UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

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(Mark One) ⊠	ANNUAL REPORT PURSUANT TO S	SECTION 13 OR 15(d) OF THE SEC	CURITIES EXCHANGE ACT OF 1934
	For th	e fiscal year ended December 31, 202	24
	TRANSITION REPORT PURSUANT	TO SECTION 13 OR 15(d) OF THI	E SECURITIES EXCHANGE ACT OF 1934
		Commission file number 000-29889	
	RIGEL P	HARMACEUTICALS	S. INC.
		name of registrant as specified in its charte	
	Delaware (State or other jurisdiction of incorporation or organization) 611 Gateway Boulevard, Suite 900, South San Francisco, California (Address of principal executive offices)		94-3248524 (IRS Employer Identification No.) 94080 (Zip Code)
		(650) 624-1100	
	(Registr	ant's telephone number, including area cod	le)
Securities	registered pursuant to Section 12(b) of the Act:		
	Title of each class: mon Stock, par value \$.001 per share	Trading Symbol(s) RIGL	Name of each exchange on which registered: The Nasdaq Stock Market LLC
Indicate by check such shorter period that Indicate by check	the registrant was required to file such reports), and (2)	ired to be filed by Section 13 or 15(d) of the Sechas been subject to such filing requirements for every Interactive Data File required to be subm	curities Exchange Act of 1934 during the preceding 12 months (or for
Indicate by check		in accelerated filer, a non-accelerated filer, a sma	aller reporting company, or an emerging growth company. See the ile 12b-2 of the Exchange Act.
Large-accelerated filer	☐ Accelerated filer ⊠	Non-accelerated filer \square	Smaller reporting company \square
			Emerging growth company \square
	owth company, indicate by check mark if the registrant bection 13(a) of the Exchange Act. \Box	as elected not to use the extended transition peri	iod for complying with any new or revised financial accounting standards
404(b) of the Sarbanes-	Oxley Act (15 U.S.C. 7262(b)) by the registered public	accounting firm that prepared or issued its audit	•
previously issued finan-	cial statements.		f the registrant included in the filing reflect the correction of an error to
	mark whether any of those error corrections are restater vant recovery period pursuant to $\S240.10D-1(b)$. \square	nents that required a recovery analysis of incenti	ve-based compensation received by any of the registrant's executive
	ck mark whether the registrant is a shell company (as det		
each executive officer, a conclusive determinat	director and affiliates of the registrant's outstanding con tion for other purposes.	mon stock have been excluded. The determinati	sing price of the registrant's common stock as reported on the Nasdaq 8.1 million. Shares of the registrant's outstanding common stock held by on of affiliate status for the purposes of this calculation is not necessarily
As of February 25	5, 2025, there were 17,862,958 shares of the registrant's	common stock outstanding. MENTS INCORPORATED BY REFERENC.	F
	13 and 14 of Part III of this Annual Report on Form 10-I	Cincorporate information by reference from the	definitive proxy statement for the registrant's 2025 Annual Meeting of ys after the end of the fiscal year covered by this Annual Report on

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains statements indicating expectations about future performance and other forwardlooking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act), and the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. We usually use words such as "may," "will," "would," "should," "could," "expect," "plan," "anticipate," "might," "believe," "estimate," "predict," "intend," or the negative of these terms or similar expressions to identify these forward-looking statements. These statements appear throughout this Annual Report on Form 10-K and are statements regarding our current expectations, beliefs or intent, primarily with respect to our operations and related industry developments. Examples of these statements include, but are not limited to: our business and scientific strategies; risks and uncertainties associated with the commercialization and marketing of our products in the United States (US) and outside the US; risks that the US Food and Drug Administration (FDA), European Medicines Agency (EMA), the Medicines and Healthcare Products Regulatory Agency (MHRA) or other regulatory authorities may make adverse decisions regarding our products; the progress of our and our collaborators' product development programs, including clinical testing, and the timing of results thereof; our corporate collaborations and revenues that may be received from our collaborations and the timing of those potential payments; our expectations with respect to obligations to entities party to commercial or licensing agreements with us and the timing of those obligations; our expectations with respect to regulatory submissions and approvals; our drug discovery technologies; our research and development expense; protection of our intellectual property and our intention to vigorously enforce our intellectual property rights; sufficiency of our cash and capital resources and the need for additional capital; our ability to successfully identify and acquire or in-license products or companies; our operations and legal risks; the effectiveness of our cybersecurity risk management process; and our acquisition of certain assets comprising rights to GAVRETO® (pralsetinib) in the US. You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including as a result of the risks and uncertainties discussed in "Part I, Item 1A, Risk Factors" of this Annual Report on Form 10-K. Any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events, except as required by applicable law. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

RISK FACTOR SUMMARY

Investing in our securities involves a high degree of risk. Below is a summary of the material factors that make an investment in our common stock speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, as well as other risks that we face, can be found below under the heading "Part 1, Item 1A, Risk Factors" and should be carefully considered, together with other information in this Form 10-K and our other filings with the SEC, before making an investment decision regarding our common stock.

- Our prospects are highly dependent on our existing commercial products, TAVALISSE® (fostamatinib disodium hexahydrate),
 REZLIDHIA® (olutasidenib), and GAVRETO® (pralsetinib). To the extent that the commercial success of our products in the US
 and respective territories outside of the US is diminished or halted, our business, financial condition and results of operations may
 be adversely affected, and the price of our common stock may decline.
- We may not be able to successfully develop or commercialize our product candidates if problems arise in the clinical testing and/or approval process. There is a high risk that drug discovery and development efforts might not generate successful product candidates. If the results of our clinical trials do not meet the primary efficacy endpoints, or if the top-line data from the results of our clinical trials may not ultimately meet the requirements for an NDA approval by the FDA and other regulatory authorities, the commercial prospects of our business may be harmed, and our ability to generate product revenues may be delayed or eliminated.
- Our strategy to expand our hematology and oncology pipeline on our own, or through acquisitions or in-licensing of early or latestage products or companies, or through partnerships with pharmaceutical and biotechnology companies, as well as academic institutions and government organizations, may not be successful.
- Even if we, or any of our collaborative partners, are able to continue to commercialize our products or any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations, unfavorable health technology assessments (HTA), third-party payor reimbursement practices or labeling restrictions, all of which may vary from country to country and any of which could harm our business.
- If we are unable to successfully market and distribute our products and retain experienced commercial personnel, our business will be substantially harmed.
- We are subject to stringent and evolving healthcare regulatory, privacy and information security laws, regulations, rules, policies
 and contractual obligations, and changes in such laws, regulations, rules, policies, contractual obligations and our actual or
 perceived failure to comply with such requirements could subject us to significant investigations, audits, fines, penalties, and
 claims, any of which may have a material adverse effect on our business, financial condition, results of operations or prospects.
- If manufacturers obtain approval for generic versions of our products, or of products with which we compete, our business may be
- Unforeseen safety issues could emerge with our products that could require us to change the prescribing information to add
 warnings, limit use of the product, and/or result in litigation. Any of these events could have a negative impact on our business.
- We rely and may continue to rely on third-party distribution facilities for the sale of our products and potential sale of any of our product candidates. If any or all of them become subject to adverse findings from inspections or face other difficulties to operate, then the distribution of our products may be interrupted or otherwise adversely affected.
- We lack the capability to manufacture compounds for clinical development and we intend to rely on third parties for commercial
 supply, manufacturing and distribution, if any, of our product candidates which receive regulatory approval and we may be unable
 to obtain required material or product in a timely manner, at an acceptable cost or at a quality level required to receive regulatory
 approval.

- Any product for which we have obtained regulatory approval, or for which we obtain approval in the future, is subject to, or will be subject to, extensive ongoing regulatory requirements by the FDA, EMA, MHRA and other comparable regulatory authorities, and if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, we may be subject to penalties, we may be unable to generate revenue from the sale of such products, our potential for generating positive cash flow may be diminished, and the capital necessary to fund our operations will be increased. Additionally, approval of a drug under the accelerated drug approval program may be withdrawn or the labeled indication of the drug changed if trials fail to verify clinical benefit or do not demonstrate sufficient clinical benefit to justify the risks associated with the drug.
- If our corporate collaborations or license agreements are unsuccessful, or if we fail to form new corporate collaborations or license
 agreements, our research and development efforts could be delayed.
- Our success is dependent on securing intellectual property rights and data exclusivity and other regulatory rights (such as orphan
 exclusivity, pediatric extensions and supplementary protection certificate) held by us and third parties, and our interest in such
 rights is complex and uncertain.
- If a dispute arises regarding the infringement or misappropriation of the proprietary rights of others, such dispute could be costly
 and result in delays in our research and development activities, partnering and commercialization activities.
- If our competitors develop technologies that are more effective than ours, our commercial opportunity will be reduced or eliminated.
- If product liability lawsuits are successfully brought against us, we may incur substantial liabilities and may be required to limit commercialization of our products.

PART I

Item 1. Business

Overview

We are a biotechnology company dedicated to developing and providing novel therapies that significantly improve the lives of patients with hematologic disorders and cancer. We focus on products that address signaling pathways that are critical to disease mechanisms

TAVALISSE (fostamatinib disodium hexahydrate) is our first product approved by the FDA. TAVALISSE is the only approved oral spleen tyrosine kinase (SYK) inhibitor for the treatment of adult patients with chronic immune thrombocytopenia (ITP) who have had an insufficient response to a previous treatment. The product is also commercially available in Europe and the United Kingdom (UK) (as TAVLESSE), and in Canada, Israel and Japan (as TAVALISSE) for the treatment of chronic ITP in adult patients.

REZLIDHIA (olutasidenib) is our second FDA-approved product. REZLIDHIA capsules are indicated for the treatment of adult patients with relapsed or refractory (R/R) acute myeloid leukemia (AML) with a susceptible isocitrate dehydrogenase-1 (IDH1) mutation as detected by an FDA-approved test. We in-licensed REZLIDHIA from Forma Therapeutics, Inc., now Novo Nordisk (Forma), with exclusive, worldwide rights for its development, manufacturing and commercialization.

GAVRETO (pralsetinib) is our third FDA-approved product which we began commercializing in June 2024. GAVRETO is a once daily, small molecule, oral, kinase inhibitor of wild-type rearranged during transfection (RET) and oncogenic RET fusions. GAVRETO is approved by the FDA for the treatment of adult patients with metastatic RET fusion-positive non-small cell lung cancer (NSCLC) as detected by an FDA-approved test. GAVRETO is also approved under accelerated approval based on overall response rate and duration response rate, for the treatment of adult and

pediatric patients 12 years of age and older with advanced or metastatic RET fusion-positive thyroid cancer who require systemic therapy and who are radioactive iodine-refractory (if radioactive iodine is appropriate). We acquired the rights to research, develop, manufacture and commercialize GAVRETO in the US from Blueprint Medicines Corporation (Blueprint) pursuant to an Asset Purchase Agreement entered in February 2024.

We continue to advance the development of R289, our dual interleukin receptor-associated kinases 1 and 4 (IRAK 1/4) inhibitor program, in an open-label, Phase 1b study to determine the tolerability and preliminary efficacy of the drug in patients with lower-risk myelodysplastic syndrome (MDS) who are relapsed, refractory or resistant to prior therapies.

We have strategic development collaborations with the University of Texas MD Anderson Cancer Center (MDACC) to expand our evaluation of olutasidenib in AML and other hematologic cancers with IDH1 mutations, and with Collaborative Network for Neuro-Oncology Clinical Trials (CONNECT) to conduct a Phase 2 clinical trial to evaluate olutasidenib in combination with temozolomide in patients with high-grade glioma (HGG) harboring an IDH1 mutation.

We have a receptor-interacting serine/threonine-protein kinase 1 (RIPK1) inhibitor program in clinical development with our partner Eli Lilly and Company (Lilly). We also have product candidates in clinical development with partners BerGenBio ASA (BerGenBio) and Daiichi Sankyo (Daiichi).

Business Updates

TAVALISSE in ITP

In 2024, we recognized \$104.8 million of TAVALISSE net product sales, a 12% increase compared to \$93.7 million in 2023. The increase was primarily due to increased quantities sold, as well as increased price per bottle, partially offset by higher revenue reserves driven by increased government and private payor rebates.

REZLIDHIA in R/R AML with mIDH1

In 2024, we recognized \$23.0 million of REZLIDHIA net product sales, a 118% increase compared to \$10.6 million in 2023. The increase was primarily due to increased quantities sold primarily driven by increased number of patients under therapy, partially offset by higher revenue reserves primarily due to increased government rebates.

GAVRETO (pralsetinib) in metastatic RET fusion-positive NSCLC and advanced thyroid cancers

In 2024, we recognized \$17.1 million of GAVRETO net product sales. We began our commercialization of GAVRETO in June 2024. We distribute and market GAVRETO for approved indications in RET fusion-positive NSCLC and advanced thyroid cancers. We believe GAVRETO is highly synergistic with our current product portfolio, and we expect to continue to leverage our existing commercial infrastructure to ensure current and newly prescribed GAVRETO patients have continued access to this important treatment option. We acquired GAVRETO from Blueprint pursuant to an Asset Purchase Agreement entered into on February 22, 2024. Pursuant to the Asset Purchase Agreement, we purchased certain assets comprising the right to research, develop, manufacture and commercialize GAVRETO in the US. Under the terms of the agreement, we agreed to pay Blueprint a purchase price of \$15.0 million, of which, \$10.0 million was paid in July 2024 following our first commercial sale of GAVRETO at the end of June 2024, and an additional \$5.0 million payable on the first anniversary of the closing date of the agreement, subject to certain conditions. Blueprint is also eligible to receive up to \$97.5 million in future commercial milestone payments and up to \$5.0 million in future regulatory milestone payments, in addition to tiered royalties ranging from 10% to 30%.

Simultaneously and in conjunction with entering into the Asset Purchase Agreement, we also entered into certain supporting agreements, including a customary transition agreement. We also agreed to purchase certain drug product inventories from Blueprint under a Material Transfer Agreement, and received such inventories amounting to approximately \$6.5 million during the year ended December 31, 2024.

R289, an Oral IRAK 1/4 Inhibitor for Lower-Risk MDS

We advanced the development of our dual IRAK 1/4 inhibitor program, following evaluation of single and multiple ascending doses of R289 in healthy subjects. The ongoing Phase 1b open-label, multicenter study evaluates the safety, tolerability and preliminary efficacy of R289 in patients with R/R lower-risk MDS. This Phase 1b study is expected to enroll approximately 86 patients (up to 36 patients in the dose escalation phase, up to 40 patients in the dose expansion phase, and 10 less heavily pre-treated patients in an exploratory cohort). The primary objective of the study is safety, with secondary and exploratory objectives to assess preliminary efficacy and characterize the pharmacokinetic and pharmacodynamic profile of R289. The safety and efficacy data from this Phase 1b study is intended to inform the recommended dose of R289 for further clinical evaluation in lower-risk MDS. Enrollment in the fifth dose level (500 mg / 250 mg split dose) is complete and the new sixth dose level (500 mg twice daily) is now open for enrollment. In December 2024, initial data from the dose escalation part of the Phase 1b study was presented at the 66th American Society of Hematology (ASH) Annual Meeting and Exposition. In summary, R289 was generally well tolerated with preliminary signs of efficacy in a heavily pretreated lower-risk MDS patient population, the majority of whom were high transfusion burden (HTB) at baseline. Red blood cell (RBC)-transfusion independence (RBC-TI) ≥8 weeks was achieved by three patients (1 at 500 mg QD and 2 at 750 mg QD); two HTB patients achieved RBC-TI >24 weeks. The median duration of RBC-TI was 29 weeks (range 12.7-51.9 weeks). One HTB patient receiving 500 mg QD achieved a minor hematologic improvement-erythroid (HI-E) response, with a 64% reduction in RBC transfusions compared to baseline. The three patients that achieved RBC-TI had peak hemoglobin increases exceeding 2.0 g/dL compared to baseline.

R289 was granted Fast Track designation by the FDA for the treatment of patients with previously-treated transfusion dependent lower-risk MDS in November 2024. In January 2025, the FDA granted R289 orphan drug designation for the treatment of myelodysplastic syndromes.

Olutasidenib in AML, Other Hematologic Cancers and HGG

In December 2023, we entered into a Strategic Collaboration Agreement with the MDACC, a comprehensive cancer research, treatment, and prevention center. The collaboration will expand our evaluation of olutasidenib in AML and other hematologic cancers with IDH1 mutations. Under the Strategic Collaboration Agreement, we will jointly lead the clinical development efforts with MDACC to evaluate the potential of olutasidenib to treat newly diagnosed and R/R patients with AML, higher-risk MDS, and advanced myeloproliferative neoplasms, in combination with other agents. The collaboration will also support the evaluation of olutasidenib as monotherapy in patients with IDH1 mutated clonal cytopenia of undetermined significance (CCUS) and lower-risk MDS, as well as maintenance therapy following hematopoietic stem cell transplant. Under the Strategic Collaboration Agreement, we will provide MDACC the study materials and \$15.0 million in time-based milestone payments as compensation for services to be provided for the studies, over the five-year collaboration term, unless terminated earlier as provided for in the agreement. Through December 31, 2024, we provided \$2.0 million funding to MDACC. MDACC has now opened for enrollment the four studies outlined in the multi-year strategic development alliance.

In January 2024, we announced our collaboration with CONNECT, an international collaborative network of pediatric cancer centers, to conduct a Phase 2 clinical trial to evaluate olutasidenib in combination with temozolomide in patients with HGG harboring an IDH1 mutation (TarGet-D). Under the collaboration, CONNECT will include the olutasidenib treatment arm (TarGet-D) within CONNECT's TarGet study, a molecularly guided Phase 2 umbrella clinical trial for HGG. In our sponsored arm, adolescents and young adult patients (<39 years old) with newly-diagnosed IDH1-mutation positive HGG will receive maintenance therapy with olutasidenib in combination with temozolomide for the first year after radiotherapy, followed by olutasidenib monotherapy for the second year. Under the collaboration, we will provide CONNECT with funding up to \$3.0 million and study material over the four-year collaboration. CONNECT recently opened for enrollment the TARGET-D study, a Phase 2 study evaluating olutasidenib in combination with temozolomide, followed by olutasidenib monotherapy, as maintenance therapy for newly diagnosed adolescent and young adult patients (ages 12 to 39 years) with HGG harboring an IDH1 mutation.

Incrementally, we plan on initiating a Phase 2 clinical study in recurrent glioma. This, in combination with our strategic collaborations with MD Anderson and CONNECT, are aimed to expand our olutasidenib pipeline development programs.

Collaboration and License Agreement with Kissei

In September 2024, we announced the expansion of our relationship with Kissei, granting exclusive rights to develop and commercialize olutasidenib in all human diseases in Japan, Korea and Taiwan, pursuant to a collaboration and license agreement. Under the terms of the agreement, we received a one-time, non-creditable upfront cash payment of \$10.0 million from Kissei, with the potential for up to an additional \$152.5 million in development, regulatory and commercial milestone payments, and will receive mid twenty to lower thirty percent, tiered, escalated net sales-based payments for the supply of olutasidenib, subject to certain customary reductions and offsets. Pursuant to the agreement, Kissei is responsible for companion diagnostic development in Japan, for which we will share fifty percent of the costs incurred by Kissei, up to \$3.0 million, which are creditable against future milestones and transfer price payments owed to us. We remain responsible for the manufacture and supply of olutasidenib for all development and commercialization activities under the agreement. Pursuant to the concurrently executed supply agreement, we will supply Kissei with bulk drug product for use under the collaboration and license agreement.

We in-licensed olutasidenib from Forma with exclusive, worldwide rights for its development, manufacturing and commercialization. Under the agreement with Forma, Forma is entitled to a certain portion of sublicensing revenue, which include, but are not limited to, upfront payments, milestone payments and royalties, that we receive from a third party sublicensee. Following the collaboration and license agreement with Kissei, we paid Forma a portion of the sublicensing revenue fee amounting to \$2.3 million following our receipt of the upfront cash payment from Kissei.

Commercial License Agreement with Dr. Reddy's

In November 2024, we entered into a commercial license agreement with Dr. Reddy's Laboratories (Dr. Reddy's) to grant Dr. Reddy's an exclusive license to develop and commercialize olutasidenib in Dr. Reddy's territory which includes Latin America, South Africa, India, Australia, New Zealand, and certain countries in the Commonwealth of Independent States (CIS), Southeast Asia region and North Africa. Pursuant to the commercial license agreement, we were entitled to receive a \$4.0 million one-time, non-refundable and non-creditable upfront payment, which amount, net of applicable foreign withholding taxes was received in February 2025. In addition, we are also entitled to a potential for up to an additional \$36.0 million in regulatory and sales-based commercial milestone payments, and will receive high teens- to thirty percent, tiered, escalated net-sales based royalty payments for products sold in Dr. Reddy's territory, subject to certain standard reductions and offsets. Dr. Reddy's is responsible for performing and funding all development activities necessary to obtain regulatory approval and commercialize olutasidenib in the Dr. Reddy's territory. We are responsible for the exclusive manufacture and supply of olutasidenib for all future development and commercialization activities under the agreement.

As discussed above, Forma is entitled to a certain portion of sublicensing revenue from olutasidenib. Following the commercial license agreement with Dr. Reddy's, Forma is entitled to a portion of the sublicensing revenue from Dr. Reddy's, including \$0.9 million upon our receipt of the upfront cash payment, net of applicable foreign withholding taxes, from Dr. Reddy's.

Global Strategic Partnership with Lilly

Lilly is continuing to advance ocadusertib (previously R552), an investigational, potent and selective RIPK1 inhibitor. Lilly has initiated the Phase 2a trial studying ocadusertib in adult patients with moderately to severely active rheumatoid arthritis. The Phase 2a enrollment of approximately 100 patients is ongoing, with preliminary analysis of the Phase 2a results anticipated in the first half of 2025. RIPK1 is implicated in a broad range of key inflammatory cellular processes and plays a key role in tumor necrosis factor signaling, especially in the induction of pro-inflammatory necroptosis. The program also includes RIPK1 compounds that cross the blood-brain barrier (CNS-penetrants) to address neurodegenerative diseases such as Alzheimer's disease and amyotrophic lateral sclerosis.

Under the Lilly Agreement, we are responsible for 20% of the development costs for ocadusertib in the US, Europe and Japan, up to a specified cap, and Lilly is responsible for funding the remainder of all development activities for ocadusertib and other non-CNS disease development candidates. Under the Lilly Agreement, we have the right to opt-out of co-funding the ocadusertib development activities in the US, Europe and Japan at two different specified times

and as a result receive lesser royalties from sales. In September 2023, we provided the first opt-out notice to Lilly and our funding commitment was capped at a specified amount through April 1, 2024, as provided for in the Lilly Agreement, as amended in September 2023. We provided \$21.4 million funding to Lilly throughout the periods for our share for ocadusertib development costs incurred through April 1, 2024. Under the Lilly Agreement as amended, we have the right to opt-in to co-funding of ocadusertib development, upon us providing notice to Lilly within 30 days of certain events, as specified in the Lilly Agreement. If we decide to exercise our opt-in right, we will be required to continue to share in global development costs, and if we later exercise our second opt-out right (no later than April 1, 2025), our share in global development costs will be up to a specified cap through December 31, 2025, as provided for in the Lilly Agreement.

Patent Infringement Lawsuit

In June 2022, we received a notice letter regarding an Abbreviated New Drug Application (ANDA) submitted to the FDA by Annora Pharma Private Limited (Annora) requesting approval to market a generic version of TAVALISSE. In July 2022, we filed a lawsuit in the US District Court for the District of New Jersey against Annora and its subsidiaries for infringement of certain of our US patents. Litigation continues, and no trial date is currently set. For a more detailed discussion of this litigation matter, see "Part I, Item 3, Legal Proceedings" of this Annual Report on Form 10-K.

Strategy

Our goal is to establish ourselves as a successful commercial stage biopharmaceutical company with significant development capabilities. We aim to expand our commercial business in the US on our own and globally through partnerships. We recently expanded our hematology and oncology portfolio with our third commercialized product, GAVRETO, which we believe is highly synergistic with and complementary to our existing hematology and oncology focused commercial infrastructure. We continue to maintain a strong commercial and medical affairs team in the US to enable us to execute successfully on our commercialization strategy to grow TAVALISSE in chronic ITP, REZLIDHIA in mIDH1 R/R AML, and GAVRETO in NSCLC and advanced thyroid cancers. For the expansion of fostamatinib and olutasidenib outside of the US, we entered into partnerships and are currently exploring other partnership opportunities. We continue our development of novel therapies designed to significantly improve the lives of patients with hematological disorders and cancer. We will be focusing on the further development of our products in other indications on our own or through our partners. We aim to expand our portfolio with additional commercial products and/or additional candidates for our development pipeline, on our own and/or in partnership with pharmaceutical and biotechnology companies as well as academic institutions and government organizations.

In particular, the key elements that we believe are value drivers, which we plan to continue to execute include:

- growing sales of TAVALISSE in chronic ITP, REZLIDHIA in mIDH1 R/R AML, and GAVRETO in NSCLC and advanced thyroid cancers; and
- advancing our development pipeline on our own and/or with collaboration partner(s).

Our Product Portfolio

The following table summarizes our portfolio:

	Indication	Target	Stage	Partner
Commercialized Products				
"AVALISSE® (fostamatinib) ^{1,2}	Adult Chronic ITP	SYK	Approved	
EZLIDHIA® (olutasidenib) ³	R/R AML	mIDH1	Approved	
GAVRETO® (pralsetinib)4	RET+ NSCLC & Advanced Thyroid Cancer	RET	Approved	
Clinical Trials				
2289*	Lower-risk MDS	IRAK1/4		12
artnered Programs		_		70.0
emcentinib*	NSCLC	AXL	Phase 2	BerGenBio
Ocadusertib (previously R552)*	Rheumatoid Arthritis	RIPK1		Lilly
Ailademetan*	Cancer	MDM2		O Daiichi-Sankyo
exxx (CNS penetrant)	CNS Diseases	RIPK1		Lilly
Company-Sponsored Trials				
Please see the TAVALISSE Full Prescribing Informs The product is also commercially available in Emmune thrombocytopenia (ITP). Please see the REZLIDHIA Full Prescribing Inform Please see the GAVRETO Full Prescribing Inform Investicational compound in this indication and	urope and the UK (TAVLESSE) as well as Canad ation, including Boxed WARNING ation	la, Israel and Japai	n (TAVALISSE) for the tred	atment of adult chronic

Commercial Products

TAVALISSE/Fostamatinib in ITP

TAVALISSE overview

Chronic ITP affects an estimated 81,300 adult patients in the US. In patients with ITP, the immune system attacks and destroys the body's own blood platelets, which play an active role in blood clotting and healing. ITP patients can suffer extraordinary bruising, bleeding and fatigue as a result of low platelet counts. Current therapies for ITP include steroids, blood platelet production boosters that imitate thrombopoietin (TPO) and splenectomy.

Taken in tablet form, fostamatinib blocks the activation of SYK inside immune cells. ITP is typically characterized by the body producing antibodies that attach to healthy platelets in the blood stream. Immune cells recognize these antibodies and affix to them, which activates the SYK enzyme inside the immune cell, and triggers the destruction of the antibody and the attached platelet. When SYK is inhibited by fostamatinib, it interrupts this immune cell function and allows the platelets to escape destruction. The results of our Phase 2 clinical trial, in which fostamatinib was orally administered to 16 adults with chronic ITP, published in *Blood*, showed that fostamatinib significantly increased the platelet counts of certain ITP patients, including those who had failed other currently available agents.

Our Fostamatinib for Immune Thrombocytopenia (FIT) Phase 3 clinical program had a total of 150 ITP patients which were randomized into two identical multicenter, double-blind, placebo-controlled clinical trials. The patients were diagnosed with persistent or chronic ITP, and had blood platelet counts consistently below 30,000 per microliter of blood. Two-thirds of the subjects received fostamatinib orally at 100 mg twice daily (bid) and the other third received placebo on the same schedule. Subjects were expected to remain on treatment for up to 24 weeks. At week four of treatment, subjects who failed to meet certain platelet counts and met certain tolerability thresholds could have their dosage of fostamatinib (or corresponding placebo) increased to 150 mg bid. The primary efficacy endpoint of this program was a stable platelet response by week 24 with platelet counts at or above 50,000 per microliter of blood for at least four of the final six qualifying blood draws. In August 2016, we announced the results of the first FIT study, reporting that fostamatinib met the study's primary efficacy endpoint. The study showed that 18% of patients receiving

fostamatinib achieved a stable platelet response compared to none receiving a placebo control. In October 2016, we announced the results of the second FIT study, reporting that the response rate (16% in the treatment group, versus 4% in the placebo group) was consistent with the first study, although the difference was not statistically significant. In the ITP double-blind studies, the most commonly reported adverse reactions occurring in at least 5% of patients treated with TAVALISSE were diarrhea, hypertension, nausea, dizziness, increased alanine aminotransferase, increased aspartate aminotransferase, respiratory infection, rash, abdominal pain, fatigue, chest pain, and neutropenia. Serious adverse drug reactions occurring in at least 1% of patients treated with TAVALISSE in the ITP double-blind studies were febrile neutropenia, diarrhea, pneumonia, and hypertensive crisis. A post-hoc analysis from our Phase 3 clinical program in adult patients with chronic ITP, highlighting the potential benefit of using TAVALISSE in earlier lines of therapy, was published in the British Journal of Haematology in July 2020. In addition, a report describing the long-term safety and durable efficacy of TAVALISSE with up to five years of treatment was published in Therapeutic Advances in Hematology in 2021.

The FDA granted orphan drug designation for fostamatinib for the treatment of ITP in August 2015. TAVALISSE was approved by the FDA in April 2018 for the treatment of ITP in adult patients who have had an insufficient response to a previous treatment, and successfully launched in the US in May 2018.

Competitive landscape for TAVALISSE

Our industry is intensely competitive and subject to rapid and significant technological change. TAVALISSE is competing with other existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. For example, there are existing therapies and drug candidates in development for the treatment of ITP that may be alternative therapies to TAVALISSE.

Currently, corticosteroids remain the most common first line therapy for ITP, occasionally in conjunction with intravenous immunoglobulin (IVIg) or anti-Rh(D) to help further augment platelet count recovery, particularly in emergency situations. However, it has been estimated that frontline agents lead to durable remissions in only a small percentage of newly diagnosed adults with ITP. Moreover, concerns with steroid-related side effects often restrict therapy to approximately four weeks. As such, many patients progress to persistent or chronic ITP, requiring other forms of therapeutic intervention. In long-term treatment of chronic ITP, patients are often cycled through several therapies over time in order to maintain a sufficient response to the disease.

Other approaches to treat ITP are varied in their mechanism of action, and there is no consensus about the sequence of their use. Options include splenectomy, thrombopoietin receptor agonists (TPO-Ras) and various immunosuppressants (such as rituximab). The response rate criteria of the above-mentioned options vary, precluding a comparison of response rates for individual therapies.

Even with the above treatment options, a significant number of patients remain severely thrombocytopenic for long durations and are subject to risk of spontaneous or trauma-induced hemorrhage. The addition of fostamatinib to the currently available treatment options could be beneficial because it has a different mechanism of action than any of the therapies that are currently available. Fostamatinib is a potent and relatively selective SYK inhibitor, and its inhibition of Fc receptors and B-cell receptors of signaling pathways make it a potentially broad immunomodulatory agent.

Other products in the US that are approved by the FDA to increase platelet production through binding to TPO receptors on megakaryocyte precursors include PROMACTA® (Novartis International AG), Nplate® (Amgen, Inc.), DOPTELET® (Swedish Orphan Biovitrum AB) and ALVAIZTM (Teva Pharmaceutical Industries Ltd.). In the longer term, we may eventually face competition from potential manufacturers of generic versions of our marketed products, including the proposed generic version of TAVALISSE that is the subject of an ANDA submitted to the FDA by Annora, which, if approved and allowed to enter the market, it could result in significant decreases in the revenue derived from sale of TAVALISSE and thereby materially harm our business and financial condition.

TAVALISSE commercial activities, including sales and marketing

Our marketing and sales efforts are focused on hematologists and hematologist-oncologists in the US who manage chronic adult ITP patients. We have a fully integrated commercial team consisting of sales, marketing, market access, and commercial operations functions. Our sales team promotes our products in the US using customary

pharmaceutical company practices. Our products are sold initially through third-party wholesale distribution and specialty pharmacy channels and group purchasing organizations before being ultimately prescribed to patients. To facilitate our commercial activities in the US, we also enter into arrangements with various third parties, including advertising agencies, market research firms and other sales-support-related services as needed. We believe that our commercial team and distribution practices are adequate to ensure that our marketing efforts reach relevant customers and deliver our products to patients in a timely and compliant fashion. Also, to help ensure that all eligible patients in the US have appropriate access to our products, we have established a reimbursement and patient support program called Rigel OneCare ® (ROC). Through ROC, we provide co-pay assistance to qualified, commercially insured patients to help minimize out-of-pocket costs and provide free product to uninsured or under-insured patients who meet certain established clinical and financial eligibility criteria. In addition, ROC is designed to provide reimbursement support, such as information related to prior authorizations, benefits investigations and appeals.

We have entered into various license and commercial agreements to commercialize fostamatinib globally as discussed below, but we retain the global rights to fostamatinib outside of the respective territories under such license and commercial agreements.

Fostamatinib outside of the US

We have a commercialization license agreement with Grifols for exclusive rights to commercialize fostamatinib for human diseases, and non-exclusive rights to develop, fostamatinib in their territory. Grifols territory includes EU, the UK, Turkey, the Middle East, North Africa and Russia (including Commonwealth of Independent States). In January 2020, the European Commission (EC) granted a centralized MA for fostamatinib (TAVLESSE) valid throughout EU and which has been grandfathered in the UK, after the departure of the UK from the EU, for the treatment of chronic ITP in adult patients who are refractory to other treatments. Grifols has launched TAVLESSE in the UK and certain countries in EU including Germany, France, Italy and Spain, and continues a phased rollout across the rest of EU.

We have an exclusive license and supply agreement with Kissei to develop and commercialize fostamatinib in all current and potential indications in Japan, China, Taiwan and Korea. Kissei is a Japan-based pharmaceutical company addressing patients' unmet medical needs through its research, development and commercialization efforts, as well as through collaborations with partners. Japan has the third highest prevalence of chronic ITP in the world behind the US and Europe. Kissei was granted orphan drug designation from the Japanese Ministry of Health, Labor and Welfare for R788 (fostamatinib) in chronic ITP in February 2020. In December 2022, Japan's Pharmaceuticals and Medical Devices Agency (PMDA) approved TAVALISSE for the treatment of chronic ITP, and in April 2023, Kissei launched TAVALISSE for chronic ITP in Japan. In January 2025, Kissei announced the Korean Ministry of Food and Drug Safety approved TAVALISSE for the treatment of thrombocytopenia in adult patients with chronic idiopathic thrombocytopenic purpura who have had an insufficient response to a previous treatment

We have exclusive commercial and license agreements with Medison to commercialize fostamatinib in all potential indications in Canada and Israel. In November 2020, Health Canada approved the New Drug Submission for TAVALISSE for the treatment of thrombocytopenia in adult patients with chronic ITP who have had an insufficient response to other treatments. In August 2021, Medison Israel received the licenses for registrational approval from the Ministry of Health. TAVALISSE is commercially available in Canada and Israel

We have a commercial license agreement with Knight to exclusively commercialize fostamatinib for approved indications in Latin America, consisting of Mexico, Central and South America, and the Caribbean. We are also responsible for the exclusive manufacture and supply of fostamatinib for all future development and commercialization activities under a commercial and supply agreement. In August 2023, Knight submitted the MAA for regulatory approval in Mexico, Colombia and Brazil for fostamatinib for the treatment of adult patients with ITP who had insufficient response to a previous treatment. In December 2024, Knight announced the approval of TAVALISSE in Mexico for the treatment of thrombocytopenia in adult patients with chronic ITP who have had an insufficient response to a previous treatment.

REZLIDHIA/Olutasidenib in R/R AML with mIDH1

REZLIDHIA overview

mIDH1 alterations are seen in AML, MDS, glioma, chondrosarcoma, and intrahepatic cholangiocarcinoma. It is estimated that there are approximately 1,000 adult patients, a well-identified patient population, with mIDH1 R/R AML, part of an AML market estimated to have an incidence of approximately 20,000 cases in the US and an estimated 120,000 cases globally. Despite having approved treatment options for R/R AML patients who are mIDH1 positive, an unmet need remains.

Olutasidenib, an oral, small molecule drug designed to selectively bind to and inhibit mIDH1, is a treatment option with durable remissions, reduced QTc potential, and a stable pharmacokinetics profile that enables a consistent drug exposure over time. This targeted agent has the potential to provide therapeutic benefit by reducing 2-hydroxyglutarate levels and restoring normal cellular differentiation. IDH1 is a natural enzyme that is part of the normal metabolism of all cells. When mutated, IDH1 activity can promote blood malignancies and solid tumors. Olutasidenib was granted orphan drug designation by the FDA for the treatment of AML, which provides orphan drug market exclusivity from the time of marketing approval on December 1, 2022.

REZLIDHIA is designed to bind to and inhibit mIDH1 to reduce 2-hydroxyglutarate levels and restore normal cellular differentiation of myeloid cells. REZLIDHIA is a novel, non-intensive monotherapy treatment in the R/R AML setting demonstrating a CR+CRh rate of 35% in patients with over 90% of those responders in complete remission.

We in-licensed REZLIDHIA from Forma pursuant to a license and transition services agreement entered in July 2022, with exclusive, worldwide rights for development, manufacturing and commercialization of REZLIDHIA for any uses, including for the treatment of AML and other malignancies. In accordance with the terms of the license and transition services agreement, we paid an upfront fee of \$2.0 million, with the potential to pay up to \$67.5 million additional payments upon achievement of specified development and regulatory milestones and up to \$165.5 million additional payments upon achievement of certain commercial milestones. In 2022, certain milestones were met which entitled Forma to receive a \$17.5 million milestone payments. No new milestone was met in 2023 and 2024. In addition, subject to the terms and conditions of the license and transition services agreement, Forma would be entitled to tiered royalty payments on net sales of licensed products at percentages ranging from low-teens to mid-thirties, as well as certain portions of our sublicensing revenue, subject to certain standard reductions and offsets.

In December 2022, the FDA approved REZLIDHIA capsules for the treatment of adult patients with R/R AML with IDH1 mutation as detected by an FDA-approved test, and we began the commercialization of REZLIDHIA and made it available to patients. The recommended dosage of REZLIDHIA is 150 mg taken orally twice daily until disease progression or unacceptable toxicity. The FDA approval was based on the NDA for olutasidenib for the treatment of m1DH1 R/R AML submitted by Forma, that had a PDUFA action date for the application of February 15, 2023. The NDA application was supported with a Phase 2 registrational trial for olutasidenib in m1DH1 R/R AML. Interim results from the Phase 2 registrational trial were reported at the American Society of Clinical Oncology (ASCO) annual meeting in June 2021. The interim results of this trial of 153 patients showed that olutasidenib demonstrated a favorable tolerability profile as a monotherapy in patients with R/R AML who have a susceptible m1DH1, and achieved a complete remission (CR) plus CR with partial hematologic recovery (CRh) rate of 33.3% (30% CR and 3% CRh), the primary efficacy endpoint. While a median duration of CR/CRh was not yet reached, a sensitivity analysis (with a hematopoietic stem cell transplant, as the end of a response) indicated the median duration of CR/CRh was 13.8 months. The overall response rate, comprised CR, CRh, Cri, partial response, and morphologic leukemia-free state (MLFS), was 46% and the median duration of overall response rate (ORR) was 11.7 months. The median overall survival was 10.5 months. For patients with CR/CRh, the median overall survival was not reached, but the estimated 18-month survival was 87%. The most frequently reported treatment emergent adverse events were nausea, constipation, increased white blood cell count, decreased red blood cell count, pyrexia, febrile neutropenia, and fatigue.

In January 2023, we announced that REZLIDHIA has been added by the National Comprehensive Cancer Network (NCCN) to the latest NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for AML. REZLIDHIA is now included as a recommended targeted therapy for adult patients with R/R AML with IDH1 mutation.

In February 2023, we announced peer-reviewed publication data in *Blood Advances*, which summarize clinical results from the Phase 2 registrational trial of REZLIDHIA in patients with mIDH1 R/R AML. The published data demonstrate that REZLIDHIA induced durable remissions and transfusion independence with a well-characterized safety profile. The observed efficacy is clinically meaningful and represents a therapeutic advance in this poor prognosis patient population with limited treatment options. REZLIDHIA demonstrated both a high rate of response and an extended median duration of complete response of 28.1 months, which is more than a year longer than what is reported with the standard of care. In June 2023, we announced the second REZLIDHIA publication in *Blood Advances*, a review article examining the preclinical and clinical development, and the positioning of REZLIDHIA in the mIDH1 AML treatment landscape. The review concluded that the approval of REZLIDHIA is a critical addition to the mIDH1 AML treatment landscape. Further, the available data support the use of REZLIDHIA as monotherapy in R/R AML patients who have failed intensive chemotherapy or venetoclax plus hypomethylating agents combination therapy.

In April 2024, we announced a peer-reviewed publication in *Leukemia & Lymphoma* on data from an analysis of the Phase 2 study evaluating REZLIDHIA in patients with mIDH1 AML who are R/R to prior venetoclax-based regimens. The findings from these analyses suggest that REZLIDHIA alone or in combination with azacitidine demonstrated potential efficacy in patients with AML following failure of venetoclax combination therapy.

In May 2024, we announced the presentation of the five-year results from the registrational Phase 2 trial of REZLIDHIA in R/R mIDH1 AML patients at the 2024 ASCO Annual Meeting and EHA 2024 Hybrid Congress. The data published reinforces REZLIDHIA's efficacy in heavily pretreated patients with mIDH1 AML, including those R/R to prior venetoclax. The safety profile was consistent with what was previously reported. Further, REZLIDHIA was generally well tolerated in elderly patients with R/R mIDH1 AML and induced durable remissions. Despite the challenges of treating elderly patients who had already failed prior AML treatment, the results suggest that elderly patients can benefit from therapy with REZLIDHIA. REZLIDHIA was also effective in achieving remission in patients with mIDH1 R/R AML and served as a bridging strategy towards potentially curative allogeneic transplantation in a substantial subset of these previously ineligible patients. Additionally, REZLIDHIA was well tolerated in a subset of patients with myeloproliferative neoplasms mIDH1 AML, a patient population often associated with poor responses to available therapies.

Competitive landscape for REZLIDHIA

There is currently one other product approved in the US for patients with IDH1 mutation. The FDA granted approval to TIBSOVO® (ivosidenib), an oral targeted IDH1 mutation inhibitor, (i) in July 2018, for adult patients with R/R AML with a susceptible IDH1 mutation, (ii) in May 2019, for newly diagnosed AML with a susceptible IDH1 mutation who are at least 75 years old or who have comorbidities that preclude use of intensive induction chemotherapy, (iii) in August 2021, for adult patients with previously treated, locally advanced or metastatic cholangiocarcinoma with an IDH1 mutation as detected by an FDA-approved test, (iv) in May 2022, in combination with azacitidine (azacitidine for injection) for newly diagnosed AML with a susceptible IDH1 mutation, as detected by an FDA-approved test in adults 75 years or older, or who have comorbidities that preclude use of intensive induction chemotherapy, and (v) in October 2023, for adult patients with R/R MDS with a susceptible IDH1 mutation, as detected by an FDA-approved test. In addition, some clinicians may utilize non-targeted treatments for patients with mIDH1 R/R AML, including use of venetoclax combinations, hypomethylating agents, other chemotherapy regimens, or investigational agents that may be available to them.

REZLIDHIA commercial activities, including sales and marketing

We believe REZLIDHIA is highly synergistic with our existing hematology-oncology focused commercial and medical affairs infrastructure. Our commercial effort focuses on growing awareness of REZLIDHIA within key institutions, and among targeted HCPs who manage patients with R/R AML with mIDH1. We retain the global rights, excluding certain geographies as discussed below, to develop and commercialize olutasidenib for all indications, and we are currently exploring other ex-US partnership opportunities.

Olutasidenib outside of the US

In September 2024, we entered into a collaboration and license agreement with Kissei, pursuant to which Kissei

was granted exclusive rights to develop and commercialize olutasidenib in all human diseases in Japan, Korea and Taiwan. Kissei will initially seek approval for REZLIDHIA in Japan for R/R mIDH1 AML and will be responsible for conducting clinical studies as required by the Japanese PMDA. We remain responsible for the manufacture and supply of olutasidenib for all development and commercialization activities and will supply Kissei with bulk drug product for use under the license and supply agreements.

In November 2024, we entered into a commercial license agreement with Dr. Reddy's for an exclusive license to develop and commercialize olutasidenib in Dr. Reddy's territory which includes Latin America, South Africa, India, certain countries in the CIS, Southeast Asia region and North Africa, Australia, and New Zealand. We are responsible for the exclusive manufacture and supply of olutasidenib for all future development and commercialization activities under a supply agreement.

Under the license and services agreement with Forma as discussed in "Note 5 – In-Licensing and Acquisition" of our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K, Forma is entitled to a certain portion of sublicensing revenue, which include, but are not limited to upfront payment, milestone payments and royalties, that we receive from a third party sublicensee. Following the license agreements with Kissei and Dr. Reddy's as discussed above, Forma is entitled to a portion of the sublicensing revenue we receive from Kissei and Dr. Reddy's.

GAVRETO/Pralsetinib in metastatic RET fusion-positive NSCLC and advanced thyroid cancers

GAVRETO overview

RET is a receptor tyrosine kinase that activates multiple downstream pathways involved in cell proliferation and survival. RET can be activated by mutation or when a portion of the RET gene that encodes the kinase domain is joined to part of another gene creating a fusion gene that encodes an aberrantly activated RET fusion protein. RET alterations, such as fusions or mutations, drive the growth of multiple tumor types. It is estimated that over 226,000 adult patients in the US will be diagnosed with lung cancer in 2025. NSCLC is the most common type of lung cancer in the US accounting for 80-85% of all lung cancer diagnoses. RET activating fusions are key disease drivers in NSCLC. RET fusions are implicated in approximately 1-2% of patients with NSCLC.

We acquired the rights to research, develop, manufacture and commercialize GAVRETO from Blueprint, pursuant to an Asset Purchase Agreement entered in February 2024. GAVRETO is a once daily, small molecule, oral, kinase inhibitor of wild-type RET and oncogenic RET fusions. Currently, GAVRETO is one of only two approved RET inhibitors on the market for patients. GAVRETO is approved by the FDA for the treatment of adult patients with metastatic RET fusion-positive NSCLC as detected by an FDA-approved test.

GAVRETO is also approved for the treatment of adult and pediatric patients 12 years of age and older with advanced or metastatic RET fusion-positive thyroid cancer who require systemic therapy and who are radioactive iodine-refractory (if radioactive iodine is appropriate). This indication was approved by the FDA under accelerated approval based on overall response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trial. Discussions with the FDA regarding confirmatory requirements are ongoing.

In June 2024, we announced the completion of the transfer to us of the NDA for GAVRETO, and GAVRETO became commercially available from us in the US by prescription. GAVRETO was co-marketed by Blueprint and Genentech, a member of Roche, to patients in the US since September 2020 pursuant to a collaboration agreement between Blueprint and Roche, which agreement was terminated effective in February 2024.

The FDA granted GAVRETO new chemical entity exclusivity until September 2025 and orphan drug exclusivity until September 2027 with respect to the approval for treatment of adult patients with metastatic RET fusion-positive NSCLC as detected by an FDA-approved test. The FDA also granted GAVRETO two orphan drug exclusivities until December 2027 with respect to FDA approval for the treatment of adult and pediatric patients 12 years of age and older with advanced or metastatic RET fusion-positive thyroid cancer who require systemic therapy and who are

radioactive iodine-refractory (if radioactive iodine is appropriate), and for the treatment of adult and pediatric patients 12 years of age and older with advanced or metastatic RET-mutant medullary thyroid carcinoma who require systemic therapy.

Competitive landscape for GAVRETO

GAVRETO faces competition for RET fusion-positive NSCLC and advanced thyroid cancers from Lilly's selpercatinib (Retevmo®). In addition, other commercially available therapies used to treat RET fusion-positive NSCLC include cabozantanib and platinum-based chemotherapy regimens with or without pembrolizumab, atezolizumab, nivolumab/ipilumumab, cemiplimab or tremelimumab-durvalumab. GAVRETO may also face competition from other drug candidates in development for RET-altered cancers, as well as multi-kinase inhibitors with RET activity being evaluated in clinical trials.

GAVRETO commercial activities, including sales and marketing

We began our commercialization and started recognizing revenue from product sales of GAVRETO in June 2024. We believe GAVRETO is highly synergistic with our current product portfolio, and we expect to continue to leverage our existing commercial infrastructure to ensure current and newly prescribed GAVRETO patients have continued access to this important treatment option. We distribute and market GAVRETO for approved indications in RET fusion-positive NSCLC and advanced thyroid cancers.

Clinical Stage Programs

R289, an Oral IRAK 1/4 Inhibitor for Hematology-Oncology, Autoimmune, and Inflammatory Diseases

During the second quarter of 2018, we selected R835, a proprietary molecule from our dual IRAK 1/4 inhibitor program, for human clinical trials. This investigational candidate is an orally administered, potent and selective inhibitor of IRAK1 and IRAK4 that blocks inflammatory cytokine production in response to toll-like receptor (TLR) and the interleukin-1 receptor (IL-1R) family signaling. TLRs and IL-1Rs play a critical role in the innate immune response and dysregulation of these pathways can lead to a variety of inflammatory conditions. R835 prevents cytokine release in response to TLR and IL-1R activation in vitro, and is active in multiple rodent models of inflammatory disease including psoriasis, arthritis, lupus, multiple sclerosis and gout. Preclinical studies show that R835 inhibits both the IRAK1 and IRAK4 signaling pathways, which play a key role in inflammation and immune responses to tissue damage. Dual inhibition of IRAK1 and IRAK4 allows for more complete suppression of pro-inflammatory cytokine release than inhibition of either one individually.

In October 2019, we announced results from a Phase 1 randomized, placebo-controlled, double-blind clinical study evaluating the safety, tolerability, pharmacokinetics (PK) and pharmacodynamics of R835 in 91 healthy adult subjects. The Phase 1 study showed that R835 had a favorable safety, tolerability and PK profile and established proof-of-mechanism by demonstrating the inhibition of inflammatory cytokine production in response to a lipopolysaccharide (LPS) challenge.

We advanced the development of our IRAK 1/4 inhibitor program, following evaluation of single and multiple ascending doses of R289, a new pro-drug formulation of R835 in healthy subjects. In January 2022, we initiated a Phase 1b open-label, multicenter study to evaluate the safety, tolerability and preliminary efficacy of R289 in patients with R/R lower-risk MDS. In December 2022, we announced the dosing of the first patient. This Phase 1b study is expected to enroll approximately 48 patients (up to 36 patients in the dose escalation phase, up to 40 patients in the dose expansion phase, and 10 less heavily pre-treated LR-MDS patients in an exploratory cohort). The primary objective of the study is safety, with secondary and exploratory objectives to assess preliminary efficacy and characterize the pharmacokinetic and pharmacodynamic profile of R289. The safety and efficacy data from this Phase 1b study is intended to inform the recommended dose of R289 for further clinical evaluation in lower-risk MDS. Enrollment in the fifth dose level (500 mg / 250 mg split dose) is complete and the new sixth dose level (500 mg twice daily) is now open for enrollment. In December 2024, initial data from the dose escalation part of the Phase 1b study was presented at the 66^{th} ASH Annual Meeting and Exposition. In summary, R289 was generally well tolerated with preliminary signs of efficacy in this heavily pretreated lower-risk MDS patient population, the majority of whom were HTB at baseline. RBC-TI \geq 8 weeks

was achieved by three patients (1 at 500 mg QD and 2 at 750 mg QD); two HTB patients achieved RBC-TI >24 weeks. The median duration of RBC-TI was 29 weeks (range 12.7-51.9 weeks). One HTB patient receiving 500 mg QD achieved a minor HI-E response, with a 64% reduction in RBC transfusions compared to baseline. The three patients that achieved RBC-TI had peak hemoglobin increases exceeding 2.0 g/dL compared to baseline.

R289 was granted Fast Track designation by the FDA for the treatment of patients with previously-treated transfusion dependent lower-risk MDS in November 2024. In January 2025, the FDA granted R289 orphan drug designation for the treatment of myelodysplastic syndromes.

Olutasidenib for mIDH1 AML, Other Heamtologic Cancers and HGG

We have a strategic collaboration agreement with MDACC to expand our evaluation of olutasidenib in AML and other hematologic cancers with IDH1 mutations. Under such collaboration agreement, we will jointly lead the clinical development efforts with MDACC to evaluate the potential of olutasidenib to treat newly diagnosed and R/R patients with AML, higher-risk MDS, and advanced myeloproliferative neoplasms, in combination with other agents. The collaboration will also support the evaluation of olutasidenib as monotherapy in patients with IDH1 mutated CCUS and lower-risk MDS, as well as maintenance therapy following hematopoietic stem cell transplant. MDACC has now opened for enrollment the four studies outlined in the multi-year strategic development alliance. In August 2024, MDACC opened enrollment for a Phase 1b/2 triplet therapy trial of decitabine and venetoclax in combination with olutasidenib in patients with mIDH1 AML. The Phase 1b part of the trial seeks to determine the safety and tolerability and recommended Phase 2 dose of decitabine and venetoclax in combination with olutasidenib. The primary objective of the Phase 2 part of the trial is to determine the complete remission rate in both newly diagnosed and R/R patients. The first patient was enrolled in the Phase 1b/2 triplet therapy trial in September 2024, and the trial is ongoing. In December 2024, MDACC opened enrollment for two trials, a Phase 2 study in patients with IDH1-mutated CCUS, lower-risk MDS and chronic myelomonocytic leukemia (CMML), and a Phase 1/2 study of olutasidenib maintenance therapy following an allogeneic stem cell transplant for patients with IDH1-mutated myeloid malignancies. In January 2025, MDACC opened for enrollment a Phase 2 study of olutasidenib in combination with hypomethylating agents (HMA) in patients with mIDH1 higher-risk myelodysplastic syndrome (HR-MDS)/ CMML or advanced myeloproliferative neoplasms.

We also have a collaboration with CONNECT to conduct a Phase 2 clinical trial to evaluate olutasidenib in combination with temozolomide in patients with HGG harboring an IDH1 mutation (TarGet-D). Under the collaboration, CONNECT will include the olutasidenib treatment arm (TarGet-D) within CONNECT's TarGet study, a molecularly guided Phase 2 umbrella clinical trial for HGG. In our sponsored arm, adolescents and young adult patients (<39 years old) with newly-diagnosed IDH1-mutation positive HGG will receive maintenance therapy with olutasidenib in combination with temozolomide for the first year after radiotherapy, followed by olutasidenib monotherapy for the second year. CONNECT recently opened for enrollment the TARGET-D study, a Phase 2 study evaluating olutasidenib in combination with temozolomide, followed by olutasidenib monotherapy, as maintenance therapy for newly diagnosed adolescent and young adult patients (ages 12 to 39 years) with HGG harboring an IDH1 mutation.

Partnered Clinical Programs

Ocadusertib - Lilly

Lilly is continuing to advance ocadusertib (previously R552) and has initiated the Phase 2a trial studying ocadusertib in adult patients with moderately to severely active rheumatoid arthritis. The Phase 2a enrollment of approximately 100 patients is ongoing, with preliminary analysis of the Phase 2a results anticipated in the first half of 2025. RIPK1 is implicated in a broad range of key inflammatory cellular processes and plays a key role in tumor necrosis factor signaling, especially in the induction of pro-inflammatory necroptosis. The program also includes RIPK1 compounds that cross the blood-brain barrier (CNS-penetrants) to address neurodegenerative diseases such as Alzheimer's disease and amyotrophic lateral sclerosis.

Bemcentinib - BerGenBio

We have an exclusive, worldwide research, development and commercialization agreement with BerGenBio for our investigational AXL receptor tyrosine kinase inhibitor, R428 (now referred to as bemcentinib (BGB324)). In February 2023, BerGenBio announced positive data from the Phase 2 trial of bemcentinib in combination with pembrolizumab in patients with second-line NSCLC. The treatment with bemcentinib in combination with pembrolizumab demonstrated long survival benefit and sustained disease control, particularly in patients with AXL TPS > 5, substantiating the relevance of AXL as a target and bemcentinib's selective inhibition capabilities in NSCLC. Also in March 2023, BerGenBio announced its first patient dosed in a Phase 1b/2a trial evaluating bemcentinib in first-line NSCLC patients harboring STK11 mutations. In March 2024, BerGenBio announced initiation of the Phase 2a portion of the study following a positive decision by the Data and Safety Monitoring Board (DSMB) following review of the Phase 1b safety data. In July 2024, BerGenBio announced that the DSMB confirmed acceptable safety at the highest dose tested in Phase 1b and recommended that under the study protocol, no additional patients will be required for Phase 1b. In October 2024, BerGenBio announced the preliminary safety data from dose escalation Phase 1b in first-line NSCLC patients.

Milademetan - Daiichi

DS-3032 is an investigational oral selective inhibitor of the MDM2 protein investigated by Daiichi in three Phase 1 clinical trials for solid and hematological malignancies including AML, acute lymphocytic leukemia, chronic myeloid leukemia in blast phase, lymphoma and MDS. Preliminary safety and efficacy data from a Phase 1 trial of DS-3032 suggests that DS-3032 may be a promising treatment for hematological malignancies including R/R AML and high-risk MDS. In September 2020, worldwide rights to DS-3032 (milademetan) were out-licensed from Daiichi to Rain Oncology Inc. (Rain). In January 2024, Pathos Al, Inc. (Pathos) completed the acquisition of Rain. Pathos indicated that it has continued interest in further developing milademetan for cancer patients using its propriety PathOS Platform.

Research, Preclinical and Clinical Development Programs

We maintain expertise in drug development to leverage our existing proprietary collection of inhibitors, small-molecule compound libraries and large database of associated phenotypic and biochemical assay results of therapeutic interest. We also maintain leading expertise on specific areas of operation such as inhibition of SYK, IRAK 1/4, RIPK1 and mIDH1 kinases to assist clinical development and commercial affairs, as well as to expand and explore additional opportunities for such inhibitors in the clinical space. Our preclinical operations involve collaborations with clinical research organizations, leading investigators from universities and research organizations around the world, and strategic collaborations with other pharmaceutical companies.

We have experts in clinical development to design and implement clinical trials and to analyze the data derived from these trials. The clinical development group possesses expertise in project management and regulatory affairs. We work with external clinical research organizations with expertise in managing clinical trials, drug formulation, and the manufacture of clinical trial supplies to support our clinical development efforts.

We also have strategic development collaborations with MDACC and CONNECT to conduct evaluation of olutasidenib in AML, other hematologic cancers and glioma. Incrementally, we plan on initiating a Phase 2 clinical study in recurrent glioma. This, in combination with our strategic collaborations with MD Anderson and CONNECT, are aimed to expand our olutasidenib pipeline development programs.

Commercialization and Sponsored Research and License Agreements

For a discussion of our Commercialization and Sponsored Research and License, see "Note 4 – Sponsored Research and License Agreements and Government Contracts" to our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

Intellectual Property

We actively seek patent protection for our marketed products and investigational candidates and associated technologies, in the US and in major market countries that we consider important to the development of our business worldwide. We strive to obtain and maintain proprietary protection for other discoveries, inventions, trade secrets and know-how that are critical to our business operations. We also strive to operate without infringing the proprietary rights of others, and aim to prevent others from infringing our proprietary rights. We hold global patent rights necessary for the continued development and commercialization of fostamatinib, olutasidenib and R289, and US patent rights necessary for the continued development and commercialization of pralsetinib in the US. We have developed and continue to develop an extensive patent portfolio in the US, Europe, Japan and other major market countries to protect our commercial and clinical programs.

TAVALISSE (fostamatinib). Fostamatinib is covered as a composition of matter in US Patent No. 7,449,458 having an earliest expiration date in 2026 and which was granted patent term extension extending the term to September 2031. In addition to the composition of matter patent, US patents covering our fostamatinib products directed to, among others, particular salts, crystalline forms, formulations and therapeutic uses, are listed in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations (referred to as the "Orange Book") and have patent expiration dates falling between 2026 and 2032. As of December 31, 2024, there are 43 issued US patents including the aforementioned Orange Book listed patents, and 4 pending applications which includes pending applications covering additional therapeutic uses, which, if issued, will have expiration dates to 2041.

In Europe and Japan, fostamatinib composition of matter patents are issued having an earliest patent expiration date in 2026 but which have been extended to 2031 through patent term extension in Japan and supplemental protection certificates in Europe. Additional patents covering fostamatinib salts, crystalline forms, formulations, as well as methods of use, are issued in Europe and Japan, with patent expiration to 2032, not including any patent term extensions.

REZLIDHIA (olutasidenib). Olutasidenib is covered as a composition of matter in US Patent No. 9,834,539 having an earliest expiration date in 2035 and for which a patent term extension application is pending which is expected to extend the expiration to December 2036. In addition to the composition of matter patent, additional US patents covering our olutasidenib products which are directed to, among others, particular salts, solid forms, formulations and therapeutic uses, are listed in the Orange Book and have patent expiration dates falling between 2035 and 2039. As of December 31, 2024, there are 18 issued US patents including the aforementioned Orange Book listed patents covering our olutasidenib marketed products, and 8 pending US patent applications including patent applications directed to therapeutic uses and combination therapies with olutasidenib, which, if issued, will have expiration dates to 2045.

In Japan and Europe, corresponding olutasidenib composition of matter patents have issued having an earliest expiration date in 2035, not including any patent term extensions. We intend to file additional foreign applications directed to new therapeutic uses and combination therapies for olutasidenib, which, if issued, will have expiration dates to 2045.

GAVRETO (pralsetinib). Pralsetinib is covered as a composition of matter in US Patent No. 10,030,005 having an expiration date in November 2036. As of December 31, 2024, we have 6 issued and 4 pending patent applications in the US covering our pralsetinib product including particular solid forms and formulations, as well as therapeutic uses. Collectively, these patents and patent applications, if issued, will have expiration dates between 2036 and 2041.

R289. We have developed and continue to develop our patent portfolio covering our investigational candidate R289. R289 is covered as a composition of matter in US Patent No. 11,370,787, having an earliest expiration date in 2040, not including any potential patent term extension. As of December 31, 2024, we have 4 issued and 5 pending patent applications in the US covering additional R289 composition of matter, including salts and solid forms, as well as R289 formulation and therapeutic uses. Collectively, these patents and patent applications, if issued, will have earliest expiration dates falling between 2036 and 2045. We are seeking global patent protection for R289 and currently have R289 composition of matter patents and patent applications covering R289 that are issued or pending in over 20 countries. We intend to file additional US and foreign applications based on our ongoing development programs directed

to new therapeutic uses and combination therapies as well as new formulations and methods of manufacture, to the extent they are discovered or invented.

Competition

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Many of the drugs that we are attempting to discover will be competing with existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting.

We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as from academic and research institutions and government agencies, both in the US and abroad. Some of these competitors are pursuing the development of pharmaceuticals that target the same diseases and conditions as our research programs. Our major competitors include fully integrated pharmaceutical companies that have extensive drug discovery efforts and are developing novel small molecule and biologics pharmaceuticals. We also face significant competition from organizations that are pursuing the same or similar technologies, including the discovery of targets that are useful in compound screening, as the technologies used by us in our drug discovery efforts.

Competition may also arise from:

- new or better methods of target identification or validation;
- generic version of our products or of products with which we compete;
- other drug development technologies and methods of preventing or reducing the incidence of disease;
- · new small molecules; or
- other classes of therapeutic agents.

Our competitors or their collaborative partners may utilize discovery technologies and techniques or partner with collaborators in order to develop products more rapidly or successfully than we or our collaborators are able to do. Many of our competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources and larger research and development staffs than we do. In addition, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies and may establish exclusive collaborative or licensing relationships with our competitors.

We believe that our ability to compete is dependent, in part, upon our ability to create, maintain and license scientifically advanced technology and upon our and our collaborators' ability to develop and commercialize pharmaceutical products based on this technology, as well as our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary technology or processes and secure sufficient capital resources for the expected substantial time period between technological conception and commercial sales of products based upon our technology. The failure by any of our collaborators or us, including our commercial team, in any of those areas may prevent the successful commercialization of our potential drug targets.

Many of our competitors, either alone or together with their collaborative partners, have significantly greater experience than we do in:

- identifying and validating targets;
- · screening compounds against targets; and
- · undertaking preclinical testing and clinical trials.

Accordingly, our competitors may succeed in obtaining patent protection, identifying or validating new targets or discovering new drug compounds before we do.

Our competitors might develop technologies and drugs that are more effective or less costly than any that are being developed by us or that would render our technology and product candidates obsolete and noncompetitive. In addition, our competitors may succeed in obtaining the approval of the FDA or other regulatory agencies for product candidates more rapidly. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before us may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights that would delay or prevent our ability to market certain products. Any drugs resulting from our research and development efforts, or from our joint efforts with our existing or future collaborative partners, might not be able to compete successfully with competitors' existing or future products or obtain regulatory approval in the US or elsewhere

We face and will continue to face intense competition from other companies for commercial and collaborative arrangements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions and for licenses to additional technologies. These competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective than ours.

Our ability to compete successfully will depend, in part, on our ability to:

- identify and validate targets;
- discover candidate drug compounds that interact with the targets we identify;
- attract and retain scientific and product development personnel;
- obtain patent or other proprietary protection for our new drug compounds and technologies;
- enter commercialization agreements for our new drug compounds; and
- obtain and maintain an appropriate reimbursement price and positive recommendations by HTA bodies.

ITP

There are existing therapies and drug candidates in development for the treatment of ITP that may be alternative therapies to TAVALISSE. Currently, corticosteroids remain the most common first line therapy for ITP, occasionally in conjunction with intravenous immuglobulin (IVIg) or anti-Rh(D) as added agents to help further augment platelet count recovery, particularly in emergency situations. However, it has been estimated that frontline agents lead to durable remissions in only a small percentage of newly-diagnosed adults with ITP. Moreover, concerns with steroid-related side effects often restrict therapy to approximately four weeks. As such, many patients progress to persistent or chronic ITP, requiring other forms of therapeutic intervention.

The FDA can approve an ANDA for a generic version of a branded drug without the ANDA applicant undertaking the clinical testing necessary to obtain approval to market a new drug. In September 2019, the FDA published product-specific bioequivalence guidance on fostamatinib disodium to let potential ANDA applicants understand the data the FDA would expect to see for approval of a generic version of TAVALISSE. The earliest an ANDA may be filed by a generic company was April 17, 2022. The ANDA process can result in generic competition if the patents at issue are not upheld or if the generic competitor is found not to infringe our patents.

Other approaches to treat ITP are varied in their mechanism of action, and there is no consensus about the sequence of their use. Options include splenectomy, TPO-Ras, and various immunosuppressants (such as rituximab). The response rate criteria of the above-mentioned options vary, precluding a comparison of response rates for individual therapies. According to the most recent ITP guideline from the ASH, there was a lack of evidence to support strong recommendations for various management approaches. In general, strategies that avoided medication side effects were favored. A large focus was placed on shared decision-making especially with regard to second-line therapy.

Even with the above treatment options, a significant number of patients remain severely thrombocytopenic for long durations and are subject to risk of spontaneous or trauma-induced hemorrhage. The addition of fostamatinib to the treatment options could be beneficial since it has a different mechanism of action than the TPO agonists. Fostamatinib is a potent and relatively selective SYK inhibitor, and its inhibition of Fc receptors and B-cell receptors signaling pathways make it a potentially broad immunomodulatory agent.

Other products in the US that are approved by the FDA to increase platelet production through binding and TPO receptors on megakaryocyte precursors include PROMACTA (Novartis International AG), Nplate (Amgen, Inc.), DOPTELET (Dova Pharmaceuticals) and ALVAIZ (Teva Pharmaceutical Industries Ltd.).

AML with IDH1 Mutation

There is currently one other product approved in the US for patients with IDH1 mutation. TIBSOVO (ivosidenib), an oral targeted IDH1 mutation inhibitor, is an FDA-approved drug for (i) adult patients with R/R AML with a susceptible IDH1 mutation, (ii) newly diagnosed AML with a susceptible IDH1 mutation who are at least 75 years old or who have comorbidities that preclude use of intensive induction chemotherapy, (iii) for adult patients with previously treated, locally advanced or metastatic cholangiocarcinoma with an IDH1 mutation as detected by an FDA-approved test, and (iv) in combination with azacitidine (azacitidine for injection), for newly diagnosed AML with a susceptible IDH1 mutation, as detected by an FDA-approved test in adults 75 years or older, or who have comorbidities that preclude use of intensive induction chemotherapy. TIBSOVO is a registered trademark of Servier Pharmaceuticals LLC, a wholly owned, indirect subsidiary of Les Laboratoires Servier. In addition, some clinicians may utilize non-targeted treatments for patients with mIDH1 R/R AML, including use of venetoclax combinations, hypomethylating agents, other chemotherapy regimens, or investigational agents that may be available to them.

Metastatic RET fusion-positive NSCLC and advanced thyroid cancers

GAVRETO faces competition for RET fusion-positive NSCLC and advanced thyroid cancers from Lilly's selpercatinib (Retevmo). In addition, other commercially available therapies used to treat RET fusion-positive NSCLC include cabozantanib and platinum-based chemotherapy regimens with or without pembrolizumab, atezolizumab, nivolumab/ipilumumab, cemiplimab or tremelimumab-durvalumab. GAVRETO may also face competition from other drug candidates in development for RET-altered cancers, as well as multi-kinase inhibitors with RET activity being evaluated in clinical trials.

Government Regulation

Government authorities in the US, at the federal, state and local level, and in other countries and jurisdictions, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, sampling, tracking and tracing, sales, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining regulatory approvals in the US and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations, such as those governing personal information and information security, require the expenditure of substantial time and financial resources.

Review and Approval of Drugs in the US

In the US, the FDA approves and regulates drugs under the Federal Food, Drug, and Cosmetic Act (FDCA) and implementing regulations. The failure to comply with requirements under the FDCA and other applicable laws at any time during the product development process, approval process or after approval may subject an applicant and/or sponsor to a variety of administrative or judicial sanctions, including refusal by the FDA to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters and other types of letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations and penalties.

A drug product candidate must be approved by the FDA through the new drug application (NDA). An applicant seeking approval to market and distribute a new drug product in the US must typically undertake the following:

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice regulations;
- submission to the FDA of an IND, which must take effect before human clinical trials may begin;
- approval by an independent institutional review board (IRB) for each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices (GCP) to
 establish the safety and efficacy of the proposed drug product for each indication;
- preparation and submission to the FDA of an NDA requesting marketing for one or more proposed indications;
- review by an FDA advisory committee, if requested by the FDA;
- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the product, or
 components thereof, are produced to assess compliance with current Good Manufacturing Practices (cGMP), requirements
 and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and
 purity;
- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data:
- payment of user fees and securing FDA approval of the NDA; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and potentially post-market requirement, or PMR, and commitment, or PMC, studies.

Before an applicant begins testing a compound with potential therapeutic value in humans, the drug candidate enters the preclinical testing stage. Preclinical studies include laboratory evaluation as well as in vitro and animal studies to assess product chemistry, formulation, and toxicity, as well as the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. The results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical studies, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, and long-term toxicity studies, may continue after the IND is submitted.

An IND is an exemption from the FDCA that allows an unapproved new drug to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer an investigational drug to humans. In support of the IND, applicants must submit a protocol for each clinical trial and any subsequent protocol amendments. In addition, the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature, among other things, are submitted to the FDA as part of an IND. The FDA requires a 30-day waiting period after the submission of each IND before clinical trials may begin. At any time during this 30-day period, or thereafter, the FDA may raise concerns or questions about the conduct of the trials as outlined in the IND and impose a clinical hold or partial clinical hold. In this case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can begin or resume. An IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review and reapprove the study at least annually. An IRB can suspend or terminate approval of a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Human clinical trials are typically conducted in sequential phases, which may overlap or be combined:

- **Phase 1**. The drug is initially introduced into a small number of healthy human subjects or, in certain indications such as cancer, patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine optimal dosage.
- Phase 2. The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to
 preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal
 dosage.
- Phase 3. These clinical trials are commonly referred to as "pivotal" studies, which denote a study that presents the data that the FDA or other relevant regulatory agency will use to determine whether or not to approve a drug. The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, identify adverse effects, establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product.
- Phase 4. Post-approval studies may be conducted after initial marketing approval. These studies are used to gain additional
 experience from the treatment of patients in the intended therapeutic indication.

In most cases the FDA requires at least two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the drug. A single Phase 3 trial with other confirmatory evidence may be sufficient in rare instances, such as where the study is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of a clinically meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potentially serious outcome and confirmation of the result in a second trial would be practically or ethically impossible.

Concurrent with clinical trials, companies often complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with current good manufacturing practices (cGMP) requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final drug. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

The FDA or the sponsor or the data monitoring committee may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk.

Review and Approval of Drugs in the EU and the UK

Similar rules governing clinical trials to those in place in the US apply in the EU and the UK, with a clinical trial application required to be submitted for each clinical trial to each EU Member State's national competent authority and an independent Ethics Committee. Following the UK's exit from the EU, commonly referred to as Brexit, and the end of the transition period that was in place until the end of 2020, clinical trials that take place in the UK will be seen by the EMA as trials that have taken place in a "third country" and will only be considered during the course of a marketing authorization application if they are carried out on a basis that is in line with the regulations governing clinical trials in the EU. As of January 31, 2022, clinical trials in the EU must be conducted in accordance with the requirements of the EU Clinical Trials Regulation (EU) No 536/2014 (CTR) that has amended the system of approval for clinical trials in the EU. Under the CTR as of January 31, 2023, sponsors must apply for authorizations through the Clinical Trials Information System (CTIS), the new clinical trials portal and database that allows a coordinated and streamlined application and authorization process for clinical trials and ethical approvals throughout the EU. The UK has not applied the CTR, and is currently revising its own clinical trials framework, and therefore its regulatory framework on clinical trials is not aligned with the EU CTR. This may result in trials that take place in the UK potentially carrying less weight when applying for a marketing authorization in the EU.

Review of an NDA by the FDA

If clinical trials are successful, the next step in the drug development process is the preparation and submission to the FDA of an NDA. The NDA is the vehicle through which drug applicants formally propose that the FDA approve a new drug for marketing and sale in the US for one or more indications. The NDA must contain a description of the manufacturing process and quality control methods, as well as results of preclinical tests, toxicology studies, clinical trials and proposed labeling, among other things. The submission of most NDAs is subject to an application user fee and the sponsor of an approved NDA is also subject to annual program user fees. These fees are typically increased annually.

Following submission of an NDA, the FDA conducts a preliminary review of an NDA to determine whether the application is sufficiently complete to permit substantive review. The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA has agreed to goals to review and act within ten months from filing for standard review NDAs and within six months for NDAs that have been designated for "priority review."

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is or will be manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. In addition, as a condition of approval, the FDA may require an applicant to develop a REMS. REMS use risk minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, seriousness of the disease or condition to be treated by the drug, expected benefit of the product, expected duration of treatment, seriousness of known or potential adverse events, and whether the product is a new molecular entity.

The FDA is required to refer an application for a novel drug to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

On the basis of the FDA's evaluation of the NDA and accompanying information, including the results of the inspection of the manufacturing facilities, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA intends to review such resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If the FDA approves a product, it may limit the approved indications for use for the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. After approval, many types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and submission to FDA of an sNDA, which may require FDA review and approval prior to implementation. An NDA

supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

Expedited review designations

The FDA is authorized to designate certain products for expedited review if they are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. These programs are referred to as Fast Track designation, Breakthrough Therapy designation and Priority Review designation. In addition, accelerated approval offers the potential for approval based on a surrogate or intermediate clinical endpoint. In May 2014, the FDA published a final Guidance for Industry titled "Expedited Programs for Serious Conditions Drugs and Biologics," which provides guidance on the FDA programs that are intended to facilitate and expedite development and review of new drug candidates as well as threshold criteria generally applicable to concluding that a drug candidate is a candidate for these expedited development and review programs.

The FDA may designate a product for Fast Track review if it is intended, whether alone or in combination with one or more other products, for the treatment of a serious or life-threatening disease or condition, and nonclinical or clinical data demonstrate the potential to address unmet medical needs for such a disease or condition. For Fast Track products, sponsors may have greater interactions with the FDA and the FDA may initiate review of sections of a Fast Track product's application before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by the sponsor, that a Fast Track product may be effective. The sponsor must also provide, and the FDA must approve, a schedule for the submission of the remaining information and the sponsor must pay applicable user fees. However, the FDA's review clock for a Fast Track application does not begin until the last section of the application is submitted. In addition, the Fast Track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

A product may be designated as a Breakthrough Therapy if it is intended, either alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing available therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to Breakthrough Therapies, including holding meetings with the sponsor throughout the development process; providing timely advice to the product sponsor regarding development and approval; involving more senior staff in the review process; assigning a cross disciplinary project lead for the review team; rolling review; and, taking other steps to design the clinical trials in an efficient manner.

FDA intends to review applications for standard review drug products within ten months of the 60-day filing date; and, applications for priority review drugs within six months. Priority review can be applied to drugs that the FDA determines treat a serious condition, and if approved, would offer a significant improvement in safety or effectiveness. The FDA determines, on a case-by-case basis, whether the proposed product represents a significant improvement when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation.

Accelerated approval pathway

The FDA may grant accelerated approval to a drug for a serious or life-threatening condition that provides a meaningful therapeutic advantage to patients over available treatments based upon a determination that the drug has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such drug for such a condition when the product has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality (IMM) and that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity or prevalence of the condition and the availability or lack of alternative treatments. Drugs granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign or other measure that is thought to predict clinical benefit but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a drug, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints but has indicated that such endpoints generally may support accelerated approval where the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate clinical benefit of a drug. The accelerated approval pathway is most often used in settings in which the course of a disease is long, and an extended period of time is required to measure the intended clinical benefit of a drug, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly. Thus, accelerated approval has been used extensively in the development and approval of drugs for treatment of a variety of cancers in which the goal of therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. As a result, a drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, would allow the FDA to withdraw the drug from the market on an expedited basis. In addition, all promotional materials for drugs approved under accelerated regulations are subject to prior review by the FDA.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA, EMA and MHRA approvals are subject to pervasive and continuing regulation by the FDA, EMA and MHRA and other national competent authorities in the EU including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, tracking and tracing, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and consistent with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. However, physicians may, in their independent medical judgment, prescribe legally available products for off-label uses. The FDA does not regulate the behavior of physicians in their choice of treatments but the FDA does restrict manufacturer's communications on the subject of off-label use of their products.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, and its implementing regulations, as well as the Drug Supply Chain Security Act, or DSCSA, which regulate the distribution and tracing of prescription drugs and prescription drug samples at the federal level, and set minimum standards for the regulation of drug distributors by the states. The PDMA, its implementing regulations and state laws limit the distribution of prescription pharmaceutical product samples, and the DSCA imposes requirements to track and trace drug products, ensure accountability in distribution and to identify and remove counterfeit and other illegitimate products from the market.

Many jurisdictions, including the EU and the UK, require each marketing authorization holder, national competent authority and the EMA to operate a pharmacovigilance system to ensure that the safety of all medicines is monitored throughout their use. The overall EU pharmacovigilance system operates through cooperation between the EU Member States, EMA and the EC.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may designate a drug product as an "orphan drug" if it is intended to treat a rare disease or condition, generally meaning that it affects fewer than 200,000 individuals in the US, or more in cases in which there is no reasonable expectation that the cost of developing and making a drug product available in the US for treatment of the disease or condition will be recovered from sales of the product. A company must request orphan drug designation before submitting an NDA for the drug and rare disease or condition. Orphan drug designation does not shorten the goal dates for the regulatory review and approval process, although it does convey certain advantages such as tax benefits and exemption from the application fee. After the FDA grants Orphan drug designation, the name of the drug and its potential orphan-designated use are disclosed publicly by the FDA.

If a product with orphan designation receives the first FDA approval for the disease or condition for which it has such designation, the product generally will receive orphan drug exclusivity. Orphan drug exclusivity means that the FDA may not approve another sponsor's marketing application for the same drug for the same indication for seven years, except in certain limited circumstances. Orphan exclusivity does not block the approval of a different drug for the same rare disease or condition, nor does it block the approval of the same drug for different indications. If a drug designated as an orphan drug ultimately receives marketing approval for an indication broader than what was designated in its orphan drug application, it may not be entitled to exclusivity. Orphan exclusivity will not bar approval of another product under certain circumstances, including if a subsequent product with the same drug for the same indication is shown to be clinically superior to the approved product on the basis of greater efficacy or safety, or providing a major contribution to patient care, or if the company with orphan drug exclusivity is not able to meet market demand.

In the EU and UK, under Regulation (EC)141/2000 and the UK Human Medicines Regulation 2012 (as amended), respectively, medicinal products may be granted an orphan drug designation if they are used to treat or prevent life-threatening or chronically debilitating conditions that affect no more than five in 10,000 people in the EU/ UK and for which there is no satisfactory method of diagnosis, prevention or treatment when the application is made, or when the medicinal product is of significant benefit to those affected by the condition. In addition, orphan drug designation can be granted to drugs used to treat or prevent life-threatening or chronically debilitating conditions which, for economic reasons, would be unlikely to be developed without incentives.

The application for orphan designation must be submitted to and approved by the EMA in respect of the EU or to the MHRA for the UK before an application is made for marketing authorization for the product. Medicinal products which benefit from orphan status, which they successfully maintain post-grant of the marketing authorization, can benefit from up to ten years of market exclusivity in respect of the approved indication. This prevents regulatory authorities in the EU or the UK, as the case may be, from granting marketing authorizations for similar medicinal products for the same therapeutic indication, unless another applicant can show that the similar medicinal product in question is safer, more effective or clinically superior to the orphan-designated product or if the marketing authorization holder consents to the second orphan medicinal product application, or where the marketing authorization holder cannot supply the needs of the market.

The ten-year market exclusivity may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation, for example, if the product is sufficiently profitable not to justify the maintenance of market exclusivity. Conversely, the 10-year exclusivity period can be further extended by 2 years, when pediatric studies are conducted in accordance with an agreed pediatric investigation plan (PIP) and in completion of all the legal requirements.

However, the general pharmaceutical legislative framework, as well as the framework applicable to orphan and pediatric medicinal products in the EU, is under review. The EC expects to publish its position on this in March 2023. Although the final proposals are not yet formally known, it is expected that there will be a reduction in applicable regulatory exclusivities which will significantly affect all medicinal products that will be authorized after the legislative changes have taken effect, including a reduction in the 10-year orphan market exclusivity, which will be modulated according to certain parameters.

Pediatric studies and exclusivity

Under the Pediatric Research Equity Act of 2003, an NDA or supplement thereto must contain data that are adequate to assess the safety and effectiveness of the drug product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. With enactment of the Food and Drug Administration Safety and Innovation Act of 2012 (the FDASIA), sponsors must also submit pediatric study plans prior to the assessment data.

Those plans must contain an outline of the proposed pediatric study or studies the applicant plans to conduct, including study objectives and design, any deferral or waiver requests, and other information required by regulation. The applicant, the FDA and the FDA's internal review committee must then review the information submitted, consult with each other and agree upon a final plan. The FDA or the applicant may request an amendment to the plan at any time.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Additional requirements and procedures relating to deferral requests and requests for extension of deferrals are contained in FDASIA. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation.

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan exclusivity. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application.

In the EU and the UK, a six-month extension to a supplementary protection certificate may be granted, subject to certain circumstances, upon the completion of an agreed pediatric investigation plan (PIP). However, within the EU, regulatory protections afforded to medicinal products such as data exclusivity, marketing protection, market exclusivity for orphan indications and pediatric extensions are currently under review and could be curtailed in future years.

ANDA for generic drugs

In 1984, with passage of the Hatch-Waxman Amendments to the FDCA, Congress established an abbreviated regulatory scheme allowing the FDA to approve generic drugs that are shown to contain the same active ingredients as, and to be bioequivalent to, drugs previously approved by the FDA pursuant to NDAs. To obtain approval of a generic drug, an applicant must submit an ANDA to the agency. An ANDA is a comprehensive submission that contains, among other things, data and information pertaining to the active pharmaceutical ingredient, bioequivalence, drug product

formulation, specifications and stability of the generic drug, as well as analytical methods, manufacturing process validation data and quality control procedures. ANDAs are "abbreviated" because they generally do not include preclinical and clinical data to demonstrate safety and effectiveness. Instead, in support of such applications, a generic manufacturer may rely on the preclinical and clinical testing previously conducted for a drug product previously approved under an NDA, known as the reference listed drug (RLD).

Specifically, in order for an ANDA to be approved, the FDA must find that the generic version is identical to the RLD with respect to the active ingredients, the route of administration, the dosage form and the strength of the drug. An applicant may submit an ANDA suitability petition to request the FDA's prior permission to submit an abbreviated application for a drug that differs from the RLD in route of administration, dosage form, or strength, or for a drug that has one different active ingredient in a fixed combination drug product (i.e., a drug product with multiple active ingredients). At the same time, the FDA must also determine that the generic drug is "bioequivalent" to the innovator drug. Under the statute, a generic drug is bioequivalent to a RLD if "the rate and extent of absorption of the drug do not show a significant difference from the rate and extent of absorption of the listed drug." Upon approval of an ANDA, the FDA indicates whether the generic product is "therapeutically equivalent" to the RLD in its publication "Approved Drug Products with Therapeutic Equivalence Evaluations," also referred to as the "Orange Book." Physicians and pharmacists may consider a therapeutic equivalent generic drug to be fully substitutable for the RLD. In addition, by operation of certain state laws and numerous health insurance programs, the FDA's designation of therapeutic equivalence often results in substitution of the generic drug without the knowledge or consent of either the prescribing physician or patient.

505(b)(2) NDA

As an alternative path to FDA approval for modifications to formulations or uses of products previously approved by the FDA pursuant to an NDA, an applicant may submit an NDA under Section 505(b)(2) of the FDCA. Section 505(b)(2) was enacted as part of the Hatch-Waxman Amendments and permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by, or for, the applicant, and for which the applicant has not obtained a right of reference. If the 505(b)(2) applicant can establish that reliance on the FDA's previous findings of safety and effectiveness is scientifically and legally appropriate, it may eliminate the need to conduct certain preclinical studies or clinical trials of the new product. The FDA may also require companies to perform additional bridging studies or measurements, including clinical trials, to support the change from the previously approved reference drug. The FDA may then approve the new drug candidate for all, or some, of the label indications for which the reference drug has been approved, as well as for any new indication sought by the 505(b)(2) applicant.

Hatch-Waxman patent certification and the 30-month stay

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent whose claims cover the applicant's product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Orange Book

When an ANDA applicant files its application with the FDA, the applicant is required to certify to the FDA concerning any patents listed for the reference product in the Orange Book, except for patents covering methods of use for which the ANDA applicant is not seeking approval. To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would. Specifically, the applicant must certify that (i) the required patent information has not been filed; (ii) the listed patent has expired; (iii) the listed patent has not expired but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the new product. The ANDA applicant may also elect to submit a statement certifying that its proposed ANDA label does not contain (or carve out) any language regarding the patented method-of-use rather than certify to a listed method-of-use patent, known as a Section VIII statement. If the applicant does not challenge the listed patents, the ANDA application will not be approved until all the listed patents or that such patents are invalid, is called a Paragraph IV certification. If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may

then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the ANDA applicant.

Patent term extension

After NDA approval, owners of relevant drug patents may apply for up to a five-year patent extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory process. The allowable patent term extension is typically calculated as one-half the time between the effective date of an IND application and the submission date of a NDA, plus the time between NDA submission date and the NDA approval date up to a maximum of five years. The time can be shortened if the FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years from the date of product approval. Only one patent applicable to an approved drug is eligible for extension and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended and the application for the extension must be submitted prior to the expiration of the patent in question. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements.

Exclusivity under the Hatch-Waxman Amendments

In addition, under the Hatch-Waxman Amendments, the FDA may not approve an ANDA or 505(b)(2) NDA referencing a particular drug until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing a new chemical entity (NCE). For the purposes of this provision, an NCE is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such NCE exclusivity has been granted, an ANDA or 505(b)(2) NDA may not be submitted to the FDA until the expiration of five years from the date the NDA is approved, unless the submission is accompanied by a Paragraph IV certification, in which case the applicant may submit its application four years following the original product approval.

The FDCA also provides for a period of three years of exclusivity if the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are essential to the approval of the application. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication. Three-year exclusivity would be available for a drug product that contains a previously approved active moiety, provided the statutory requirement for a new clinical investigation is satisfied. Unlike five-year NCE exclusivity, an award of three-year exclusivity does not block the FDA from accepting ANDAs or 505(b)(2) NDAs seeking approval for generic versions of the drug as of the date of approval of the original drug product; it does, however, block the FDA from approving ANDAs or 505(b)(2) NDAs during the period of exclusivity. The FDA typically makes decisions about awards of data exclusivity shortly before a product is approved.

FDA EUA

Section 564 of the FDCA (21 U.S.C. § 360bbb-3) allows the FDA to authorize the shipment of drugs, biological products (including vaccines), or medical devices that either lack required approval, licensure, or clearance (unapproved products), or are approved but are to be used for unapproved ways to diagnose, treat, or prevent serious diseases or conditions in the event of an emergency declaration by the US Department of Health and Human Services (DHHS) Secretary.

On February 4, 2020, then-DHHS Secretary Alex M. Azar II determined that a public health emergency exists for COVID-19 and declared that it justifies the authorization of emergency use of in vitro diagnostics for COVID-19, pursuant to Section 564 of the FDCA. On March 2, 2020, March 24, 2020, and March 27, 2020, Secretary Azar issued

corresponding declarations for personal respiratory protective devices; for medical devices, including alternative products used as medical devices; and, for drugs and biological products. The determination and these declarations were published in the Federal Register on February 7, 2020, March 10, 2020, March 27, 2020, and April 1, 2020, respectively.

While the emergency determination and declaration are effective, the FDA may authorize the use of an unapproved product or an unapproved use of an approved product if it concludes that:

- an agent referred to in the emergency declaration could cause a serious or life-threatening disease or condition;
- it is reasonable to believe that the authorized product may be effective in diagnosing, treating, or preventing that disease or condition or a serious or life-threatening disease or condition caused by an approved product or a product marketed under an EUA:
- the known and potential benefits of the authorized product, when used for that disease or condition, outweigh known and
 potential risks, taking into consideration the material threat of agents identified in the emergency declaration;
- there is no adequate, approved, and available alternative to the authorized product for diagnosing, preventing, or treating the relevant disease or condition; and
- any other criteria prescribed by the FDA is satisfied.

Medical products that are granted an EUA are only permitted to commercialize their products under the terms and conditions provided in the authorization. The FDCA authorizes FDA to impose such conditions on an EUA as may be necessary to protect the public health. Consequently, postmarketing requirements will vary across EUAs. In addition, FDA has, on occasion, waived requirements for drugs marketed under an EUA.

Generally, EUAs for unapproved products or unapproved uses of approved products require that manufacturers distribute factsheets for healthcare providers, addressing significant known and potential benefits and risk, and the extent to which benefits and risks are unknown, and the fact that FDA has authorized emergency use; and, distribution of factsheets for recipients of the product, addressing significant known and potential benefits and risk, and the extent to which benefits and risks are unknown, the option to accept or refuse the product, the consequences of refusing, available alternatives, and the fact that FDA has authorized emergency use.

Generally, EUAs for unapproved products and, per FDA's discretion, EUAs for unapproved uses of approved products, include requirements for adverse event monitoring and reporting, and other recordkeeping and reporting requirements. Note, however, that approved products are already subject to equivalent requirements.

In addition, FDA may include various requirements in an EUA as a matter of discretion as deemed necessary to protect the public health, including restrictions on which entities may distribute the product, and how to perform distribution (including requiring that distribution be limited to government entities), restrictions on who may administer the product, requirements for collection and analysis of safety and effectiveness data, waivers of cGMP, and restrictions applicable to prescription drugs or restricted devices (including advertising and promotion restrictions).

The FDA may revoke an EUA where it is determined that the underlying health emergency no longer exists or warrants such authorization, if the conditions for the issuance of the EUA are no longer met, or if other circumstances make revocation appropriate to protect the public health or safety.

On May 11, 2023, the COVID-19 PHE declared under the Public Health Services Act expired. FDA officials have stated that this will not impact FDA's ability to authorize medical countermeasures for emergency use, such that existing EUAs will remain in effect and the agency may continue to issue new EUAs going forward when criteria for issuance are met. This is nonetheless subject to change.

Pharmaceutical Coverage, Pricing and Reimbursement

In the US and other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Third-party payors include federal and state government health programs such as Medicare and Medicaid, commercial health insurers, managed care organizations, and other organizations. Significant uncertainty exists as to the coverage and reimbursement status of products approved by the FDA and other government authorities. For example, in the US, there have been several recent US Congressional inquiries and proposed federal legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the cost of drugs under Medicare, and reform government program reimbursement methodologies for drugs. This includes the Consolidated Appropriations Act of 2021, which addressed several drug price reporting and transparency measures, such as a new requirement for prescription drug plan sponsors and Medicare Advantage organizations to develop tools to display Medicare Part D prescription drug benefit information in real time and for insurance companies and employer-based health plans to report information on pharmacy benefit and drug costs to the Secretaries of the Departments of Health and Human Services, Labor and the Treasury. Additionally, on March 11, 2021, Congress enacted the American Rescue Plan Act of 2021, which included among its provisions a sunset of the provision in the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act (collectively, the Affordable Care Act) that capped pharmaceutical manufacturers' rebate liability under the Medicaid Drug Rebate Program (MDRP). Under the Affordable Care Act, manufacturers' rebate liability was capped at 100% of the average manufacturer price for a covered outpatient drug. As of January 1, 2024, manufacturers' MDRP rebate liability is no longer capped, potentially resulting in a manufacturer paying more in MDRP rebates than it receives on the sale of certain covered outpatient drugs. In August 2022, the Inflation Reduction Act of 2022 (IRA) was signed into law, which implements substantial changes to the Medicare program, including drug pricing reforms and changes to the Medicare Part D benefit design. Among other reforms, the IRA imposes inflation rebates on drug manufacturers for products reimbursed under Medicare Parts B and D if the prices of those products increase faster than inflation; implements changes to the Medicare Part D benefit that, beginning in 2025, cap beneficiary annual out-of-pocket spending at \$2,000, while imposing new discount obligations for pharmaceutical manufacturers; and, beginning in 2026, establishes a "maximum fair price" for a fixed number of pharmaceutical and biological products covered under Medicare Parts B and D following a price negotiation process with the Centers for Medicare and Medicaid Services (CMS). CMS has also taken steps to implement the IRA, including: releasing the negotiated maximum prices, which will be effective in 2026, for the first ten drugs that were subject to the IRA's negotiation process; releasing quarterly lists of Medicare Part B products that are subject to adjusted coinsurance rates based on the inflationary rebate provisions of the IRA; and announcing a list of fifteen additional drugs that will be subject to price negotiations during 2025. While it remains to be seen how the drug pricing provisions imposed by the IRA will affect the broader pharmaceutical industry, several pharmaceutical manufacturers and other industry stakeholders have challenged the law, including through lawsuits brought against the DHHS, the Secretary of DHHS, CMS, and the CMS Administrator challenging the constitutionality and administrative implementation of the IRA's drug price negotiation provisions.

At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including limitations on reimbursement, discounts, restrictions on certain product access and marketing, cost disclosure (including disclosures for certain price increases or launches of costly drugs), and transparency measures, and, in some cases, to encourage importation from other countries and bulk purchasing. Thus, even if a product candidate is approved, sales of the product will depend, in part, on the extent to which third-party payors provide coverage and establish adequate reimbursement levels for the product. It is likely that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for a pharmaceutical manufacturer's products or additional pricing pressure.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable marketing approvals. Nonetheless, product candidates may not be considered medically necessary or cost effective. A decision by a third-party payor not to cover a product candidate could reduce physician utilization once the product is approved and have an adverse effect on sales, results of operations and financial condition. Additionally, a payor's decision to provide

coverage for a product does not imply that adequate reimbursement will be approved at a rate that covers our costs, including research, development, manufacture, sale and distribution. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payor to payor.

The containment of healthcare costs also has become a priority of federal, state and foreign governments and the prices of drugs have been a focus in this effort. Governments and third-party payors have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Increasingly, the third-party payors who reimburse patients or healthcare providers, such as government and private insurance plans, are requiring that drug companies provide them with predetermined discounts from list prices, and are seeking to reduce the prices charged or the amounts reimbursed for medical products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive marketing approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

In the EU, pricing and reimbursement methods can differ in each Member State. Some Member States and the UK may require that health technology assessments (HTA) be completed to obtain reimbursement or pricing approval. The outcome of HTA assessments is decided on a national basis and some Member States may decide not to reimburse the use of medicines or may reduce the rate of reimbursement. In December 2021, the EU adopted a new Regulation on Health Technology Assessment which allows Member States to carry out joint clinical assessments and operate joint clinical consultations. The new Regulation came into effect in January 2025.

Healthcare and Privacy Law and Regulation

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of drug products that are granted marketing approval. Arrangements with providers, consultants, third-party payors and customers are subject to broadly applicable federal and state fraud and abuse laws, anti-kickback laws, false claims laws, laws requiring reporting of payments to physicians and teaching physicians and other healthcare providers, patient privacy laws and regulations and other healthcare laws and regulations that may constrain business and/or financial arrangements. Restrictions under applicable healthcare laws and regulations, include the following:

the federal Anti-Kickback Statute, which is a criminal law that prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, paying, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid. The term "remuneration" has been broadly interpreted to include anything of value. The intent standard under the federal Anti-Kickback Statute was amended by the Affordable Care Act to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. The federal Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, pharmacies, purchasers, and formulary managers on the other, including, for example, consulting/speaking arrangements, discount and rebate offers, grants, charitable contributions, and patient support offerings, among others. A conviction for violation of the federal Anti-Kickback Statute can result in criminal fines and/or imprisonment and requires mandatory exclusion from participation in federal health care programs. Exclusion may also be imposed if the government determines that an entity has committed acts that are prohibited by the federal Anti-Kickback Statute. Although there are a number of statutory exceptions and regulatory safe harbors to the federal Anti-Kickback Statute protecting certain common business arrangements and activities from prosecution or regulatory sanctions, the exceptions and safe harbors are drawn narrowly, and practices that involve remuneration to those who prescribe, purchase, or recommend pharmaceutical and biological products, including certain discounts, or engaging such individuals as speakers or consultants, may be subject to scrutiny if they do not fit squarely within an exception or safe harbor. Moreover, a claim

including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act;

- the federal civil and criminal false claims laws and civil monetary penalty laws, including the civil False Claims Act (FCA), which prohibits, among other things, (i) knowingly presenting, or causing to be presented, claims for payment of government funds that are false or fraudulent; (ii) knowingly making, or using or causing to be made or used, a false record or statement material to a false or fraudulent claim; (iii) knowingly making, using or causing to made or used a false record or statement material to an obligation to pay money to the government; or (iv) knowingly concealing or knowingly and improperly avoiding, decreasing, or concealing an obligation to pay money to the federal government. Private individuals, commonly known as "whistleblowers," can bring FCA qui tam actions, on behalf of the government and may share in amounts paid by the entity to the government in recovery or settlement. Pharmaceutical companies have been investigated and/or subject to government enforcement actions asserting liability under the FCA in connection with their alleged off-label promotion of drugs, purportedly concealing price concessions in the pricing information submitted to the government for government price reporting purposes, and allegedly providing free product to customers with the expectation that the customers would bill federal healthcare programs for the product. In addition, a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. Moreover, manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. FCA liability is potentially significant in the healthcare industry because the statute provides for treble damages and significant mandatory penalties per false or fraudulent claim or statement for violations. Such per-claim penalties are currently set at \$14,308 to \$28,619 per false claim or statement for penalties assessed after January 15, 2025, with respect to violations occurring after November 2, 2015. Criminal penalties, including imprisonment and criminal fines, are also possible for making or presenting a false, fictitious or fraudulent claim to the federal government:
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for, among other things, executing or attempting to execute a scheme to defraud any healthcare benefit program, including any third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statements or representations, or making false statements relating to healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and their respective implementing regulations, which impose HIPAA-covered entities and their business associates obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security, accessibility and transmission of individually identifiable health information, including protected health information (PHI). While the vast majority of HIPAA obligations do not apply to pharmaceutical companies or clinical trial data, the requirements inform privacy and security practices across the industry and may impact interactions with health care providers. Moreover, HITECH created tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions;
- the federal payment transparency tracking and reporting requirements known as the federal Physician Payments Sunshine
 Act, implemented as the Open Payments Program, which requires certain manufacturers of drugs, devices, biologics and
 medical supplies, among others, to report annually to CMS, within the DHHS, information related to payments and other
 transfers of value made by that entity to US-licensed physicians (defined to include doctors, dentists, optometrists, podiatrists
 and chiropractors).

physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists, certified nurse midwives, and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Failure to timely, accurately, and completely submit the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties;

- state laws that require the reporting of certain pricing information, including information pertaining to and justifying price
 increases, prohibit prescription drug price gouging; or impose payment caps on certain pharmaceutical products deemed by
 the state to be "high cost"; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may be broader in scope than analogous federal laws and may apply to sales or marketing arrangements and claims involving healthcare items or services regardless of payor.

Some state, local and foreign laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, restrict payments that may be made to healthcare providers and other potential referral sources, and/or require drug manufacturers to report information related to payments and transfers of value made to physicians and other health care providers or entities or marketing expenditures. In addition, there are state and local laws that require registration of sales representatives; state laws that require drug manufacturers to report information related to drug pricing; data privacy and security laws and regulations in foreign jurisdictions that may be more stringent than those in the US (such as the EU's General Data Protection Regulation (EU GDPR), which became effective in May 2018); federal and state laws governing the privacy and security of personal information (including health information) many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts; and state laws related to insurance fraud in the case of claims involving private insurers.

Efforts to ensure that our business arrangements will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, individual imprisonment, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, possible exclusion from participation in federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Healthcare Reform

The US federal and state governments continue to propose and pass legislation designed to reduce the cost of healthcare. In March 2010, the US Congress enacted the Affordable Care Act, which included changes to the coverage and payment for drug products under government health care programs. This law was designed to expand access to health insurance coverage for uninsured and underinsured individuals while containing overall healthcare costs. There have been numerous judicial and Congressional challenges to certain aspects of the Affordable Care Act, as well as efforts to repeal or replace certain aspects of the Affordable Care Act. For example, the Tax Cuts and Jobs Act of 2017 included a provision that repealed the tax-based shared responsibility payment imposed by the Affordable Care Act on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." Further, the Consolidated Appropriations Act of 2020 fully repealed the Affordable Care Act's mandated "Cadillac" tax on certain high-cost employer-sponsored health coverage and the medical device excise tax on non-exempt medical devices, and also eliminated the health insurer tax. The Bipartisan Budget Act of 2018 (BBA) amended the Affordable Care Act to increase from 50% to 70% the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." Under the IRA, this coverage gap has been eliminated as of January 1,

2025. The IRA also requires pharmaceutical manufacturers to pay 10% of the negotiated price of brands, biologics, and biosimilar products, when Medicare Part D beneficiaries are in the initial coverage phase, and 20% of the negotiated price during the catastrophic phase of Medicare Part D coverage. In December 2018, CMS published a new final rule permitting further collections and payments to and from certain Affordable Care Act qualified health plans and health insurance issuers under the Affordable Care Act risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On June 17, 2021, the US Supreme Court dismissed a judicial challenge to the Affordable Care Act brought by several states without specifically ruling on the constitutionality of the law. It is unclear how any future litigation and other healthcare reform efforts will impact the Affordable Care Act.

Other legislative changes have been proposed and adopted in the US since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013, and, due to subsequent legislative amendments, will remain in effect through the first eight months of the fiscal year 2032 sequestration order, unless additional Congressional action is taken (with the exception of a temporary suspension, and later a temporary reduction, instituted during the COVID-19 pandemic that expired on July 1, 2022). In January 2013, former President Obama signed into law the American Taxpayer Relief Act of 2012 (ATRA), which, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

In addition, there has been heightened governmental scrutiny in the US of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. Such scrutiny has resulted in several congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. For example, on March 11, 2021, the American Rescue Plan Act of 2021 was signed into law, which among other changes, eliminated the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacture price, for single source and innovator multiple source drugs, as of January 1, 2024. The American Rescue Plan Act also temporarily increased premium tax credit assistance for individuals eligible for subsidies under the Affordable Care Act for 2021 and 2022 and removed the 400% federal poverty level limit that otherwise applies for purposes of eligibility to receive premium tax credits. The IRA extended this increased tax credit assistance and removal of the 400% federal poverty limit through 2025. In August 2022, the IRA was signed into law, which implements substantial changes to the Medicare program, including drug pricing reforms and changes to the Medicare Part D benefit design. Among other reforms, the IRA imposes inflation rebates on drug manufacturers for products reimbursed under Medicare Parts B and D if the prices of those products increase faster than inflation; implements changes to the Medicare Part D benefit that, beginning in 2025, will cap benefit annual out-of-pocket spending at \$2,000, while imposing new discount obligations for pharmaceutical manufacturers; and, beginning in 2026, establishes a "maximum fair price" for a fixed number of pharmaceutical and biological products covered under Medicare Parts B and D following a price negotiation process with CMS. On February 14, 2023, the DHHS issued a report, which, among other things, selects three potential drug affordability and accessibility models to be tested by the CMS Innovation Center. Specifically, the report addresses: (1) a model that would allow Part D Sponsors to establish a "high-value drug list" setting the maximum co-payment amount for certain common generic drugs at \$2; (2) a Medicaid-focused model that would establish a partnership between CMS, manufacturers, and state Medicaid agencies that would result in multi-state outcomes-based agreements for certain cell and gene therapy drugs; and (3) a model that would adjust Medicare Part B payment amounts for Accelerated Approval Program drugs to advance the developments of novel treatments. It remains to be seen how these drug pricing initiatives will affect the broader pharmaceutical industry. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. For example, several recently passed state laws require disclosures to state agencies and/or commercial purchasers with respect to price increases and new product launches that exceed certain pricing thresholds as identified in the relevant statutes. Some of these laws and regulations contain ambiguous requirements that government officials have not yet clarified. Given the lack of clarity in the laws and

their implementation, our reporting actions could be subject to the penalty provisions of the pertinent federal and state laws and regulations. Some states have also established prescription drug affordability boards that are tasked with identifying certain high-cost prescription products that may pose affordability challenges for consumers and payors, conducting cost reviews on such products, and, in some circumstances, imposing upper payment limits on such products.

Policy changes, including potential modification or repeal of all or parts of the Affordable Care Act or the implementation of new health care legislation, could result in significant changes to the health care system, which may prevent us from being able to generate revenue, attain profitability or commercialize our drugs. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand or lower pricing for our product candidates, or additional pricing pressures.

Outside the US, ensuring adequate coverage and payment for our products will face challenges. Pricing of prescription pharmaceuticals is subject to governmental control in many countries. Pricing negotiations with governmental authorities can extend well beyond the receipt of regulatory approval for a product and may require us to conduct a clinical trial that compares the cost effectiveness of our product candidates or products to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in our commercialization efforts. Third-party payors are challenging the prices charged for medical products and services, and many third-party payors limit reimbursement for newly approved health care products. Recent budgetary pressures in many EU countries are also causing governments to consider or implement various cost-containment measures, such as price freezes, increased price cuts and rebates. If budget pressures continue, governments may implement additional cost-containment measures. Cost-control initiatives could decrease the price we might establish for products that we may develop or sell, which would result in lower product revenues or royalties payable to us. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products.

Scientific and Medical Advisors

We utilize scientists, key opinion leaders and physicians to advise us on scientific and medical matters as part of our ongoing commercialization activities and research and product development efforts, including experts in clinical trial design, preclinical development work, chemistry, biology, immunology, oncology and immuno-oncology. Certain of our consultants receive non-employee options to purchase our common stock and certain of our scientific and medical advisors receive honorarium for time spent assisting us.

Manufacturing and Raw Materials

We currently do not have the manufacturing capabilities or experience necessary to produce our products or any product candidates for clinical trials. We currently use three active pharmaceutical ingredient manufacturing facilities and three finished goods manufacturing facilities for our products. We do not own or operate manufacturing or distribution facilities or resources for clinical or commercial production and distribution of our product for commercial use or for preclinical and clinical trials. We assign internal personnel to manage and oversee third parties working on our behalf under contract. These third parties manufacture raw materials, the active pharmaceutical ingredients and finished drug product for commercial distribution and for use in clinical studies. We currently rely on and will continue to rely on these third-party contract manufacturers to produce sufficient quantities of our products.

Human Capital Resources

As of December 31, 2024, we have 162 full-time and 2 part-time employees. Of these employees, 88 were engaged in commercial activities, 43 were engaged in development activities, and 33 were engaged in general and administrative activities. We also engage 8 temporary employees and consultants.

None of our employees are represented by a collective bargaining arrangement, and we believe our relationship with our employees is good. We aim to provide a stimulating and rewarding work environment, with recognition for accomplishments and the opportunity to advance our employees' careers while sharing in the excitement

of our growth and success. We know that our success depends on the experience, intellect, and talent of our highly motivated team, and we truly value the people who make our organization great. We provide a collaborative work environment that is both personally fulfilling and enables our employees to work together to achieve the purpose and goals of the organization. Our human capital efforts focus on maintaining a sufficient number of skilled employees in each respective department. Recruiting and retaining experienced and qualified sales and marketing personnel to successfully commercialize our product and scientific personnel to continue to perform research and development work in the future will be critical to our business success. Our ability to recruit, develop and retain highly skilled talent is a significant determinant of our success. To facilitate talent attraction, retention, and development, we strive to be an all welcoming and a safe workplace with opportunities for our employees to grow and develop in their careers, supported by competitive compensation, opportunities for equity ownership, development opportunities that enable continued learning and growth and employment packages that promote well-being across all aspects of our employees' lives, including health care, retirement planning and paid time off.

The health, safety, and wellness of our employees is a priority in which we have always invested and intend to continue to do. We provide our employees with access to a variety of innovative, flexible, and convenient health and wellness programs. Additionally, we offer programs to help support employees physical and mental health by providing tools and resources to help them improve or maintain their health status, encourage engagement in healthy behaviors, and offer choices where possible so they are customized to meet their needs.

We provide compensation and benefits programs to help meet the needs of our employees. In addition to base compensation, these programs include annual bonuses, Stock Award Plans, Employee Stock Purchase Plans, 401(k), healthcare and insurance benefits, paid time off, health and fitness benefits and various additional employee programs. We have robust annual performance review processes for reviewing employees' performance and pay.

Environmental, Social and Governance (ESG)

Our approach to ESG factors is consistent with our mission and our corporate values. We are committed to conducting our business in a safe and environmentally sustainable manner that promotes the health of patients, our employees, our community and the environment. ESG oversight is exercised both at the Board of Directors level and through our executive leadership. The Corporate Governance, Health Care Compliance Oversight and Nominating Committee has oversight responsibility over our ESG strategy and policies and is briefed by management on matters related to ESG as appropriate. For more information and the latest on our ESG efforts, please refer to our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC. Additionally, our full ESG report is available on our website at www.rigel.com/investors/esg. Information in our ESG Report is not incorporated by reference into this Form 10-K.

Corporate Information

Our principal executive office is currently located at 611 Gateway Boulevard, Suite 900, South San Francisco, CA 94080. Our telephone number is (650) 624-1100.

Available Information

We electronically file with the SEC our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy and information statements, and amendments to such reports and statements filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. We make copies of these reports available free of charge on or through our website at www.rigel.com, as soon as reasonably practicable after we electronically file these reports with, or furnish them to, the SEC. The information found on our website is not part of or incorporated by reference into this Annual Report on Form 10-K.

The SEC also maintains an internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at www.sec.gov.

Item 1A. Risk Factors

In evaluating our business, you should carefully consider the following risks, as well as the other information contained in this Annual Report on Form 10-K. These risk factors could cause our actual results to differ materially from those contained in forward-looking statements we have made in this Annual Report on Form 10-K and those we may make from time to time. If any of the following risks actually occurs, our business, financial condition and operating results could be harmed. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business.

Risks Related to Our Business and Our Industry

If the market opportunities for our products and product candidates are smaller than we believe they are, our revenues may be adversely affected, and our business may suffer.

Certain of the diseases that our products and our other product candidates being developed to address are in underserved and underdiagnosed populations. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who will seek treatment utilizing our products or product candidates, may not be accurate. If our estimates of the prevalence or number of patients potentially on therapy prove to be inaccurate, the market opportunities for our products and our other product candidates may be smaller than what we believe they are, our prospects for generating expected revenue may be adversely affected and our business may suffer.

We may need to continue to increase the size of our organization and we may encounter difficulties with managing our growth, which could adversely affect our business and results of operations.

While we have substantially increased the size of our organization particularly in our sales force in 2021, we also implemented reductions in workforce particularly in our research and development group in 2021 and 2022. We may need to add additional qualified personnel and resources to support our commercial activities and expected growth. Our current infrastructure may be inadequate to support our development and commercialization efforts and expected growth. Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees, and may take time away from running other aspects of our business, including commercialization of our products and development of our other product candidates.

Our future financial performance and our ability to sustain successful commercialization of our products and our ability to commercialize other product candidates that may receive regulatory approval will depend, in part, on our ability to manage any future growth effectively. In particular, as we continue to commercialize our products, we will need to support the training and ongoing activities of our sales force and will likely need to continue to expand the size of our employee base for managerial, operational, financial and other resources. To that end, we must be able to successfully:

- manage our development efforts effectively;
- integrate additional management, administrative and manufacturing personnel;
- further develop our marketing and sales organization; and
- maintain sufficient administrative, accounting and management information systems and controls.

We may not be able to accomplish these tasks or successfully manage our operations and, accordingly, may not achieve our research, development, and commercialization goals. Our failure to accomplish any of these goals, including as a result of business or other interruptions resulting from a potential pandemic or global economic slowdown, could adversely affect our business and operations.

Our strategy to expand our hematology and oncology pipeline on our own, or through acquisitions or in-licensing of early or late-stage products or companies, or through partnerships with pharmaceutical and biotechnology companies, as well as academic institutions and government organizations, may not be successful.

Our business is focused on the development and commercialization of novel therapies that significantly improve the lives of patients with hematologic disorders and cancer. In this regard, we continue to pursue internal drug discovery efforts or partnerships with pharmaceutical and biotech companies, as well as academic institutions and government organizations, with the goal of identifying new product candidates to advance into clinical trials. Our discovery efforts to identify new product candidates require substantial technical, financial and human resources. These discovery efforts may initially show promise in identifying potential product candidates, yet ultimately fail to yield product candidates for clinical development for a number of reasons. For example, potential product candidates may, on later stage clinical trial, be shown to have inadequate efficacy, harmful side effects, suboptimal pharmaceutical profiles or other characteristics suggesting that they are unlikely to be commercially viable products.

Apart from our discovery efforts, we continue to seek to broaden and diversify our product portfolio through acquisition or inlicensing of a product. This strategy is dependent on our ability to successfully identify and acquire or in-license relevant product candidates. In July 2022, we entered into a license and transition services agreement with Forma for an exclusive license to develop, manufacture and commercialize olutasidenib, a proprietary inhibitor of mIDH1, for any uses worldwide, including for the treatment of AML and other malignancies. On December 1, 2022, the FDA approved REZLIDHIA capsules for the treatment of adult patients with R/R AML with a susceptible IDH1 mutations as detected by an FDA-approved test. REZLIDHIA is our second commercial product and we believe is highly synergistic with our existing hematology-oncology focused commercial and medical affairs infrastructure. Further, in February 2024, we entered into an Asset Purchase Agreement with Blueprint to purchase certain assets comprising the right to research, develop, manufacture and commercialize GAVRETO, Blueprint's proprietary RET inhibitor of tyrosine kinase for the treatment of metastatic RET fusion-positive NSCLC and advanced thyroid cancer, in the US. Simultaneously and in connection with entering into the Asset Purchase Agreement, we also entered into certain supporting agreements with Blueprint, including a customary transition agreement, pursuant to which, during a transition period, Blueprint will transition regulatory and distribution responsibility for pralsetinib to us. On June 24, 2024, we announced the completion of the transfer of GAVRETO NDA to us, and GAVRETO became commercially available from us in the US by prescription beginning on June 27, 2024. The in-licensing and acquisition of a product is a highly competitive area, and many other companies are pursuing the same or similar product candidates to those that we may consider attractive. In particular, larger companies with more well-established and diverse revenue streams may have a competitive advantage over us due to their size, financial resources and more extensive clinical development and commercialization capabilities. Furthermore, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. The success of this strategy depends partly upon our ability to identify, select and acquire or in-license promising product candidates and technologies. The process of proposing, negotiating and implementing a license or acquisition of a product candidate is lengthy and complex, and we may be unable to in-license or acquire the rights to any such products, product candidates or technologies from third parties for several reasons. We may also be unable to in-license or acquire additional relevant product candidates on acceptable terms. Further, even if we identify acquisition or in-licensing targets, we may not be able to complete the transactions or we may determine after due diligence investigation not to pursue identified targets. Even if we succeed in our efforts to obtain rights to suitable product candidates, the success of our investments in these areas, our investment strategy will remain subject to the inherent risks associated with the development and commercialization of the product, and with the competitive business environment in which we operate.

In addition, acquisitions and in-licensing may entail numerous operational, financial and legal risks, including:

- potential failure of the due diligence process to identify significant problems, liabilities or other shortcomings or challenges of
 an acquired or licensed product candidate or technology, including problems, liabilities or other shortcomings or challenges
 with respect to intellectual property, product quality, partner disputes or issues and other legal and financial contingencies and
 known and unknown liabilities:
- inability to integrate the target company or in-licensed asset successfully into our existing business and inability to maintain
 the key business relationships of the target;

- in an in-licensing or an asset acquisition of a product that is commercially available in the market, we may not be able to
 successfully transition the existing patients who are dependent to the acquired or in-licensed product, or successfully enter
 into a reimbursement coverage contracts that the existing patients were previously dependent into, or successfully enter into a
 contract with contract manufacturers to continue the production of the in-licensed or acquired product;
- assumption of unknown or contingent liabilities or incurrence of unanticipated expenses;
- exposure to known and unknown liabilities, including possible intellectual property infringement claims, violations of laws, tax liabilities and commercial disputes;
- incurrence of substantial debt, dilutive issuances of securities or depletion of cash to pay for acquisitions;
- incurrence of large one-time expenses and acquiring intangible assets that could result in significant future amortization expense and significant write-offs;
- higher than expected acquisition and integration costs; and
- inability to maintain uniform standards, controls, procedures and policies;

There is a high risk that drug discovery and development efforts might not generate successful product candidates.

We currently have product candidates in the clinical testing stage and may further pursue to expand our clinical testing efforts. In our industry, it is statistically unlikely that the limited number of compounds that we have identified as potential product candidates will actually lead to successful product development efforts. We have invested a significant portion of our efforts and financial resources into clinical development. Our ability to generate product revenue, which will not occur until after regulatory approval, if ever, will depend on the successful development, regulatory approval and eventual commercialization of our product candidates.

Our compounds in clinical trials and our future leads for potential drug compounds are subject to the risks and failures inherent in the development of pharmaceutical products. These risks include, but are not limited to, the inherent difficulty in selecting the right drug and drug target and avoiding unwanted side effects, as well as unanticipated problems relating to product development, testing, enrollment, obtaining regulatory approvals, obtaining and maintaining reimbursement in national markets and positive recommendation from HTA bodies, maintaining regulatory compliance, manufacturing, competition and costs and expenses that may exceed current estimates. In future clinical trials, we, our partners or others may discover additional side effects and/or a higher frequency of side effects than those observed in previously completed clinical trials. The results of preliminary and mid-stage clinical trials do not necessarily predict clinical or commercial success, and larger later-stage clinical trials may fail to confirm the results observed in the previous clinical trials. Similarly, a clinical trial may show that a product candidate is safe and effective for certain patient populations in a particular indication, but other clinical trials may fail to confirm those results in a subset of that population or in a different patient population, which may limit the potential market for that product candidate. For example, in October 2024, we issued a Dear Healthcare Provider Letter for GAVRETO related to a new safety signal identified in an ongoing Phase 3 clinical trial of pralsetinib in first-line treatment of RET fusion-positive, metastatic NSCLC patients, being conducted by Roche. The letter advises healthcare providers to apply certain measures to protect patient safety, including enhanced ongoing monitoring for signs and symptoms of infection as well as guidance for withholding treatment to patients in the presence of active infection. With respect to our own compounds in development, we have established anticipated timelines with respect to the initiation of clinical trials based on existing knowledge of the compounds. However, we cannot provide assurance that we will meet any of these timelines for clinical development. Additionally, the initial results of a completed earlier clinical trial of a product candidate do not necessarily predict final results and the results may not be repeated in later clinical trials.

Because of the uncertainty of whether the accumulated preclinical evidence (pharmacokinetic, pharmacodynamic, safety and/or other factors) or early clinical results will be observed in later clinical trials, we can make no assurances regarding the likely results from our future clinical trials or the impact of those results on our business. For example, we conducted a Phase 3 pivotal trial of fostamatinib in patients with warm auto immune hemolytic anemia (wAIHA) initiated in March 2019 and completed in April 2022. In June 2022, we announced top-line

efficacy and safety data results of the trial, and the results did not demonstrate statistical significance in the primary efficacy endpoint of durable hemoglobin response in the overall study population. We conducted an in-depth analysis of these data to better understand differences in patient characteristics and outcomes and submitted these findings to the FDA. In October 2022, we announced that we received guidance from the FDA's review of these findings. Based on the result of the trial and the guidance from the FDA, we did not file an sNDA for this indication. Further, we may experience errors in the analysis of our clinical trial results. For example, we conducted our Phase 3 clinical trial to evaluate safety and efficacy of fostamatinib in hospitalized COVID-19 patients launched in November 2020 and completed enrollment in July 2022. We previously announced in November 2022 the top-line results did not meet statistical significance in the primary efficacy endpoint. Upon further analysis, we discovered an error by the biostatistical contract research organization (CRO) in the application of a statistical stratification factor. After correcting for this statistical error, the primary endpoint of the study was met. However, given the end of the federal COVID-19 PHE in May 2023, and based on feedback from the FDA, DOD and other advisors regarding the program's regulatory requirements, costs, timeline and potential for success, we decided not to submit an Emergency Use Authorization (EUA) or sNDA.

Foreign regulatory requirements governing clinical trials may diverge and impose additional regulatory burdens, which may result in delays. For instance, the new EU Clinical Trials Regulation (EU) No 536/2014 (CTR) has amended the system of approval for clinical trials in the EU and has established a new clinical trials portal and database for application for authorizations, called the Clinical Trials Information System (CTIS). All ongoing clinical trials in the EU will be subject to the provisions of the CTR as of January 31, 2025. In addition, on June 18, 2024, new CTIS transparency rules came into effect, requiring scheduled publication of certain key clinical trial information.

If the results of our clinical trials fail to meet the primary efficacy endpoints, or otherwise do not ultimately meet the requirements for an NDA approval by the FDA, the commercial prospects of our business may be harmed, our ability to generate product revenues may be delayed or eliminated or we may be forced to undertake other strategic alternatives that are in our shareholders' best interests, including cost reduction measures. If we are unable to obtain adequate financing or engage in a strategic transaction on commercially reasonable terms or at all, we may be required to implement further cost reduction strategies which could significantly impact activities related to our commercial efforts and/or research and development of our future product candidates, and could significantly harm our business, financial condition and results of operations. In addition, these cost reduction strategies could cause us to further curtail our operations or take other actions that would adversely impact our shareholders.

We are subject to federal and state healthcare fraud and abuse laws, false claims laws and other federal and state healthcare laws, and the failure to comply with such laws could result in substantial penalties. Our employees, independent contractors, consultants, principal investigators, CROs, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors and customers, may expose us to broadly applicable federal, state and foreign fraud and abuse and other healthcare laws and regulations including anti-kickback and false claims laws, data privacy and security laws, and transparency reporting laws. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute any product for which we have obtained regulatory approval, or for which we may obtain regulatory approval in the future. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws and regulations intended to prevent fraud, misconduct, bribery kickbacks, self-dealing and other abusive or inappropriate practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, including promoting off-label uses of our products, certain commission compensation, certain customer incentive programs, certain patient support offerings, and other business arrangements generally. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of patient recruitment for clinical trials, creating fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation. See "Business – Government Regulation – Healthcare and Privacy Law and Regulation and Healthcare Reform" contained in Part I, Item 1 of this Annual Report on Form 10-K, for more information on the healthcare laws and regulations that may affect our ability to operate.

We are also exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, principal investigators, CROs, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to: comply with the laws of the FDA and other similar foreign regulatory bodies; provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies; comply with manufacturing standards we have established; comply with federal and state data privacy, security, fraud and abuse and other healthcare laws and regulations in the US and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations.

We are also subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. Efforts to ensure that our business arrangements will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, monetary fines, imprisonment, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

We are subject to stringent and evolving privacy and information security laws, regulations, rules, policies, and contractual obligations, and changes in such laws, regulations, rules, policies, contractual obligations and our actual or perceived failure to comply with such requirements could subject us to significant investigations, fines, penalties and claims, any of which may have a material adverse effect on our business, financial condition, results of operations or prospects.

We are subject to, or affected by, various federal, state and foreign laws, rules, directives, and regulations, as well as regulatory guidance, policies and contractual obligations relating to privacy and information security, governing the acquisition, collection, access, use, disclosure, processing, modification, retention, storage, transfer, destruction, protection, and security (collectively, "processing") of personal information and other sensitive information about individuals. The global privacy and information security landscape is evolving rapidly, and implementation standards and enforcement practices are likely to continue to develop for the foreseeable future and may result in conflicting or inconsistent compliance obligations. Legislators and regulators are increasingly adopting or amending privacy and information security laws, rules, directives, and regulations that may create uncertainty in our business, affect our or our collaborators', service providers' and contractors' ability to operate in certain jurisdictions or to process personal information, transfer data internationally, necessitate the acceptance of more onerous obligations in our contracts, result in enforcement actions, litigation or other liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future. Any failure or perceived failure by us or our collaborators, service providers and contractors to comply with federal, state or foreign laws or regulations, our internal policies and procedures or our contracts governing the processing of personal information could result in negative publicity, diversion of management time and effort and proceedings against us by governmental entities or others. In many jurisdictions, enforcement actions, litigation, and other consequences for noncompliance with privacy and information security laws and regulations are rising. Compliance with applicable privacy and information security laws and regulations, as well as regulatory guidance, policies and contractual obligations, is a rigorous and time-intensive process, and we may be required to put in place additional mechanisms to ensure compliance with the new privacy and information security requirements. If we fail to comply with any such obligations, we may face significant investigations, fines, penalties and claims that could materially and adversely affect our business, financial condition, results of operations, ability to process personal information and income from certain business initiatives.

In the US, these obligations include various federal, state, and local statutes, rules, and regulations relating to privacy and data security. The Federal Trade Commission (FTC) has authority under Section 5 of the FTC Act to regulate unfair or deceptive or practices, and has used this authority to initiate enforcement actions against companies that implement inadequate controls around privacy and information security in violation of their externally facing policies. The FTC has brought several cases alleging violations of Section 5 of the FTC Act with respect to health information, and has proposed rulemaking on a variety of privacy and data security topics. Additionally, the FTC published an advance notice of proposed rulemaking in 2022 on commercial surveillance and data security, and may propose regulation concerning the ways in which companies collect, aggregate, protect, use, analyze, and retain consumer data, as well as transfer, share, sell, or otherwise monetize that data in the coming years. The FTC has also been active with respect to enforcement of its Health Breach Notification Rule and in scrutinizing the use and disclosure of sensitive personal information. The FTC finalized changes to the Health Breach Notification Rule in April 2024. Moreover, the US federal government has also enacted statutes to address privacy and information security issues impacting particular industries or activities, including the following laws and regulations, including, but not limited to: the Electronic Communications Privacy Act, the Computer Fraud and Abuse Act, the Health Insurance Portability and Accountability Act (HIPAA), the Health Information Technology for Economic and Clinical Health Act, the Telephone Consumer Protection Act, the CAN-SPAM Act, and other laws and regulations, and continues to consider comprehensive federal privacy legislation.

In addition, state legislatures have enacted statutes to address privacy and information security issues, including the California Consumer Privacy Act of 2018 (the CCPA). For example, the CCPA, as amended by the California Privacy Rights Act (CPRA), establishes a privacy framework applicable to for-profit entities that are doing business in California, including an expansive definition of personal information and data privacy rights for California residents (as consumers, business contacts and employees), and authorizes potentially severe statutory damages and creates a private right of action for certain data security breaches. The CCPA also requires businesses subject to the law to provide disclosures to California residents and to provide them with rights with respect to their personal information, including the right to opt out of the sale of such information. Moreover, the CPRA, among other things, imposes requirements relating to data minimization and correction, and gives California residents additional rights over their personal information, including the right to opt-out of the use of their personal information in online behavioral advertising and to opt-out of certain types of consumer profiling. The CPRA also provides for penalties for CPRA violations concerning California residents under the age of 16, and established the California Privacy Protection Agency to implement and enforce the law. Although there are exemptions for PHI, clinical trial and other research-related data under the CCPA, the CCPA could impact our business depending on how it is interpreted by the California Privacy Protection Agency, as well from new regulations issued by the Agency to further implement the law. Compliance with the CCPA may increase our compliance costs and potential liability.

Multiple other states have followed California and enacted comprehensive privacy laws, or are considering similar legislation. While these new laws and proposals generally include exemptions for HIPAA-covered PHI and clinical trial data, they add layers of complexity to compliance in the US market, and could increase our compliance costs and adversely affect our business. Moreover, some states have enacted laws specific to health data privacy, which may cause additional compliance costs such as the Washington My Health My Data Act and Nevada's Consumer Health Data Privacy Law. For example, the Washington My Health My Data Act regulates "consumer health data" which is defined as "personal information that is linked or reasonably linkable to a consumer and that identifies a consumer's past, present, or future physical or mental health." However, the My Health My Data Act provides exemptions for personal data used or shared in research, including data subject to 45 C.F.R. Parts 46, 50, and 56. States, such as Colorado, Utah and California, have passed or are considering legislation or regulation governing the development or use of artificial intelligence technologies, supplementing the existing consumer protection, FDA and other regulatory guidance that may apply to the use of AI technologies in our business, and which may impact our use of technology. Moreover, many states also have in place data security laws requiring companies to maintain certain safeguards with respect to the processing of personal information, and all states require companies to notify individuals or government regulators in the event of a data breach impacting such information.

Laws and regulations relating to privacy, data protection, consumer protection, AI and information security are evolving and subject to potentially differing interpretations. These requirements may be interpreted and applied in a manner that varies from one jurisdiction to another and/or may conflict with other laws or regulations. New laws and regulations add additional complexity, requirements, restrictions and potential legal risk. Accordingly, compliance

programs may require additional investment in resources, and could impact availability of previously useful data.

Internationally, our operations abroad may also be subject to increased scrutiny or attention from foreign data protection authorities. For example, our clinical trial programs and research collaborations outside the US may implicate foreign data protection laws, including those in the European Economic Area, Switzerland, and/or the UK (collectively, Europe). Many jurisdictions have established or are in the process of establishing privacy and data security legal frameworks with which we, our collaborators, service providers, including our CROs, and contractors must comply. For example, in the EU, the collection, use, disclosure, transfer and other processing of personal data (i.e., data which identifies an individual or from which an individual is identifiable) is governed by the EU General Data Protection Regulation 2016/679 (the EU GDPR), which came into direct effect in all EU Member States on and from May 25, 2018. The UK has implemented the EU GDPR as the UK GDPR which sits alongside the UK Data Protection Act 2018 (the UK GDPR, and together with the EU GDPR, the GDPR). In October 2024, the UK government introduced to Parliament the Data (Use and Access) Bill (the DUA Bill) which is set to introduce reforms to the UK GDPR. The DUA Bill is currently progressing through the legislative process and is expected to be finalized during 2025. The GDPR has direct effect where an entity is established in the European Economic Area (EEA) or the UK (as applicable) and has extraterritorial effect, including where an entity established outside of the EEA or the UK processes personal data in relation to the offering of goods or services to individuals in the EEA and/or the UK or the monitoring of their behavior.

The GDPR imposes obligations on controllers, including, among others:

- accountability and transparency requirements, requiring controllers to demonstrate and record compliance with the GDPR and
 to provide more detailed information to data subjects regarding the processing of their personal data;
- requirements to process personal data lawfully including specific requirements for obtaining valid consent where consent is the lawful basis for processing;
- obligations to consider data protection when any new products or services are developed and designed (including e.g., to limit the amount of personal data processed);
- obligations to comply with data protection rights of data subjects including a right: (i) of access to, erasure of, or rectification
 of personal data, (ii) to restriction of processing or to withdraw consent to processing, (iii) to object to processing or to ask for
 a copy of personal data to be provided to a third party, and (iv) not to be subject to solely automated decision-making; and
- an obligation to report personal data breaches to: (i) the data protection supervisory authority without undue delay (and no later than 72 hours) after becoming aware of the personal data breach, where feasible, unless the personal data breach is unlikely to result in a risk to the data subjects' rights and freedoms; and (ii) affected data subjects, where the personal data breach is likely to result in a high risk to their rights and freedoms.

In addition, the EU GDPR prohibits the international transfer of personal data from the EEA to jurisdictions that the European Commission does not recognize as having an 'adequate' level of data protection unless a data transfer mechanism has been put in place or a derogation under the EU GDPR can be relied on. In certain cases (e.g., where transfers are made in reliance on EU SCCs) a company must also carry out a so-called transfer privacy impact assessment (TIA). A TIA, among other things, assesses laws governing access to personal data in the recipient country and considers whether supplementary measures that provide privacy protections additional to those provided under EU SCCs will need to be implemented to ensure an 'essentially equivalent' level of data protection to that afforded in the EEA.

On July 10, 2023, the European Commission adopted its Final Implementing Decision granting the US adequacy (Adequacy Decision) for EU-US transfers of personal data for entities self-certified to the EU-US Data Privacy Framework (DPF). Entities relying on EU SCCs for transfers to the US, are also able to rely on the analysis in the Adequacy Decision as support for their TIA regarding the equivalence of US national security safeguards and redress.

The UK GDPR also imposes similar restrictions on transfers of personal data from the UK to jurisdictions that the UK Government does not consider adequate, including the US. The UK Government has published its own form of the EU SCCs, known as the International Data Transfer Agreement and an International Data Transfer Addendum to the EU SCCs. The UK Information Commissioner's Office (ICO) has also published its version of the TIA and guidance on international transfers, although entities may choose to adopt either the EU or UK style TIA. Further, on September 21, 2023, the UK Secretary of State for Science, Innovation and Technology established a UK-US data bridge (i.e., a UK adequacy decision) and adopted UK regulations to implement the UK-US data bridge (UK Adequacy Regulations). Personal data may be transferred from the UK under the UK-US data bridge through the UK extension to the DPF, from October 12, 2023, to organizations self-certified under the UK extension to the DPF.

Data protection supervisory authorities have the power under the GDPR to (amongst other thing) impose fines for serious breaches of up to the higher of 4% of the organization's annual worldwide turnover or €20 million (under the EU GDPR) or £17.5 million (under the UK GDPR). The GDPR identifies a list of points to consider when determining the level of fines for data supervisory authorities to impose (including the nature, gravity and duration of the infringement). Data subjects also have a right to compensation, as a result of an organization's breach of the GDPR which has affected them, for financial or non-financial losses (e.g., distress).

Privacy and data protection compliance has and may in the future require substantial amendments to our procedures and policies and the changes could adversely impact our business by increasing operational and compliance costs or impact business practices. Further, there is a risk that the amended policies and procedures will not be implemented correctly or that individuals within the business will not be fully compliant with the new procedures. If there are breaches of these measures, we could face significant litigation, government investigations, administrative and monetary sanctions as well as reputational damage which may have a material adverse effect on our operations, financial condition and prospects. There is a risk that we could be impacted by a cybersecurity incident that results in loss or unauthorized disclosure of personal data, potentially resulting in us facing harms similar to those described above.

Additionally, other countries outside of Europe have enacted or are considering enacting similar cross-border data transfer restrictions and laws requiring local data residency, with strict requirements and limitations for processing personal information, which could increase the cost and complexity of delivering our services and operating our business. For example, Brazil enacted the General Data Protection Law, New Zealand enacted the New Zealand Privacy Act, China released its Personal Information Protection Law, which went into effect November 1, 2021, and Canada introduced the Digital Charter Implementation Act. As with the EU GDPR, these laws are broad and may increase our compliance burdens, including by mandating potentially burdensome documentation requirements and granting certain rights to individuals to control how we collect, use, disclose, retain, and process personal information about them.

We publish privacy policies and other documentation regarding our collection, processing, use and disclosure of personal information and/or other confidential information. Although we endeavor to comply with our published policies and other documentation, we may at times fail to do so or may be perceived to have failed to do so. Moreover, despite our efforts, we may not be successful in achieving compliance if our employees, collaborators, contractors, service providers or vendors fail to act in accordance with our published policies and documentation. Such failures can subject us to potential foreign, local, state and federal action if they are found to be deceptive, unfair, or misrepresentative of our actual practices. Moreover, trial participants or research subjects about whom we or our partners obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information or exercise their right to do so under applicable privacy legislation. Claims that we have violated individuals' privacy rights or failed to comply with data protection laws or applicable privacy policies and documentation, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

In addition to data privacy requirements, cybersecurity requirements are laid down in various laws in the EU and the UK, the key ones being: (i) the GDPR (as discussed above), which requires controllers and processors to implement appropriate technical and organizational measures to safeguard personal data to a level of security appropriate to the data protection risk; (ii) the UK Network and Information Systems Regulation 2018 (NIS Regulations), and (iii) the EU Network and Information Systems Security 2 Directive (NISD2).

The GDPR does not provide for a specific set of cybersecurity requirements or measures to be implemented, but rather requires a controller or processor to implement appropriate cyber and data security measures in accordance with the then-current risk, the state of the art, the costs of implementation and the nature, scope, context and purposes of the processing. The GDPR however does explicitly require that controllers notify personal data breaches, within the meaning of the GDPR as described above.

In the UK, the NIS Regulations apply to 'operators of essential services' (OES) and 'relevant digital service providers' (RDSP) and following the UK General Election in July 2024, the new UK Government has announced it intends to introduce a Cyber Security and Resilience Bill to the UK Parliament. The NIS Regulations require that appropriate and proportionate technical and organizational measures are implemented to manage the risk of network and information systems, and impose requirements related to incident handling and notification in relation to incidents with significant disruptive effect. Under the NIS Regulations, the ICO may issue fines of up to £17 million and take other action following non-compliance.

In the EU, the NISD2 (and the implementing laws at a national EU Member State level) impose stringent cybersecurity and incident reporting requirements on 'essential' and 'important' entities, which include ICT managed service providers (MSP), cloud service providers as well as entities carrying out research and development activities of medicinal products, and certain specific medical device manufacturers. Our entities may be in scope of the NISD2 where they qualify as a MSP, cloud provider, R&D entity and/or medical device manufacturer within the meaning of NISD2 and offer those services in the EU.

The NISD2 empowers the EU Member States to define all rules regarding penalties applicable to infringements, provided that they are effective, proportionate, and dissuasive. NISD2 states that any maximum fine which national implementing law provides for should at least be set at €10 million or 2% of total worldwide turnover, whichever is higher, where essential entities are concerned. Other sanctions may include (i) a temporary suspension to provide services in the EU (by suspending relevant authorizations/certifications); (ii) an order to make public certain elements of the infringement and/or inform customers; and (iii) injunctions to immediately cease infringing conduct. Importantly, NISD2 also provides that senior members of staff can be held personally liable, and face administrative fines or be temporarily suspended from exercising managerial functions at the legal representative or chief executive officer level. The NISD2 has not to date been transposed by all EU Member States despite the deadline for doing so having passed.

In addition, the EU Critical Entities Resilience Directive (CER) is aimed at strengthening the resilience of 'critical infrastructure' against specific threats including cyber incidents, natural hazards, terrorist attacks, insider threats, and sabotage. The scope of CER includes entities designated as 'critical' under CER and includes (among other things) the health sector and the manufacturers of medical devices as 'essential services.' The CER imposes cybersecurity and resilience requirements in particular in relation to incidents with so-called 'significant disruptive effects' – which are incidents that are able to significantly impact the continuation of the critical infrastructure service offering in the EU. Requirements include to: (i) identify relevant risks that may significantly disrupt the provision of essential services (i.e., pursuant to a risk assessment); (ii) take appropriate and proportionate technical, security and organizational measures to ensure resilience (i.e., based on the outcome of the risk assessment); and (iii) notify disruptive incidents to the competent authorities within 24 hours after becoming aware of an incident. The CER is enforceable on a national EU Member State level by the competent authorities, and allows EU Member States to set penalties as long as they are effective, proportionate, and dissuasive. Our entities may be in scope of the CER where they qualify as critical entities within the meaning of CER. The CER has not to date been transposed by all EU Member States despite the deadline for doing so having passed.

In the EU, a number of new laws related to digital data and AI have recently entered into force, are expected to enter into force in the foreseeable future, or have been proposed and are being considered. We are still assessing the scope of application, impact, and risk of these recent EU laws on our business, and will continue to assess this moving forward, including for example: (i) the EU's Data Act, which – came into force on January 11, 2024 and which seeks to, among other things regulate the use of, and access to, data generated through connected (or Internet-of-Things) devices and introduces a new means for public sector bodies to access, use and re-use private sector data. EU Member State competent authorities are empowered to enforce the Data Act and determine the appropriate sanction provided penalties are "effective, proportionate and dissuasive"; and (ii) the European Health Data Space Regulation (EHDS), which was

formally adopted on January 8, 2025 and is expected to enter into force during 2025 and which seeks to, among other things, provide individuals with more control over their electronic health data (EHD), enable cross-border sharing of EHD between national EU healthcare systems and facilitate the sharing of EHD for secondary research purposes.

The EU has developed a standalone law to govern the offering and use of AI systems in the EU (the "AI Act") which entered into force on August 1, 2024 and will become applicable in a gradual manner between 2025-2027 depending on the requirement. The AI Act imposes regulatory requirements onto AI system providers, importers, distributors, and deployers, in accordance with the level of risk involved with the AI system ("unacceptable", "high", "limited", and "minimal" risk). Unacceptable-risk AI systems are banned from being offered and used in the EU, and high-risk AI systems (which include AI used as part of medical devices in certain instances) are subject to a set of regulatory requirements under the AI Act including to establish quality and post-marketing monitoring and risk assessment systems, requirements related to the training of AI systems and training data, and requirements related to human oversight. Limited-risk AI systems are subject mainly to transparency requirements only and minimal-risk AI systems are not subject to obligations under the AI Act. General-purpose AI systems are subject to a number of requirements – mostly akin to the requirements that apply to high-risk AI systems under the AI Act.

Non-compliance with the AI Act may be subject to regulatory fines of up to 7% of annual worldwide turnover. In parallel, on October 10, 2024, the EU adopted the EU Product Liability Directive to regulate non-contractual and non-fault based liability for defective products, including digital products and AI, and has introduced a new EU AI Liability Directive to facilitate claims for damages brought by EU users of AI systems.

The UK to date has not adopted dedicated AI legislation, instead looking to rely on a principles-based, sector-specific approach to AI regulation. However, in July 2024 it was announced that new AI regulation would in fact be introduced.

Further, many jurisdictions impose mandatory clinical trial information obligations on sponsors. In the EU, such obligations arise under the Transparency Regulation No 1049/ 2001, EMA Policy 0043, EMA Policy 0070 and the Clinical Trials Regulation No 536/2014 (which the UK has not implemented, as the law entered into force following the UK's exit from the EU), all of which impose on sponsors the obligation to make publicly available certain information stemming from clinical studies. In the EU, the transparency framework provides EU-based parties the right to submit an access to documents request to the EMA for information included in the MAA dossier for approved medicinal products. Only very limited information is exempted from disclosure, i.e., commercially confidential information (which is construed increasingly narrowly) and protected personal data. It is possible for competitors to access and use this data in their own research and development programs anywhere in the world, once this data is in the public domain.

Significant changes or developments in US laws or policies, including changes in US healthcare regulation, may have a material adverse effect on our business.

There is uncertainty surrounding potential changes to the regulatory environment in the US, particularly as it relates to healthcare regulation and related programs, following the outcome of the recent US Presidential election which may have an adverse effect on our business. For example, the new administration issued an executive order establishing an agency to reform federal government processes and reduce expenditures. Pressures on and uncertainty surrounding the US federal government's budget, and potential changes in budgetary priorities, could adversely affect the funding for individual programs, including Medicare and other government programs upon which our business depends. Additionally, changes in legislation and regulations (including those related to taxation, trade and importation), economic and monetary policies, geopolitical matters, among other potential impacts, could adversely impact the global economy and our operating results. The potential impact of new policies that may be implemented as a result of the new administration is currently uncertain.

The biopharmaceutical industry is subject to extensive regulatory obligations and policies that may be subject to change, including due to judicial challenges, election cycles, and resulting regulatory updates and changes in policy priorities.

On June 28, 2024, the US Supreme Court issued an opinion holding that courts reviewing agency action pursuant to the Administrative Procedure Act "must exercise their independent judgment" and "may not defer to an agency interpretation of the law simply because a statute is ambiguous." The decision will have a significant impact on how lower courts evaluate challenges to agency interpretations of law, including those by the FDA, DHHS, CMS and other agencies with significant oversight of the biopharmaceutical industry. The new framework is likely to increase both the frequency of such challenges and their odds of success by eliminating one way in which the government previously prevailed in such cases. As a result, significant regulatory policies will be subject to increased litigation and judicial scrutiny.

In addition, federal agency priorities, leadership, policies, rulemaking, communications, spending and staffing may be significantly impacted by election cycles. For example, the current presidential administration aims to significantly reduce government spending through cuts to federal healthcare programs and reductions in the workforces of key government agencies, such as the FDA, DHHS, and CMS. Efforts by the current administration to limit federal agency budgets or personnel may result in reductions to agency budgets, employees and operations, which may lead to slower response times and longer review periods, potentially affecting our ability to progress development of our product candidates or obtain regulatory approval for our product candidates. Any resulting changes in regulation may result in unexpected delays, increased costs, or other negative impacts on our business that are difficult to predict.

Enhanced governmental and public scrutiny over, or investigations or litigation involving, pharmaceutical manufacturer donations to patient assistance programs may require us to modify our programs and could negatively impact our business practices, harm our reputation, divert the attention of management and increase our expenses.

To help patients afford our products, we have a manufacturer-sponsored patient assistance program that helps financially needy patients in the US access our therapies. This type of program has become the subject of enforcement scrutiny in recent years. For example, some pharmaceutical manufacturers have been named in lawsuits challenging the legality of their patient assistance programs under a variety of federal and state laws. In addition, certain state and federal enforcement authorities continue to pursue investigations and enter into settlements related to manufacturers' support of patient assistance programs, and members of Congress have also initiated inquiries on topics that include, for example, manufacturer-sponsored patient assistance programs, co-payment assistance programs, and manufacturer contributions to independent charitable patient assistance programs. Moreover, the DHHS, Office of the Inspector General continues to publish advisory opinions and other agency guidance on the topic of patient assistance, which reflects the government's continued scrutiny of manufacturer sponsored or supported patient assistance programs. Numerous organizations, including pharmaceutical manufacturers, have been subject to ongoing litigation, enforcement activities and settlements related to their patient support programs and certain of these organizations have entered into, or have otherwise agreed to, significant civil settlements with applicable enforcement authorities. It is possible that future legislation may be proposed that would establish requirements or restrictions with respect to these programs and/or support that would affect pharmaceutical manufacturers.

Our patient assistance program could become the target of similar inquiries, litigation, enforcement, and/or legislative proposals. If we are deemed not to have complied with laws or regulations in the operation of, or our interactions with, these programs, we could be subject to damages, fines, penalties or other criminal, civil or administrative sanctions or enforcement actions. We cannot ensure that our compliance controls, policies and procedures will be sufficient to protect against acts of our employees, business partners or vendors that may violate the laws or regulations of the jurisdictions in which we operate. A government investigation could negatively impact our business practices, harm our reputation, divert the attention of management and increase our expenses.

If manufacturers obtain approval for generic versions of our products, or of products with which we compete, our business may be harmed.

Under the FDCA, the FDA can approve an ANDA for a generic version of a branded drug without the ANDA applicant undertaking the clinical testing necessary to obtain approval to market a new drug. Generally, in place of such

clinical studies, an ANDA applicant usually needs only to submit data demonstrating that its product has the same active ingredient(s), strength, dosage form and route of administration and that it is bioequivalent to the branded product. In September 2019, the FDA published product-specific bioequivalence guidance on fostamatinib disodium to let potential ANDA applicants understand the data FDA would expect to see for approval of a generic version of our products.

The FDCA requires that an applicant for approval of a generic form of a branded drug certify either that its generic product does not infringe any of the patents listed by the owner of the branded drug in the FDA's Orange Book or that those patents are not enforceable. This process is known as a paragraph IV challenge. Upon notice of a paragraph IV challenge, a patent owner has 45 days to bring a patent infringement suit in federal district court against the company seeking ANDA approval of a product covered by one of the owner's patents. If this type of suit is commenced, the FDCA provides a 30-month stay on the FDA's approval of the competitor's application. If the litigation is resolved in favor of the ANDA applicant or the challenged patent expires during the 30-month stay period, the stay is lifted, and the FDA may thereafter approve the application based on the standards for approval of ANDAs. Once an ANDA is approved by the FDA, the generic manufacturer may market and sell the generic form of the branded drug in competition with the branded medicine.

The ANDA process can result in generic competition if the patents at issue are not upheld or if the generic competitor is found not to infringe the owner's patents. If this were to occur with respect to our products or products with which it competes, our business would be harmed

In June 2022, we received a notice letter regarding an ANDA submitted to the FDA by Annora, requesting approval to market a generic version of TAVALISSE. The notice letter included a Paragraph IV certification with respect to our US Patent Nos. 7,449,458; 8,263,122; 8,652,492; 8,771,648 and 8,951,504, which are listed in the Orange Book. The notice letter asserts that these patents will not be infringed by Annora's proposed product, are invalid and/or are unenforceable. Annora's notice letter does not provide a Paragraph IV certification against our other patents listed in the Orange Book. On July 25, 2022, we filed a lawsuit in the US District Court for the District of New Jersey against Annora and its affiliates, Hetero Labs Ltd., and Hetero USA, Inc., for infringement of our US patents identified in Annora's Paragraph IV certification. On September 21, 2022, Annora and its affiliates answered and counterclaimed for declaratory judgment of non-infringement and invalidity of the '458, '122, '492, '648, and '504 patents. We filed an answer to Annora's counterclaims on October 12, 2022. Annora served invalidity and non-infringement contentions on December 31, 2022. We filed an answer to Annora's invalidity and non-infringement contentions in March 2023. Litigation continues, and no trial date is currently set. We intend to vigorously enforce and defend our intellectual property related to TAVALISSE. We cannot be assured that such lawsuit will prevent the introduction of a generic version of TAVALISSE for any particular length of time, or at all. If an ANDA from Annora or any other generic manufacturer is approved, and a generic version of TAVALISSE is introduced, whether following the expiration of our patents, the invalidation of our patents as a result of any litigation, or the determination that the proposed generic product does not infringe on our patents, our sales of TAVALISSE would be adversely affected. In addition, we cannot predict what additional ANDAs could be filed by Annora or other potential generic competitors requesting approval to market generic forms of our products, which would require us to incur significant additional expense and result in distraction for our management team, and if approved, result in significant decreases in the revenue derived from sales of our marketed products and thereby materially harm our business and financial condition.

Unforeseen safety issues could emerge with our products that could require us to change the prescribing information to add warnings, limit use of the product, and/or result in litigation. Any of these events could have a negative impact on our business.

Discovery of unforeseen safety problems or increased focus on a known problem could impact our ability to commercialize our products and could result in restrictions on its permissible uses, including withdrawal of the medicine from the market.

If we or others identify additional undesirable side effects caused by our products after approval:

 regulatory authorities may require the addition of labeling statements, specific warnings, contraindications, Dear Healthcare Provider letters, press releases, field alerts, or other communications containing warnings or other safety information about our products to physicians and pharmacies;

- regulatory authorities may withdraw their approval of the product and require us to take our approved drugs off the market or suspend their commercialization until the identified issues have been satisfactorily addressed;
- we may be required to change the way the product is administered, conduct additional clinical trials, change the labeling of the product, or implement a Risk Evaluation and Mitigation Strategy (REMS);
- we may have additional limitations on how we promote our drugs;
- third-party payors may limit coverage or reimbursement for our products;
- sales of our products may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of our products and could substantially increase our operating costs and expenses, which in turn could delay or prevent us from generating significant revenue from sale of our products. For example, in October 2024, we issued a Dear Healthcare Provider letter related to a new safety signal for GAVRETO. The letter advises healthcare providers to apply certain measures to protect patient safety, including enhanced ongoing monitoring for signs and symptoms of infection as well as guidance for withholding treatment to patients in the presence of active infection. This and other communications containing warnings or other safety information to physicians and pharmacies, or required updates to labeling statements, including specific warnings or contradictions, could limit the commercial success of GAVRETO or any of our other drug products.

Side effects and toxicities associated with our products, as well as the warnings, precautions and requirements listed in the prescribing information for our products, could affect the willingness of physicians to prescribe, and patients to utilize, our products and thus harm commercial sales of our products. For example, for REZLIDHIA, the FDA-approved label contains a boxed warning describing the risk of differentiation syndrome, which can be fatal, in patients receiving the drug. This and other restrictions could limit the commercial success of the product.

If a safety issue emerges post-approval, we may become subject to costly product liability litigation by our customers, their patients or payors. Product liability claims could divert management's attention from our core business, be expensive to defend, and result in sizable damage awards against us that may not be covered by insurance. If we cannot successfully defend ourselves against claims that our products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- the inability to commercialize any products that we may develop;
- injury to our reputation and significant negative media attention;
- · withdrawal of patients from clinical studies or cancellation of studies;
- significant costs to defend the related litigation;
- · substantial monetary awards to patients; and
- loss of revenue.

We currently hold \$10.0 million in product liability insurance coverage, which may not be adequate to cover all liabilities that we may incur. Insurance coverage is increasingly expensive. We may not be able to obtain insurance coverage at a reasonable cost or in amounts adequate to satisfy any liability or associated costs that may arise in the future. These events could harm our business and results of operations and cause our stock price to decline.

Our business could be materially and adversely affected by pandemics as a result of their potential impacts on our sales force and commercialization efforts, supply chain, regulatory, clinical development and corporate development activities and other business operations, in addition to the impact of a global economic slowdown.

Pandemics may result in extended travel and other restrictions in order to reduce the spread of diseases. Government measures taken in response to pandemics could have a significant impact, both direct and indirect, on our business and commerce, as significant reductions in business related activities may occur, supply chains may be disrupted, and manufacturing and clinical development activities may be curtailed or suspended.

For example, during the COVID-19 pandemic, we observed reduced patient-doctor interactions and our representatives had fewer visits with health care providers, which negatively affected our product sales. Physicians with practices severely impacted by the COVID-19 pandemic, or a pandemic occurring in the future, and who currently prescribe our products, may eventually decide to close their independent practices and join a larger medical organization with a practice that does not prescribe our products. Additionally, a pandemic, including COVID-19 or any resurgence thereof, may impact commercial-related activities, such as our marketing programs, speaker bureaus, and market access initiatives which may be required to be conducted virtually, delayed or cancelled, all of which occurred as a result of the COVID-19 pandemic. During the COVID-19 pandemic, we had to deploy resources to enable our field-based employees to continue to engage with health care providers in hybrid virtual and in-person interactions, which may be required in the event a pandemic occurs in the future.

With respect to clinical development, in response to the COVID-19 pandemic, we took measures to implement remote and virtual approaches, including remote patient monitoring where possible and working with our investigators for appropriate care of these patients in a safe manner. Due to the effects of COVID-19 pandemic, we experienced a number of our clinical trial investigators either paused, postponed or delayed new patient enrollment and restricted site visits of existing patients enrolled. In the event that a global pandemic, or a resurgence of the COVID-19 pandemic, occurs in the future, we may need to make decisions on a country-by-country basis to minimize risk to the patients and clinical trial sites. We may also rely heavily on our clinical trial investigators to inform us of the best course of action with respect to resuming enrollment/screening, considering the ability of sites to ensure patient safety or data integrity. We experienced slower than anticipated enrollment in some of our clinical trials due to adverse effects of COVID-19 pandemic, and in the future, we may experience adverse impacts of a global pandemic on our clinical trials, including the timing thereof, or our ability to continue to treat patients enrolled in our trials, enroll and assess new patients, supply study drugs and obtain complete data points in accordance with study protocol.

Pandemics may cause significant disruption in the supply chain for our commercial products. We rely on third parties to, among other things, manufacture and ship our commercial product, raw materials and product supply for our clinical trials, perform quality testing and supply other goods and services to help manage our commercial activities, our clinical trials and our operations in the ordinary course of business. While we have engaged actively with various elements of our supply chain and distribution channel, including our customers, contract manufacturers, and logistics and transportation provider to meet demand for our products and to remain informed of any challenges within our supply chain, we may face disruptions to our supply chain and operations, and associated delays in the manufacturing and supply of our products. Such supply disruptions would adversely impact our ability to generate sales of and revenues from our products and our business, financial condition, results of operations and growth prospects could be adversely affected.

Pandemics may affect our collaboration and licensing partners for the commercialization of our products globally, as well as our ability to advance our various clinical stage programs. We cannot predict the impact of such disruptions on our partners' ability to advance commercialization of our products in the market and the timing of enrollment and completion of various clinical trials being conducted by our collaboration partners.

Health regulatory agencies globally may experience prolonged disruptions in their operations as a result of pandemics. For example, in response to the COVID-19 pandemic, the FDA delayed inspections and evaluations of certain drug manufacturing facilities and clinical research sites We cannot predict whether, and when, health regulatory agencies will decide to pause or resume inspections due to pandemics. Any de-prioritization of our clinical trials or delay

in regulatory review resulting from such disruptions could materially affect the completion of our clinical trials.

In addition, as seen in the COVID-19 pandemic, pandemics could result in a significant disruption of global financial markets. We could experience an inability to access additional capital or an impact on liquidity, which could in the future negatively affect our capacity for certain corporate development transactions or our ability to make other important, opportunistic investments, or we may not be able to meet the requirements under our Credit and Security Agreement (Credit Agreement) with MidCap Financial Trust (MidCap). While we expect pandemics to adversely affect our business, financial condition, results of operations and growth prospects in the future periods, the extent of the impact on our ability to generate sales of and revenues from our approved products, our ability to continue to secure new collaborations and support existing collaboration efforts with our partners, our clinical development and regulatory efforts, our corporate development objectives and the value of and market for our common stock, will depend on future circumstances that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration and severity of pandemics, travel restrictions, quarantines, social distancing and business closure requirements in the US and other countries, and the effectiveness of actions taken globally to contain and treat diseases. To the extent pandemics adversely affect our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described elsewhere in this "Risk Factors" section.

If we fail to comply with our reporting and payment obligations under the Medicaid Drug Rebate Program or other governmental pricing programs in the US, we could be subject to additional rebate or discount requirements, fines, sanctions and exposure under other laws which could have an adverse effect on our business, results of operations and financial condition.

We participate in the Medicaid Drug Rebate Program, as administered by CMS, the 340B Drug Pricing Program, as administered by the Health Resources and Services Administration, and other federal and state government drug pricing programs in the US, and we may participate in additional government pricing programs in the future. These programs generally require us to pay rebates or otherwise provide discounts to government payors and/or required covered entities in connection with drugs that are dispensed to beneficiaries/recipients of these programs. In some cases, such as with the Medicaid Drug Rebate Program, the rebates are based on pricing metrics that we report on a monthly and quarterly basis to the government agencies that administer the programs. Pricing requirements and rebate/discount calculations are complex, vary among products and programs, and are often subject to interpretation by governmental or regulatory agencies and the courts. The requirements of these programs, including, by way of example, their respective terms and scope, change frequently. For example, in September 2024, CMS published a final rule that included significant revisions to certain Medicaid Drug Rebate Program provisions, including, but not limited to: (i) new definitions for key terms under the Medicaid Drug Rebate Program, such as "covered outpatient drug" and "market date"; (ii) revised processes for identifying drug misclassifications, as well as additional penalties that can be imposed against manufacturers in connection with such misclassifications; and (iii) a new 12-quarter time limit for manufacturers to initiate disputes, hearing requests, and audits for state-invoiced rebate amounts. Responding to current and future changes may increase our costs, and the complexity of compliance will be time consuming. Invoicing for rebates is provided in arrears, and there is frequently a time lag of up to several months between the sales to which rebate notices relate and our receipt of those notices, which further complicates our ability to accurately estimate and accrue for rebates related to the Medicaid program as implemented by individual states. Thus, there can be no assurance that we will be able to identify all factors that may cause our discount and rebate payment obligations to vary from period to period, and our actual results may differ significantly from our estimated allowances for discounts and rebates. Changes in estimates and assumptions may have an adverse effect on our business, results of operations and financial condition.

In addition, the DHHS, Office of Inspector General and other governmental enforcement and administrative bodies have increased their focus, including through recent enforcement actions against manufacturers, on pricing requirements for products, including, but not limited to the methodologies used by manufacturers to calculate average manufacturer price and best price for compliance with reporting requirements under the Medicaid Drug Rebate Program. We are liable for errors associated with our submission of pricing data and for any overcharging of government payors. Failure to make necessary disclosures and/or to identify overpayments could result in allegations against us under the federal False Claims Act and other laws and regulations. Any required refunds to the US government or response to a government investigation or enforcement action would be expensive and time consuming and could have an adverse effect on our business, results of operations and financial condition. In addition, in the event that CMS were to terminate

our rebate agreement, no federal payments would be available under Medicaid for our covered outpatient drugs or under Medicare Part B for any of our products that may be reimbursed under Part B.

Finally, we may be affected by developments relating to the 340B Drug Pricing Program (340B Program). For example, since 2021, multiple manufacturers have implemented policies to reduce diversion and inappropriate claims for discounts by placing restrictions on 340B pricing for drugs dispensed through contract pharmacies. The DHHS sent several of these manufacturers' letters claiming that the policies violate the 340B statute and referring the manufacturers for potential enforcement action. Manufacturers challenged these letters in federal court, and the US Court of Appeals for the Third Circuit and the District of Columbia Circuit have ruled in favor of several manufacturers, finding that the policies were consistent with the 340B statute. Multiple states have recently enacted laws that require manufacturers to ship 340B drugs to certain contract pharmacies and impose various civil and criminal penalties on manufacturers that do not comply. These laws have been challenged in federal court and many of the cases are pending. In March 2024, the US Court of Appeals for the Eight Circuit upheld the Arkansas law prohibiting drug makers for restricting 340B drug discounts for providers using contract pharmacies. DHHS also issued a final rule on procedures for the 340B Program's administrative dispute resolution process in April 2024. It is unclear how the other pending litigation, proposed legislation, or future administrative action relating to the 340B Program will impact our business.

Even for those product candidates that have or may receive regulatory approval, they may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

For our product candidates that have or may receive regulatory approval, they may nonetheless fail to gain sufficient market acceptance by physicians, hospital administrators, patients, third-party payors and others in the medical community. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including the following:

- relative convenience and ease of administration;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the willingness of physicians to change their current treatment practices;
- any additional support that may be required to administer the treatment to patients;
- the willingness of hospitals and hospital systems to include our product candidates as treatment options;
- demonstration of efficacy and safety in clinical trials;
- the prevalence and severity of any side effects;
- the ability to offer product candidates for sale at competitive prices;
- the price we charge for our product candidates;
- the strength of marketing and distribution support; and
- the availability of third-party coverage and adequate reimbursement and the willingness of patients to pay out-of-pocket in the
 absence of such coverage and adequate reimbursement.

Efforts to educate the physicians, patients, third-party payors and others in the medical community on the benefits of our product candidates may require significant resources and may not be successful. If any of our product candidates are approved, but do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable on a sustained basis.

We will need additional capital in the future to sufficiently fund our operations and research.

We have consumed substantial amounts of capital to date as we continue our research and development activities, including preclinical studies and clinical trials and for the commercialization of our products. We may seek another collaborator or licensee in the future for further clinical development and commercialization of our products, as well as our other clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. We believe that our existing capital resources will be sufficient to support our current and projected funding requirements, including the continued commercialization of our products through at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with commercial launch, the development of our product candidates and other research and development activities, we are unable to estimate with certainty our future product revenues, our revenues from our current and future collaborative partners, the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities.

We will continue to need additional capital and the amount of future capital needed will depend largely on the success of our commercialization of our products, and the success of our internally developed programs as they proceed in later and more expensive clinical trials, including any additional clinical trials that we may decide to conduct with respect to our products. While we intend to opportunistically seek access to additional funds through public or private equity offerings or debt financings, we do not know whether additional financing will be available when needed, or that, if available, we will obtain financing on reasonable terms. Our ability to raise additional capital, including our ability to secure new collaborations and continue to support existing collaboration efforts with our partners, may also be adversely impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the US and worldwide resulting from a global pandemic and the global tensions arising from the Russia-Ukraine war and the Hamas-Israel war. Unless and until we are able to generate a sufficient amount of product, royalty or milestone revenue, which may never occur, we expect to finance future cash needs through public and/or private offerings of equity securities, debt financings or collaboration and licensing arrangements, as well as through proceeds from the exercise of stock options and interest income earned on the investment of our cash balances and short-term investments. To the extent we raise additional capital by issuing equity securities in the future, our stockholders could at that time experience substantial dilution. In addition, we have a significant number of stock options outstanding. To the extent that outstanding stock options have been or may be exercised or other shares issued, our stockholders may experience further dilution. Further, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Our credit facility with MidCap includes certain covenants that may restrict our business, and any other debt financing that we are able to obtain in the future may involve operating covenants that restrict our business. To the extent that we raise additional funds through any new collaboration and licensing arrangements, we may be required to refund certain payments made to us, relinquish some rights to our technologies or product candidates or grant licenses on terms that are not favorable to us.

We have indebtedness in the form of a term loan pursuant to the Credit Agreement with MidCap, which could adversely affect our financial condition and our ability to respond to changes in our business. Further, if we are unable to satisfy certain conditions of the Credit Agreement, we will be unable to draw down the remainder of the facility.

We entered into a Credit Agreement with MidCap on September 27, 2019, amended on March 29, 2021, February 11, 2022, July 27, 2022, and April 11, 2024. The Credit Agreement provides for a \$60.0 million term loan credit facility. As of December 31, 2024, the outstanding principal balance of the loan was \$60.0 million, and no remaining funds were available under the term loan credit facility. Under the Credit Agreement, we are required to repay amounts due when there is an event of default for the term loans that results in the principal, premium, if any, and interest, if any, becoming due prior to the maturity date for the term loans. The Credit Agreement also contains a number of other affirmative and restrictive covenants. See "Note 11 – Debt" to our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K" for additional details of the Credit Agreement. These and other terms in the Credit Agreement have to be monitored closely for compliance and could restrict our ability to grow our business or enter into transactions that we believe would be beneficial to our business. Our business may not generate cash flow from operations in the future sufficient to service our

debt and support our growth strategies. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as restructuring our debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our current debt obligations. In addition, we cannot be sure that additional financing will be available when required or, if available, will be on terms satisfactory to us. Further, even if we are able to obtain additional financing, we may be required to use such proceeds to repay a portion of our debt.

Our indebtedness may have other adverse effects, such as:

- our vulnerability to adverse general economic conditions and heightened competitive pressures;
- dedication of a portion of our cash flow from operations to interest payments, limiting the availability of cash for other operational purposes;
- limited flexibility in planning for, or reacting to, changes in our business and industry; and
- our inability to obtain additional financing in the future.

Our Credit Agreement with MidCap contains a mandatory prepayment provision that gives MidCap and/or its agent the right to demand payment of the outstanding principal and additional interest and fees in the event of default. We may not have enough available cash or be able to obtain financing at the time we are required to repay the term loan with additional interest and fees prior to maturity.

We rely and may continue to rely on two distribution facilities for the sale of our products and potential sale of any of our product candidates.

Our distribution operations for the sale of our products are currently concentrated in two distribution centers owned by a third-party logistics provider. Additionally, our distribution operations, if and when we launch any of our product candidates in the future, may also be concentrated in such distribution centers owned by a third-party logistics provider. Any errors in inventory level management and unforeseen inventory shortage could adversely affect our business. In addition, any significant disruption in the operation of the facility due to natural disaster or severe weather, or events such as fire, accidents, power outages, system failures, or other unforeseen causes, could devalue or damage a significant portion of our inventories and could adversely affect our product distribution and sales until such time as we could secure an alternative facility. Further, climate change may increase both the frequency and severity of extreme weather conditions and natural disasters, which may affect our business operations. If we encounter difficulties with any of our distribution facilities, whether due to the potential future impacts of a global pandemic (including as a result of disruptions of global shipping and the transport of products) or otherwise, or other problems or disasters arise, we cannot ensure that critical systems and operations will be restored in a timely manner or at all, and this would have an adverse effect on our business. In addition, growth could require us to further expand our current facility, which could affect us adversely in ways that we cannot predict.

Forecasting potential sales for any of our product candidates will be difficult, and if our projections are inaccurate, our business may be harmed, and our stock price may be adversely affected.

Our business planning requires us to forecast or make assumptions regarding product demand and revenues for any of our product candidates if they are approved despite numerous uncertainties. These uncertainties may be increased if we rely on our collaborators or other third parties to conduct commercial activities in certain geographies and provide us with accurate and timely information. Actual results may differ materially from projected results for various reasons, including the following, as well as risks identified in other risk factors:

- the efficacy and safety of any of our product candidates, including as relative to marketed products and product candidates in development by third parties;
- pricing (including discounting or other promotions), reimbursement, product returns or recalls, competition, labeling, adverse
 events and other items that impact commercialization;

- the rate of adoption in the particular market, including fluctuations in demand for various reasons;
- potential future impacts, if any, including a global pandemic;
- lack of patient and physician familiarity with the drug;
- lack of patient use and physician prescribing history;
- lack of commercialization experience with the drug;
- actual sales to patients may significantly differ from expectations based on sales to wholesalers; and
- uncertainty relating to when the drug may become commercially available to patients and rate of adoption in other territories.

We expect that our revenues from sales of any of our products will continue to be based in part on estimates, judgment and accounting policies. Any incorrect estimates or disagreements with regulators or others regarding such estimates or accounting policies may result in changes to our guidance, projections or previously reported results. We make estimates for provisions for sales discounts, returns and allowances. Our estimates are based on available customer and payor data received from the specialty pharmacies and distributors, as well as third party market research data. In part, our estimates are dependent on our distribution channel and payor mix. If actual results in the future vary from our estimates, we adjust these estimates, which would affect our net product revenue and earnings in the period such variances become known. Expected and actual product sales and quarterly and other results may greatly fluctuate, including in the nearterm, and such fluctuations can adversely affect the price of our common stock, perceptions of our ability to forecast demand and revenues, and our ability to maintain and fund our operations.

We do not and will not have access to all information regarding our products and product candidates we licensed to our collaboration partners.

We do not and will not have access to all information regarding our products and other product candidates, including potentially material information about commercialization plans, medical information strategies, clinical trial design and execution, safety reports from clinical trials, safety reports, regulatory affairs, process development, manufacturing and other areas known by our collaboration partners. In addition, we have confidentiality obligations under our respective agreements with our collaboration partners. Thus, our ability to keep our shareholders informed about the status of our products and other product candidates will be limited by the degree to which our collaboration partners keep us informed and allows us to disclose such information to the public. If our collaboration partners fail to keep us informed about commercialization efforts related to our products, or the status of the clinical development or regulatory approval pathway of other product candidates licensed to them, we may make operational and/or investment decisions that we would not have made had we been fully informed, which may adversely affect our business and operations.

Our future funding requirements will depend on many uncertain factors.

Our future funding requirements will depend upon many factors, many of which are beyond our control, including, but not limited to:

- the costs to commercialize our products in the US, or any other future product candidates, if any such candidate receives regulatory approval for commercial sale;
- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- our ability to secure patent and regulatory protection;
- our ability to secure a favorable price or a positive HTA assessment;
- potential future impacts, if any, of a global pandemic;

- the costs and timing of regulatory filings and approvals by us and our collaborators;
- the progress of research and development programs carried out by us and our collaborative partners;
- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that may trigger payments to us from our collaboration partners;
- our ability to acquire or license other technologies or compounds that we may seek to pursue;
- our ability to manage our growth;
- competing technological and market developments;
- · the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights; and
- expenses associated with any unforeseen litigation, including any arbitration and securities class action lawsuits.

Insufficient funds may require us to delay, scale back or eliminate some or all of our commercial efforts and/or research and development programs, to reduce personnel and operating expenses, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern.

Our success as a company is uncertain due to our history of operating losses and the uncertainty of any future profitability.

For the year ended December 31, 2024, we recognized income from operations of \$24.2 million primarily due to higher net product sales and collaboration revenues, partially offset by our operating expenses. Historically, we have incurred losses from operations each year since we were incorporated in June 1996 other than in fiscal year 2010, due in large part to the significant research and development expenditures and costs of our ongoing commercial efforts. Although we recognized income from operations for the current period, there can be no assurance that we will generate annual operating income in the foreseeable future. Currently, our potential sources of revenues include sales of our products, as well as upfront, milestones and royalty payments pursuant to our collaboration arrangements, all of which may never materialize if sales of our products decline or if our collaboration partners do not achieve certain events or generate net sales to which these contingent payments are dependent on. If our future drug candidates fail or do not gain regulatory approval, or if our drugs do not achieve sustainable market acceptance, we may not be profitable. As of December 31, 2024, we had an accumulated deficit of approximately \$1.4 billion. The extent of our future losses or profitability, if any, is highly uncertain.

If our corporate collaborations or license agreements are unsuccessful, or if we fail to form new corporate collaborations or license agreements, our research and development efforts could be delayed.

Our strategy depends upon the formation and sustainability of multiple collaborative arrangements and license agreements with third parties now and in the future. We rely on these arrangements for not only financial resources, but also for expertise we need now and in the future relating to clinical trials, manufacturing, sales and marketing, and for licenses to technology rights. To date, we have entered into several such arrangements with corporate collaborators; however, we do not know if these collaborations or additional collaborations with third parties, if any, will dedicate sufficient resources or if any development or commercialization efforts by third parties will be successful. In addition, our corporate collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a drug candidate or development program. Should a collaborative partner fail to develop or commercialize a compound or product to which it has rights from us for any reason, including corporate restructuring, such failure might delay our ongoing research and development efforts, because we might not receive any future payments, and we would not receive any royalties associated with such compound or product. We may seek another collaborator or licensee in the future for clinical development and commercialization of our products, as well as our other

clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. If we are unable to form new collaborations or enter into new license agreements, our research and development efforts could be delayed. In addition, the continuation of some of our partnered drug discovery and development programs may be dependent on the periodic renewal of our corporate collaborations.

Each of our collaborations could be terminated by the other party at any time, and we may not be able to renew these collaborations on acceptable terms, if at all, or negotiate additional corporate collaborations on acceptable terms, if at all. If these collaborations terminate or are not renewed, any resultant loss of revenues from these collaborations or loss of the resources and expertise of our collaborative partners could adversely affect our business.

Conflicts also might arise with collaborative partners concerning proprietary rights to particular compounds. While our existing collaborative agreements typically provide that we retain milestone payments, royalty rights and/or revenue sharing with respect to drugs developed from certain compounds or derivative compounds, any such payments or royalty rights may be at reduced rates, and disputes may arise over the application of payment provisions or derivative payment provisions to such drugs, and we may not be successful in such disputes. For example, in September 2018, BerGenBio served us with a notice of arbitration seeking declaratory relief related to the interpretation of provisions under our June 2011 license agreement, particularly as they relate to the rights and obligations of the parties in the event of the license or sale of a product in the program by BerGenBio and/or the sale of BerGenBio to a third party. The arbitration panel dismissed four of the six declarations sought by BerGenBio, and we thereafter consented to one of the remaining declarations requested by BerGenBio. On February 27, 2019, the arbitration panel issued a determination granting the declaration sought by BerGenBio on the remaining issue, and held that in the event of a sale of shares by BerGenBio's shareholders where there is no monetary benefit to BerGenBio, we would not be entitled to a portion of the proceeds from such a sale. In this circumstance where the revenue share provision is not triggered, the milestone and royalty payment provisions remain in effect. While we do not believe that the determination will have an adverse effect on our operations, cash flows or financial condition, we can make no assurance regarding any such impact. Additionally, the management teams of our collaborators may change for various reasons including due to being acquired. Different management teams or an acquiring company of our collaborators may have different priorities which may have adverse results on the collaboration with us.

We are also a party to various license agreements that give us rights to use specified technologies in our research and development processes. The agreements pursuant to which we have in-licensed technology permit our licensors to terminate the agreements under certain circumstances. If we are not able to continue to license these and future technologies on commercially reasonable terms, our product development and research may be delayed or otherwise adversely affected.

If conflicts arise between our collaborators or advisors and us, any of them may act in their self-interest, which may be adverse to our stockholders' interests.

If conflicts arise between us and our corporate collaborators or scientific advisors, the other party may act in its self-interest and not in the interest of our stockholders. Some of our corporate collaborators are conducting multiple product development efforts within each disease area that is the subject of the collaboration with us or may be acquired or merged with a company having a competing program. In some of our collaborations, we have agreed not to conduct, independently or with any third party, any research that is competitive with the research conducted under our collaborations. Our collaborators, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by our collaborators or to which our collaborators have rights, may result in their withdrawal of support for our product candidates.

If any of our corporate collaborators were to breach or terminate its agreement with us or otherwise fail to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated. We generally do not control the amount and timing of resources that our corporate collaborators devote to our programs or potential products. We do not know whether current or future collaborative partners, if any, might pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by collaborative arrangements with us.

Our success is dependent on intellectual property rights held by us and third parties, and our interest in such rights is complex and uncertain

Our success will depend to a large part on our own, our licensees' and our licensors' ability to obtain and defend patents for each party's respective technologies and the compounds and other products, if any, resulting from the application of such technologies. For example, fostamatinib is covered as a composition of matter in a US issued patent that has an expiration date of September 2031, olutasidenib is covered as a composition of matter in a US issued patent that has an expected expiration date of December 2036, after taking into account patent term extension rules, and pralsetinib is covered as a composition of matter in a US issued patent that has an expiration date in November 2036 and subject to extensions.

In the future, our patent position might be highly uncertain and involve complex legal and factual questions, and the cost to defend may also be significant. For example, we may be involved in post-grant proceedings before the US Patent and Trademark Office. Post-grant proceedings are complex and expensive legal proceedings and there is no assurance we will be successful in any such proceedings. A post-grant proceeding could result in our losing our patent rights and/or our freedom to operate and/or require us to pay significant royalties. Additionally, third parties may challenge the validity, enforceability or scope of our issued patents, which may result in such patents being narrowed, invalidated or held unenforceable through interference, opposition or invalidity proceedings before the US Patent and Trademark Office or non-US patent offices. Any successful opposition to our patents could deprive us of exclusive rights necessary for the successful commercialization of our products or our other product candidates. Oppositions could also be filed to complementary patents, such as formulations, methods of manufacture and methods of use, that are intended to extend the patent life of the overall portfolio beyond the patent life covering the composition of matter. A successful opposition to any such complementary patent could impact our ability to extend the life of the overall portfolio beyond that of the related composition of matter patent.

An adverse outcome may allow third parties to use our intellectual property without a license and/or allow third parties to introduce generic and other competing products, any of which would negatively impact our business. For example, in June 2022, we received a notice letter from Annora advising that it has filed an ANDA with the FDA for a generic version of TAVALISSE and asserting that certain patents related to TAVALISSE that are listed in the Orange Book will not be infringed by Annora's proposed product, are invalid and/or are unenforceable. In July 2022, we filed a lawsuit in the US District Court for the District of New Jersey against Annora and its subsidiaries for infringement of those US patents. In September 2022, Annora and its subsidiaries answered and counterclaimed for declaratory judgment of non-infringement and invalidity of those patents. We filed an answer to Annora's counterclaims on October 12, 2022. Annora served invalidity and non-infringement contentions on December 31, 2022. We filed an answer to Annora's invalidity and non-infringement contentions in March 2023. Litigation continues, and no trial date is currently set. We intend to vigorously enforce and defend our intellectual property rights related to TAVALISSE. Should Annora or any other third parties receive FDA approval of an ANDA for a generic version of fostamatinib or a 505(b)(2) NDA with respect to fostamatinib, and if our patents covering fostamatinib were held to be invalid (or if such competing generic versions of fostamatinib were found to not infringe our patents), then they could introduce generic versions of fostamatinib or other such 505(b)(2) products before our patents expire, and the resulting competition would negatively affect our business, financial condition and results of operations. Please also see the risk factor entitled, "If manufacturers obtain approval for generic versions of our products, or of products with which we compete, our business may be harmed." In the future, there might be other claims that are subject to substantial uncertainties and unascertainable damages or other remedies, and the cost to defend may also be significant.

Additional uncertainty may result because no consistent policy regarding the breadth of legal claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in our or other companies' patents.

Because the degree of future protection for our proprietary rights is uncertain, we cannot assure that:

- we were the first to make the inventions covered by each of our pending patent applications;
- we were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our

technologies;

- any of our pending patent applications will result in issued patents;
- any patents issued to us or our collaborators will provide a basis for commercially viable products or will provide us with any
 competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies that are patentable;
- we will obtain a supplementary protection certificate that will extend the protection afforded by the patent to the product with a marketing authorization; or
- the patents of others will not have a negative effect on our ability to do business.

We rely on trade secrets to protect technology where we believe patent protection is not appropriate or obtainable; however, trade secrets are difficult to protect. While we require employees, collaborators and consultants to enter into confidentiality agreements, we may not be able to adequately protect our trade secrets or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information.

We are a party to certain in-license agreements that are important to our business, and we generally do not control the prosecution of in-licensed technology. Accordingly, we are unable to exercise the same degree of control over this intellectual property as we exercise over our internally developed technology. Moreover, some of our academic institution licensors, research collaborators and scientific advisors have rights to publish data and information in which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, our ability to receive patent protection or protect our proprietary information may otherwise be impaired. In addition, some of the technology we have licensed relies on patented inventions developed using US government resources.

The US government retains certain rights, as defined by law, in such patents, and may choose to exercise such rights. Certain of our in-licenses may be terminated if we fail to meet specified obligations. If we fail to meet such obligations and any of our licensors exercise their termination rights, we could lose our rights under those agreements. If we lose any of our rights, it may adversely affect the way we conduct our business. In addition, because certain of our licenses are sublicenses, the actions of our licensors may affect our rights under those licenses.

If a dispute arises regarding the infringement or misappropriation of the proprietary rights of others, such dispute could be costly and result in delays in our research and development activities, partnering and commercialization activities.

Our success will depend, in part, on our ability to operate without infringing or misappropriating the proprietary rights of others. There are many issued patents and patent applications filed by third parties relating to products or processes that are similar or identical to our licensors or ours, and others may be filed in the future. There may also be copyrights or trademarks that third parties hold. There can be no assurance that our activities, or those of our licensors, will not violate intellectual property rights of others. We believe that there may be significant litigation in the industry regarding patent and other intellectual property rights, and we do not know if our collaborators or we would be successful in any such litigation. Any legal action against our collaborators or us claiming damages or seeking to enjoin commercial activities relating to the affected products, our methods or processes could:

- require our collaborators or us to obtain a license to continue to use, manufacture or market the affected products, methods or
 processes, which may not be available on commercially reasonable terms, if at all;
- prevent us from using the subject matter claimed in the patents held by others;
- subject us to potential liability for damages;
- consume a substantial portion of our managerial and financial resources; and
- · result in litigation or administrative proceedings that may be costly, whether we win or lose.

Our effective tax rate may fluctuate, and we may incur obligations in tax jurisdictions in excess of accrued amounts.

We are subject to taxation in numerous US states and territories. As a result, our effective tax rate is derived from a combination of applicable tax rates in the various places that we operate. In preparing our financial statements, we estimate the amount of tax that will become payable in each of such places. Nevertheless, our effective tax rate may be different than experienced in the past due to numerous factors, including passage of the newly enacted federal income tax law, changes in the mix of our profitability from state to state, the results of examinations and audits of our tax filings, our inability to secure or sustain acceptable agreements with tax authorities, changes in accounting for income taxes and changes in tax laws. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations and may result in tax obligations in excess of amounts accrued in our financial statements

Our ability to use net operating losses (NOLs) and certain other tax attributes is uncertain and may be limited.

Our ability to use our federal and state NOLs to offset potential future taxable income and related income taxes that would otherwise be due is dependent upon our generation of future taxable income before the expiration dates of the NOLs, and we cannot predict with certainty when, or whether, we will generate sufficient taxable income to use all of our NOLs. Federal NOLs generated prior to 2018 will continue to be governed by the NOL carryforward rules as they existed prior to the adoption of the Tax Cuts and Jobs Act (Tax Act), which means that generally they will expire 20 years after they were generated if not used prior thereto. Many states have similar laws. Accordingly, our federal and state NOLs could expire unused and be unavailable to offset future income tax liabilities. Moreover, federal NOLs generated in tax years ending after December 31, 2017 may be carried forward indefinitely, but the deductibility of such federal NOLs may be limited to 80% of current year taxable income for tax years beginning after January 1, 2021. In June 2024, California Senate Bill 167 was signed into law which suspends NOL deductions for tax years beginning on or after January 1, 2024 and before January 1, 2027 for taxpayers with net business income or modified adjusted gross income of at least \$1.0 million for the tax year. The legislation also limits the aggregate use of otherwise allowable business credits to \$5.0 million for each tax year beginning on or after January 1, 2024 but before January 1, 2027 (except for certain credits not subject to the limitation). Further, the Tax Act requires the taxpayers to capitalize Research and Experimental (R&E) expenditures under Section 174 of the Internal Revenue Code, as amended (Code), effective for taxable years beginning after December 31, 2021, which will reduce our NOLs beginning in 2022. R&E expenditures attributable to US-based research must be amortized over a period of 5 years and R&E expenditures attributable to research conducted outside of the US must be amortized over a period of 15 years.

In addition, utilization of NOLs to offset potential future taxable income and related income taxes that would otherwise be due is subject to annual limitations under the "ownership change" provisions of Sections 382 and 383 of the Code and similar state provisions, which may result in the expiration of NOLs before future utilization. In general, under the Code, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes (such as research and development credit carryforwards) to offset its post-change taxable income or taxes may be limited. Our equity offerings and other changes in our stock ownership, some of which are outside of our control, may have resulted or could in the future result in an ownership change. Although we have completed studies to provide reasonable assurance that an ownership change limitation would not apply, we cannot be certain that a taxing authority would reach the same conclusion. If, after a review or audit, an ownership change limitation were to apply, utilization of our domestic NOLs and tax credit carryforwards could be limited in future periods and a portion of the carryforwards could expire before being available to reduce future income tax liabilities. Moreover, our ability to utilize our NOLs is conditioned upon us achieving profitability and generating US federal taxable income.

Changes in valuation allowance of deferred tax assets may affect our future operating results

We continue to record a full valuation allowance on our deferred tax assets considering our cumulative losses in prior years. In assessing the need for a valuation allowance, we consider historical levels of income, expectations and risks associated with estimates of future taxable income. We periodically evaluate our deferred tax asset balance for realizability. To the extent we believe it is more-likely-than-not that our deferred tax assets will not be realized, we will continue to maintain the valuation allowance against the deferred tax assets. Realization of our deferred tax assets is

dependent primarily upon future taxable income. If our assumptions and consequently our estimates change in the future, the valuation allowances may be increased or decreased, resulting in a respective increase or decrease in income tax expense.

Because we expect to be dependent upon collaborative and license agreements, we might not meet our strategic objectives.

Our ability to generate revenue in the near term depends on the timing of recognition of certain upfront payments, achievement of certain payment triggering events with our existing collaboration agreements and our ability to enter into additional collaborative agreements with third parties. Our ability to enter into new collaborations and the revenue, if any, that may be recognized under these collaborations is highly uncertain. If we are unable to enter into one or more new collaborations, our business prospects could be harmed, which could have an immediate adverse effect on our ability to continue to develop our compounds and on the trading price of our stock. Our ability to enter into a collaboration may be dependent on many factors, such as the results of our clinical trials, competitive factors and the fit of one of our programs with another company's risk tolerance, including toward regulatory issues, patent portfolio, clinical pipeline, the stage of the available data, particularly if it is early, overall corporate goals and financial position.

To date, a portion of our revenues have been related to the research or transition phase of each of our collaborative agreements. Such revenues are for specified periods, and the impact of such revenues on our results of operations is at least partially offset by corresponding research costs. Following the completion of the research or transition phase of each collaborative agreement, additional revenues may come only from payments triggered by milestones and/or the achievement of other contingent events, and royalties, which may not be paid, if at all, until certain conditions are met. This risk is heightened due to the fact that unsuccessful research efforts may preclude us from receiving any contingent payments under these agreements. Our receipt of revenues from collaborative arrangements is also significantly affected by the timing of efforts expended by us and our collaborators and the timing of lead compound identification. We have received payments from our current collaborations including Lilly, Grifols, Kissei, Medison, Knight, BerGenBio, and Daiichi. Under several agreements, future payments may not be earned until the collaborator has advanced product candidates into clinical testing, which may never occur or may not occur until sometime well into the future. If we are not able to generate revenue under our collaborations when and in accordance with our expectations or the expectations of industry analysts, this failure could harm our business and have an immediate adverse effect on the trading price of our common stock.

Our business requires us to generate meaningful revenue from royalties and licensing agreements. To date, we have not recognized material amount of revenue from royalties for the commercial sale of drugs, and we do not know when we will be able to generate such meaningful revenue in the future.

Securities class action lawsuits or other litigation could result in substantial damages and may divert management's time and attention from our business.

We have been subject to class action lawsuits in the past and we may be subject to lawsuits in the future, such as those that might occur if there was to be a change in our corporate strategy. These and other lawsuits are subject to inherent uncertainties, and the actual costs to be incurred relating to the lawsuit will depend upon many unknown factors. The outcome of litigation is necessarily uncertain, and we could be forced to expend significant resources in the defense of such suits, and we may not prevail. Monitoring and defending against legal actions is time-consuming for our management and detracts from our ability to fully focus our internal resources on our business activities. In addition, we may incur substantial legal fees and costs in connection with any such litigation. We have not established any reserves for any potential liability relating to any such potential lawsuits. It is possible that we could, in the future, incur judgments or enter into settlements of claims for monetary damages. A decision adverse to our interests on any such actions could result in the payment of substantial damages, or possibly fines, and could have an adverse effect on our cash flow, results of operations and financial position.

If our competitors develop technologies that are more effective than ours, our commercial opportunity will be reduced or eliminated.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Many of the drugs that we are attempting to discover will be competing with existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. For example, the commercialization of new pharmaceutical products is highly competitive, and we face substantial competition with respect to our products in which there are existing therapies and drug candidates in development for the treatment of hematologic disorders and cancer that may be alternative therapies to our products. Many of our competitors, including a number of large pharmaceutical companies that compete directly with us, have significantly greater financial resources and expertise commercializing approved products than we do. Also, many of our competitors are large pharmaceutical companies that will have a greater ability to reduce prices for their competing drugs in an effort to gain market share and undermine the value proposition that we might otherwise be able to offer to payors. We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as from academic and research institutions and government agencies, both in the US and abroad. Some of these competitors are pursuing the development of pharmaceuticals that target the same diseases and conditions as our research programs. Our competitors including fully integrated pharmaceutical companies have extensive drug discovery efforts and are developing novel small-molecule pharmaceuticals. We also face significant competition from organizations that are pursuing the same or similar technologies, including the discovery of targets that are useful in compound screening, as the technologies used by us in our drug discovery efforts.

Competition may also arise from:

- new or better methods of target identification or validation;
- generic versions of our products or of products with which we compete;
- other drug development technologies and methods of preventing or reducing the incidence of disease;
- · new small molecules; or
- other classes of therapeutic agents.

Our competitors or their collaborative partners may utilize discovery technologies and techniques or partner with collaborators in order to develop products more rapidly or successfully than we or our collaborators are able to do. Many of our competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources and larger research and development staffs than we do. In addition, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies and may establish exclusive collaborative or licensing relationships with our competitors.

We believe that our ability to compete is dependent, in part, upon our ability to create, maintain and license scientifically-advanced technology and upon our and our collaborators' ability to develop and commercialize pharmaceutical products based on this technology, as well as our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary technology or processes, secure effective market access by ensuring competitive pricing and reimbursement in territories of interest, and secure sufficient capital resources for the expected substantial time period between technological conception and commercial sales of products based upon our technology. The failure by any of our collaborators or us in any of those areas may prevent the successful commercialization of our potential drug targets.

Many of our competitors, either alone or together with their collaborative partners, have significantly greater experience than we do in:

- · identifying and validating targets;
- screening compounds against targets; and

undertaking preclinical testing and clinical trials.

Accordingly, our competitors may succeed in obtaining patent protection, identifying or validating new targets or developing new drug compounds before we do.

Our competitors might develop technologies and drugs that are more effective or less costly than any that are being developed by us or that would render our technology and product candidates obsolete and noncompetitive. In addition, our competitors may succeed in obtaining the approval of the FDA or other regulatory agencies for product candidates more rapidly. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before us may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights that would delay or prevent our ability to market certain products. Any drugs resulting from our research and development efforts, or from our joint efforts with our existing or future collaborative partners, might not be able to compete successfully with competitors' existing or future products or obtain regulatory approval in the US or elsewhere

We face and will continue to face intense competition from other companies for collaborative arrangements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions and for licenses to additional technologies. These competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective than ours.

Our ability to compete successfully will depend, in part, on our ability to:

- identify and validate targets;
- discover candidate drug compounds that interact with the targets we identify in a safe and efficacious way;
- attract and retain scientific and product development personnel;
- recruit subjects into our clinical trials;
- obtain and maintain required regulatory approvals;
- obtain patent or other proprietary protection for our new drug compounds and technologies;
- obtain access to manufacturing resources of the sufficient standard and scale;
- · enter commercialization agreements for our new drug compounds; and
- obtain and maintain appropriate reimbursement price and positive recommendations by HTA bodies.

Our stock price may be volatile, and our stockholders' investment in our common stock could decline in value.

The market prices for our common stock and the securities of other biotechnology companies have been highly volatile and may continue to be highly volatile in the future. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- our ability to continue to sell our products in the US;
- our ability to enter into partnering opportunities across our pipeline;
- the receipt or failure to receive the additional funding necessary to conduct our business;
- selling of our common stock by large stockholders;
- presentations of detailed clinical trial data at medical and scientific conferences and investor perception

thereof;

- announcements of technological innovations or new commercial products by our competitors or us;
- the announcement of regulatory applications, such as Annora's ANDA, seeking approval of generic versions of our marketed products;
- developments concerning proprietary rights, including patents;
- developments concerning our collaborations;
- publicity regarding actual or potential medical results relating to products under development by our competitors or us;
- regulatory developments in the US and foreign countries;
- changes in the structure of healthcare payment systems;
- litigation or arbitration;
- economic and other external factors or other disaster or crisis; and
- period-to-period fluctuations in financial results.

We completed a reverse stock split of our shares of common stock, which may reduce and may limit the market trading liquidity of the shares due to the reduced number of shares outstanding and may potentially have an anti-takeover effect.

We completed a reverse stock split of our common stock by a ratio of 1-for-10 effective June 27, 2024. The primary objective of the reverse stock split was to attempt to raise the per share trading price of our common stock. We believe that a low per share market price of our common stock impairs our marketability to, and acceptance by, institutional investors and other members of the investing public and creates a negative impression of us. Among other benefits, the effectuation of the reverse stock split seeks to help us maintain compliance with the minimum bid continued listing requirement of \$1.00 per share required to maintain continued listing on The Nasdaq Global Select Market (the Bid Price Requirement). Prior to us effecting a reverse stock split, the closing bid price of our common stock at certain periods fell below \$1.00 per share for 30 consecutive trading days. We received deficiency letters from the Listing Qualifications Department of Nasdaq on November 22, 2022 and November 27, 2023, notifying us that, for 30 consecutive business days, the bid price for our common stock had closed below the Bid Price Requirement. We received notification from the Listing Department of Nasdaq on January 5, 2023 and December 12, 2023 that we had regained our compliance with the Bid Price Requirement because the closing price of our common stock closed at \$1.00 or more for over 10 consecutive days. Although we regained compliance with the Nasdaq Bid Price Requirement, in the future, Nasdaq may initiate a delisting process with a notification letter if we were to again fall out of compliance. If we were to receive such a notification, we would be afforded a grace period of 180 calendar days to regain compliance with the Bid Price Requirement. In order to regain compliance, shares of our common stock would need to maintain a minimum closing bid price of at least \$1.00 per share for a minimum of 10 consecutive trading days. Additionally, we may be unable to meet other applicable Nasdaq listing requirements, including maintaining minimum levels of stockholders' equity or market values of our common stock in which case, our common stock could be delisted. If our common stock were to be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease.

Reducing the number of outstanding shares of our common stock through the reverse stock split increased the per share trading price of our common stock. However, there is no assurance that:

 the market price per share of our common stock after the reverse stock split will rise in proportion to the reduction in the number of shares outstanding before the reverse stock split;

- the reverse stock split will result in a per-share price that would attract brokers and investors who do not trade in lower-priced stocks.
- the reverse stock split will result in a per-share price that will increase our ability to attract and retain employees and other service providers; or
- the reverse stock split will promote greater liquidity for our stockholders with respect to their shares.

In addition, the reverse stock split reduced the number of outstanding shares of our common stock without reducing the authorized number of shares of our common stock. Therefore, the number of shares of our common stock that are authorized and unissued has increased relative to the number of issued and outstanding shares of our common stock following the reverse stock split. Our Board of Directors may authorize the issuance of the remaining authorized and unissued shares without further stockholder action for a variety of purposes, except as such stockholder approval may be required in particular cases by our Amended and Restated Certificate of Incorporation, applicable law or the rules of any stock exchange on which our securities may then be listed. The issuance of additional shares would be dilutive to our existing stockholders and may cause a decline in the trading price of our common stock. The issuance of authorized but unissued shares of common stock could be used to deter a potential takeover of us that may otherwise be beneficial to stockholders by diluting the shares held by a potential suitor or issuing shares to a stockholder that will vote in accordance with our Board of Directors' desires. A takeover may be beneficial to independent stockholders because, among other reasons, a potential suitor may offer such stockholders a premium for their shares of stock compared to the then-existing market price. We do not have any plans or proposals to adopt provisions or enter into agreements that may have material anti-takeover consequences.

The market price of our common stock is based on our performance and other factors, some of which are unrelated to the number of shares outstanding. If the market price of our common stock declines, the percentage decline as an absolute number and as a percentage of our overall market capitalization may be greater than would occur in the absence of the reverse stock split.

The withdrawal of the UK from the EU may adversely impact our ability to obtain regulatory approvals of our product candidates in the UK, result in restrictions or imposition of taxes and duties for importing our product candidates into the UK, and may require us to incur additional expenses in order to develop, manufacture and commercialize our product candidates in the UK.

Following the result of a referendum in 2016, the UK left the EU on January 31, 2020, commonly referred to as Brexit. Pursuant to the formal withdrawal arrangements agreed between the UK and the EU, the UK was subject to a transition period until December 31, 2020, or the Transition Period, during which EU rules continued to apply. A trade and cooperation agreement (Trade Agreement) that outlines the future trading relationship between the UK and the EU was agreed to in December 2020 and has been approved by each EU member state and the UK.

Since a significant proportion of the regulatory framework in the UK applicable to our business and our product candidates is derived from EU directives and regulations, Brexit has had, and will continue to have, a material impact upon the regulatory regime with respect to the development, manufacture, importation, approval and commercialization of our product candidates in the UK or the EU. Great Britain (made up of England, Scotland, and Wales) is no longer covered by the EEA's procedures for the grant of marketing authorizations (Northern Ireland will be covered by such procedures). The UK Government and the EU recently adopted a new agreement, the "Windsor Framework" which will replace the Northern Ireland Protocol. According to the Windsor Framework, medicinal products intended for the UK market including Northern Ireland will be authorized by the MHRA, and will bear a "UK only" label. This means that Medicinal products placed on the market in Northern Ireland will no longer need to be compliant with EU law. These new measures will be implemented from January 1, 2025.

A separate marketing authorization will be required to market drugs in Great Britain. The MHRA has launched the Innovative Licensing and Access Pathway (ILAP), a new accelerated assessment procedure for marketing authorization applications facilitating the interaction with pricing authorities and HTA bodies and aiming to enable companies to enter the UK market faster. On January 1, 2024, the MHRA launched a new International Recognition Procedure for Great Britain (England, Scotland and Wales) marketing authorization applications whereby the MHRA

will, when considering such applications, recognize the approval of medicines by trusted reference regulators in Australia, Canada, Switzerland, Singapore, Japan, United States and EU following its own abbreviated assessment. Any delay in obtaining, or an inability to obtain, any marketing approvals would delay or prevent us from commercializing our product candidates in the UK or the EU and restrict our ability to generate revenue and achieve and sustain profitability.

While the Trade Agreement provides for the tariff-free trade of medicinal products between the UK and the EU, there may be additional non-tariff costs to such trade which did not exist prior to the end of the Transition Period. Further, should the UK diverge from the EU from a regulatory perspective in relation to medicinal products, tariffs could be put into place in the future. We could therefore, both now and in the future, face significant additional expenses (when compared to the position prior to the end of the Transition Period) to operate our business, which could significantly and materially harm or delay our ability to generate revenues or achieve profitability of our business. Any further changes in international trade, tariff and import/export regulations as a result of Brexit or otherwise may impose unexpected duty costs or other non-tariff barriers on us. These developments, or the perception that any of them could occur, may significantly reduce global trade and, in particular, trade between the impacted nations and the UK. It is also possible that Brexit may negatively affect our ability to attract and retain employees, particularly those from the EU.

Orphan designation in the UK following Brexit is granted on an essentially identical basis as in the EU but is based on the prevalence of the condition in the UK. It is therefore possible that conditions that are currently designated as orphan conditions in the UK will no longer be, and conditions that are not currently designated as orphan conditions in the EU will be designated as such in the UK.

In April 2023, the European Commission adopted a wide ranging proposal for a new Directive and a new Regulation to revise and replace the existing general pharmaceutical legislation. This change will likely result in significant changes to the pharmaceutical industry. In particular, it is expected that the new Directive and Regulations will, if made into law, affect the duration of the period of regulatory protection afforded to medicinal products including regulatory data protection (also called "data exclusivity"), marketing exclusivity afforded to orphan medicinal products, as well as the conditions of eligibility to the orphan designation. The legislation is not expected to be adopted before 2026/2027.

If product liability lawsuits are successfully brought against us, we may incur substantial liabilities and may be required to limit commercialization of our products.

The testing and marketing of medical products and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. We carry product liability insurance that is limited in scope and amount and may not be adequate to fully protect us against product liability claims. If and when we obtain marketing approval for our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of pharmaceutical products we develop, alone or with corporate collaborators. We, or our corporate collaborators, might not be able to obtain insurance at a reasonable cost, if at all. While under various circumstances we are entitled to be indemnified against losses by our corporate collaborators, indemnification may not be available or adequate should any claim arise.

We depend on various scientific consultants and advisors for the success and continuation of our research and development efforts.

We work extensively with various scientific consultants and advisors. The potential success of our drug discovery and development programs depends, in part, on continued collaborations with certain of these consultants and advisors. We, and various members of our management and research staff, rely on certain of these consultants and advisors for expertise in our research, regulatory and clinical efforts. Our scientific advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We do not know if we will be able to maintain such consulting agreements or that such scientific advisors will not enter

into consulting arrangements with competing pharmaceutical or biotechnology companies, any of which may have a detrimental impact on our research objectives and could have an adverse effect on our business, financial condition and results of operations.

While we have a strong compliance process in place to ensure we are complying with all requirements of law, our consulting or advisory contracts with our scientific consultants and advisors may be scrutinized under the Anti-Kickback Statute, the UK Bribery Act 2010, and other similar national and state-level legislation, which prohibit, among other things, companies from offering or paying anything of value as remuneration for ordering, purchasing, or recommending the ordering or purchasing of pharmaceutical and biological products that may be paid for, in whole or in part, by Medicare, Medicaid, or another federal healthcare program. Although there are several statutory exceptions and regulatory safe harbors that may protect these arrangements from prosecution or regulatory sanctions, our consulting and advising contracts may be subject to scrutiny if they do not fit squarely within an available exception or safe harbor.

If we use biological and hazardous materials in a manner that causes injury or violates laws, we may be liable for damages, penalties or fines.

Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals, animals, and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these animals and materials. In the event of contamination or injury, we could be held liable for damages that result or for penalties or fines that may be imposed, and such liability could exceed our resources. We are also subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with, or any potential violation of, these laws and regulations could be significant.

Our information technology systems, or those used by our CROs or other contractors or consultants, may fail or suffer other breakdowns, cyber-attacks, or information security breaches.

We are dependent upon information technology systems, infrastructure, and data to operate our business. While we believe our cybersecurity measures are adequate, our cybersecurity risk management, strategy and governance may be found to be inadequate that could harm our business. We rely on third-party vendors and their information technology systems. Despite the implementation of security measures, our recovery systems, security protocols, network protection mechanisms and other security measures and those of our CROs and other contractors and consultants are vulnerable to compromise from natural disasters; terrorism; war; telecommunication and electric failures; traditional computer hackers; malicious code (such as computer viruses or worms); employee error, theft or misuse; denial-ofservice attacks; cyber-attacks by sophisticated nation-state and nation-state supported actors including ransomware; or other system disruptions. We receive, generate and store significant and increasing volumes of personal (including health), confidential and proprietary information. There can be no assurance that we, or our collaborators, CROs, third-party vendors, contractors and consultants will be successful in efforts to detect, prevent, protect against or fully recover systems or data from all breakdowns, service interruptions, attacks or breaches. Any breakdown, cyber-attack or information security breach could result in a disruption of our drug development programs or other aspects of our business. For example, the loss of clinical trial data from completed or ongoing clinical trials for a product candidate could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of personal, confidential or proprietary information, we could incur liability, incur significant remediation or litigation costs, result in product development delays, disrupt key business operations, cause loss of revenue and divert attention of management and key information technology resources.

Hackers and data thieves are increasingly sophisticated and operate large-scale and complex automated attacks, including on companies within the healthcare industry. As the cyber-threat landscape evolves, these threats are likely growing in frequency, sophistication and intensity and are increasingly difficult to detect. The costs of maintaining or upgrading our cyber-security systems at the level necessary to keep up with our expanding operations and prevent against potential attacks are increasing. Cyber threats may be generic, or they may be targeted against our information systems. Our network and storage applications and those of our contract manufacturing organizations, collaborators, contractors, CROs or vendors may be subject to unauthorized access or processing by hackers or breached due to

operator or other human error, theft, malfeasance or other system disruptions. We may be unable to anticipate or immediately detect information security incidents and the damage caused by such incidents. These data breaches and any unauthorized access, processing or disclosure of our information or intellectual property could compromise our intellectual property and expose our sensitive business information. Such attacks, such as in the case of a ransomware attack, also may interfere with our ability to continue to operate and may result in delays and shortcomings due to an attack that may encrypt our or our service providers' or partners' systems unusable. Additionally, because our services involve the processing of personal information and other sensitive information about individuals, we are subject to various laws, regulations, industry standards, and contractual requirements related to such processing. Any event that leads to unauthorized access, processing or disclosure of personal information, including personal information regarding our clinical trial participants or employees, could harm our reputation and business, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to investigations and mandatory corrective action, and otherwise subject us to liability under laws, regulations or contracts that protect the privacy and security of personal information, which could disrupt our business, damage our reputation with our stakeholders, result in increased costs or loss of revenue, lead to negative publicity or result in significant financial exposure. The CCPA, in particular, includes a private right of action for California consumers whose personal information is impacted by a data security incident resulting from a company's failure to maintain reasonable security procedures, and hence may result in civil litigation in the event of a security breach impacting such information. In addition, legislators and regulators in the US have enacted and are proposing new and more robust privacy and cybersecurity laws and regulations in response to increasing broad-based cyberattacks, including the CCPA and New York SHIELD Act. Notably, on July 26, 2023, the SEC adopted a final rule on cybersecurity risk management, strategy, governance and incident disclosure (SEC Cyber Rule). The SEC Cyber Rule requires public companies to make current disclosures about material cybersecurity incidents as well as annual disclosures of material information about their cybersecurity risk management, strategy and governance. The SEC Cyber Rule became effective on September 5, 2023. New data security laws add additional complexity, requirements, restrictions and potential legal risk, and compliance programs may require additional investment in resources, and could impact strategies and availability of previously useful data.

The costs to respond to a security breach and/or to mitigate any identified security vulnerabilities could be significant, our efforts to address these issues may not be successful, and these issues could result in interruptions, delays, negative publicity, loss of customer trust, and other harms to our business and competitive position. Remediation of any potential security breach may involve significant time, resources, and expenses. We could be required to fundamentally change our business activities and practices in response to a security breach and our systems or networks may be perceived as less desirable, which could negatively affect our business and damage our reputation.

A security breach may cause us to breach our contracts with third parties. Our agreements with relevant stakeholders such as collaborators may require us to use legally required, industry-standard or reasonable measures to safeguard personal information. A security breach could lead to claims by relevant stakeholders that we have failed to comply with such contractual obligations, or require us to cooperate with these stakeholders in their own compliance efforts related to the security breach. In addition, any non-compliance with our data privacy obligations in our contracts or our inability to flow down such obligations from relevant stakeholders to our vendors may cause us to breach our contracts. As a result, we could be subject to legal action or the relevant stakeholders could end their relationships with us. There can be no assurance that the limitations of liability in our contracts would be enforceable or adequate or would otherwise protect us from liabilities or damages.

We may not have adequate insurance coverage for security incidents or breaches. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim.

Future equity issuances or a sale of a substantial number of shares of our common stock may cause the price of our common stock to

Because we will continue to need additional capital in the future to continue to expand our business, we may conduct additional equity offerings. We have an Open Market Sale Agreement with Jefferies LLC (Jefferies) entered on August 4, 2020, and amended and restated on August 2, 2024, pursuant to which, we may sell from time to time, through Jefferies, shares of our common stock in sales deemed to be "at-the-market offerings" as defined in Rule 415 under the Securities Act, subject to conditions specified in the Open Market Sale Agreement, including maintaining an effective registration statement covering the sale of shares under the Open Market Sale Agreement. We had a shelf registration statement (the Prior Registration Statement) filed with the SEC that expired on August 3, 2024. The Prior Registration Statement included a base prospectus registering the offering, issuance, and sale by us of up to \$250.0 million in the aggregate of the securities identified from time to time in one or more offerings, including the \$100.0 million of shares of our common stock that may be offered, issued and sold under the Open Market Sale Agreement. On August 2, 2024, we filed a new shelf registration statement (the New Registration Statement) with the SEC to replace the Prior Registration Statement. The New Registration Statement was declared effective on August 9, 2024 by the SEC. The New Registration Statement includes a base prospectus to register the offering, issuance and sale by us of up to \$250.0 million in the aggregate of securities identified from time to time in one or more offerings, including up to \$100.0 million of shares of our common stock that may be offered, issued and sold under the Open Market Sale Agreement. As of December 31, 2024, we have not sold any shares of common stock under such Open Market Sale Agreement.

We may also in the future enter into underwriting or sales agreements with financial institutions for the offer and sale of any combination of common stock, preferred stock, debt securities and warrants in one or more offerings. If we or our stockholders sell, or if it is perceived that we or they will sell, substantial amounts of our common stock in the public market, the market price of our common stock could fall. A decline in the market price of our common stock could make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. In addition, future sales by us of our common stock may be dilutive to existing stockholders. Furthermore, if we obtain funds through a credit facility or through the issuance of debt or preferred securities, these securities would likely have rights senior to the rights of our common stockholders, which could impair the value of our common stock.

Risks Related to Clinical Development and Regulatory Approval

Enacted or future legislation, and/or potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain regulatory approval of our product candidates and/or commercialize our products or our product candidates, once approved, and affect the prices we may set or obtain.

The regulations that govern, among other things, regulatory approvals, coverage, pricing and reimbursement for new drug products vary widely from country to country. In the US and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay regulatory approval of our product candidates, restrict or regulate post-approval activities and affect our ability to successfully sell our products, or any product candidates for which we obtain regulatory approval in the future. In particular, in March 2010, the Affordable Care Act was enacted, which substantially changed the way health care is financed by both governmental and private insurers, and continues to significantly impact the US pharmaceutical industry. On June 17, 2021, the US Supreme Court dismissed a legal challenge to the Affordable Care Act brought by several states (which argued that, without the individual mandate, the entire Affordable Care Act was unconstitutional) without specifically ruling on the constitutionality of the law. It is unclear how future actions before the Supreme Court, other such litigation, and the healthcare reform measures of future presidential administrations will impact the Affordable Care Act and our business.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce the costs of healthcare and/or impose price controls may adversely affect, for example:

the demand for our products, or our product candidates, if we obtain regulatory approval;

- our ability to set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

In the US, the EU and other potentially significant markets for our current and future products, government authorities and third-party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. In the US, there have been several Congressional inquiries and federal legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer-sponsored patient assistance programs, and reform government program reimbursement methodologies for drugs.

On March 11, 2021, the American Rescue Plan Act of 2021 was signed into law, which, among other changes, eliminated the statutory Medicaid drug rebate cap, which was previously set at 100% of a drug's average manufacture price, for single source and innovator multiple source drugs, as of January 1, 2024. The American Rescue Plan Act also temporarily increased premium tax credit assistance for individuals eligible for subsidies under the Affordable Care Act for 2021 and 2022 and removed the 400% federal poverty level limit that otherwise applies for purposes of eligibility to receive premium tax credits. The Inflation Reduction Act (IRA) extended this increased tax credit assistance and removal of the 400% federal poverty limit through 2025. Additionally, beginning in April 2013, the Budget Control Act of 2011 created an automatic reduction of Medicare payments to providers of up to 2%. As a result of the COVID-19 pandemic, this reduction was temporarily suspended from May 1, 2020 through March 31, 2022, with subsequent reductions to 1% from April 1, 2022 through June 30, 2022. The 2% reduction was then reinstated and has been in effect since July 1, 2022, and will remain in effect through the first eight months in which the fiscal year 2032 sequestration order is in effect, unless additional Congressional action is taken. Moreover, on June 16, 2022, the Federal Trade Commission issued a policy statement stating its intent to increase enforcement scrutiny of "exclusionary rebates" to PBMs and other intermediaries that "foreclose competition." On August 16, 2022, the IRA was signed into law, which, among other reforms, allows Medicare to: beginning in 2026, establish a "maximum fair price" for a fixed number of pharmaceutical and biological products covered under Medicare Parts B and D following a price negotiation with CMS; beginning in 2023, penalize drug companies that raise prices for products covered under Medicare Parts B and D faster than inflation; and beginning in 2025, impose new discount obligations on pharmaceutical and biological manufacturers for products covered under Medicare Part D. CMS continues to take steps to implement the IRA, including: releasing the negotiated maximum prices, which will be effective in 2026, for the first ten drugs that were subject to the IRA's negotiation process; releasing quarterly lists of Medicare Part B products that are subject to adjusted coinsurance rates based on the inflationary rebate provisions of the IRA; and announcing a list of fifteen additional drugs that will be subject to price negotiations during 2025. While it remains to be seen how the drug pricing provisions imposed by the IRA will affect the broader pharmaceutical industry, several pharmaceutical manufacturers and other industry stakeholders have challenged the law, including through lawsuits brought against the DHHS, the Secretary of the DHHS, CMS, and the CMS Administrator challenging the constitutionality and administrative implementation of the IRA's drug price negotiation provisions.

There have also been healthcare reform efforts carried out via administrative agencies. For example, on February 14, 2023, the DHHS issued a report, which, among other things, selects three potential drug affordability and accessibility models to be tested by the CMS Innovation Center. Specifically, the report addresses: (1) a model that would allow Part D Sponsors to establish a "high-value drug list" setting the maximum out-of-pocket costs for certain common generic drugs at \$2 per month per drug; (2) a Medicaid-focused model that would establish a partnership between CMS, manufacturers, and state Medicaid agencies that would result in multi-state outcomesbased agreements for certain cell and gene therapy drugs; and (3) a model that would adjust Medicare Part B payment amounts for Accelerated Approval Program drugs to advance the developments of novel treatments. Additionally, consistent with former President Biden's previous announcements in connection with the Cancer Moonshot initiative, on June 27, 2023,

the Center for Medicare Innovation at CMS announced a new model, the Enhancing Oncology Model, that is designed to make high-quality cancer care more affordable to both patients and Medicare.

Other proposed administrative actions may affect our government pricing responsibilities. For example, there are pending legal and legislative developments relating to the 340B Drug Pricing Program, including ongoing litigation challenging federal enforcement actions against manufacturers and recently introduced and enacted state legislation. It remains to be seen how these drug pricing initiatives will affect the broader pharmaceutical industry.

The results of the 2024 Presidential and Congressional elections, and potential subsequent developments further increase the uncertainty related to the healthcare regulatory environment. In addition, on June 28, 2024, the U.S. Supreme Court issued an opinion holding that courts reviewing agency action pursuant to the Administrative Procedure Act (APA) "must exercise their independent judgment" and "may not defer to an agency interpretation of the law simply because a statute is ambiguous." The decision will have a significant impact on how lower courts evaluate challenges to agency interpretations of law, including those by CMS and other agencies with significant oversight of the healthcare industry. The new framework is likely to increase both the frequency of such challenges and their odds of success by eliminating one way in which the government previously prevailed in such cases. As a result, significant regulatory policies may be subject to increased litigation and judicial scrutiny. Any resulting changes in regulation may result in unexpected delays, increased costs, or other negative impacts that are difficult to predict but could have a material adverse effect on our business and financial condition. For example, certain of these changes could impose additional limitations on the rates we will be able to charge for our future products or the amounts of reimbursement available for our future products from governmental agencies or third-party payors.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing. Specifically, several US states and localities have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports, and/or make periodic public disclosures on sales, marketing, pricing, clinical trials, and other activities. Other state laws prohibit certain marketing-related activities, including the provision of gifts, meals or other items to certain healthcare providers, and restrict the ability of manufacturers to offer co-pay support to patients for certain prescription drugs. Several state laws require disclosures related to state agencies and/or commercial purchasers with respect to price increases and new product launches that exceed certain thresholds as identified in the relevant statutes. Another emerging trend at the state level is the establishment of prescription drug affordability boards, some of which will prospectively permit certain states to establish upper payment limits for drugs that the state has determined to be "high-cost." Some of these laws and regulations contain ambiguous requirements that government officials have not yet clarified. Given the lack of clarity in the laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent federal and state laws and regulations.

Furthermore, the increased emphasis on managed healthcare in the US and on country and regional pricing and reimbursement controls in the EU and the UK will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid, healthcare reform, pharmaceutical reimbursement policies and pricing in general. Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products.

We cannot predict the likelihood, nature, or extent of health reform initiatives that may arise from future legislation or administrative action. However, we expect these initiatives to increase pressure on drug pricing. Further, certain broader legislation that is not targeted to the health care industry may nonetheless adversely affect our profitability. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

See "Part I, Item 1 – Business – Government Regulation – Healthcare Reform" of this Annual Report on Form 10-K, for additional information.

Regulatory approval for any approved product is limited by the FDA, the EC and other regulators to those specific indications and conditions for which clinical safety and efficacy have been demonstrated, and we may incur significant liability if it is determined that we are promoting the "off-label" use of our products or any of our future product candidates if approved.

Any regulatory approval is limited to those specific diseases, indications and patient populations for which a product is deemed to be safe and effective by the FDA, the EC and other regulators. For example, the FDA-approved label for TAVALISSE is only approved for use in adults with ITP who have had an insufficient response to other treatments and for REZLIDHIA is only approved for use in adult patients with R/R AML with a susceptible IDH1 mutation as detected by an FDA-approved test. Further, GAVRETO is approved by the FDA for the treatment of adult patients with metastatic RET fusion-positive NSCLC and has a conditional approval for the treatment of adult and pediatric patients 12 years of age and older with advanced or metastatic RET fusion-positive thyroid cancer. In addition to the FDA approval required for new formulations, any new indication for an approved product also requires FDA approval. If we are not able to obtain FDA approval for any desired future indications for our products and product candidates, or if we are not able to maintain a conditional approval or transition a conditional approval to full approval, our ability to effectively market and sell our products may be reduced and our business may be adversely affected.

While physicians may choose to prescribe drugs for uses that are not described in the product's labeling and for uses that differ from those tested in clinical studies and approved by the regulatory authorities, our ability to promote the products is limited to those indications and patient populations that are specifically approved by the FDA. These "off-label" uses are common across medical specialties and may constitute an appropriate treatment for some patients in varied circumstances. We have implemented compliance and monitoring policies and procedures, including a process for internal review of promotional materials, to deter the promotion of our products for off-label uses. We cannot guarantee that these compliance activities will prevent or timely detect off-label promotion by sales representatives or other personnel in their communications with health care professionals, patients and others, particularly if these activities are concealed from us. Regulatory authorities in the US generally do not regulate the behavior of physicians in their choice of treatments. Regulatory authorities do, however, restrict communications by pharmaceutical companies on the subject of off-label use. If our promotional activities fail to comply with the FDA's or other competent national authority's regulations or guidelines, we may be subject to warnings from, or enforcement action by, these regulatory authorities. In addition, our failure to follow FDA rules and guidelines relating to promotion and advertising may cause the FDA to issue warning letters or untitled letters, suspend or withdraw an approved product from the market, require a recall or institute fines, which could result in the disgorgement of money, operating restrictions, injunctions or civil or criminal enforcement, and other consequences, any of which could harm our business.

Notwithstanding the regulatory restrictions on off-label promotion, the FDA and other regulatory authorities allow companies to engage in truthful, non-misleading and non-promotional scientific exchange concerning their products. We engage in medical education activities and communicate with investigators and potential investigators regarding our clinical trials. If the FDA or other regulatory or enforcement authorities determine that our communications regarding our marketed product are not in compliance with the relevant regulatory requirements and that we have improperly promoted off-label uses, or that our communications regarding our investigational products are not in compliance with the relevant regulatory requirements and that we have improperly engaged in pre-approval promotion, we may be subject to significant liability, including civil and administrative remedies as well as criminal sanctions.

Delays in clinical testing could result in increased costs to us.

We may not be able to initiate or continue clinical studies or trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these clinical trials as required by the FDA or other regulatory authorities, whether due to the impacts of a global pandemic, global tensions arising from the Russian-Ukrainian war and Hamas-Israel war or otherwise. Even if we are able to enroll a sufficient number of patients in our clinical trials, if the pace of enrollment is slower than we expect, the development costs for our product candidates may increase and the completion of our clinical trials may be delayed, or our clinical trials could become too expensive to complete. Significant delays in clinical testing could negatively impact our product development costs and timing. Our estimates regarding timing are based on a number of assumptions, including assumptions based on past experience with

our other clinical programs. If we are unable to enroll the patients in these trials at the projected rate, the completion of the clinical program could be delayed and the costs of conducting the program could increase, either of which could harm our business.

Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a study, delays from scaling up of a study, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a study at a prospective clinical site or delays in recruiting subjects to participate in a study. In addition, we typically rely on third-party clinical investigators to conduct our clinical trials and other third-party organizations to oversee the operations of such trials and to perform data collection and analysis. The clinical investigators are not our employees, and we cannot control the amount or timing of resources that they devote to our programs. Failure of the third-party organizations to meet their obligations, whether due to the potential future impacts of a global pandemic, the global tensions arising from the Russian-Ukrainian war and Hamas-Israel war or otherwise, could adversely affect clinical development of our products. As a result, we may face additional delaying factors outside our control if these parties do not perform their obligations in a timely fashion. For example, any number of those issues could arise with our clinical trials causing a delay. Delays of this sort could occur for the reasons identified above or other reasons. If we have delays in conducting the clinical trials or obtaining regulatory approvals, our product development costs will increase. For example, we may need to make additional payments to third-party investigators and organizations to retain their services or we may need to pay recruitment incentives. If the delays are significant, our financial results and the commercial prospects for our product candidates will be harmed, and our ability to become profitable will be delayed. Moreover, these third-party investigators and organizations may also have relationships with other commercial entities, some of which may compete with us. If these third-party investigators and organizations assist our competitors at our expense, it could harm our competitive position.

Due to the effects of the COVID-19 pandemic, for several of our development programs, we experienced disruption or delay in our ability to enroll and assess patients, maintain patient enrollment, supply study drugs, report trial results, or interact with regulators, ethics committees or other important agencies due to limitations in employee resources or otherwise. In addition, in the event that a global pandemic occurs in the future, some patients in our clinical trial may not be able or willing to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. Similarly, our ability to recruit and retain patients and principal investigators and site staff may be adversely affected if a global pandemic continues and persists for an extended period of time, and we may experience significant disruptions to our clinical development timelines, which would adversely affect our business, financial condition, results of operations and growth prospects in the future.

We have conducted in the past and are currently conducting or may conduct in the future clinical trials in the US and outside the US. In the past, we had clinical trial sites in Russia and Ukraine for our wAIHA trial, which trials have concluded. Recent actions taken by the Russian Federation in Ukraine and surrounding areas have destabilized the region and caused the adoption of comprehensive sanctions by, among others, the EU, the US and the UK, which restrict a wide range of trade and financial dealings with Russia and Russian persons, as well as certain regions in Ukraine. Also, the recent global tensions arising from the Hamas-Israel war may result in disruptions in the broader global economic environment. Further, some patients may not be able to comply with clinical trial protocols if the conflict impedes patient movement or interrupts healthcare services. In addition, clinical trial site initiation and patient enrollment may be delayed, and we may not be able to access sites for initiation and monitoring in regions affected by the Russian-Ukrainian war or the Hamas-Israel war including due to the prioritization of hospital resources away from clinical trials or as a result of warfare, violence, government-imposed curfews, or events or other governmental actions that restrict movement. We could also experience disruptions in our supply chain or limits our ability to obtain sufficient materials for our drug products in certain regions.

Public perception of the risk-benefit balance for our product candidates may be affected by adverse events in clinical trials involving our product candidate or other treatments.

Negative perception of the efficacy, safety, or tolerability of any investigational medicines that we develop, or of other products similar to products we are developing, could adversely affect our ability to conduct our business, advance our investigational medicines, or obtain regulatory approvals.

Adverse events in clinical trials of our investigational medicines or in clinical trials of others developing similar products could result in a decrease in the perceived benefit of one or more of our programs, increased regulatory scrutiny, decreased confidence by patients and clinical trial collaborators in our investigational medicines, and less demand for any product that we may develop. If and when they are used in clinical trials, our developmental candidates and investigational medicines could result in a greater quantity of reportable adverse events, including suspected unexpected serious adverse reactions, other reportable negative clinical outcomes, manufacturing reportable events or material clinical events that could lead to clinical delay or hold by the FDA or applicable regulatory authority or other clinical delays, any of which could negatively impact the perception of one or more of our programs, as well as our business as a whole. In addition, responses by US, state, or foreign governments to negative public perception may result in new legislation or regulations that could limit our ability to develop any investigational medicines or commercialize any approved products, obtain or maintain regulatory approval, or otherwise achieve profitability. More restrictive statutory regimes, government regulations, or negative public opinion would have an adverse effect on our business, financial condition, results of operations, and prospects and may delay or impair the development of our investigational medicines and commercialization of any approved products or demand for any products we may develop.

We lack the capability to manufacture compounds for clinical development, and we rely on and intend to continue relying on third parties for commercial supply, manufacturing and distribution if any of our product candidates which receive regulatory approval and we may be unable to obtain required material or product in a timely manner, at an acceptable cost or at a quality level required to receive regulatory approval.

We currently do not have the manufacturing capabilities or experience necessary to produce our products or any product candidates for clinical trials. We currently use three active pharmaceutical ingredient manufacturing facilities and three finished goods manufacturing facilities for our products. We do not currently have, nor do we plan to acquire the infrastructure or capability to supply, manufacture or distribute preclinical, clinical or commercial quantities of drug substances or products. For each clinical trial of our unpartnered product candidates, we rely on third-party manufacturers for the active pharmaceutical ingredients, as well as various manufacturers to manufacture starting components, excipients and formulated drug products. Our ability to develop our product candidates, and our ability to commercially supply our products will depend, in part, on our ability to successfully obtain the active pharmaceutical ingredients and other substances and materials used in our product candidates from third parties and to have finished products manufactured by third parties in accordance with regulatory requirements and in sufficient quantities for preclinical and clinical testing and commercialization. If we fail to develop and maintain supply relationships with these third parties, we may be unable to continue to develop or commercialize our product candidates.

We rely and will continue to rely on certain third parties, including those located outside the US, as our limited source of the materials they supply or the finished products they manufacture. In the ordinary course of business, we enter into agreements with contract manufacturers to manufacture our inventory products. For example, in October 2024, we entered into an agreement with a third-party contract manufacture to manufacture TAVALISSE that is expected to be delivered starting in fiscal year 2026 through 2029. Although the agreement provides a cancellation clause with or without cause upon written notice, we may or may not be subject to payment of cancellation fees. The level of cancellation fees is generally dependent on the timing of the written notice in relation to the commencement date of work, with the maximum cancellation fees equal to the full price of the work order. The drug substances and other materials used in our product candidates are currently available only from one or a limited number of suppliers or manufacturers and certain of our finished product candidates are manufactured by one or a limited number of contract manufacturers. Any of these existing suppliers or manufacturers may:

- fail to supply us with product on a timely basis or in the requested amount due to unexpected damage to or destruction of facilities or equipment or otherwise;
- fail to increase manufacturing capacity and produce drug product and components in larger quantities and at higher yields in a timely or cost-effective manner, or at all, to sufficiently meet our commercial needs;
- be unable to meet our production demands due to issues related to their reliance on sole-source suppliers and manufacturers;
- supply us with product that fails to meet regulatory requirements;

- become unavailable through business interruption or financial insolvency;
- lose regulatory status as an approved source;
- be unable or unwilling to renew current supply agreements when such agreements expire on a timely basis, on acceptable terms or at all; or
- discontinue production or manufacturing of necessary drug substances or products.

Our current and anticipated future dependence upon these third-party manufacturers may adversely affect our ability to develop and commercialize product candidates on a timely and competitive basis, which could have an adverse effect on sales, results of operations and financial condition. If we were required to transfer manufacturing processes to other third-party manufacturers and we were able to identify an alternative manufacturer, we would still need to satisfy various regulatory requirements. Satisfaction of these requirements could cause us to experience significant delays in receiving an adequate supply of our products and products in development and could be costly. Moreover, we may not be able to transfer processes that are proprietary to the manufacturer, if any. These manufacturers may not be able to produce material on a timely basis or manufacture material at the quality level or in the quantity required to meet our development timelines and applicable regulatory requirements and may also experience a shortage in qualified personnel. Our third-party manufacturers import certain materials from China to produce our products. The tensions between the US and China have led to a series of tariffs and sanctions being imposed by the US on imports from China mainland, as well as other business restrictions. Geopolitical developments, including changes arising as a result of the recent US presidential election, may lead to further developments with respect to the imposition or threat of imposition of trade policies, tariffs, taxes and other limitations on cross-border operations. Such tensions could adversely impact us and our third-party manufacturers. We may not be able to maintain or renew our existing third-party manufacturing arrangements, or enter into new arrangements, on acceptable terms, or at all. Our third-party manufacturers could terminate or decline to renew our manufacturing arrangements based on their own business priorities, at a time that is costly or inconvenient for us. If we are unable to contract for the production of materials in sufficient quantity and of sufficient quality on acceptable terms, our planned clinical trials may be significantly delayed. Manufacturing delays could postpone the filing of our investigational new drug (IND) applications and/or the initiation or completion of clinical trials that we have currently planned or may plan in the future.

Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration, the EMA, national competent authorities in the EU and UK and other federal and state government and regulatory agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards and they may not be able to comply. Switching manufacturers may be difficult because the number of potential manufacturers is limited. It may be difficult or impossible for us to find a replacement manufacturer quickly on acceptable terms, or at all. Additionally, if we are required to enter into new supply arrangements, we may not be able to obtain approval from the FDA of any alternate supplier in a timely manner, or at all, which could delay or prevent the clinical development and commercialization of any related product candidates. Failure of our third-party manufacturers or us to comply with applicable regulations, whether due to the impacts of a global pandemic or otherwise, could result in sanctions being imposed on us, including fines, civil penalties, delays in or failure to grant marketing approval of our product candidates, injunctions, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products and compounds, operating restrictions and criminal prosecutions, warning or similar letters or civil, criminal or administrative sanctions against us, any of which could adversely affect our business

Any product for which we have obtained regulatory approval, or for which we obtain approval in the future, is subject to, or will be subject to, extensive ongoing regulatory requirements by the FDA, EMA, MHRA and other comparable regulatory authorities, and if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, we may be subject to penalties, we may be unable to generate revenue from the sale of such products, our potential for generating positive cash flow will be diminished, and the capital necessary to fund our operations will be increased.

We commercialize our products in the US and we have entered into commercialization agreements with third parties to commercialize fostamatinib outside the US. Any product for which we have obtained regulatory approval, or

for which we obtain regulatory approval in the future, along with the manufacturing processes and practices, post-approval clinical research, product labeling, advertising and promotional activities for such product, are subject to continual requirements of, and review by, the FDA, the EMA and other comparable international regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians, import and export requirements and recordkeeping. If we or our suppliers encounter manufacturing, quality or compliance difficulties with respect to our products or any of our product candidates, when and if approved, whether due to the impacts of a global pandemic (including as a result of disruptions of global shipping and the transport of products) or otherwise, we may be unable to obtain or maintain regulatory approval or meet commercial demand for such products, which could adversely affect our business, financial conditions, results of operations and growth prospects.

Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we will not be able to promote any products we develop for indications or uses for which they are not approved.

In addition, the FDA often requires post-marketing testing and surveillance to monitor the effects of products. The FDA, the EMA and other comparable international regulatory agencies may condition approval of our product candidates on the completion of such post-marketing clinical studies. These post-marketing studies may suggest that a product causes undesirable side effects or may present a risk to the patient. Additionally, the FDA may require REMS to help ensure that the benefits of the drug outweigh its risks. A REMS may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate healthcare providers of the drug's risks, limitations on who may prescribe or dispense the drug, requirements that patients enroll in a registry or undergo certain health evaluations or other measures that the FDA deems necessary to ensure the safe use of the drug.

Discovery after approval of previously unknown problems with any of our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in actions such as:

- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials;
- restrictions on product manufacturing processes;
- restrictions on the marketing of a product;
- restrictions on product distribution;
- requirements to conduct post-marketing clinical trials;
- untitled or warning letters or other adverse publicity;
- withdrawal of products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- refusal to permit the import or export of our products;
- product seizure;
- fines, restitution or disgorgement of profits or revenue;
- refusal to allow us to enter into supply contracts, including government contracts;
- · injunctions; or

imposition of civil or criminal penalties.

If such regulatory actions are taken, the value of our company and our operating results will be adversely affected. Additionally, if the FDA, the EMA or any other comparable international regulatory agency withdraws its approval of a product that is or may be approved, we will be unable to generate revenue from the sale of that product in the relevant jurisdiction, our potential for generating positive cash flow will be diminished and the capital necessary to fund our operations will be increased. Accordingly, we continue to expend significant time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance, post-marketing studies and quality control.

If any of our third-party contractors fail to perform their responsibilities to comply with FDA rules and regulations, the marketing and sales of our products could be delayed and we may be subject to enforcement action, which could decrease our revenues.

Conducting our business requires us to manage relationships with third-party contractors. As a result, our success depends partially on the success of these third parties in performing their responsibilities to comply with FDA rules and regulations. Although we pre-qualify our contractors and we believe that they are fully capable of performing their contractual obligations, we cannot directly control the adequacy and timeliness of the resources and expertise that they apply to these activities.

If any of our partners or contractors fail to perform their obligations in an adequate and timely manner, or fail to comply with the FDA's rules and regulations, then the marketing and sales of our products could be delayed. The FDA may also take enforcement actions against us based on compliance issues identified with our contractors. If any of these events occur, we may incur significant liabilities, which could decrease our revenues. For example, sales and medical science liaison or MSL personnel, including contractors, must comply with FDA requirements for the advertisement and promotion of products.

If we are unable to obtain regulatory approval to market products in the US and foreign jurisdictions, we will not be permitted to commercialize products we or our collaborative partners may develop.

We cannot predict whether regulatory clearance will be obtained for any product that we, or our collaborative partners, hope to develop. Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. Of particular significance to us are the requirements relating to research and development and testing.

Before commencing clinical trials in humans in the US, we, or our collaborative partners, will need to submit and receive approval from the FDA of an IND application. Clinical trials are subject to oversight by institutional review boards and the FDA and:

- must be conducted in conformance with the FDA's good clinical practices and other applicable regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;
- are subject to continuing FDA and regulatory oversight;
- may require large numbers of test subjects; and
- may be suspended by us, our collaborators or the FDA at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the IND or the conduct of these trials.

While we have stated that we intend to file additional INDs for future product candidates, this is only a statement of intent, and we may not be able to do so because we may not be able to identify potential product candidates. In addition, the FDA may not approve any IND we or our collaborative partners may submit in a timely manner, or at all.

Before receiving FDA approval to market a product, we must demonstrate with substantial clinical evidence that the product is safe and effective in the patient population and the indication that will be treated. Data obtained from preclinical and clinical activities are susceptible to varying interpretations that could delay, limit or prevent regulatory approvals. In addition, delays or rejections may be encountered based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, adverse publicity, as well as other regulatory action against our potential products or us. Additionally, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approval.

If regulatory approval of a product is granted, this approval will be limited to those indications or disease states and conditions for which the product is demonstrated through clinical trials to be safe and efficacious. We cannot assure that any compound developed by us, alone or with others, will prove to be safe and efficacious in clinical trials and will meet all of the applicable regulatory requirements needed to receive marketing approval.

Outside the US, our ability, or that of our collaborative partners, to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities. This foreign regulatory approval process typically includes all of the risks and costs associated with FDA approval described above and may also include additional risks and costs, such as the risk that such foreign regulatory authorities, which often have different regulatory and clinical trial requirements, interpretations and guidance from the FDA, may require additional clinical trials or results for approval of a product candidate, any of which could result in delays, significant additional costs or failure to obtain such regulatory approval. There can be no assurance, however, that we or our collaborative partners will not have to provide additional information or analysis, or conduct additional clinical trials, before receiving approval to market product candidates.

We have orphan drug designations from the FDA but we may not be able to obtain additional orphan drug designations in the future, or maintain the orphan drug designations or exclusivity for the approved drugs for the treatment of respective indications, or we may be unable to maintain the benefits associated with orphan drug designations, including the potential for market exclusivity.

We have an orphan drug designation in the US for fostamatinib for the treatment of ITP and wAIHA, and for olutasidenib for the treatment of AML. Also, pralsetinib has an orphan drug designation in the US for the treatment of adult patients with metastatic RET fusion-positive NSCLC, for the treatment of advanced or metastatic RET fusion-positive thyroid cancer, and for the treatment of advanced or metastatic RET-mutant medullary thyroid carcinoma. In January 2025, the FDA granted R289 orphan drug designation for the treatment of myelodysplastic syndromes. We may also seek orphan drug designation for other product candidates in the future. Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the US, or a patient population greater than 200,000 in the US where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the US. In the US, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including a full NDA, to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity. At this time, we do not have nor will we seek to apply for orphan drug designation in the EU or the UK in the foreseeable future.

We cannot assure that any future application for orphan drug designation with respect to any other product candidate will be granted. If we are unable to obtain orphan drug designation with respect to other product candidates in the US, we will not be eligible to obtain the period of market exclusivity that could result from orphan drug designation or be afforded the financial incentives associated with orphan drug designation. Even though we have received orphan drug designation for fostamatinib for the treatment of ITP and wAIHA in the US, we may not be the first to obtain marketing approval for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products or we might not maintain our orphan drug designation. In addition, exclusive marketing rights in the US for fostamatinib for the treatment of ITP, wAIHA or any future product candidate may be limited if we seek

approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

In addition, Congress is considering updates to the orphan drug provisions of the FDCA in response to a recent 11th Circuit decision. Any changes to the orphan drug provisions could change our opportunities for, or likelihood of success in obtaining, orphan drug exclusivity and would materially adversely affect our business, financial condition, results of operations, cash flows and prospects.

Risks Related to Commercialization

Our prospects are highly dependent on our commercial products. To the extent that the commercial success of our products in the US is diminished or is not commercially successful, our business, financial condition and results of operations may be adversely affected, and the price of our common stock may decline.

We are focusing a significant portion of our activities and resources on our products, and we believe our prospects are highly dependent on, and a significant portion of the value of our company relates to, our ability to sustain successful commercialization of our products in the US. We have also entered into exclusive commercialization agreements with third parties to commercialize fostamatinib outside the US, and we plan to further enter partnership with existing or other third parties to commercialize our products outside the US in the future.

Sustained successful commercialization of our products is subject to many risks and uncertainties, including the impact of a global pandemic on the successful commercialization in the US, as well as the successful commercialization efforts for our products through our collaborative partners. There are numerous examples of unsuccessful product launches and failures to meet high expectations of market potential, including by pharmaceutical companies with more experience and resources than us.

There are many factors that could cause the commercialization of our products to be unsuccessful, including a number of factors that are outside our control. The commercial success of our products depends on the extent to which patients and physicians accept and adopt our products to treat the related diseases. We also do not know how physicians, patients and payors will respond to our future price increases of our products. Physicians may not prescribe our products and patients may be unwilling to use our products if coverage is not provided or reimbursement is inadequate to cover a significant portion of the cost. Our products compete, and may in the future compete, with currently existing therapies, including generic drugs, and products currently under development. Our competitors, particularly large pharmaceutical companies, may deploy more resources to market, sell and distribute their products. If our efforts are not appropriately resourced to adequately promote our products, the commercial potential of our sales may be diminished. Additionally, any negative development for our products in clinical development in additional indications may adversely impact the commercialization and potential of fostamatinib. Thus, significant uncertainty remains regarding the commercial potential of our products.

Market acceptance of our products will depend on a number of factors, including:

- the timing of market introduction of the product as well as competitive products;
- the clinical indications for which the product is approved;
- acceptance by physicians, the medical community and patients of the product as a safe and effective treatment;
- potential future impacts, if any, due to the effects of a global pandemic and the global tensions arising from

the Russian-Ukrainian war and Hamas-Israel war;

- the ability to distinguish safety and efficacy from existing, less expensive generic alternative therapies, if any;
- the convenience of prescribing, administrating and initiating patients on the product and the length of time the patient is on the product;
- the potential and perceived value and advantages of the product over alternative treatments;
- the cost of treatment in relation to alternative treatments, including any similar generic treatments;
- pricing and the availability of coverage and adequate reimbursement by third-party payors and government authorities;
- a positive HTA concluding that the product is cost-effective and the HTA bodies issuing a positive recommendation for the
 use of the product as a first or second line of treatment for the granted therapeutic indication;
- the prevalence and severity of adverse side effects; and
- the effectiveness of sales and marketing efforts.

If we are unable to sustain anticipated level of sales growth from our products, or if we fail to achieve anticipated product royalties and collaboration milestones, we may need to reduce our operating expenses, access other sources of cash or otherwise modify our business plans, which could have a negative impact on our business, financial condition and results of operations. For example, during 2021, we experienced lower than anticipated sales of our products due to continuing impacts of physician and patient access issues created by the COVID-19 pandemic. From time to time, our net product sales are negatively impacted by the decrease in level of inventories remaining at our distribution channels.

We also may not be successful entering into arrangements with third parties to sell and market one or more of our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, including development and commercialization of fostamatinib in Kissei, Grifols, Medison and Knight's territories, and of olutasidenib in Kissei and Dr. Reddy's territories. As a consequence of our license agreements with our collaboration partners, we rely heavily upon their regulatory, commercial, medical affairs, market access and other expertise and resources for commercialization of fostamatinib in their respective territories outside of the US. We cannot control the amount of resources that our partners dedicate to the commercialization of fostamatinib, and our ability to generate revenues from the commercialization of fostamatinib by our partners depends on their ability to achieve market acceptance of fostamatinib in its approved indications in their respective territories.

Furthermore, foreign sales of fostamatinib by our partners could be adversely affected by the imposition of governmental controls, political and economic instability, outbreaks of pandemic diseases, such as the COVID-19 pandemic, trade restrictions or barriers and changes in tariffs and escalating global trade and political tensions. For example, the COVID-19 pandemic has resulted in increased travel restrictions and extended shutdowns of certain businesses in the US and around the world. If our collaborators are unable to successfully complete clinical trials, delay commercialization of fostamatinib or do not invest the resources necessary to successfully commercialize fostamatinib in international territories where it has been approved, this could reduce the amount of revenue we are due to receive under these license agreements, resulting in harm to our business and operations. If we do not establish and maintain sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

Even if we, or any of our collaborative partners, are able to continue to commercialize our products or any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations, third-party payor reimbursement practices or labeling restrictions, all of which may vary from country to country and any of which could harm our business.

The commercial success of any product for which we have obtained regulatory approval, or for which we may obtain regulatory approval in the future will depend substantially on the extent to which the costs of our product or product candidates are or will be paid by third-party payors, including government health care programs and private health insurers. There is a significant trend in the health care industry by public and private payors to contain or reduce their costs, including by taking the following steps, among others: decreasing the portion of costs payors will cover, ceasing to provide full payment for certain products depending on outcomes, and/or not covering certain products at all. If payors implement any of the foregoing with respect to our products, it would have an adverse impact on our revenue and results of operations. If coverage is not available, or reimbursement is limited, we, or any of our collaborative partners, may not be able to successfully commercialize our products or any of our product candidates in some jurisdictions. Even if coverage is provided, the approved reimbursement amount may not be at a rate that covers our costs, including research, development, manufacture, sale and distribution. In the US, no uniform policy of coverage and reimbursement for products exists among third-party payors; therefore, coverage and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific, clinical or other support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved drugs. Marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed, which could delay market entry (or, if pricing is not approved, we may be unable to sell at all in a country where we have received regulatory approval for a product. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some countries, the proposed pricing for a drug must be approved before it may be lawfully marketed). In addition, authorities in some countries impose additional obligations, such as HTAs, which assess the performance of a drug in comparison with its cost. The outcome of HTA assessments is judged on a national basis and some payors may not reimburse the use of our products or may reduce the rate of reimbursement for our products and as a result, revenue from such products may decrease.

On January 12, 2025, the new HTA Regulation, Regulation No 2021/2282 on Health Technology Assessment (HTA Regulation) started applying to new cancer medicines and advanced therapy medicinal products, and imposes a new procedure for the assessment of the pricing and reimbursement of medicinal products. The HTA Regulation intends to foster cooperation among EU member states in assessing health technologies and provide a procedure for joint clinical assessments of medicinal products at a centralized level. It requires companies applying for products in scope to make relevant submissions for the joint clinical assessment, in line with a number of prespecified criteria. By 2030 it will apply to all medicinal products.

In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we, or any of our collaborative partners, might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, possibly for lengthy time periods, which may negatively impact the revenues we are able to generate from the sale of the product in that country. In particular, we cannot predict to what extent the effects of a global pandemic, depending on its scale and duration, may disrupt global healthcare systems and access to our products or result in a widespread loss of individual health insurance coverage due to unemployment, a shift from commercial payor coverage to government payor coverage, or an increase in demand for patient assistance and/or free drug programs, any of which would adversely affect access to and demand for our products and our net sales. Adverse pricing limitations may also hinder our ability or the ability of any future collaborators to recoup our or their investment in one or more product candidates, even if our product candidates obtain marketing approval. Further, even if favorable coverage and reimbursement status is attained for one or more products for which we or our collaborative partners receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Therefore, our ability, and the ability of any of our collaborative partners, to successfully commercialize our products or any of our product candidates will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third-party payors.

Additionally, the labeling ultimately approved for any of our product candidates for which we have or may obtain regulatory approval may include restrictions on their uses and may be subject to ongoing FDA or international regulatory authority requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. If we or any of our collaborative partners do not timely obtain or comply with the labeling approval by the FDA or international regulatory authorities on any of our product candidates, it may delay or inhibit our ability to successfully commercialize our products and generate revenues.

If we are unable to successfully market and distribute our products and retain experienced commercial personnel, our business will be substantially harmed.

We continuously expend significant time and resources to maintain a sales force that is credible and compliant with applicable laws in marketing our products. In addition, we must continually train our sales force to ensure that an appropriate and compliant message about our products is being delivered. If we are unable to effectively train our sales force and equip them with compliant and effective materials, including medical and sales literature to help them appropriately inform and educate health care providers regarding the potential benefits and proper administration of our products, our efforts to successfully commercialize our products could be put in jeopardy, which would negatively impact our ability to generate product revenues.

We have established our distribution, sales, marketing and market access capabilities, all of which will be necessary to successfully commercialize our products. As a result, we will be required to expend significant time and resources to market, sell, and distribute our products to hematologists and hematologists-oncologists. There is no guarantee that the marketing strategies we have developed, or the distribution, sales, marketing and market access capabilities that we have developed will be successful. Particularly, we are dependent on third-party logistics, specialty pharmacies and distribution partners in the distribution of our products. If they are unable to perform effectively or if they do not provide efficient distribution of the medicine to patients, our business may be harmed.

Maintaining our sales, marketing, market access and product distribution capabilities requires significant resources, and there are numerous risks involved with managing our commercial team, including our potential inability to successfully train, retain and incentivize adequate numbers of qualified and effective sales and marketing personnel. We are also competing for talent with numerous commercial and pre-commercial-stage oncology-focused biotechnology companies seeking to build out their commercial organizations, as well as other large pharmaceutical organizations that have extensive, well-funded and more experienced sales and marketing operations, and we may be unable to maintain or adequately scale our commercial organization as a result of such competition. If we cannot maintain effective sales, marketing, market access and product distribution capabilities, we may be unable to realize the commercial potential of our products. Also, to the extent that the commercial opportunities for our products grow over time, we may not properly judge the requisite size and experience of our current commercialization teams or the level of distribution necessary to market and sell our products, which could have an adverse impact on our business, financial condition and results of operations.

We may not be able to successfully develop or commercialize our product candidates if problems arise in the clinical testing and approval process.

The activities associated with the research, development and commercialization of our products and other product candidates in our pipeline must undergo extensive clinical trials, which can take many years and require substantial expenditures, subject to extensive regulation by the FDA and other regulatory agencies in the US and by comparable authorities in other countries. The process of obtaining regulatory approvals in the US and other foreign jurisdictions is expensive, and lengthy, if approval is obtained at all.

Our clinical trials may fail to produce results satisfactory to the FDA or regulatory authorities in other jurisdictions. The regulatory process also requires preclinical testing, and data obtained from preclinical and clinical activities are susceptible to varying interpretations. The FDA has substantial discretion in the approval process and may refuse to approve any NDA or sNDA and decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. Varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of our products for any individual, additional indications. For example, in June 2022, we announced that the top-line results from our Phase 3 trial in wAIHA did not demonstrate statistical significance in the primary efficacy endpoint of durable hemoglobin response in the overall study population. While we conducted an indepth analysis of these data to better understand differences in patient characteristics and outcomes and submitted these findings to the FDA, in October 2022, we announced that we received guidance from the FDA of these findings. Based on the result of the trial and the guidance from the FDA, we did not file an sNDA for wAIHA.

It is also possible that we could experience delays in the timing of our interactions with regulatory authorities due to absenteeism by governmental employees or the diversion of regulatory authority efforts and attention to approval of other therapeutics, or other public health emergencies including a global pandemic, which could delay or limit our ability to make planned regulatory submissions or develop and commercialize our product candidates on anticipated timelines.

In addition, delays or rejections may be encountered based upon changes in regulatory policy for product approval during the period of product development and regulatory agency review, which may cause delays in the approval or rejection of an application for our products or for our other product candidates.

Commercialization of our product candidates depends upon successful completion of extensive preclinical studies and clinical trials to demonstrate their safety and efficacy for humans. Preclinical testing and clinical development are long, expensive and uncertain processes.

In connection with clinical trials of our product candidates, we may face the following risks among others:

- the product candidate may not prove to be effective;
- the product candidate may cause harmful side effects;
- the clinical results may not replicate the results of earlier, smaller trials;
- we or third parties with whom we collaborate, may be significantly impacted by force majeure events;
- we, or the FDA or similar foreign regulatory authorities, may delay, terminate or suspend the trials;
- our results may not be statistically significant;
- patient recruitment and enrollment may be slower than expected;
- patients may drop out of the trials or otherwise not enroll; and
- regulatory and clinical trial requirements, interpretations or guidance may change.

We do not know whether we will be permitted to undertake clinical trials of potential products beyond the trials already concluded and the trials currently in process. It will take us or our collaborative partners several years to complete any such testing, and failure can occur at any stage of testing. Interim results of trials do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier trials.

Further, evolving FDA standards may cause additional setbacks. In 2023, FDA published guidance documents and a final rule which all concern clinical trial requirements. In June 2023, FDA published a draft guidance, E6(R3) Good Clinical Practice, which seeks to unify standards for clinical trial data for the International Council for

Harmonisation of Technical Requirements of Pharmaceuticals for Human Use member countries and regions. In August 2023, FDA published a guidance document, Informed Consent, Guidance for IRBs, Clinical Investigators, and Sponsors, which supersedes past guidance and finalizes draft guidance on informed consent. Further, in December 2023, FDA published a final rule, Institutional Review Board Waiver or Alteration of Informed Consent for Minimal Risk Clinical Investigations, which allows exceptions from informed consent requirements when a clinical investigation poses no more than minimal risk to the human subject and includes appropriate safeguards to protect the rights, safety, and welfare of human subjects.

Alterations to clinical trial requirements, including due to judicial challenges, may affect recruitment and retention of patients and may hinder or delay a clinical trial. Further, changes to data requirements may cause FDA or comparable foreign regulatory authorities to disagree with data from preclinical studies or clinical trials, and may require further studies. Changes to trial requirements or trial data may increase costs and delay product development.

General Risk Factors

Global economic conditions could adversely impact our business.

Deterioration in the macroeconomic economy could lead to losses or defaults by our customers or suppliers, which in turn, could have a material adverse effect on our current and/or projected business operations and results of operations and financial condition. The global financial markets and economy are currently, and have from time to time experienced extreme volatility and disruptions, including severely diminished liquidity and credit availability, rising interest and inflation rates, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability.

Any significant deterioration in the US economy would likely affect the operation of our business and ability to raise capital. In addition, US debt ceiling and budget deficit concerns have increased the possibility of additional credit-rating downgrades and economic slowdowns, or a recession in the US. Although US lawmakers passed legislation to raise the federal debt ceiling on multiple occasions, ratings agencies have lowered or threatened to lower the long-term sovereign credit rating on the US. The impact of this or any further downgrades to the US government's sovereign credit rating or its perceived creditworthiness could adversely affect the US and global financial markets and economic conditions.

The global financial markets and economy may also be adversely affected by the current or anticipated impact of military conflict, including the ongoing Russian-Ukrainian war, and the Hamas-Israel war, terrorism or other geopolitical events. Sanctions imposed by the US and other countries in response to such conflicts, including the Russian-Ukrainian war and the Hamas-Israel war, may also adversely impact the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability.

The US government has indicated its intent to alter its approach to international trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements and treaties with foreign countries. In addition, the US government has initiated or is considering imposing tariffs on certain foreign goods. Related to this action, certain foreign governments, including China, have instituted or are considering imposing tariffs on certain US goods. It remains unclear what the US Administration or foreign governments will or will not do with respect to tariffs or other international trade agreements and policies. A trade war or other governmental action related to tariffs or international trade agreements or policies has the potential to disrupt our research activities, affect our suppliers and/or the US or global economy or certain sectors thereof and, thus, could adversely impact our businesses.

Bank failures or other events affecting financial institutions could adversely impact our liquidity and other business.

Financial institutions have recently experienced, and may experience in the future, industry instability and failures which have led to disruptions in access to bank deposits or lending commitments. In 2023, the closures of Silicon Valley Bank (SVB) and Signature Bank and their placement into receivership with the Federal Deposit Insurance Corporation (FDIC), as well as the FDIC's seizure and sale of First Republic Bank, created bank-specific and broader financial institution liquidity risk and concerns. On March 12, 2023, federal regulators announced that the FDIC would

complete its resolution of SVB in a manner that fully protects all depositors. On March 27, 2023, First Citizens Bank (FCB) announced that it has entered into an agreement with FDIC to purchase all of the asset and liabilities of SVB. Customers of SVB automatically become customers of FCB following the acquisition.

We maintain a depository relationship with SVB/FCB and other banking institutions. All of our cash deposits are accessible to us, and we do not anticipate any losses with respect to such funds. Since the March 2023 financial institution failure, there has been a heightened risk and greater focus on the potential failures of other banks in the future. If these banks fail in the future, we may not be able to immediately (or ever) recover our cash in excess of the FDIC insured limits which would adversely impact our operating liquidity and could negatively impact our operations, results of operations and financial performance. Although we believe our exposure is limited, if in the future any of the financial institutions that we maintain depository or lending relationships were to be placed into receivership, we may be unable to access such funds to meet our working capital requirements. In addition, if any of our customers, suppliers or other parties with whom we conduct business are unable to access funds, such parties' ability to pay their obligations to us or to enter into new commercial arrangements requiring additional payments to us could be adversely affected. Although we assess our banking and customer relationships as we believe necessary or appropriate, our access to funding sources and other credit arrangements in amounts adequate to finance or capitalize our current and projected future business operations could be significantly impacted by factors that affect us, the financial institutions with which we have credit agreement or arrangements directly, or the financial services industry or economy in general.

Shareholder activism and private securities-related litigation could cause material disruption to our business.

Publicly traded companies have increasingly become subject to campaigns by our stakeholders, including investors, and more recently regulatory organizations advocating corporate actions such as actions related to ESG matters, impacts of climate change, financial restructuring, increased borrowing, dividends, share repurchases and even sales of assets or the entire company. Responding to proxy contests and other actions by such activist investors or others in the future could be costly and time-consuming, disrupt our operations and divert the attention of our Board of Directors and senior management from the pursuit of our business strategies, which could adversely affect our results of operations and financial condition.

There is a growing emphasis from select investors, regulators, and other stakeholders on corporate responsibility, particularly regarding ESG factors. Some investors and advocacy groups utilize these factors to shape investment strategies, potentially opting out of investing in our company if they perceive our corporate responsibility policies as insufficient. Third-party providers offering corporate responsibility ratings and reports have surged to meet rising investor demand, with numerous organizations evaluating companies on ESG matters, and these evaluations receive widespread attention. A low ESG or sustainability rating from such providers could lead certain investors to overlook our common stock in favor of competitors. Institutional investors, in particular, use these ratings to compare companies, and any perceived lag in our ESG efforts might prompt voting decisions or other actions to hold our Board of Directors accountable. Furthermore, evolving assessment criteria for corporate responsibility practices may raise expectations, compelling us to undertake costly initiatives to meet new standards. Failure to meet these evolving criteria could reinforce the perception of inadequate corporate responsibility policies. Non-compliance could also lead to reputational damage if our procedures or standards fall short of stakeholder expectations.

Securities-related class action lawsuits and/or derivative lawsuits have often been brought against companies, including biotechnology and biopharmaceutical companies, that experience volatility in the market price of their securities. It is possible that such lawsuit will be filed, or allegations from stockholders with this matter. Such lawsuits and any other related lawsuits are subject to inherent uncertainties, and the actual defense and disposition costs will depend upon many unknown factors. The outcome of such lawsuits is necessarily uncertain. We could be forced to expend significant resources in the defense of the pending lawsuits and any additional lawsuits, and we may not prevail.

Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us, which may be beneficial to our stockholders, more difficult.

Provisions of our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws (our Bylaws), as well as provisions of Delaware law, could make it more difficult for a third party to acquire us, even if

doing so would benefit our stockholders. These provisions:

- establish that members of our Board of Directors may be removed only for cause upon the affirmative vote of stockholders owning a majority of our capital stock;
- authorize the issuance of "blank check" preferred stock that could be issued by our Board of Directors to increase the number of outstanding shares and thwart a takeover attempt;
- limit who may call a special meeting of stockholders;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- establish advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted upon at stockholder meetings;
- provide for staggered terms for our Board of Directors; and
- provide that the authorized number of directors may be changed only by a resolution of our Board of Directors.

In addition, Section 203 of the Delaware General Corporation Law (DGCL), which imposes certain restrictions relating to transactions with major stockholders, may discourage, delay or prevent a third party from acquiring us.

Our Bylaws designate a state or federal court located within the State of Delaware as the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our current or former directors, officers, stockholders, or other employees.

Our Bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of us under Delaware law, (ii) any action asserting a claim of breach of a fiduciary duty by any current or former director, officer, or other employee of ours that is owed to us or our stockholders, (iii) any action asserting a claim against us or any of our directors, officers, or other employees arising pursuant to any provision of the DGCL or our Amended and Restated Certificate of Incorporation and our Bylaws (as either may be amended from time to time), (iv) any action asserting a claim against us governed by the internal affairs doctrine, or (v) any other action asserting an "internal corporate claim," as defined under Section 115 of the DGCL. The forgoing provisions do not apply to any claims arising under the Securities Act and, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act.

These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our current or former directors, officers, or other employees, which may discourage lawsuits with respect to such claims. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. It is possible that a court could find these types of provisions to be inapplicable or unenforceable, and if a court were to find the choice of forum provision to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations, and financial condition.

Increasing use of social media could give rise to liability and may harm our business.

We and our employees are increasingly utilizing social media tools and our website as a means of communication. Despite our efforts to monitor evolving social media communication guidelines and comply with applicable laws, regulations and national and EU codes of conduct, there is risk that the unauthorized use of social media by us or our employees to communicate about our products or business, sharing of publications in unintended audiences

in other jurisdictions, or any inadvertent promotional activity or disclosure of material, nonpublic information through these means, may cause us to be found in violation of applicable laws and regulations, which may give rise to liability and result in harm to our business. In addition, there is also risk of inappropriate disclosure of sensitive information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse impact on our business, financial condition and results of operations. Furthermore, negative posts or comments about us or our products on social media could seriously damage our reputation, brand image and goodwill.

Our future success depends on our ability to attract and retain key employees and relationships.

We are highly dependent on the commercial, research and development, clinical, business development, financial and legal expertise of our executive officers, as well as the other principal members of our management. We expect to continue hiring and retaining qualified personnel which is critical to our success. Replacing key employees and executive officers may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize drugs. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. In particular, our research programs depend on our ability to attract and retain highly skilled chemists, other scientists, and development, regulatory and clinical personnel. If we lose the services of any of our key personnel, our research and development efforts could be seriously and adversely affected. Our employees can terminate their employment with us at any time.

Our facilities are located near known earthquake fault zones, and the occurrence of an earthquake or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our facilities are located in the San Francisco Bay Area near known earthquake fault zones and are vulnerable to significant damage from earthquakes. We are also vulnerable to damage from other types of disasters, including fires, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities would be seriously, or potentially completely, impaired, and our research could be lost or destroyed. In addition, the unique nature of our research activities and of much of our equipment could make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Risk Management and Strategy

Cybersecurity and privacy incidents in the pharmaceutical industry are growing in frequency and severity, prompting organizations to invest heavily in people, processes, and technology to bolster their cybersecurity risk management capabilities.

We assess the integrity of our information technology and cybersecurity platforms to help ensure proper safety measures are implemented. We understand the extensive responsibility associated with safeguarding our systems and data. Our processes for assessing, identifying, and managing material risks from cybersecurity threats include:

- Detection and Prevention: We utilize various securities tools and technologies designed to prevent, identify, protect, detect, escalate, respond and recover from cyber threats in a timely manner. Our approach includes real-time monitoring, threat analysis, and regular security evaluations to identify and mitigate potential vulnerabilities.
- User Training & Education: We realize that human error can be a significant cybersecurity risk, so we have implemented education and training programs for our staff to raise awareness about cybersecurity best practices. By promoting a culture of security consciousness, we empower our staff to identify potential threats and respond effectively, in a way that is designed to enhance the overall cybersecurity posture of our organization.
- Incidence Response and Business Continuity: We have comprehensive Incidence Response and Business Continuity plans in place
 designed to ensure the continuity, availability and accessibility of our systems and data, even in the face of unforeseen events such
 as natural disasters or cyber incidents, which plans and systems we test regularly.

We rely upon the capacity, availability and security of our information technology hardware and software infrastructure. We maintain comprehensive compliance and security programs designed to help safeguard and ensure the integrity of the confidential information we possess, which includes both organization and technical control measures. We routinely conduct employee trainings on important information security procedures and test and measure compliance with these security measures. In addition, we maintain cyber insurance policies that mitigate the financial risk of any potential incident.

We engage consultants, auditors, and other third parties in connection with such processes. We work with third-party service providers to assist us in our cybersecurity risk management to identify areas that may potentially impact our business, develop and implement control framework to mitigate such cybersecurity risks, and to be prepared to respond to and report (as required) applicable cybersecurity incidents.

We face a number of risks including the growing threat of cybersecurity attacks. Despite our implementation of security measures to combat the threats of cybersecurity attacks, any system failure, accident or security breach could result in disruptions to our operations. To the extent that any disruption, cybersecurity attack or other security breach results in a loss or damage to our data or inappropriate disclosure of confidential information, our business could be harmed. In addition, we may be required to incur significant costs to protect against damaged caused by these disruptions or security breaches in the future.

While we have not, as of the date of this Annual Report on Form 10-K, experienced cybersecurity incidents that have materially affected us, our business strategy, our results of operations or our financial condition, there can be no

guarantee that we will not experience such an incident in the future. For additional information regarding risks from cybersecurity threats, please refer to "Item 1A. Risk Factors" of this annual report on Form 10-K.

Governance

Our Corporate Governance, Healthcare Compliance Oversight, and Nominating committee oversees our cybersecurity risk management. This committee periodically reviews and assesses the risk exposure of our risks related to data privacy, technology and information security, including cyber-security, and back-up of information systems and makes recommendations to our Board of Director pertaining to monitoring and minimizing findings in such assessment. This committee periodically reports to the Board of Directors.

While the Corporate Governance, Healthcare Compliance Oversight, and Nominating committee oversees our cybersecurity risk management, our management also plays an integral role in cybersecurity oversight. Our management is responsible for day-to-day risk management processes. This includes periodic updates from the Executive Director of Information Technology who has over 24 years of work experience in the life science industry, and holds an undergraduate degree in Industrial Technology. The Executive Director of Information Technology is responsible for managing the daily measures of safeguarding the information technology infrastructure from potential threats and vulnerabilities, which includes monitoring the prevention, detection, mitigation, and remediation of cybersecurity incidents. Additionally, we have established a Crisis Management Team (CMT), which is a team of cross-functional participants who are prepared to review and assess any potential cybersecurity incidents. The CMT team is led by our CFO and our General Counsel who will advise the Corporate Governance, Healthcare Compliance Oversight, and Nominating committee of the Board accordingly in the event of any incident. We believe this division of responsibilities is the most effective approach for addressing our cybersecurity risks and that the Board leadership structure supports this approach.

Item 2. Properties

We lease a 13,670 rentable square feet office space located at 611 Gateway Boulevard, Suite 900, South San Francisco, California. We currently sublease the office from Atara Biotherapeutics, Inc. (Atara), which sublease will expire in May 2025. In February 2025, we entered into a lease agreement with 611 Gateway Center LP (611 Gateway) to lease the same office space currently subleased from Atara, which lease will commence following the expiration of the sublease with Atara and expire in July 2027. This leased facility is currently held as our Headquarters. We believe that this leased facility is in good operating condition and is adequate for all our present and near term

Item 3. Legal Proceedings

From time to time, we may be a party or subject to legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. Some of these proceedings that we may be involved in the future are claims that are subject to substantial uncertainties and unascertainable damages or other remedies.

Our threshold for disclosing material environmental legal proceedings involving a government authority where potential monetary sanctions are involved is \$1.0 million.

In June 2022, we received a notice letter regarding an ANDA submitted to the FDA by Annora, requesting approval to market a generic version of TAVALISSE. The notice letter included a Paragraph IV certification with respect to our US Patent Nos. 7,449,458; 8,263,122; 8,652,492; 8,771,648 and 8,951,504, which are listed in the FDA's Orange Book. The notice letter asserts that these patents will not be infringed by Annora's proposed product, are invalid and/or are unenforceable. Annora's notice letter does not provide a Paragraph IV certification against our other patents listed in the Orange Book. On July 25, 2022, we filed a lawsuit in the US District Court for the District of New Jersey against Annora and its affiliates, Hetero Labs Ltd., and Hetero USA, Inc., for infringement of our US patents identified in Annora's Paragraph IV certification. On September 21, 2022, Annora and its affiliates answered and counterclaimed for declaratory judgment of non-infringement and invalidity of the '458, '122, '492, '648, and '504 patents. We served an answer to Annora's counterclaims in October 2022. Annora served invalidity and non-infringement contentions in December 2022. We served an answer to Annora's invalidity and non-infringement contentions in March 2023.

Litigation continues, and no trial date is currently set. We intend to vigorously enforce and defend our intellectual property related to TAVALISSE.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities Market Information

Our common stock commenced trading publicly on the Nasdaq Global Market under the symbol "RIGL" on December 7, 2000.

On June 27, 2024, we effected a 1-for-10 reverse stock split. As a result of the reverse stock split, every ten issued and outstanding shares of our common stock were automatically combined into one issued and outstanding share of common stock. No fractional shares were issued in connection with the reverse stock split. As a result of the reverse stock split, proportionate adjustments were made to the number of shares underlying (and as applicable, the exercise or conversion prices of) our outstanding equity awards and to the number of shares of common stock issuable under our equity incentive plans. The reverse stock split did not change the par value of our common stock, which remains \$0.001, or the authorized number of shares of our common stock. All share amounts and per share amounts disclosed in this Annual Report on Form 10-K have been adjusted to reflect the reverse stock split on a retroactive basis for the respective periods presented.

Holders of Record

As of February 25, 2025, there were approximately 28 holders of record of our common stock.

Dividend Policy

We have not paid any cash dividends on our common stock and currently do not plan to pay any cash dividends in the foreseeable future.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

None.

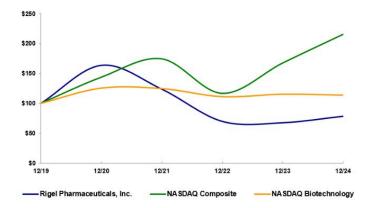
Performance Measurement Comparison

The graph below shows the cumulative total stockholder return of an investment of \$100 (and the reinvestment of any dividends thereafter) on December 31, 2019 in (i) our common stock, (ii) the Nasdaq Composite Index and (iii) the Nasdaq Biotechnology Index. The Nasdaq Biotechnology Index is a modified-capitalization weighted index that includes securities of Nasdaq-listed companies classified according to the Industry Classification Benchmark as either Biotechnology or Pharmaceuticals and which also meet other eligibility criteria. Our stock price performance shown in the graph below is based upon historical data and is not indicative of future stock price performance.

The following graph and related information shall not be deemed "soliciting material" or be deemed to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing, except to the extent that we specifically incorporate it by reference into such filing.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among Rigel Pharmaceuticals, Inc., the Nasdaq Composite Index and the Nasdaq Biotechnology Index



Item 6. [Reserved]

Not applicable.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with our "Notes to Financial Statements" contained in Part II, Item 8 of this Form 10-K. This section of this Form 10-K discusses 2024 and 2023 items and 2024 and 2023 year-to-year comparisons. This section does not discuss 2022 items and 2023 to 2022 year-to-year comparisons. Discussions of 2022 items and 2023 to 2022 year-to-year comparisons can be found in the "Part II, Item 7 Management's Discussion and Analysis of Financial Condition and Result of Operations" of our Annual Report on Form 10-K for the year ended December 31, 2023.

Overview

We are a biotechnology company dedicated to developing and providing novel therapies that significantly improve the lives of patients with hematologic disorders and cancer. We focus on products that address signaling pathways that are critical to disease mechanisms.

TAVALISSE (fostamatinib disodium hexahydrate) is our first product approved by the FDA. TAVALISSE is the only approved oral SYK inhibitor for the treatment of adult patients with chronic ITP who have had an insufficient response to a previous treatment. The product is also commercially available in Europe and the UK (as TAVLESSE), and in Canada, Israel and Japan (as TAVALISSE) for the treatment of chronic ITP in adult patients.

REZLIDHIA (olutasidenib) is our second FDA-approved product. REZLIDHIA capsules are indicated for the treatment of adult patients with R/R AML with a susceptible IDH1 mutation as detected by an FDA-approved test. We in-licensed REZLIDHIA from Forma with exclusive, worldwide rights for its development, manufacturing and commercialization.

GAVRETO (pralsetinib) is our third FDA-approved product which we began commercializing in June 2024. GAVRETO is a once daily, small molecule, oral, kinase inhibitor of wild-type RET and oncogenic RET fusions. GAVRETO is approved by the FDA for the treatment of adult patients with metastatic RET fusion-positive NSCLC as detected by an FDA-approved test. GAVRETO is also approved under accelerated approval based on overall response rate and duration response rate, for the treatment of adult and pediatric patients 12 years of age and older with advanced or metastatic RET fusion-positive thyroid cancer who require systemic therapy and who are radioactive iodine-refractory (if radioactive iodine is appropriate). We acquired the rights to research, develop, manufacture and commercialize GAVRETO in the US from Blueprint pursuant to an Asset Purchase Agreement entered in February 2024.

We continue to advance the development of R289, our dual IRAK 1/4 inhibitor program, in an open-label, Phase 1b study to determine the tolerability and preliminary efficacy of the drug in patients with lower-risk MDS who are relapsed, refractory or resistant to prior therapies.

We have strategic development collaborations with MDACC to expand our evaluation of olutasidenib in AML and other hematologic cancers with IDH1 mutations, and with CONNECT to conduct a Phase 2 clinical trial to evaluate olutasidenib in combination with temozolomide in patients with HGG harboring an IDH1 mutation.

We have a RIPK1 inhibitor program in clinical development with our partner Lilly. We also have product candidates in clinical development with partners BerGenBio and Daiichi.

For discussions of recent business updates, please refer to "Part I, Item 1, Business – Business Updates" of this Annual Report on Form 10-K.

Critical Accounting Estimates

The preparation of these financial statements requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other

sources. Actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are more fully described in "Note 1– Description of Business and Summary of Significant Accounting Policies" in the "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K. We believe our critical accounting estimates which require subjective and complex judgments include estimates around our product sales allowances and discounts as described below.

Our revenues from product sales are recognized at net sales price when our customers obtain control of our product, which occurs at a point in time, upon delivery. Under the revenue recognition guidance, we are required to estimate the transaction price, including variable consideration that is subject to a constraint, in our contracts with our customers. Variable considerations are included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur. Revenue from product sales is recorded net of certain variable considerations which includes estimated government-mandated rebates and chargebacks, PBM rebates, distribution fees, estimated product returns and other deductions.

Provisions for sales discounts, returns and allowances are provided for in the period the related revenue is recorded. Our estimates are based on available customer and payor data received from the specialty pharmacies and distributors, as well as third-party market research data. Actual amounts of consideration ultimately received may differ from our estimates. If actual results in the future vary from our estimates, we will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known

Recent Accounting Pronouncements

For a discussion of recent accounting pronouncements, see "Note 1– Description of Business and Summary of Significant Accounting Policies", in the "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

Results of Operations

Revenues

	Year Ended December 31,					
	2024		2023			\$ Change
				in thousands)		
Product sales, net	\$	144,902	\$	104,294	\$	40,608
Contract revenues from collaborations		34,376		11,488		22,888
Government contracts		_		1,100		(1,100)
Total revenues	\$	179,278	\$	116,882	\$	62,396

The following table summarizes revenues from each of our customers who individually accounted for 10% or more of the total net product sales and revenues from collaborations:

	Year Ended Deco	ember 31,
	2024	2023
McKesson Corporation	45%	43%
Cencora Inc. (formerly ASD Healthcare)	20%	21%
Cardinal Health, Inc.	13%	25%
Kissei	11%	*

^{*} Denotes less than 10%

Revenue from product sales is related to our sale of our products in the US, net of chargebacks, discounts and fees, government and other rebates and returns. Typically, our first quarter net sales are impacted by the first quarter reimbursement issues such as the resetting of co-pays and the Medicare donut hole.

TAVALISSE net product sales in 2024 was \$104.8 million, increased by 12% compared to \$93.7 million in 2023. The increase was primarily due to increased quantities sold, as well as increased price per bottle, partially offset by higher revenue reserves driven by increased government and private payor rebates. REZLIDHIA net product sales in 2024 was \$23.0 million, increased by 118% compared to \$10.6 million in 2023. The increase was primarily due to increased quantities sold primarily driven by increased number of patients under therapy, partially offset by the higher revenue reserves primarily due to increased government rebates. Following the commercialization of GAVRETO in June 2024, we started recognizing revenue from shipments to our distributors. In 2024, we recognized \$17.1 million of GAVRETO net product sales.

Following table summarizes our revenues by collaborative partners for the periods presented:

	Year Ended December 31,					
		2024	2023			\$ Change
			(in	thousands)		
Kissei	\$	20,414	\$	2,186	\$	18,228
Grifols		9,085		8,782		303
Dr. Reddy's		4,000		_		4,000
Medison		502		520		(18)
Other third parties		375		_		375
Total revenues from collaborations	\$	34,376	\$	11,488	\$	22,888

In 2024, contract revenues from collaborations consisted primarily of revenue from Kissei of \$20.4 million, \$10.0 million of which was the upfront fee we received from sublicensing olutasidenib, and the remainder was related to the delivery of drug supplies. In addition, we recognized revenue from Grifols of \$9.1 million related to delivery of drug supplies and earned royalty, and \$4.0 million from Dr. Reddy's related to an upfront fee from sublicensing olutasidenib. In 2023, contract revenues from collaborations consisted primarily of revenue from Grifols of \$8.8 million related to the delivery of drug supplies and earned royalty, and revenue from Kissei of \$2.2 million related to the delivery of drug supplies.

No government contract revenue was recognized in 2024. Government contracts revenue in 2023 comprised \$1.0 million of government award granted to us by the US Department of Defense (DOD) to support our Phase 3 clinical trial to evaluate the safety and efficacy of fostamatinib in hospitalized COVID-19 patients, and \$0.1 million award granted to us by Biomedical Advanced Research and Development (BARDA), part of the Office of the Assistant Secretary for the Preparedness and Response at the DHHS for our evaluation of fostamatinib in mitigating the impact of long-term respiratory distress.

We expect our future revenues to include product sales of our existing commercial products and product sales from new commercial products we may have in the future. Our net product sales may be impacted by the demand from our customers, changes to government and private payor rebate programs, chargeback and discount programs, co-payment assistance programs, and any other rebate and discount programs we may enter in the future. In addition, our future revenues may include payments from our existing and new collaboration partners and government grants. As of December 31, 2024, we have deferred revenue of \$1.4 million associated with our collaboration agreement with Kissei, which amount will be recognized as revenue upon satisfaction of our remaining performance obligation.

Cost of Product Sales

	 Year Ended	Decei	mber 31,	
	 2024		2023	 \$ Change
			(in thousands)	
Cost of product sales	\$ 18,647	\$	7,110	\$ 11,537

The cost of product sales includes the cost of inventories sold to our customers and to our collaborative partners. Certain inventories sold for the periods presented include inventory quantities acquired or produced prior to the FDA approval of the product, and do not reflect the full cost of the inventories sold, since such costs incurred prior to FDA approval were previously expensed and charged to research and development expense. In particular, we still utilize active pharmaceutical ingredients with zero cost for our TAVALISSE inventories, which we expect to make use of for the next 1 to 2 years. As such, we recognize lower cost of product sales in the periods where we sell inventory quantities acquired or produced prior to the FDA approval of the product. As we acquire or produce more FDA approved inventory quantities in the future, our inventory cost in the balance sheet and cost of product sales will reflect the full cost of acquiring or producing such products. Cost of product sales may also include reserves for potential excess, dated or obsolete inventories, estimated based upon assumptions about future demand and market conditions as well as product shelf lives. Cost of product sales also includes amortization of intangible assets acquired from in-licensing or acquisition of commercialized products, as well as sublicensing revenue fees and royalty expense.

The increase in cost of product sales in 2024 compared to 2023 was primarily due to increased royalty expense and sublicensing revenue fee of \$6.8 million, and increased amortization of intangible assets of \$1.0 million. In addition, cost of product sales also increased by \$3.7 million due to increase in product sales and delivery of drug supplies pursuant to our supply agreements with our collaborative partners.

Research and Development Expense

	 Year Ended	Decen	iber 31,	
	 2024		2023	 S Change
			(in thousands)	
Research and development expense	\$ 23,380	\$	24,522	\$ (1,142)
Stock-based compensation expense included in research and				
development expense	\$ 1,514	\$	2,094	\$ (580)

The decrease in research and development expense in 2024 compared to 2023 was primarily due to decreased personnel related costs and stock-based compensation expense of \$0.9 million, decreased consulting related expenses of \$0.9 million, and decreased other various research and development expenses of \$0.8 million. These decreases were partially offset by increased clinical trial related expenses of \$1.5 million primarily driven by increased research development activities on our ongoing clinical development programs for olutasidenib, which was partly offset by decreased clinical expenses due to the timing of study progress activities on our ongoing IRAK 1/4 inhibitor program, and timing of trial completion activities on our Phase 3 trials of fostamatinib in patients with COVID-19 and wAIHA.

Our research and development expenditures include costs related to preclinical and clinical trials, scientific personnel, supplies, equipment, consultants, sponsored research, stock-based compensation, and allocated facility costs. We expect to continue to incur significant research and development expense as we continue our activities in our clinical studies including IRAK 1/4 inhibitor program; our collaborative partnerships with MDACC and CONNECT to evaluate olutasidenib in AML, other hematologic cancers and glioma; and any other clinical programs we may pursue in the future.

We do not track fully burdened research and development costs separately for each of our drug candidates. Our research team is focused on identifying and evaluating product candidates in our focused range of therapeutic indications that can be developed into small molecule therapeutics in our own proprietary programs or with potential collaborative partners. "Research" expenses relate primarily to personnel expenses, lab supplies, fees to third-party research consultants and compounds. Our development group leads the implementation of our clinical and regulatory strategies

and prioritizes disease indications in which our compounds may be studied in clinical trials. "Development" expenses relate primarily to clinical trials, personnel expenses, costs related to our regulatory filings, lab supplies and fees to third-party research consultants. "Other" expenses primarily consist of allocated facilities costs and allocated stock-based compensation expense relating to personnel in research and development groups.

In addition to reviewing the three categories of research and development expense described in the preceding paragraph, we principally consider qualitative factors in making decisions regarding our research and development programs, which include enrollment in clinical trials and the results thereof, the clinical and commercial potential for our drug candidates and competitive dynamics. We also make our research and development decisions in the context of our overall business strategy, which includes the evaluation of potential collaborations for the development of our drug candidates.

Preclinical testing and clinical development are long, expensive and uncertain processes, and we cannot reliably predict the timing of such clinical trial activities. In general, biopharmaceutical development involves a series of steps, beginning with identification of a potential target and including, among others, proof of concept in animals and Phase 1, 2 and 3 clinical trials in humans. Significant delays in clinical testing could materially impact our product development costs and timing of completion of the clinical trials. We do not know whether planned clinical trials will begin on time, will need to be halted or revamped or will be completed on schedule, or at all. Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a trial, delays from scale up, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a clinical trial at a prospective clinical site or delays in recruiting subjects to participate in a clinical trial.

We currently do not have reliable estimates of total costs for a particular drug candidate to reach the market. Our potential products are subject to a lengthy and uncertain regulatory process that may involve unanticipated additional clinical trials and may not result in receipt of the necessary regulatory approvals. Failure to receive the necessary regulatory approvals would prevent us from commercializing the product candidates affected. In addition, clinical trials of our potential products may fail to demonstrate safety and efficacy, which could prevent or significantly delay regulatory approval.

The following table presents our total research and development expense by category (in thousands):

	 Year Ended December 31,				From January 1, 2007*		
	2024	2023			to December 31, 2024		
Categories:							
Research	\$ 1,217	\$	1,773	\$	270,273		
Development	20,141		19,655		582,616		
Other	2,022		3,094		279,272		
	\$ 23,380	\$	24,522	\$	1,132,161		

^{*} We started tracking research and development expense by category on January 1, 2007.

"Other" expenses in 2024 and 2023 consisted of allocated facilities costs of \$0.5 million and \$1.0 million, respectively, and stock-based compensation expense of \$1.5 million and \$2.1 million, respectively.

Selling, General and Administrative Expense

	Year Ended December 31,				
	2024		2023		\$ Change
				(in thousands)	
Selling, general and administrative expense	\$	113,059	\$	105,741	\$ 7,318
Stock-based compensation expense included in selling, general and					
administrative expense	\$	10,879	\$	6,712	\$ 4,167

The increase in selling, general and administrative expense in 2024 compared to 2023 was primarily due to increased personnel-related costs and stock-based compensation expense of \$7.4 million primarily driven by increased headcount, and increased commercial related expenses of \$2.5 million primarily due to expansion of commercial activities. These increases were partially offset by decreased consulting and third party services of \$0.9 million and decreased other various sales, general and administrative expenses of \$1.7 million.

We expect to incur significant selling, general and administrative expenses, as we expect our commercial related expenses to increase as we continue to expand our commercial activities for our commercial products. We continue to deploy resources to enable our field-based employees to engage with healthcare providers. These engagements have enabled our field team to cover existing prescribers, as well as develop relationships with new prescribers to identify appropriate patients for our products.

Interest Income and Expense

	Ye	Year Ended December 31,			
	2024	4	2023		\$ Change
			(in thousands)		
Interest income	\$	2,092 \$	2,272	\$	(180)
Interest expense	\$	(7,918) \$	(6,872)	\$	(1,046)

Interest income is related to our interest-bearing cash and investment balances. The decrease in interest income in 2024 compared to 2023 was primarily driven by lower interest rates.

Interest expense comprised primarily of interest on the outstanding term loans with MidCap. The increase in interest expense in 2024 compared 2023 was primarily due to higher interest rate applicable to the term loans, as well as higher principal outstanding balance of the term loans as additional \$20.0 million (Tranche 5) was funded in March 2023.

Provision for income tax

	_	rear E	naea De	cemper 31,		
	_	2024		2023	_	\$ Change
				(in thousands)		
Provision for income taxes	\$	8	81	\$	\$	881

The provision for income tax for the year ended December 31, 2024 was related to foreign withholding tax and state taxes. We have not recorded federal income taxes due to the sufficient NOL carryforwards that were generated prior to the enactment of the Tax Act, as well as significant research and development credit carryforwards. We continue to record a full valuation allowance on our deferred tax assets considering our cumulative losses in prior years and forecasted losses in the future. For the year ended December 31, 2023, there was no foreign withholding tax, and we have not recorded state and federal income taxes due to our pre-tax book losses and a full valuation allowance was recorded against our deferred tax assets.

Liquidity and Capital Resources

Liquidity

As of December 31, 2024 and 2023, we had approximately \$77.3 million and \$56.9 million, respectively, in cash, cash equivalents and short-term investments. We continue to maintain investment portfolios primarily in money market funds, US treasury bills, government-sponsored enterprise securities, corporate bonds and commercial paper. Cash in excess of immediate requirements is invested with regard to liquidity and capital preservation. We view our investments portfolio as available-for-sale and are available for use in current operations. Wherever possible, we seek to minimize the potential effects of concentration and degrees of risk. We continue to monitor the impact of the changes in the conditions of the credit and financial markets to our investment portfolio and assess if future changes in our investment strategy are necessary.

Following summarizes our cash flow activity for the periods presented:

	Year Ended	December	r 31,
	2024		2023
	(in tho	usands)	
Net cash provided by (used in):			
Operating activities	\$ 31,471	\$	(5,743)
Investing activities	4,130		(4,297)
Financing activities	(11,641)		18,367
Net increase in cash and cash equivalents	\$ 23,960	\$	8,327

Net cash provided by operating activities in 2024 was primarily due the proceeds from sales of our products, and cash received from our collaboration partners including the \$10.0 million upfront payment from Kissei pursuant to the collaboration and license agreement, partially offset by the payments of operating expenses. Net cash used in operating activities in 2023 was primarily due to payments of operating expenses, partially offset by the proceeds from sales of our products, cash received from our collaboration partners including the \$20.0 million regulatory milestone payment from Kissei received in January 2023, as well as cash received from government grants.

Net cash provided by investing activities in 2024 comprised primarily of net maturities of short-term investments of \$4.4 million, proceeds from sale of property and equipment of \$0.1 million, partially offset by payments for acquisition of intangible assets and capital expenditures of \$0.4 million. Net cash used in investing activities in 2023 comprised payment of milestone obligations to Forma recorded as intangible assets of \$15.0 million, partially offset by net maturities of short-term investments of \$10.4 million and proceeds from sale of property and equipment of \$0.3 million.

Net cash used in financing activities in 2024 comprised payment of the closing purchase price to Blueprint of \$10.0 million and cost share payments to a collaboration partner of \$3.6 million, partially offset by the net proceeds from issuance of common stock upon exercise of stock options and participation in the Purchase Plan of \$2.0 million. Net cash provided by financing activities in 2023 was primarily due to the net cash proceeds from term loan financing (Tranche 5) of \$20.0 million and proceeds from exercise of stock options and participation in the Purchase Plan of \$1.0 million, partially offset by our cost share payments to Lilly of \$2.6 million.

We believe that our existing capital resources are sufficient to support our current and projected funding requirements, including the continued commercialization of our products, through at least the next 12 months from the date of issuance of this Annual Report on Form 10-K. We used estimates and assumptions that may differ from actual, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with commercializing our products, the development of our product candidates and other research and development activities, we are unable to estimate with certainty our future product revenues, our revenues from our current and future collaborative partners, the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities.

Capital Resources

We finance our operations primarily through sales of our products, and contract payments under our collaboration agreements, as well as through equity securities and debt financing.

Under our existing collaboration agreements that we entered in the ordinary course of business, we received or may be entitled to receive upfront cash payments, payments contingent upon specified events achieved by such partners and royalties on any net sales of products sold by such partners under the agreements. As of December 31, 2024, total future contingent payments to us under our existing agreements with our collaboration partners was approximately \$1.5 billion, if all potential product candidates achieved all of the payment triggering events under all of our current agreements. This estimated future contingent amount does not include any estimated royalties that could be due to us if the partners successfully commercialize any of the licensed products. Future events that may trigger payments to us under the agreements are based solely on our partners' future efforts and achievements of specified development, regulatory and/or commercial events. See further discussion in "Note 4 - Sponsored Research and License Agreements

and Government Contracts" to our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

We have an Open Market Sale Agreement with Jefferies, as a sole agent, entered on August 4, 2020, and amended and restated on August 2, 2024. Pursuant to such Open Market Sale Agreement, we may sell from time to time, through Jefferies, shares of our common stock in sales deemed to be "at-the-market offerings" as defined in Rule 415 under the Securities Act, subject to conditions specified in the Open Market Sale Agreement, including maintaining an effective registration statement covering the sale of shares under the Open Market Sale Agreement. We have an active Registration Statement filed with the SEC, which registered, among other securities, a base prospectus which covers the offering, issuance, and sale by us of up to \$250.0 million in the aggregate of the securities identified from time to time in one or more offerings, which include the \$100.0 million of shares of our common stock that may be offered, issued and sold under the Open Market Sale Agreement. As of December 31, 2024, we have not sold any shares of common stock under such Open Market Sale Agreement.

We have a Credit Agreement with MidCap that provides for \$60.0 million term loan credit facility, which was fully funded as of December 31, 2024.

Our operations will require significant additional funding in the foreseeable future. Unless and until we can generate sufficient cash from our operating activities, we may choose to raise additional funds through public and/or private offerings of equity securities, debt financings, or from other sources. However, certain external factors such as global pandemics, the global tensions arising from the Russia-Ukraine war and Hamas-Israel war, political and economic legislations, and other factors may continue to rapidly evolve which could significantly disrupt the global financial markets. Our ability to raise additional funds may be adversely impacted by potential worsening of global economic conditions and volatility in the credit and financial markets in the US and worldwide. We could experience an inability to access additional funds, which could in the future negatively affect our capacity for certain corporate development transactions or our ability to make important, opportunistic investments. To the extent that we raise additional funds through the sale of equity, our shareholders' ownership interest may experience substantial dilution. Our current credit facility with MidCap and any debt financing that we can obtain in the future may involve operating covenants that may restrict our business. To the extent that we raise additional funds through collaboration and licensing arrangements, we may be required to relinquish some of our rights to our technologies or product candidates or grant licenses on terms that are not favorable to us.

Our future funding requirements will depend upon many factors, including, but not limited to:

- the ongoing costs to commercialize our products, or any other future product candidates, if any such candidate receives regulatory approval for commercial sale;
- our ability to generate expected revenue from our commercialization efforts;
- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- our ability to secure and maintain our patent protection and regulatory rights;
- our ability to meet operating covenants under our current and future credit facilities, if any;
- our ability to enter into partnering opportunities across our pipeline within and outside the US;
- the costs and timing of regulatory filings and approvals by us and our collaborators;
- the progress of research and development programs carried out by us and our collaborative partners;
- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that may trigger payments to us from our collaboration partners;
- our ability to acquire or license other technologies or compounds that we may seek to pursue;
- our ability to manage our growth;

- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights, including regulatory rights such as regulatory data exclusivities; and
- expenses associated with any unforeseen litigation, including any arbitration and securities class action lawsuits.

Insufficient funds may require us to delay, scale back or eliminate some or all of our commercial efforts and/or research or development programs, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern.

Material Cash Requirements

We conduct our commercial activities and research and development programs internally and with third parties that include, among others, arrangements with vendors, consultants, CROs and universities. Our contract arrangements with these third parties are generally cancellable on reasonable notice, and our obligations under such arrangements are generally based on services performed. We have agreements with certain clinical research organizations to conduct our clinical trials including our strategic development collaborations with MDACC and CONNECT. The timing of payments for any amounts owed under the respective agreements depends on various factors including, but not limited to, patient enrollment and other progress of the clinical trials. We can terminate these agreements at any time, and if terminated, we would not be liable for the full amount of the respective agreements. Instead, we will be liable for services provided through the termination date plus certain cancellation charges, if any, as defined in each of the respective agreements. In addition, these agreements may, from time to time, be subjected to amendments as a result of any change orders executed by the parties. We expect to continue entering into contracts in the normal course of business with various third parties to support our commercial activities and research and development programs.

In the ordinary course of business, we enter into agreements with contract manufacturers to manufacture our inventory products. Although the agreements generally provide a termination clause with or without cause, we may still be subjected to payment of cancellation fees. The level of cancellation fees is generally dependent on the timing of the written notice in relation to the commencement of work, with the maximum cancellation fees equal to the full price of the work order. In October 2024, we entered into an agreement with a third-party contract manufacturer to manufacture TAVALISSE that is expected to be delivered starting in 2026 through 2029. As of December 31, 2024, the contractual obligation not included in our financial statements related an agreement that may potentially be subjected to cancellation fees amounted to approximately \$24.1 million, with approximately \$6.8 million due in one year and \$9.3 million due within two to three years. As of December 31, 2024, we have not incurred any cancellation fees under our agreements with contract manufacturers.

As discussed in detail in "Note 4 – Sponsored Research and License Agreements and Government Contracts" to our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K, under the Lilly Agreement, although our co-funding obligation for development of ocadusertib (previously R552) in the US, Europe, and Japan ended on April 1, 2024, we have the right to opt-in to co-funding, upon us providing notice to Lilly within 30 days of certain events, as specified in the agreement. If we decide to exercise our opt-in right, we will be required to continue to share in the global development costs with Lilly, and if we later exercise our second opt-out right (no later than April 1, 2025), our share in global development costs will be up to a specified cap through December 31, 2025, as provided for in the Lilly Agreement.

Also, as discussed in detail in "Note 4 – Sponsored Research and License Agreements and Government Contracts" and "Note 5 – In-Licensing and Acquisition" of our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K, pursuant to our license and transition services agreement with Forma, Forma is entitled to potential development and regulatory milestone payment and tiered royalty payments on net sales as well as certain portion of sublicensing revenue. Further, following our olutasidenib sublicensing agreements with Kissei and Dr. Reddy's, Forma is entitled to the portion of the sublicensing revenue we receive from Kissei and Dr. Reddy's under such respective agreements.

Additionally, as discussed in detail in "Note 5 – In-Licensing and Acquisition" of our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of this Annual Report on Form 10-K, pursuant to an Asset Purchase Agreement with Blueprint, in addition to unpaid purchase price consideration, Blueprint is entitled to potential commercial and regulatory milestone payments, as well as tiered royalty payments.

We have a contractual commitment with respect to our credit facility with MidCap. Under the amended Credit Agreement, the term loans mature on September 1, 2027, and the interest-only period is through October 1, 2025. As of December 31, 2024, the outstanding principal amount of the loan was \$60.0 million, of which \$7.5 million principal payments are due within 12 months. As of December 31, 2024, future interest calculated using the base interest rate as per the amended Credit Agreement, and the final fee payments associated with the credit facility amounted to \$14.3 million, with approximately \$6.5 million payable within 12 months.

As of December 31, 2024, we have a contractual commitment related to our sublease agreement with Atara for approximately \$0.3 million, payable through the expiration of the sublease agreement in May 2025. In February 2025, we entered into a lease agreement with 611 Gateway to lease the same office space currently subleased from Atara. Our contractual commitment related to the lease agreement with 611 Gateway was \$1.4 million, of which \$0.3 million is payable in the next 12 months from December 31, 2024.

We are also subject to claims related to the patent protection of certain of our technologies, as well as purported securities class action lawsuit, other litigations, and other contractual agreements. We are required to assess the likelihood of any adverse judgments or outcomes to these matters as well as potential ranges of probable losses. A determination of the amount of reserves required, if any, for these contingencies is made after careful analysis of each individual matter. We do not have other material contractual commitments with respect to matters discussed above.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities related to our investments and borrowings. Our cash equivalents and short-term investments consists of money market funds, US treasury bills, government-sponsored enterprise securities, and corporate bonds and commercial paper. Our cash equivalents and short-terms investments are invested in high-grade securities, and as a result, we believe represent a minimal credit risk. The goals of our investment policy are liquidity and capital preservation; we do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate exposure. If interest rates were to increase or decrease by 100 basis points, the fair value of our cash equivalents and short-term investments would increase or decrease by an immaterial amount.

Interest on our outstanding loan from MidCap is subject to changes in Secured Overnight Financing Rate (SOFR). Fluctuations in SOFR above the contractual floor rate may have a material effect on our interest payment obligations in the future.

Item 8. Financial Statements and Supplementary Data

INDEX TO FINANCIAL STATEMENTS Rigel Pharmaceuticals, Inc.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Rigel Pharmaceuticals, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Rigel Pharmaceuticals, Inc. (the Company) as of December 31, 2024 and 2023, the related statements of operations, comprehensive income (loss), stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2024, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 4, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

Product Sales Allowances and Discounts

Description of the Matter As described in Note 1 to the financial statements, revenue from product sales is recorded net of adjustments for estimated government-mandated and/or privately-negotiated rebates and chargebacks, distribution fees, estimated product returns, and other deductions. Provisions for these adjustments are recorded in the period in which the related revenue is recorded and are

presented either as a reduction of accounts receivable or as an accrued liability in the Company's balance sheet. As of December 31, 2024, the Company has recorded net liabilities for product sales allowances and discounts of \$26.4 million.

Auditing product sales allowances and discounts involved evaluation of management's subjective judgments regarding the reasonableness of estimated payor and channel mix applied to product sales during the period. These estimates are based on available customer and payor data received from specialty pharmacies and distributors and reflect management's judgments regarding adjustments to historical trends. The Company has a limited history upon which to base such estimates, and changes in the estimated payor and channel mix can have a material effect on the amount of variable consideration recognized.

How We Addressed the Matter in Our Audit We tested the Company's internal controls over the process for estimating and recording product sales allowances and discounts. Our testing included controls over management's review of significant assumptions, such as payor mix and channel mix, and other inputs, which include product sold, contractual terms and discount rates, used in the estimates

To test the Company's provisions for allowances and discounts, our audit procedures included, among others, evaluating the methodologies and assumptions used and the underlying data used by the Company. We evaluated the assumptions used by management against historical trends, evaluated the change in estimated accruals from prior periods, and assessed the historical accuracy of the Company's estimates against actual results over material ending accrual balances. We performed substantive analytical procedures on material ending accrual balances by assessing whether the accrued balance is reasonable relative to historical payment lag and sales activity.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1998. San Francisco, California March 4, 2025

RIGEL PHARMACEUTICALS, INC. BALANCE SHEETS

(In thousands, except share and per share amounts)

	As of Dec			
	2024		2023	
Assets				
Current assets:				
Cash and cash equivalents	\$ 56,746	\$	32,786	
Short-term investments	20,575		24,147	
Accounts receivable, net	41,615		30,550	
Inventories	6,002		5,522	
Prepaid and other current assets	 10,165		6,261	
Total current assets	135,103		99,266	
Property and equipment, net	92		165	
Intangible assets, net	27,100		13,878	
Operating lease right-of-use assets	246		861	
Other assets	1,435		3,055	
Total assets	\$ 163,976	\$	117,225	
Liabilities and stockholders' equity (deficit)				
Current liabilities:				
Accounts payable	\$ 3,339	\$	7,142	
Accrued compensation	10,139		8,676	
Accrued research and development	4,073		3,513	
Revenue reserves and refund liability	26,440		15,684	
Loans payable, net, current portion	7,272		7,229	
Other accrued liabilities	10,396		5,334	
Deferred revenue	1,355		1,355	
Lease liabilities, current portion	285		692	
Other long-term liabilities, current portion	_		3,642	
Total current liabilities	 63.299		53,267	
Acquisition-related liabilities	5,000		33,207	
Long-term portion of lease liabilities	-		285	
Long-term portion of loans payable, net	52,408		52,373	
Other long-term liabilities	39,981		39,944	
Total liabilities	160.688		145.869	
Total naomities	 100,000		143,609	
Commitments				
Communents				
Stockholders' equity (deficit):				
Preferred stock, \$0.001 par value; 10,000,000 shares authorized; none issued				
and outstanding as of December 31, 2024 and 2023 Common stock ⁽¹⁾ , \$0.001 par value; 400,000,000 shares authorized; 17,710,216	_		_	
and 17,482,513 shares issued and outstanding as of December 31, 2024 and 2023, respectively	18		17	
Additional paid-in capital (1)	1,393,325		1,378,881	
Accumulated other comprehensive income	(1 200 065)		(1.407.550)	
Accumulated deficit	(1,390,065)		(1,407,550)	
Total stockholders' equity (deficit)	3,288		(28,644)	
Total liabilities and stockholders' equity (deficit)	\$ 163,976	\$	117,225	

⁽¹⁾ Shares issued and outstanding, including appropriate reclassifications between common stock and additional paid-in capital, have been restated to reflect the 1-for-10 reverse stock split effected on June 27, 2024 on a retroactive basis for the respective periods presented.

See Accompanying Notes to Financial Statements.

RIGEL PHARMACEUTICALS, INC. STATEMENTS OF OPERATIONS (In thousands, except per share amounts)

	 Year Ended December 31,				
	 2024		2023		2022
Revenues:					
Product sales, net	\$ 144,902	\$	104,294	\$	76,718
Contract revenues from collaborations	34,376		11,488		39,024
Government contracts			1,100		4,500
Total revenues	179,278		116,882		120,242
Costs and expenses:					
Cost of product sales	18,647		7,110		1,749
Research and development	23,380		24,522		60,272
Selling, general and administrative	113,059		105,741		112,451
Restructuring charges	_		_		1,320
Total costs and expenses	155,086		137,373		175,792
Income (loss) from operations	24,192		(20,491)		(55,550)
Interest income	2,092		2,272		684
Interest expense	(7,918)		(6,872)		(3,707)
Income (loss) before income taxes	 18,366		(25,091)		(58,573)
Provision for income taxes	881		_		_
Net income (loss)	\$ 17,485	\$	(25,091)	\$	(58,573)
Net income (loss) per share ⁽¹⁾					
Basic	\$ 0.99	\$	(1.44)	\$	(3.44)
Diluted	\$ 0.99	\$	(1.44)	\$	(3.44)
Weighted average shares used in computing net income (loss) per share (1)	 				
Basic	17,579		17,401		17,049
Diluted	17,687		17,401	_	17,049

⁽¹⁾ Share and per share amounts have been restated to reflect the 1-for-10 reverse stock split effected on June 27, 2024 on a retroactive basis for the respective periods presented.

RIGEL PHARMACEUTICALS, INC. STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (In thousands)

	 Year Ended December 31,							
	2024		2023		2022			
Net income (loss)	\$ 17,485	\$	(25,091)	\$	(58,573)			
Other comprehensive income (loss):								
Net unrealized gain (loss) on short-term investments	2		161		(51)			
Comprehensive income (loss)	\$ 17,487	\$	(24,930)	\$	(58,624)			

RIGEL PHARMACEUTICALS, INC. STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

(In thousands, except number of shares)

	Common St	tock (1)	Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Capital (1)	Income (Loss)	Deficit	Equity (Deficit)
Balance as of January 1, 2022	17,160,175	\$ 17	\$ 1,354,345	\$ (102)	\$ (1,323,886)	\$ 30,374
Net loss	_	_	_	_	(58,573)	(58,573)
Net change in unrealized loss on short-term investments	_	_	_	(51)	_	(51)
Issuance of common stock upon exercise of options and						
participation in Purchase Plan	158,016	_	2,124	_	_	2,124
Issuance of common stock upon vesting of restricted						
stock units (RSUs)	21,625	_	_	_	_	
Stock-based compensation expense			12,510			12,510
Balance as of December 31, 2022	17,339,816	17	1,368,979	(153)	(1,382,459)	(13,616)
Net loss	_	_	_	_	(25,091)	(25,091)
Net change in unrealized loss on short-term investments	_	_	_	161	_	161
Issuance of common stock upon exercise of options and						
participation in Purchase Plan	99,196	_	1,049			1,049
Issuance of common stock upon vesting of RSUs	43,501	_	_			_
Stock-based compensation expense	_	_	8,853			8,853
Balance as of December 31, 2023	17,482,513	17	1,378,881	8	(1,407,550)	(28,644)
Net income	_	_	_	_	17,485	17,485
Net change in unrealized gain on short-term investments	_	_	_	2	_	2
Issuance of common stock upon exercise of options and						
participation in Purchase Plan	158,795	1	1,963	_	_	1,964
Issuance of common stock upon vesting of RSUs	68,908	_	_	_	_	_
Stock-based compensation expense		_	12,481	_	_	12,481
Balance as of December 31, 2024	17,710,216	\$ 18	\$ 1,393,325	\$ 10	\$ (1,390,065)	\$ 3,288

⁽¹⁾ All share amounts in this column, including appropriate reclassifications between common stock and additional paid-in capital, have been restated to reflect the 1-for-10 reverse stock split effected on June 27, 2024 on a retroactive basis for the respective periods presented.

RIGEL PHARMACEUTICALS, INC. STATEMENTS OF CASH FLOWS (In thousands)

		Year Ended December				oer 31,		
		2024		2023		2022		
Operating activities								
Net income (loss)	\$	17,485	\$	(25,091)	\$	(58,573)		
Adjustments to reconcile net income (loss) to net cash provided by operating activities:								
Stock-based compensation expense		12,393		8,806		12,385		
(Gain) loss on sale and disposal of fixed assets		(79)		266		(138)		
Depreciation and amortization		2,228		1,238		998		
Non-cash interest expense		_		_		682		
Net amortization of discount on short-term investments and term loans		(709)		(479)		(63)		
Changes in assets and liabilities:								
Accounts receivable, net		(11,065)		9,770		(24,848)		
Inventories		764		1,172		(2,377)		
Prepaid and other current and non-current assets		(3,440)		2,054		(513)		
Right-of-use assets		615		1,069		7,773		
Accounts payable		(3,803)		(366)		3,788		
Accrued compensation		1,463		(190)		(1,824)		
Accrued research and development		560		(4,195)		(2,676)		
Revenue reserves and refund liability		10,756		3,539		4,230		
Other accrued liabilities		4,995		(1,151)		1,709		
Lease liability		(692)		(1,128)		(8,546)		
Deferred revenue		_		(14)		(1,227)		
Other current and long-term liabilities		_		(1,043)		(4,538)		
Net cash provided by (used in) operating activities	_	31,471		(5,743)		(73,758)		
Investing activities	_							
Maturities of short-term investments		39,700		41,650		101,228		
Purchases of short-term investments		(35,272)		(31,206)		(28,894)		
Capital expenditures		(36)				(450)		
Payments for acquisition of intangible assets		(360)		(15,000)		`´		
Proceeds from sale of property and equipment		98		259		893		
Net cash provided by (used in) investing activities	_	4,130		(4,297)		72,777		
Financing activities	_		_		_			
Net proceeds from term loan financing		_		19,950		19,542		
Net proceeds from issuance of common stock from equity plans		1,964		1,049		2,124		
Closing purchase price payment related to asset acquisition		(10,000)		_		´ _		
Cost share payments to a collaboration partner		(3,605)		(2,632)		(15,116)		
Net cash (used in) provided by financing activities	_	(11,641)		18,367		6,550		
Net increase in cash and cash equivalents	_	23,960	_	8,327	_	5,569		
Cash and cash equivalents at beginning of period		32,786		24,459		18,890		
Cash and cash equivalents at organisms of period	\$	56,746	\$	32,786	\$	24,459		
·	Φ	30,740	Ψ	32,700	Ψ	27,737		
Supplemental disclosure of cash flow information	\$	7.020	¢.	5.040	¢.	2.405		
Interest paid	\$	7,039	\$	5,848	\$	2,495		
Income taxes paid		331		_		15 000		
Purchases of intangible asset included within accounts payable				_		15,000		
Acquisition-related liabilities		5,000		_		_		

RIGEL PHARMACEUTICALS, INC. NOTES TO FINANCIAL STATEMENTS

In this Annual Report on Form 10-K, "Rigel," "we," "us" and "our" refer to Rigel Pharmaceuticals, Inc. and "common stock" refers to Rigel's common stock, par value \$0.001 per share.

1. DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business

We are a biotechnology company dedicated to developing and providing novel therapies that significantly improve the lives of patients with hematologic disorders and cancer. We focus on products that address signaling pathways that are critical to disease mechanisms.

TAVALISSE (fostamatinib disodium hexahydrate) is our first product approved by the FDA. TAVALISSE is the only approved oral SYK inhibitor for the treatment of adult patients with chronic ITP who have had an insufficient response to a previous treatment. The product is also commercially available in Europe and the UK (as TAVLESSE), and in Canada, Israel and Japan (as TAVALISSE) for the treatment of chronic ITP in adult patients.

REZLIDHIA (olutasidenib) is our second FDA-approved product. REZLIDHIA capsules are indicated for the treatment of adult patients with R/R AML with a susceptible IDH1 mutation as detected by an FDA-approved test. We in-licensed REZLIDHIA from Forma with exclusive, worldwide rights for its development, manufacturing and commercialization.

GAVRETO (pralsetinib) is our third FDA-approved product which we began commercializing on June 27, 2024. GAVRETO is a once daily, small molecule, oral, kinase inhibitor of wild-type RET and oncogenic RET fusions. GAVRETO is approved by the FDA for the treatment of adult patients with metastatic RET fusion-positive NSCLC as detected by an FDA-approved test. GAVRETO is also approved under accelerated approval based on overall response rate and duration response rate, for the treatment of adult and pediatric patients 12 years of age and older with advanced or metastatic RET fusion-positive thyroid cancer who require systemic therapy and who are radioactive iodine-refractory (if radioactive iodine is appropriate). We acquired the rights to research, develop, manufacture and commercialize GAVRETO in the US from Blueprint pursuant to an Asset Purchase Agreement entered in February 2024.

We continue to advance the development of R289, our dual IRAK 1/4 inhibitor program, in an open-label, Phase 1b study to determine the tolerability and preliminary efficacy of the drug in patients with lower-risk MDS who are relapsed, refractory or resistant to prior therapies.

We have strategic development collaborations with MDACC to expand our evaluation of olutasidenib in AML and other hematologic cancers with IDH1 mutations, and with CONNECT to conduct a Phase 2 clinical trial to evaluate olutasidenib in combination with temozolomide in patients with HGG harboring an IDH1 mutation.

We have a RIPK1 inhibitor program in clinical development with our partner Lilly. We also have product candidates in clinical development with partners BerGenBio and Daiichi.

Basis of Presentation

The accompanying financial statements have been prepared in accordance with United States generally accepted accounting principles (US GAAP). Any reference in these notes to applicable accounting guidance is meant to refer to the authoritative US GAAP included in the Accounting Standards Codification (ASC), and Accounting Standards Update (ASU) issued by the Financial Accounting Standards Board (FASB).

Reverse Stock Split

We filed with the Secretary of State of the State of Delaware a certificate of amendment to our Amended and Restated Certificate of Incorporation, to effect a 1-for-10 reverse stock split, effective June 27, 2024. As a result of the reverse stock split, every ten issued and outstanding shares of our common stock were automatically combined into one issued and outstanding share of common stock. Accordingly, an amount equal to the par value of the decreased shares resulting from the reverse stock split was reclassified from common stock to additional paid-in capital on the balance sheet and statement of changes in stockholders' equity (deficit). No fractional shares were issued in connection with the reverse stock split. Stockholders who otherwise would be entitled to receive fractional shares of common stock were entitled to receive the cash value equal to the fraction to which the stockholder would otherwise be entitled, multiplied by the closing price of the common stock as reported by Nasdaq on the last trading day prior to the effective date of the split. As a result of the reverse stock split, proportionate adjustments were made to the number of shares underlying (and as applicable, the exercise or conversion prices of) our outstanding equity awards and to the number of shares of common stock issuable under our equity incentive plans. The reverse stock split did not change the par value of our common stock, which remains \$0.001, or the authorized number of shares of our common stock. All share amounts and per share amounts disclosed in this Annual Report on Form 10-K have been adjusted to reflect the reverse stock split on a retroactive basis for the respective periods presented.

Liquidity

As of December 31, 2024, we had approximately \$77.3 million in cash, cash equivalents and short-term investments. Since inception, we have financed our operations primarily through sales of equity securities, debt financing arrangement, contract payments under our collaboration agreements and from product sales. Based on our current operating plan, we believe that our existing cash, cash equivalents, and short-term investments will be sufficient to fund our expenses and capital expenditure requirements through at least the next 12 months from the date of issuance of this Annual Report on Form 10-K.

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires management to make certain judgments, estimates and assumptions that could affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Critical accounting estimates and assumptions made by management include those relating to estimates around our product sales allowances and discounts; estimates around accounting for collaboration arrangements; and estimates around research and development accruals. Other accounting estimates also include but not limited to allowance for credit losses, inventory reserves, estimated general accruals, valuation of our stock option awards and probability of achievement of corporate performance-based milestones for our performance-based stock option awards, valuation allowance on deferred tax asset, estimated useful lives of long-lived assets, and any potential impairment loss. We base our estimates and assumptions on historical experience and on various other assumptions we believe to be applicable, and evaluate them on an ongoing basis to ensure they remain reasonable under current conditions. Actual results could differ significantly from those estimates, which could have a material impact on our business, results of operations, and financial condition.

Segment Reporting

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker (CODM), or decision making-group, in deciding how to allocate resources and in assessing performance. Our CODM is our chief executive officer. We view our operations and manage our business as one operating segment.

In November 2023, FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which expands public entities' segment disclosures, among others, requiring disclosure of significant segment expenses that are regularly provided to the CODM and included within each reported measure of segment profit or loss; an amount and description of its composition for other segment items; and interim disclosures of a reportable segment's profit or loss and assets. This new guidance was effective for us beginning on this annual report on Form 10-K for the year ended December 31, 2024, and applied retrospectively to all prior periods presented. The impact

of the adoption of this guidance was not material to our financial position or results of operations, as the requirements impact only segment reporting disclosures in our notes to financial statements. See 'Note 15 – Segment Information' for further details.

Revenue Recognition

We recognize revenue in accordance with ASC Topic 606, Revenue from Contracts with Customers (ASC 606), when a customer obtains control of promised goods or services, in an amount that reflects the consideration which we expect to receive in exchange for those goods or services. To determine whether arrangements are within the scope of ASC 606, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy our performance obligation. We apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. At contract inception, once the contract is determined to be within the scope of this new guidance, we assess the goods or services promised within each contract and identify, as a performance obligation, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Product Sales

Revenues from product sales are recognized when our customers obtain control of our product, which occurs at a point in time upon delivery. Our specialty distributors resell our products to specialty pharmacy providers, health care providers, hospitals and clinics. In addition to distribution agreements with our specialty distributors, we also have arrangements with certain specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities that provide for government-mandated and/or privately-negotiated rebates, chargebacks and discounts with respect to the purchase of our products.

Under ASC 606, we are required to estimate the transaction price, including variable consideration that is subject to a constraint, in our contracts with our customers. Variable consideration is included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur. Revenue from product sales is recorded net of certain variable consideration which includes estimated government-mandated rebates and chargebacks, distribution fees, estimated product returns and other deductions.

Provisions for returns and other adjustments are provided for in the period the related revenue is recorded. Actual amounts of consideration ultimately received may differ from our estimates. If actual results in the future vary from our estimates, we will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known.

The following are our significant categories of sales discounts and allowances:

Sales Discounts. We provide certain customer a prompt payment discount that is explicitly stated in our contract. The sales discount is recorded as a reduction of revenue in the period the related product revenue is recognized.

Product Returns. We offer our specialty distributors a right to return product purchased directly from us, which is principally based upon the product's expiration date. Product return allowances are estimated and recorded at the time of sale.

Government and Private Payor Rebates: We are subject to discount obligations under the state Medicaid programs and Medicare prescription drug coverage gap program. We estimate our Medicaid and Medicare prescription drug coverage gap rebates based upon a range of possible outcomes that are probability-weighted for the estimated payor mix. We also have rebate program agreements with certain PBMs for certain product, pursuant to which rebates will be paid in accordance with the respective agreements. The rebate reserves are recorded in the same period the related revenue is recognized, resulting in a reduction of product revenue and related liability is recorded as revenue reserves within revenue reserves and refund liability in the balance sheet. Our liability for these rebates consists primarily of estimates of claims for the current quarter, and estimated future claims that will be made for product that has been

recognized as revenue, but remains in the distribution channel inventories at the end of each reporting period.

Chargebacks and Discounts: Chargebacks for fees and discounts represent the estimated obligations resulting from contractual commitments to sell products to certain specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities at prices lower than the list prices charged to our specialty distributors who directly purchase the product from us. These specialty distributors charge us for the difference between what they pay for the product and our contracted selling price to these specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities. These reserves are established in the same period that the related revenue is recognized, resulting in a reduction of product revenue. Actual chargeback amounts are generally determined at the time of resale to the specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities by our specialty distributors. The estimated obligations arising from these chargebacks and discounts are recorded as revenue reserves within revenue reserves and refund liability in the balance sheet.

Co-Payment Assistance: We offer co-payment assistance to commercially insured patients meeting certain eligibility requirements. The calculation of the accrual for co-pay assistance is based on an estimate of claims and the cost per claim that we expect to receive associated with product that has been recognized as revenue.

Contract Revenues from Collaborations

In the normal course of business, we conduct research and development programs independently and in connection with our corporate collaborators, pursuant to which we license certain rights to our intellectual property to third parties. The terms of these arrangements typically include payment to us for a combination of one or more of the following: upfront license fees; development, regulatory and commercial milestone payments; product supply services; and royalties on net sales of licensed products.

Upfront License Fees: If the license to our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, we recognize revenues from upfront license fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other promises, we determine whether the combined performance obligation is satisfied over time or at a point in time. If the combined performance obligation is satisfied over time, we use judgment in determining the appropriate method of measuring progress for purposes of recognizing revenue from the up-front license fees. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition.

For arrangements that require us to share in the development costs but to which we do not participate in the co-development work, the portion of the upfront fee attributed to our share in the future development costs is excluded from the transaction price. If such share in the development costs is payable beyond 12 months from the delivery of the corresponding license, a significant financing component is deemed to exist. If a significant financing component is identified, we adjust the transaction price by reducing the upfront fee by the net present value of our share in future development costs over the expected commitment period. Such discounted amount will be reported as a liability in the balance sheet, with a corresponding interest expense being accreted based on a discount rate applied over the expected commitment period.

Development, Regulatory or Commercial Milestone Payments: At the inception of each arrangement that includes payments based on the achievement of certain development, regulatory and commercial or launch events, we evaluate whether the milestones are considered probable of being achieved and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our or the licensee's control, such as regulatory approvals, are not considered probable of being achieved until uncertainty associated with the approvals has been resolved. The transaction price is then allocated to each performance obligation, on a relative standalone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, we re-evaluate the probability of achieving such development and regulatory milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, and recorded as part of contract revenues from collaborations during the period of adjustment.

Product Supply Services: Arrangements that include a promise for future supply of drug product for either clinical development or commercial supply at the licensee's discretion are generally considered as options. We assess if these options provide a material right to the licensee and if so, they are accounted for as separate performance obligations.

Sales-based Milestone Payments and Royalties: For arrangements that include sales-based royalties, including milestone payments based on the volume of sales, we determine whether the license is deemed to be the predominant item to which the royalties or sales-based milestones relate to and if such is the case, we recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Government Contracts

There is limited US GAAP accounting guidance for for-profit business entities that receives government assistance. We utilized other accounting standards, and have elected to analogize to International Financial Reporting Standards, specifically International Accounting Standards (IAS) 20, Accounting for Government Grants and Disclosures of Government Assistance. Following IAS 20, we account for government assistance as government contracts revenue within the statement of operations in the period when it is probable that we will receive the award, which is when we comply with the conditions associated with the award. Following the guidance of ASU 2021-10, Disclosures by Business Entities about Government Assistance, we disclose the nature of the transactions and the related accounting policy used, the line items on the balance sheet and income statement that are affected by the transaction and the amounts applicable to each financial statement line item, and the significant terms and conditions of the transactions, including commitment and contingencies. See "Note 4 – Sponsored Research and License Agreements and Government Contracts" for further discussions of government assistance we received.

Stock-based Compensation

Share-based awards are valued at fair value on the date of grant and that fair value is recognized over the requisite service period, which is generally the vesting period of the respective award. We use the straight-line attribution method over the requisite employee service period for the entire award in recognizing stock-based compensation expense. We account for forfeitures as they occur.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model. The model requires management to make a number of assumptions including expected volatility, expected term, risk-free interest rate and expected dividends. We estimate volatility using the historical share price performance over the expected life of the option. We use historical data to determine the applicable expected term for each of the other option groups. The risk-free interest rate is based on US Treasury constant maturity rates with similar terms to the expected term of the options for each option group. The expected dividend yield is 0% as we have not paid and do not expect to pay dividends in the future. We segregate option awards into the following three homogenous groups for the purpose of determining fair values of options: officers and directors, all other employees, and consultants.

We grant performance-based stock options to purchase shares of our common stock which will vest upon the achievement of certain corporate performance-based milestones. We determine the fair values of these performance-based stock options using the Black-Scholes option pricing model at the date of grant. For the portion of the performance-based stock options of which the performance condition is considered probable of achievement, we recognize stock-based compensation expense on the related estimated grant date fair values of such options on a straight-line basis from the date of grant up to the date when we expect the performance condition will be achieved. For the performance conditions that are not considered probable of achievement at the grant date or upon re-evaluation at each reporting date, prior to the event actually occurring, we recognize the related stock-based compensation expense when the event occurs or when we can determine that the performance condition is probable of achievement. In those cases, we recognize the change in estimate at the time we determine the condition is probable of achievement (by recognizing stock-based compensation expense as cumulative catch-up adjustment as if we had estimated at the grant date that the performance condition would have been achieved) and recognize the remaining compensation cost up to the date when we expect the performance condition will be achieved, if any.

The fair value of the RSU grant is based on the market price of our common stock on the date of grant.

Accounts Receivable

Accounts receivable are recorded net of customer allowances for prompt payment discounts and any allowance for doubtful accounts. We monitor the financial performance and creditworthiness of our customers so that we can properly assess and respond to changes in their credit profile. We have not historically experienced credit losses and no amounts were reserved for estimated losses as of the balance sheet dates presented.

The following table summarizes the activity of our customer allowances for prompt payment discounts for the periods presented (in thousands):

	Year Ended December 31,							
		2024	:	2023		2022		
Balance at the beginning of the year	\$	180	\$	136	\$	106		
Provision for prompt payment discount		1,035		686		557		
Reduction in prompt payment discount		(969)		(642)		(527)		
Balance at end of the year	\$	246	\$	180	\$	136		

Concentration of Credit Risk

Financial instruments that potentially subject us to a concentration of credit risk are primarily cash, investment in debt securities and accounts receivable. All of our cash and investment in debt securities are maintained with financial institutions that management believes are creditworthy. By policy, we limit the concentration of credit risk by diversifying our investments among a variety of high credit-quality issuers. Due to the short-term nature of these investments, we believe we do not have a material exposure to credit risk arising from our investments. We have not historically experienced any significant credit losses related to these financial instruments and do not believe that we are exposed to any significant credit risk related to these instruments.

Concentration of credit risk with respect to our accounts receivable is limited due to our small number of customers. Our accounts receivable consists mostly of outstanding invoices from our sale of our product to our customers. Accounts receivable may also include outstanding invoices from our collaboration partners with respect to the related sponsored research and license agreements and government contracts. As of December 31, 2024, 81% of our accounts receivable are outstanding invoices to our customers related to product sales in the US, and the remaining 19% are outstanding invoices from our collaboration partners, mainly Dr. Reddy's and Grifols. As of December 31, 2023, 87% of our accounts receivable are outstanding invoices to our customers related to product sales in the US, and the remaining 13% are outstanding invoices from our collaboration partners, mainly Grifols.

See "Note 3 - Revenues" for summary of revenues from each of our customers and collaboration partners who individually accounted for 10% or more of the total net product sales and revenues from collaborations.

Cash, Cash Equivalents and Short-Term Investments

Our investment in debt securities consists of money market funds, US treasury bills, government- sponsored enterprise securities, and corporate bonds and commercial paper. All of our investment in debt securities are available-for-sale and are classified based on their maturities. We consider all highly liquid investments in debt securities with maturity of 90 days or less from the date of purchase to be cash equivalents. All other investments with maturity greater than 90 days from the date of purchase are classified as short-term investments. Unrealized gains (losses) are reported within the statements of stockholders' equity (deficit) and comprehensive income (loss). The cost of securities sold is based on the specific identification method.

We periodically evaluate our available-for-sale marketable debt securities for impairment. When the fair value of a marketable debt security is below its amortized cost, the amortized cost is reduced to its fair value if it is more likely than not that we are required to sell the impaired security before recovery of our amortized cost basis, or we have the intention to sell the security. If neither of these conditions are met, we determine whether the impairment is due to credit losses by comparing the present value of the expected cash flows of the security with its amortized cost basis. The

amount of impairment recognized is limited to the excess of the amortized cost over the fair value of the security. An allowance for credit losses for the excess of amortized cost over the expected cash flows is recorded in other income (expense), net on the statements of operations. Impairment losses that are not credit-related are included in accumulated other comprehensive income (loss) in stockholders' equity (deficit).

Fair Value of Financial Instruments

The carrying amounts of our financial instruments, including cash, accounts receivable, accounts payable and accrued liabilities, approximate fair value due to their relatively short maturities. The carrying value of our loans payable and other long-term debt approximates fair value based on management's estimation that a current interest rate would not differ materially from the stated rate, or the discount rate applied.

The fair value of our cash equivalents and short-term investments measured at fair value on a recurring basis and are categorized based upon the lowest level of significant input to the valuations.

Assets and liabilities recorded at fair value in our financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities, are as follows:

- Level 1 Inputs are unadjusted, quoted prices in active markets for identical assets at the reporting date. Active markets are
 those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information
 on an ongoing basis. The fair valued assets we hold that are generally included under this Level 1 are money market securities
 where fair value is based on publicly quoted prices.
- Level 2 Inputs, other than quoted prices included in Level 1, that are either directly or indirectly observable for the asset or liability through correlation with market data at the reporting date and for the duration of the instrument's anticipated life. The fair valued assets we hold that are generally assessed under Level 2 included government-sponsored enterprise securities, US treasury bills and corporate bonds and commercial paper. We utilize third-party pricing services in developing fair value measurements where fair value is based on valuation methodologies such as models using observable market inputs, including benchmark yields, reported trades, broker/dealer quotes, bids, offers and other reference data. We use quotes from external pricing service providers and other on-line quotation systems to verify the fair value of investments provided by our third-party pricing service providers.
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the
 assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or
 liability at the reporting date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the
 inputs to the model. We do not have fair valued assets classified under Level 3.

Inventories and Cost of Product Sales

Inventories are stated at the lower-of-cost or estimated net realizable value. We determine the cost of inventories using the standard cost method, which approximates actual cost, and is valued using the first-in, first-out method. Inventory costs primarily consist of active pharmaceutical ingredients, third-party manufacturing costs and allocated internal overhead costs. We capitalize inventory costs when the product is approved by the FDA, or when based on management's judgment, future commercialization was considered probable, and the future economic benefits are expected to be realized. Prior to FDA approval of a product, costs to purchase active pharmaceutical ingredients including costs to manufacture a product are charged to research and development expense when incurred. Our physical inventories as of balance sheet dates include inventory quantities where costs have been previously charged to research

and development expense since such costs were incurred prior to FDA approval of the product.

We provide reserves for potential excess, dated or obsolete inventories based upon assumptions about future demand and market conditions, as well as product shelf life. Inventories that are not expected to be consumed beyond our normal operating cycle are classified as non-current inventories and included within other assets in the balance sheet.

Cost of product sales primarily includes cost of inventories sold, and product shipping and handling costs. Cost of product sales also include amortization of intangible assets and royalty expense incurred pursuant to our agreements with Forma and Blueprint.

Property and Equipment

Property and equipment are stated at cost net of accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, which range from three to seven years. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful lives of the assets. Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the balance sheet and any resulting gain or loss is reflected in statements of operations in the period realized.

Intangible Assets

Intangible assets are amortized over the estimated useful life of the assets. We perform an impairment review of intangible assets whenever events or changes in business circumstances indicate the carrying amount of such asset may not be fully recoverable. If events or changes in circumstances suggest that the carrying amount of the intangible assets may not be recoverable, we will estimate the future cash flows expected to be generated from its use or eventual disposition. If the expected future undiscounted cash flows are less than the carrying amount of the asset, we will recognize an impairment loss based on the excess of the carrying amount over the fair value of such asset.

Research and Development Expenses

Research and development expenses include costs incurred to conduct research and development, including scientific personnel wages and associated employee benefits, research and development supplies and equipment, payments to collaborative clinical research partners, consulting fees and other various research and development related costs.

We have various contracts with third parties related to our research and development activities, including strategic development collaborations. Costs incurred but not billed to us as of the end of the period are accrued. We make estimates of the amounts incurred in each period based on the information available to us and our knowledge of the nature of the contractual activities generating such costs. Clinical trial contract expenses are accrued based on units of activity. Expenses related to other research and development contracts, such as research contracts, toxicology study contracts and manufacturing contracts are estimated to be incurred generally on a straight-line basis over the duration of the contracts. Raw materials and study materials not related to an approved drug are charged to research and development expenses at the time of purchase.

We make accounting estimates in determining the accrual balance in each reporting period. As actual costs become known, we adjust our accruals. Although we do not expect our estimates to be materially different from amounts actually incurred, such estimates for the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in us reporting amounts that are too high or too low in any particular period. Variations in assumptions used to estimate accruals including, but not limited to, the number of patients enrolled, the rate of patient enrollment and the actual services performed may result in adjustments in research and development accruals in future periods. Changes in these estimates that result in material changes to our accruals could materially affect our financial condition and results of operations.

Research and development expenses also include milestone payment obligations incurred prior to regulatory approval of the product, which are accrued when the event requiring payment of the milestone occurs.

Advertising Expense

Advertising costs are expensed as incurred and are included within selling general and administrative expenses in the statements of operations. Advertising costs for the years ended December 31, 2024, 2023 and 2022 amounted to \$2.1 million, \$3.1 million, and \$2.7 million, respectively.

Leases

We account for leases in accordance with ASU No. 2016-02, Leases (Topic 842). Topic 842 requires a lessee to determine if an arrangement is a lease or contains a lease at contract inception. Right-of-use lease assets represent the right to use the underlying asset for the lease term and the lease liability represents the obligation to make the lease payments arising from the lease. Right-of-use lease assets and lease liability are recognized at the commencement date based on the present value of future minimum lease payments over the term of the lease. The operating right-of-use lease asset may also include initial direct costs and prepaid lease payments less lease incentives. In measuring the present value of the future minimum lease payments, we generally use our incremental borrowing rate as our lease agreement do not provide an implicit borrowing rate and we deemed that our incremental borrowing rate would be the rate of interest that we would have to pay to borrow on a collateralized basis over a similar term of the lease payments in a similar economic environment. If a lease includes options to extend the lease term, we do not assume the option will be exercised in the initial lease term assessment unless there is reasonable certainty that we will renew based on an assessment of economic factors present as of the lease commencement date. Leases with an initial term of 12 months or less are not recorded on the balance sheet. Lease expense for our operating leases is recognized on a straight-line basis over the lease term, subject to any changes in the lease or expectations regarding the terms. Variable lease costs such as common area costs and property taxes are expensed as incurred.

Restructuring

Restructuring costs comprised severance, other termination benefit costs, and stock-based compensation expense for stock award and stock option modifications related to workforce reductions. We recognize restructuring charges when the liability is probable, and the amount is estimable. Employee termination benefits are accrued at the date management has committed to a plan of termination and affected employees have been notified of their termination date and expected severance benefits.

Income Taxes

We use the asset and liability method to account for income taxes. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities from a change in tax rates is recognized in income in the period the change is enacted. A valuation allowance is established to reduce deferred tax assets to an amount whose realization is more likely than not.

Recent Accounting Pronouncements

In November 2024, FASB issued ASU 2024-03, *Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures*. This new guidance improves the disclosures about a public business entity's expenses by requiring more detailed information about the types of expenses (including purchases of inventory, employee compensation, depreciation and amortization) included within income statement expense captions. This guidance is effective for our annual reporting for the fiscal year ending December 31, 2027, and interim reporting periods beginning on fiscal year ending December 31, 2028, with early adoption is permitted. Upon adoption, this guidance may be applied prospectively to reporting periods after the effective date or retrospectively to all periods presented in the financial statements. We are currently evaluating this guidance and assessing the potential impact on our

financial statements and disclosures.

In December 2023, FASB issued ASU 2023-09, *Improvements to Income Tax Disclosures*, which enhance the annual disclosure requirements regarding the tax rate reconciliation and incomes taxes paid information. This update is effective for our fiscal year ending December 31, 2025, and maybe adopted on a prospective or retrospective basis. Early adoption is permitted. We are currently assessing the impact of adopting this guidance but does not expect to have a significant impact to our financial statements and disclosures.

Other recently issued accounting guidance not discussed in this Annual Report on Form 10-K are either not applicable or did not have, or are not expected to have, a material impact on us.

2. NET INCOME (LOSS) PER SHARE

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of shares of common stock outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of shares of common stock outstanding during the period and the number of additional shares of common stock that would have been outstanding if potentially dilutive securities had been issued. Potentially dilutive securities include stock options, RSUs and shares issuable under our Employee Stock Purchase Plan (Purchase Plan). The dilutive effect of these potentially dilutive securities is reflected in diluted earnings per share using the treasury stock method. Under the treasury stock method, an increase in the fair market value of our common stock can result in a greater dilutive effect from potentially dilutive securities.

The following table sets forth the computation of basic and diluted earnings per share (in thousands except per share amounts):

	Year Ended December 31,						
		2024		2023		2022	
EPS Numerator:							
Net income (loss)	\$	17,485	\$	(25,091)	\$	(58,573)	
EPS Denominator—Basic:							
Weighted-average common shares outstanding		17,579		17,401		17,049	
EPS Denominator—Diluted:							
Weighted-average common shares outstanding		17,579		17,401		17,049	
Dilutive effect of stock options, RSUs and shares under Purchase Plan		108		_		_	
Weighted-average shares outstanding and common stock equivalents		17,687		17,401		17,049	
Net income (loss) per share							
Basic	\$	0.99	\$	(1.44)	\$	(3.44)	
Diluted	\$	0.99	\$	(1.44)	\$	(3.44)	

The potential shares of common stock that were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive are as follows (in thousands):

	Y	Year Ended December 31,						
	2024	2023	2022					
Stock options	3,391	3,411	3,469					
RSUs	108	186	110					
Total	3,499	3,597	3,579					

3. REVENUES

Revenues disaggregated by category were as follows (in thousands):

	Year Ended December 31,						
		2024		2023		2022	
Product sales:							
Gross product sales	\$	209,924	\$	147,058	\$	108,523	
Discounts and allowances		(65,022)		(42,764)		(31,805)	
Total product sales, net		144,902	·	104,294		76,718	
Revenues from collaborations:							
License revenue		14,000		_		7,932	
Milestone revenue		_		75		25,000	
Delivery of drug supplies, royalty and others		20,376		11,413		6,092	
Total revenues from collaborations		34,376		11,488		39,024	
Government contracts				1,100		4,500	
Total revenues	\$	179,278	\$	116,882	\$	120,242	

Revenue from product sales is related to sales of our commercial products to our customers. For detailed discussions of our revenues from collaboration and government contracts, see "Note 4 – Sponsored Research and License Agreements and Government Contracts."

Our product sales revenue is net of chargebacks, discounts and fees, government and other rebates and returns. Of the total discounts and allowances from gross product sales for the years ended December 31, 2024, 2023 and 2022, \$64.0 million, \$41.5 million and \$30.9 million, respectively, was accounted for as additions to revenue reserves and refund liability, and \$1.0 million, \$1.3 million and \$0.9 million, respectively, as reductions in accounts receivable (as it relates to allowance for prompt pay discount) and prepaid and other current assets (as it relates to certain chargebacks and other fees that were prepaid) in the balance sheet. The following tables summarize the activities in chargebacks, discounts and fees, government and other rebates and returns that were accounted for revenue reserves and refund liability, for each of the periods presented (in thousands):

	hargebacks, iscounts and Fees	Government and Other Rebates	Returns	Total
Balance as of January 1, 2024	\$ 8,236	\$ 3,517	\$ 3,931	\$ 15,684
Provision related to current period sales	49,071	13,586	1,315	63,972
Credit or payments made during the period	(43,933)	(8,760)	(523)	(53,216)
Balance as of December 31, 2024	\$ 13,374	\$ 8,343	\$ 4,723	\$ 26,440
	hargebacks, iscounts and Fees	Government and Other Rebates	Returns	Total
Balance as of January 1, 2023	iscounts and	\$ and Other	\$ Returns 3,296	\$ Total 12,145
Balance as of January 1, 2023 Provision related to current period sales	scounts and Fees	 and Other Rebates	\$ 	\$
3 /	iscounts and Fees 6,213	 and Other Rebates 2,636	\$ 3,296	\$ 12,145

The following table summarizes revenues from each of our customers who individually accounted for 10% or more of the total net product sales and revenues from collaborations:

	Year Ended December 31,					
	2024	2023	2022			
McKesson Corporation	45%	43%	31%			
Cencora Inc. (formerly ASD Healthcare)	20%	21%	17%			
Cardinal Health, Inc.	13%	25%	19%			
Kissei	11%	*	24%			

Denotes less than 10%

4. SPONSORED RESEARCH AND LICENSE AGREEMENTS AND GOVERNMENT CONTRACTS

Sponsored Research and License Agreements

We conduct research and development programs independently and in connection with our corporate collaborators. As of December 31, 2024, we are a party to collaboration agreements with Lilly to develop and commercialize ocadusertib (previously R552), a RIPK1 inhibitor, for the treatment of non-CNS diseases and collaboration aimed at developing additional RIPK1 inhibitors for the treatment of CNS diseases; with Grifols to commercialize fostamatinib for human diseases in all indications, in Grifols territory which includes Europe, the UK, Turkey, the Middle East, North Africa and Russia (including Commonwealth of Independent States); with Kissei to develop and commercialize fostamatinib in Japan, China, Taiwan and Korea and olutasidenib in Japan, Korea and Taiwan; with Medison to commercialize fostamatinib in all indications, in Medison territory which includes Canada and Israel; with Knight to commercialize fostamatinib in all indications, in Knight territory which includes Latin America, consisting of Mexico, Central and South America, and the Caribbean; and with Dr. Reddy's to commercialize olutasidenib in Dr. Reddy's territory which includes Latin America, South Africa, India, Australia, New Zealand, and certain countries in the CIS, Southeast Asia region and North Africa.

Further, we are also a party to collaboration agreements, but do not have ongoing performance obligations with BerGenBio for the development and commercialization of AXL inhibitors in oncology, and with Daiichi to pursue research related to MDM2 inhibitors, a novel class of drug targets called ligases.

Under the above existing agreements that we entered into in the ordinary course of business, we received or may be entitled to receive upfront cash payments, payments contingent upon specified events achieved by such partners and royalties on any net sales of products sold by such partners under the agreements. As of December 31, 2024, total future contingent payments to us under all of above existing agreements was approximately \$1.5 billion, if all potential product candidates achieved all of the payment triggering events under all of our current agreements. Of this amount, approximately \$279.5 million relates to the achievement of development events, \$313.6 million relates to the achievement of regulatory events and \$902.0 million relates to the achievement of certain commercial or launch events. This estimated future contingent amount does not include any estimated royalties that could be due to us if the partners successfully commercialize any of the licensed products. Future events that may trigger payments to us under the agreements are based solely on our partners' future efforts and achievements of specified development, regulatory and/or commercial events.

We account for the milestone payments when such milestones are considered probable of being achieved, and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our or the licensee's control, such as regulatory approvals, are not considered probable of being achieved until uncertainty associated with the approvals has been resolved. The transaction price is then allocated to each performance obligation, on a relative standalone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, we re-evaluate the probability of achieving such milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, and recorded as part of contract revenues from collaborations during the period of adjustment.

Global Exclusive License Agreement with Lilly

We have a global exclusive license and collaboration agreement with Lilly (Lilly Agreement) entered in February 2021, which became effective on March 27, 2021, upon clearance under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, to develop and commercialize ocadusertib (previously R552) for the treatment of non-CNS diseases. In addition, the collaboration is aimed at developing additional RIPK1 inhibitors for the treatment of CNS diseases. Pursuant to the terms of the Lilly agreement, we granted Lilly the exclusive rights to develop and commercialize ocadusertib and related RIPK1 inhibitors in all indications worldwide. The parties' collaboration is governed through a joint governance committee and appropriate subcommittees.

Under the terms of Lilly Agreement, we were entitled to receive a non-refundable and non-creditable upfront cash payment amounting to \$125.0 million, which we received in April 2021. We are also entitled to additional milestone payments for non-CNS disease products consisting of up to \$330.0 million milestone payments upon the achievement of specified development and regulatory milestones, and up to \$100.0 million in sales milestone payments on a product-by-product basis. In addition, depending on the extent of our co-funding of ocadusertib development activities, we would be entitled to receive tiered royalty payments on net sales of non-CNS disease products at percentages ranging from the mid-single digits to high-teens, subject to certain standard reductions and offsets. We are also eligible to receive milestone payments for CNS disease products consisting of up to \$255.0 million in milestone payments upon the achievement of specified development, regulatory and commercial milestones, and up to \$150.0 million in sales milestone payments on a product-by-product basis. We would be entitled to receive tiered royalty payments on net sales of CNS disease products up to low-double digits, subject to certain standard reductions and offsets.

Under the Lilly Agreement, we are responsible for performing and funding initial discovery and identification of CNS disease development candidates. Following candidate selection, Lilly will be responsible for performing and funding all future development and commercialization of the CNS disease development candidates. We are responsible for 20% of development costs for ocadusertib in the US, Europe, and Japan, up to a specified cap. Lilly is responsible for funding the remainder of all development activities for ocadusertib and other non-CNS disease development candidates. Pursuant to the terms of the Lilly Agreement, we have the right to opt-out of co-funding the ocadusertib development activities in the US, Europe and Japan at two different specified times and as a result receive lesser royalties from sales. Prior to us providing our first opt-out notice and the amendment to the Lilly Agreement as discussed below, under the Lilly Agreement, we were required to fund our share of the ocadusertib development activities in the US, Europe, and Japan up to a maximum funding commitment of \$65.0 million through April 1, 2024.

We accounted for this agreement under ASC 606 and identified the following distinct performance obligations at inception of the agreement: (a) granting of the license rights over the non-CNS penetrant intellectual property (IP), and (b) granting of the license rights over the CNS penetrant IP which will be delivered to Lilly upon completion of the additional research and development efforts specified in the agreement. We concluded each of these performance obligations is distinct. We based our assessment on the assumption that Lilly can benefit from each of the licenses on its own by developing and commercializing the underlying product using its own resources.

At the inception of the Lilly Agreement, given our rights to opt-out from the development of ocadusertib, we believed at the minimum, we had a commitment to fund the development costs up to \$65.0 million as discussed above. We considered this commitment to fund the development costs as a significant financing component of the contract, which we accounted for as a reduction of the upfront fee to derive the transaction price. This financing component was recorded as a liability at its net present value of approximately \$57.9 million using a 6.4% discount rate. Interest expense is accreted on such liability over the expected commitment period and adjusted for timing of expected cost share payments. No interest was accreted during the years ended December 31, 2024 and 2023, and \$0.7 million of interest was accreted during the year ended December 31, 2022. At the inception, we allocated the net transaction price of \$67.1 million to each performance obligation based on our best estimate of its relative standalone selling price using the adjusted market assessment approach. The transaction price allocated to the non-CNS penetrant IP of \$60.4 million was recognized as revenue in the year ended December 31, 2021 upon delivery of the non-CNS penetrant IP to Lilly. The transaction price allocated to the CNS penetrant IP of \$6.7 million was recognized as revenue from the effective date of the Lilly Agreement through the eventual acceptance by Lilly in June 2022 using the input method. There was no

outstanding deferred revenue related to Lilly Agreement as of December 31, 2024 and 2023.

On September 28, 2023, we entered into an amendment to the Lilly Agreement which provided, among others that if we exercise our first opt-out right, we have the right to opt-in to the co-funding of ocadusertib development, upon us providing notice to Lilly within 30 days of certain events as specified in the Lilly Agreement, and as a result receive greater royalties from sales. If we decide to exercise our opt-in right, we will be required to continue to share in global development costs, and if we later exercise our second opt-out right (no later than April 1, 2025), our share in global development costs will be up to a specified cap through December 31, 2025, as provided for in the Lilly Agreement.

We paid Lilly \$21.4 million for our share of development costs incurred through April 1, 2024. As of December 31, 2024 and 2023, the outstanding liability to Lilly reported within other long-term liabilities (current and non-current) in the balance sheets amounted to \$40.0 million and \$43.6 million, respectively. As discussed above, following the amendment to the Lilly Agreement, and us providing the first opt-out notice to Lilly, our cost share obligation for ocadusertib development ended on April 1, 2024. Although currently we are no longer obligated to share in the ocadusertib development costs incurred subsequent to April 1, 2024, the outstanding liability reported in our balance sheet as of December 31, 2024 amounting to \$40.0 million has not been recognized as revenue because we cannot conclude that it is probable that a significant reversal of the amount of revenue, if recognized, will not occur until the likelihood of us exercising our opt-in right becomes remote, or when the opt-in right period lapses.

Grifols License Agreement

We have a commercialization license agreement with Grifols entered in January 2019 with exclusive rights to commercialize fostamatinib for human diseases, and non-exclusive rights to develop, fostamatinib in Grifols territory. Under the agreement, we received an upfront payment of \$30.0 million, with the potential for \$297.5 million in total regulatory and commercial milestones. We are also entitled to receive stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales. In January 2020, the EC granted a centralized MA for fostamatinib valid throughout the EU, and in the UK after the departure of the UK from the EU, for the treatment of chronic ITP in adult patients who are refractory to other treatments. With this approval, in February 2020, we received \$20.0 million non-refundable payment, consisted of a \$17.5 million payment due upon MAA approval by the EMA of fostamatinib for the first indication and a \$2.5 million creditable advance royalty payment, based on the terms of our collaboration agreement with Grifols. We accounted for this agreement under ASC 606 and recognized the corresponding revenue in the period we satisfied the performance obligations. As of December 31, 2024 and 2023, there was no outstanding deferred revenue.

We have a Commercial Supply Agreement with Grifols entered in October 2020 to supply and sell our drug product priced at a certain markup specified in the agreement, in quantities Grifols shall order from us pursuant to and in accordance with the agreement. For the years ended December 31, 2024, 2023, and 2022, we recognized \$4.0 million, \$5.6 million and \$1.6 million, respectively, of revenue related to delivery of drug supply to Grifols.

We recognized royalty revenue from Grifols of \$5.1 million, \$3.2 million and \$0.7 million for the years ended December 31, 2024, 2023 and 2022, respectively.

Kissei License Agreement - Olutasidenib

On September 3, 2024, we entered into a collaboration and license agreement with Kissei, pursuant to which Kissei was granted exclusive rights to develop and commercialize olutasidenib in all human diseases in Japan, Korea and Taiwan. Kissei is responsible for performing and funding the development activities for olutasidenib in the Kissei territory and we retained the co-exclusive right to conduct development activities in the Kissei territory solely for the purpose of supporting and obtaining regulatory approval of and commercializing olutasidenib in the world outside the Kissei territory. Under the terms of the agreement, we received a one-time, non-refundable, and non-creditable upfront cash payment of \$10.0 million, with the potential for up to an additional \$152.5 million in development, regulatory and commercial milestone payments, and will receive mid twenty to lower thirty percent, tiered, escalated net sales-based payments for the supply of olutasidenib, subject to certain standard reductions and offsets. Pursuant to the agreement, Kissei is responsible for companion diagnostic development in Japan, for which we will share 50% of the costs incurred

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by Kissei, up to \$3.0 million, which are creditable against future milestones and transfer price payments owed to us. We remain responsible for the manufacture and supply of olutasidenib for all development and commercialization activities under the agreement. Pursuant to the concurrently executed supply agreement, we will supply Kissei with bulk drug product for use under the collaboration and license agreement.

We accounted for this agreement following ASC 606 and concluded at the inception of the agreement, the upfront cash payment of \$10.0 million was the consideration for granting the license right to Kissei, and there are no other material deliverables associated with the upfront payment. Accordingly, we recognized the upfront payment as revenue during the year ended December 31, 2024. The variable considerations related to future development, regulatory and commercial milestones were fully constrained because it was probable that a significant reversal of cumulative revenue would occur, given the inherent uncertainty of success with these future milestones. We will reevaluate the transaction price in each reporting period as uncertain events are resolved or other changes in circumstances occur. We will recognize revenues related to the supply of olutasidenib upon delivery and when we are entitled to receive the product transfer price payments.

Under the license and services agreement with Forma as discussed in "Note 5 – In-Licensing and Acquisition", Forma is entitled to a certain portion of sublicensing revenue, which include, but are not limited to, upfront payments, milestone payments and royalties, that we receive from a third party sublicensee. Following the collaboration and license agreement with Kissei as discussed above, Forma is entitled to a portion of the sublicensing revenue we receive from Kissei. With the receipt of the upfront payment from Kissei, we recognized a \$2.3 million sublicense revenue fee payable to Forma during the year ended December 31, 2024, which we recorded within cost of product sales.

Kissei License Agreement - Fostamatinib

We have an exclusive license and supply agreement with Kissei entered in October 2018, amended in November 2022, October 2023, August 2024, September 2024 and October 2024, to develop and commercialize fostamatinib in all current and potential indications in Japan, China, Taiwan and Korea. Kissei is responsible for performing and funding all development activities for fostamatinib in Kissei territories. At the inception of the agreement, we received an upfront cash payment of \$33.0 million. Further, the agreement provides for up to \$115.0 million in potential development, regulatory and commercial milestone payments, and will receive mid- to upper twenty percent, tiered, escalated net sales-based payments for the supply of fostamatinib. Under the agreement, we granted Kissei the license rights to fostamatinib in Kissei territory and are obligated to supply Kissei with drug product for use in clinical trials and pre-commercialization activities. We are also responsible for the manufacture and supply of fostamatinib for all future development and commercialization activities.

In April 2022, Kissei announced that an NDA was submitted to Japan's PMDA for fostamatinib in chronic ITP, which entitled us to receive a \$5.0 million non-refundable and non-creditable milestone payment. In December 2022, Kissei announced that Japan's PMDA approved the NDA for fostamatinib in chronic ITP, which entitled us to receive a \$20.0 million non-refundable and non-creditable milestone payment. We accounted for this agreement under ASC 606, and recognized the corresponding revenue in the period we satisfied the performance obligations. As of December 31, 2024 and 2023, the remaining deferred revenue was related to the material right associated with discounted fostamatinib supply which amounted to \$1.4 million. There was no material revenue recognized associated with the remaining performance obligation during the years ended December 31, 2024, 2023 and 2022. In January 2025, Kissei announced the Korean Ministry of Food and Drug Safety approved fostamatinib for the treatment of chronic ITP, which entitled us to receive a \$3.0 million non-refundable and non-creditable milestone payment that we will recognize as revenue in the first quarter of 2025.

Pursuant to our supply agreement with Kissei, during the years ended December 31, 2024, 2023 and 2022, we recognized \$10.4 million, \$2.2 million, and \$2.6 million, respectively, of revenue related to delivery of drug supplies to Kissei.

Medison Commercial and License Agreements

We have exclusive commercial and license agreements with Medison entered in October 2019 for the commercialization of fostamatinib for chronic ITP in Medison territory. Pursuant to which, we received a \$5.0 million upfront payment with respect to the agreement in Canada. We accounted for this agreement under ASC 606 and identified the following combined performance obligations at inception of the agreement: (a) granting of the license and (b) obtaining regulatory approval in Canada of fostamatinib in ITP. However, under the agreement, we have the option to buy back all rights to the product in Canada within six months from obtaining regulatory approval for the treatment of auto immune hemolytic anemia in Canada. We determined that the non-refundable upfront fee represented the transaction price, however, due to the buyback provision, we accounted this upfront payment as financing arrangement under ASC 606. In 2022, management concluded that the likelihood of exercising the buyback option right was remote considering the top-line results from our Phase 3 trial of fostamatinib in wAIHA which showed that the trial did not demonstrate statistical significance in the primary efficacy endpoint, and the guidance received from the FDA. As such, in accordance with ASC 606, we relieved the outstanding financing liability of \$5.7 million, which include the upfront payment and accreted interest, and recognized such amount as revenue in 2022. There was no outstanding deferred revenue related to Medison commercial and license agreement as of December 31, 2024 and 2023.

During the years ended December 31, 2024, 2023 and 2022, we recognized \$0.5 million, \$0.5 million, and no revenue, respectively, from Medison primarily related to the delivery of drug supplies and earned royalties.

Knight Commercial License and Supply Agreement

We have commercial license and supply agreements with Knight entered in May 2022 for the exclusive commercialization of fostamatinib for approved indications in Knight territory. Pursuant to such commercial license agreement, we received a \$2.0 million one-time, non-refundable, and non-creditable upfront payment, with potential for up to an additional \$20.0 million in regulatory and sales-based commercial milestone payments, and will receive twenty- to mid-thirty percent, tiered, escalated net-sales based royalty payments for products sold in the Knight territory. We accounted for this agreement under ASC 606 and identified that the upfront payment was a consideration for granting Knight the license to commercialize fostamatinib for approved indication in the Knight territory, and no further material deliverables associated to such upfront payment. As such, we recognized the upfront payment as revenue during the year ended December 31, 2022. No revenue was recognized during the years ended December 31, 2024 and 2023 from Knight. We are also responsible for the exclusive manufacture and supply of fostamatinib for all future development and commercialization activities under the agreement.

Dr. Reddy's Commercial License Agreement

In November 2024, we entered into a commercial license agreement with Dr. Reddy's Laboratories, Ltd. (Dr. Reddy's) to grant Dr. Reddy's an exclusive license to develop and commercialize olutasidenib in Dr. Reddy's territory which includes Latin America, South Africa, India, certain countries in the CIS, Southeast Asia Region and North Africa, Australia, and New Zealand. Pursuant to the commercial license agreement, we were entitled to receive a \$4.0 million one-time, non-refundable and non-creditable upfront payment, which amount, net of applicable foreign withholding taxes was received in February 2025. In addition, we are also entitled to a potential for up to an additional \$36.0 million in regulatory and sales-based commercial milestone payments, and will receive high teens- to thirty percent, tiered, escalated net-sales based royalty payments for products sold in Dr. Reddy's territory, subject to certain standard reductions and offsets. Dr. Reddy's is responsible for performing and funding all development activities necessary to obtain regulatory approval and commercialize olutasidenib in the Dr. Reddy's territory. We are responsible for the exclusive manufacture and supply of olutasidenib for all future development and commercialization activities under the agreement.

We accounted for this agreement following ASC 606 and concluded at the inception of the agreement, the upfront cash payment of \$4.0 million was the consideration for granting the license right to Dr. Reddy's, and there are no other material deliverables associated with the upfront payment. Accordingly, we recognized the upfront payment as revenue during the year ended December 31, 2024. The variable considerations related to future development, regulatory and commercial milestones were fully constrained because it was probable that a significant reversal of cumulative

revenue would occur, given the inherent uncertainty of success with these future milestones. We will re-evaluate the transaction price in each reporting period as uncertain events are resolved or other changes in circumstances occur. We will recognize revenues related to the supply of olutasidenib upon delivery and when we are entitled to receive the product transfer price payments.

Under the license and services agreement with Forma as discussed in "Note 5 – In-Licensing and Acquisition", Forma is entitled to a certain portion of sublicensing revenue from olutasidenib. During the year ended December 31, 2024, we recorded \$0.9 million sublicense revenue fee which we recorded within cost of product sales, associated with the upfront payment from Dr. Reddy's.

Government Contracts

DOD

In January 2021, we were awarded by the DOD to support our Phase 3 clinical trial to evaluate the safety and efficacy of fostamatinib for the treatment of hospitalized high-risk patients with COVID-19. No revenue was recognized related to this grant for the year ended December 31, 2024. For the years ended December 31, 2023 and 2022, \$1.0 million and \$4.5 million, respectively, of revenue was recognized related to this grant.

BARDA

In August 2023, we were awarded up to \$0.8 million by BARDA for our evaluation of fostamatinib in mitigating the impact of long-term respiratory distress. No revenue was recognized related to this grant for the year ended December 31, 2024. For the year ended December 31, 2023, we recognized \$0.1 million of revenue related to this grant.

Strategic Development Collaborations with MD Anderson and CONNECT

In December 2023, we entered into a Strategic Collaboration Agreement with MDACC, a comprehensive cancer research, treatment, and prevention center. The collaboration will expand our evaluation of REZLIDHIA (olutasidenib) in AML and other hematologic cancers. Under the collaboration, we will provide MDACC the study materials and \$15.0 million in time-based milestone payments as compensation for services to be provided for the studies, over the five-year collaboration term, unless terminated earlier as provided for in the agreement. Through December 31, 2024, we provided \$2.0 million funding to MDACC.

In January 2024, we announced our collaboration with CONNECT, an international collaborative network of pediatric cancer centers, to conduct a Phase 2 clinical trial to evaluate REZLIDHIA (olutasidenib) in glioma. Under the collaboration, we will provide funding up to \$3.0 million and study material over the four-year collaboration.

We account for the funding we provide under the above research collaboration agreements as prepaid research and development in the balance sheet to the extent the payment is made in advance of services being rendered, and recognize such amount as research and development expense within the statements of operations as the collaborative partners render the services under the respective agreement.

5. IN-LICENSING AND ACQUISITION

Asset Purchase Agreement with Blueprint

On February 22, 2024, we acquired the US rights to research, develop, manufacture and commercialize GAVRETO (pralsetinib) from Blueprint pursuant to an Asset Purchase Agreement. The acquired assets include, among other things, applicable intellectual property related to pralsetinib in the US, including patents, copyrights and trademarks, as well as clinical regulatory and commercial data and records. Pursuant to the Asset Purchase Agreement, we agreed to pay a purchase price of \$15.0 million, \$10.0 million of which is payable upon our first commercial sale of GAVRETO (pralsetinib) and an additional \$5.0 million of which is payable on the first anniversary of the closing date of

the agreement, subject to certain conditions. Blueprint is also eligible to receive up to \$97.5 million in future commercial milestone payments and up to \$5.0 million in future regulatory milestone payments. The potential regulatory milestones include full regulatory approval of pralsetinib (or related compounds) for the treatment of adult RET-fusion positive thyroid cancer, and maintenance of the current regulatory approval of pralsetinib for the treatment of adult RET-fusion positive thyroid cancer during the period beginning on February 22, 2024 and ending on the third anniversary of the first commercial sale of pralsetinib subject to certain conditions. Subject to the terms and conditions of the Asset Purchase Agreement, Blueprint would be entitled to tiered royalty payments on net sales of products containing pralsetinib (or related compounds) ranging from 10% to 30%, subject to certain reductions and offsets.

In accordance with ASC 805 *Business Combinations* (ASC 805), the transaction was accounted for as an asset acquisition, because substantially all of the fair value of the gross assets acquired is concentrated in a single asset, which is the GAVRETO product rights. The GAVRETO product rights comprised developed technology, customers, trademarks and trade name, and are considered a single asset as they are inextricably linked. ASC 805 provides for a screen test, wherein if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, the assets acquired are not considered to be a business.

The following table summarizes the total purchase consideration in connection with the asset acquisition (in thousands):

Closing purchase price	\$ 15,000
Transaction costs	360
Total purchase consideration	\$ 15,360

Of the total closing purchase price, \$10.0 million was paid in July 2024. The remaining \$5.0 million was outstanding and presented as acquisition-related liabilities in the balance sheet as of December 31, 2024. We classified the outstanding acquisition-related liabilities as non-current considering the amount is expected to be payable in a period longer than one year. In accordance with the guidance, we classify the payments of the closing purchase price under financing activity in the statements of cash flows, considering that the payment was not made soon after the acquisition date.

The contingent considerations relating to future commercial and regulatory milestones were not included in the total purchase price consideration, and will be accounted for when the contingency is resolved and the consideration becomes payable. Royalties are recognized within cost of product sales, as revenue from GAVRETO product sales is recognized.

In an asset acquisition, the acquiring entity should recognize the assets acquired at cost to the acquiring entity which includes transaction costs and consideration given, allocated based on a relative fair value of the assets acquired measured at acquisition date. The fair value of the developed technology, customers, trademarks and trade name was estimated using a multi-period excess earnings income approach that discounts expected cash flows to present value by applying discount rate that represents the estimated rate that market participants would use to value such assets. The relative fair value is based on estimates that required judgement and certain assumptions, categorized as Level 3 in the fair value hierarchy. Since we acquired a single asset, the total purchase consideration was recorded as intangible assets. The related intangible assets are being amortized on a straight-line basis over the estimated useful life of 12 years, and the related amortization is recorded within cost of product sales.

Simultaneously and in connection with entering into the Asset Purchase Agreement, we also entered into certain supporting agreements, including a customary transition agreement, pursuant to which, during the transition period, Blueprint will transition regulatory and distribution responsibility for GAVRETO to us. We also agreed to purchase certain drug product inventories from Blueprint under a Material Transfer Agreement, and received such inventories amounting to approximately \$6.5 million during the year ended December 31, 2024.

License and Transition Services Agreement with Forma

We have a license and transition services agreement with Forma entered in July 2022, for an exclusive license to develop, manufacture and commercialize olutasidenib, a proprietary inhibitor of mutated IDH1 (mIDH1), for any uses worldwide, including for the treatment of AML and other malignancies. Forma became a wholly owned subsidiary of Novo Nordisk following the closing of its acquisition in October 2022. Pursuant to the terms of the license and transition services agreement, we paid an upfront fee of \$2.0 million, with the potential to pay up to \$67.5 million of additional payments upon achievement of specified development and regulatory milestones and up to \$165.5 million of additional payments upon achievement of certain commercial milestones. In addition, subject to the terms and conditions of the license and transition services agreement, Forma would be entitled to tiered royalty payments on net sales of licensed products at percentages ranging from low-teens to mid-thirties, as well as certain portion of our sublicensing revenue, subject to certain standard reductions and offsets.

The transaction was accounted for as an acquisition of asset under ASC 730, *Research and Development*. In accordance with the guidance, in a transaction accounted for as an asset acquisition, any acquired IPR&D that does not have alternative future use is charged to expense at the acquisition date. At the acquisition date, we accounted for the upfront fee of \$2.0 million as IPR&D and recorded such cost within research and development expenses in the statements of operations for the year ended December 31, 2022.

Under the accounting guidance, we account for contingent cash payments when it is probable that a liability is incurred and the amount can be reasonably estimated. We account for milestone payment obligations incurred at development stage and prior to a regulatory approval of an indication associated with the acquired licensed asset as research and development expense when the event requiring payment of the milestone occurs. Milestone payment obligations incurred upon and after a regulatory approval of an indication associated with the acquired licensed asset, and at the commercial stage, are recorded as intangible asset when the event requiring payment of the milestones occurs. Prior to the FDA approval of REZLIDHIA in December 2022, we achieved certain regulatory milestone which entitled Forma to receive a \$2.5 million milestone payment. Because such milestone payment obligation was incurred prior to a regulatory approval of an indication associated with the acquired licensed asset, we recorded such amount as IPR&D and recorded such cost within research and development expense during the year ended December 31, 2022. On December 1, 2022, the FDA approved REZLIDHIA capsules for the treatment of adult patients with R/R AML with susceptible IDH1 mutations as detected by an FDA-approved test. Following the FDA approval, we launched REZLIDHIA and made first shipments of the product to our customers in December 2022. With this FDA approval and first commercial sale of the product, Forma was entitled to receive a total of \$15.0 million in milestone payments. Since such milestone payment obligations were incurred upon and after regulatory approval of the product, we recorded such amount as intangible asset on our balance sheet. No new milestone was met in 2023 and 2024.

The amount recorded as intangible assets are being amortized on a straight-line basis over the estimated useful life of 14 years, and the related amortization is recorded within cost of product sales. Royalties are recognized within cost of product sales, as revenue from REZLIDHIA product sales is recognized.

6. STOCK-BASED COMPENSATION

Total stock-based compensation expense related to all of our stock-based awards was as follows (in thousands):

	 Year Ended December 31,								
	2024		2023		2022				
Selling, general and administrative	\$ 10,879	\$	6,712	\$	10,217				
Research and development	1,514		2,094		2,168				
Total stock-based compensation expense	\$ 12,393	\$	8,806	\$	12,385				

Equity Incentive Plans

On May 16, 2018, our stockholders approved the adoption of our 2018 Equity Incentive Plan (2018 Plan). The 2018 Plan is the successor plan to the 2011 Equity Incentive Plan, the 2000 Equity Incentive Plan, and the 2000 Non-Employee Directors' Stock Option Plan. We have two active equity plans, our 2018 Plan and the Rigel's Inducement Plan, as amended (Inducement Plan, and together with 2018 Plan, the Equity Incentive Plans). The 2018 Plan provides for granting of stock awards to our officers, directors, all other employees and consultants. The Inducement Plan, which is a non-stockholder approved stock plan, is intended mainly to provide an inducement material by granting awards for certain individuals to enter into employment with us. Awards granted under our Equity Incentive Plans expire no later than 10 years from the date of grant. Awards may be granted with different vesting terms from time to time. To date, we granted stock options and RSUs under our Equity Incentive Plans.

During the year ended December 31, 2024, our Board of Directors approved additional 240,197 shares of common stock reserved for issuance under our Inducement Plan. In May 2024, our stockholders approved an amendment to our 2018 Plan, to, among other items, add an additional 650,000 shares to the number of shares of common stock authorized for issuance under our 2018 Plan.

Stock Options and RSUs

The following table summarizes stock options and RSUs activity, and shares available for grant under our Equity Incentive Plans for the periods presented:

		Stock Options			RSUs			
				Weighted	Weighted		Weighted A	verage
	Shares Available	Number of		Average	Intrinsic Value	Number of	Grant D	ate
	For Grant	Shares	E	Exercise Price	(in thousands)	Shares	Fair Va	lue
Outstanding as of December 31, 2023	1,387,129	3,411,632	\$	25.62		185,938	\$	19.82
Authorized for grant	890,197							
Granted	(1,155,881)	717,106	\$	12.68		304,705	\$	12.81
Exercised/Released	_	(93,386)	\$	16.08		(68,908)	\$	18.52
Cancelled and forfeited	476,776	(470,634)	\$	27.65		(34,453) 5	\$	15.26
Outstanding as of December 31, 2024	1,598,221	3,564,718	\$	23.00	\$ 4,528	387,282	\$	14.94
Vested and expected to vest as of December 31,				•				
2024		3,454,968	\$	22.80	\$ 4,510			
Exercisable as of December 31, 2024		2,652,876	\$	24.87	\$ 1,761			

Of the total stock options outstanding as of December 31, 2024, 109,750 shares outstanding are performance-based stock options wherein the achievements of the corresponding corporate-based milestones were not probable. Accordingly, the related grant date fair value for these performance-based stock options of \$2.1 million has not been recognized as stock-based compensation expense as of December 31, 2024.

The aggregate intrinsic values of stock options outstanding, vested and expected to vest, and exercisable represents the difference between the exercise price of the underlying awards and the quoted price of our common stock for the options that were in-the-money as of December 31, 2024. For the years ended December 31, 2024, 2023 and 2022, the aggregate intrinsic values of stock option exercises were approximately \$0.6 million, \$0.02 million and \$0.2 million, respectively, representing the difference between the fair value of our common stock at the date of exercise and the exercise price paid.

Stock option grants generally vest over 3 to 4 years, and are exercisable for a period of 10 years. For the years ended December 31, 2024, 2023 and 2022, we granted options to purchase 717,106 shares, 367,180 shares and 817,911 shares, respectively, of common stock, with weighted-average grant date fair value of \$9.71 per share, \$12.80 per share and \$12.90 per share, respectively.

The following table summarizes the weighted-average assumptions relating to stock options granted during the periods presented:

	Y	Year Ended December 31,					
	2024	2023	2022				
Risk-free interest rate	4.1 %	3.9 %	2.6 %				
Expected term (in years)	6.1	6.8	6.3				
Dividend yield	0.0 %	0.0 %	0.0 %				
Expected volatility	87.7 %	84.0 %	74.8 %				

As of December 31, 2024, there was approximately \$10.6 million of unrecognized stock-based compensation cost which is expected to be recognized over the remaining weighted-average period of 2.04 years, related to time-based stock options, performance-based stock options wherein achievement of the corresponding corporate-based milestones were considered as probable, and RSUs.

Outstanding stock options and stock options exercisable information by range of exercises prices as of December 31, 2024 was as follows:

		Options Exercisable				
		Weighted-Average				
Exercise Price	Number of Shares	Remaining Contractual Life (in years)	ghted-Average xercise Price	Number of Shares		eighted-Average Exercise Price
\$9.0 - \$18.7	1,259,434	8.50	\$ 13.66	586,971	\$	14.54
\$19.6 - \$21.1	464,302	3.61	\$ 20.34	464,302	\$	20.34
\$21.4 - \$24.0	294,257	2.49	\$ 22.59	283,257	\$	22.59
\$24.2 - \$24.2	538,753	6.13	\$ 24.20	462,020	\$	24.20
\$24.4 - \$35.4	600,872	4.63	\$ 31.58	453,338	\$	30.69
\$35.9 - \$39.80	221,918	4.33	\$ 37.63	218,731	\$	37.64
\$40.7 - \$45.0	185,182	3.19	\$ 44.90	184,257	\$	44.90
\$9.0 - \$45.0	3,564,718	5.82	\$ 23.00	2,652,876	\$	24.87

Employee Stock Purchase Plan

Our Purchase Plan permits eligible employees to purchase common stock at a discount through payroll deductions during defined offering periods. Our Purchase Plan provides for a 24-month offering period comprised four six-month purchase periods with a look-back option. A look-back option is a provision in our Purchase Plan under which eligible employees can purchase shares of our common stock at a price per share equal to the lesser of 85% of the fair market value on the first day of the offering period or 85% of the fair market value on the purchase date. Our Purchase Plan also includes a feature that provides for a new offering period to begin when the fair market value of our common stock on any purchase date during an offering period falls below the fair market value of our common stock on the first day of such offering period. This feature is called a "reset." Participants are automatically enrolled in the new offering period.

Our previous 24-month offering period under our Purchase Plan ended on June 30, 2024, and a new 24-month offering period started on July 1, 2024. The fair value of awards under our Purchase Plan is estimated on the date of our new offering period using the Black-Scholes option pricing model, which is being amortized over the requisite service periods. As of December 31, 2024, there was approximately \$0.3 million, which is expected to be recognized over the remaining weighted average period of 1.12 years, related to our Purchase Plan.

For the years ended December 31, 2024, 2023 and 2022, there were 65,409 shares, 94,179 shares and 114,685 shares, respectively, of common stock purchased under the Purchase Plan, at an average price of \$7.06 per share, \$10.60 per share and \$10.10 per share, respectively. As of December 31, 2024, there were 184,174 shares reserved for future issuance under the Purchase Plan.

7. INVENTORIES

The following table summarizes inventories, net (in thousands):

		As of December 31,					
	2024			2023			
Raw materials	\$	1,077	\$	4,609			
Work in process		1,226		1,876			
Finished goods		5,014		1,508			
Total	\$	7,317	\$	7,993			
Reported as:							
Inventories	\$	6,002	\$	5,522			
Other assets		1,315		2,471			
Total	\$	7,317	\$	7,993			

Inventories as of December 31, 2024 and 2023 include inventories acquired from Forma pursuant to the license and transition agreement. Inventories as of December 31, 2024 also include inventories acquired from Blueprint pursuant to a Material Transfer Agreement as discussed in Note 5 – In-Licencing and Acquisition. As of December 31, 2024, advance payments to the manufacturer of our raw materials were included within prepaid and other current assets in the balance sheet amounted to \$3.8 million. No such advance payment was included within prepaid and other current assets as of December 31, 2023.

Non-current inventories consists of active pharmaceutical ingredient classified as raw materials which have multi-year shelf life, as well as certain work in process and finished goods inventories that are not expected to be consumed beyond our normal operating cycle.

8. CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

Cash, cash equivalents and short-term investments consisted of the following (in thousands):

	As of December 31,			· 31,
		2024		2023
Cash	\$	20,135	\$	8,247
Money market funds		16,386		9,685
US treasury bills		7,263		12,594
Government-sponsored enterprise securities		23,177		11,233
Corporate bonds and commercial paper		10,360		15,174
	\$	77,321	\$	56,933
Reported as:				
Cash and cash equivalents	\$	56,746	\$	32,786
Short-term investments		20,575		24,147
	\$	77,321	\$	56,933

Cash equivalents and short-term investments include the following securities with gross unrealized gains and losses (in thousands):

As of December 31, 2024	A	mortized Cost	Unre	ross ealized ains	Uni	Gross realized Josses	F	air Value
US treasury bills	\$	7,260	\$	3	\$	_	\$	7,263
Government-sponsored enterprise securities		23,174		3		_		23,177
Corporate bonds and commercial paper		10,356		4		_		10,360
Total	\$	40,790	\$	10	\$		\$	40,800

As of December 31, 2023	A	mortized Cost	Ur	Gross realized Gains	Un	Gross realized Losses	F	air Value
US treasury bills	\$	12,591	\$	3	\$	_	\$	12,594
Government-sponsored enterprise securities		11,230		7		(4)		11,233
Corporate bonds and commercial paper		15,172		5		(3)		15,174
Total	\$	38,993	\$	15	\$	(7)	\$	39,001

As of December 31, 2024 and 2023, our cash equivalents and short-term investments had a weighted-average time to maturity of approximately 69 days and 82 days, respectively. Our short-term investments are classified as available-for-sale securities. Accordingly, we have classified certain securities as short-term investments on our balance sheets as they are available for use in the current operations. As of December 31, 2024, there were no individual securities that were in a significant unrealized loss position, and no individual securities have been in a loss position for more than one year. We regularly review the securities in an unrealized loss position and evaluate the current expected credit loss by considering factors such as historical experience, market data, issuer-specific factors, and current economic conditions. We have not recognized any credit losses on these securities as of December 31, 2024 and 2023.

9. FAIR VALUE

The table below summarizes the fair value of our cash equivalents and short-term investments measured at fair value on a recurring basis, and are categorized based upon the lowest level of significant input to the valuations (in thousands):

	Assets at Fair Value as of December 31, 2024							
		Level 1	Level 2		Level 3		Total	
Money market funds	\$	16,386	\$		\$		\$	16,386
US treasury bills		_		7,263		_		7,263
Government-sponsored enterprise securities		_		23,177		_		23,177
Corporate bonds and commercial paper		_		10,360		_		10,360
Total	\$	16,386	\$	40,800	\$	_	\$	57,186

	Assets at Fair Value as of December 31, 2023								
		Level 1 Level 2				Level 3		Total	
Money market funds	\$	9,685	\$		\$		\$	9,685	
US treasury bills		_		12,594		_		12,594	
Government-sponsored enterprise securities		_		11,233		_		11,233	
Corporate bonds and commercial paper		_		15,174		_		15,174	
Total	\$	9,685	\$	39,001	\$	_	\$	48,686	

10. OTHER BALANCE SHEET COMPONENTS

Property and equipment

Property and equipment consist of the following (in thousands):

		As of December 31,					
	2	024		2023			
Laboratory equipment	\$	129	\$	1,470			
Computer and software		153		363			
Others		71		36			
Total property and equipment		353		1,869			
Less accumulated depreciation and amortization		(261)		(1,704)			
Property and equipment, net	\$	92	\$	165			

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Depreciation and amortization expense was \$0.1 million, \$0.2 million and \$0.9 million for the years ended December 31, 2024, 2023 and 2022, respectively. Certain property and equipment were either sold, retired or disposed of, which related costs and accumulated depreciation were removed from the balance sheet, and any resulting gain or loss were reflected in statements of operations in the period realized.

Intangible assets

Intangible assets consist of the following (in thousands):

	 As of December 31,					
	 2024		2023			
Intangible assets cost	\$ 30,360	\$	15,000			
Accumulated amortization	(3,260)		(1,122)			
Intangible assets, net	\$ 27,100	\$	13,878			

See "Note 5 – In-Licensing and Acquisition" for related discussions of capitalized intangible assets. For the years ended December 31, 2024, 2023 and 2022, amortization expense recorded within cost of sales in the statements of operations were \$2.1 million, \$1.1 million and \$0.1 million, respectively.

As of December 31, 2024, the weighted average remaining amortization period of outstanding intangible assets was 11.54 years. The following table presents the estimated future amortization expense of intangible assets (in thousands):

For the year ending December 31,	
2025	\$ 2,351
2026	2,351
2027	2,351
2028	2,351
2029	2,351
Thereafter	15,345
	\$ 27,100

Other accrued liabilities

Other accrued liabilities consist of the following (in thousands):

	As of Dec	As of December 31,			
	2024	2024			
Accrued commercial expenses	\$ 3,661	\$	1,852		
Accrued other expenses	6,735		3,482		
Total other accrued liabilities	\$ 10,396	\$	5,334		

11. DEBT

The following table summarizes loans payable, net (in thousands):

	As of December 31,					
		2024		2023		
Principal outstanding	\$	60,000	\$	60,000		
Unamortized debt issuance costs		(320)		(398)		
Principal outstanding, net of unamortized debt issuance costs	\$	59,680	\$	59,602		
Reported as:						
Loans payable, net, current portion	\$	7,272	\$	7,229		
Long-term portion of loans payable, net		52,408		52,373		
	\$	59,680	\$	59,602		

We have a Credit Agreement with MidCap entered on September 27, 2019 (Closing Date) and amended on March 29, 2021 (First Amendment), February 11, 2022 (Second Amendment), July 27, 2022 (Third Amendment), and April 11, 2024 (Fourth Amendment). The Credit Agreement provides for a \$60.0 million term loan credit facility, which was fully funded as of December 31, 2024 and 2023.

In April 2024, we entered into Fourth Amendment to the Credit Agreement, which among other things, extended the maturity date and interest only period for the term loans, revised the interest rate, reset the prepayment fee, increased the exit fee, and updated certain financial covenants. Under the amended Credit Agreement, the term loans mature on September 1, 2027, and the interest-only period is through October 1, 2025. The interest rate applicable to the term loans under is the sum of one-month SOFR, plus an adjustment of 0.11448%, subject to 4.00% applicable floor, plus applicable margin of 6.50%. A final payment fee of 4.25% of principal is due at maturity date of the term loans. The amendment was accounted for as debt modification. The unamortized debt issuance costs are continuously being amortized as interest expense through maturity using the effective interest rate method.

Prior to the Fourth Amendment to the Credit Agreement, the term loans would mature on September 1, 2026, and the interest-only period was through October 1, 2024. The term loans bore interest rate equal to the sum of one-month SOFR, plus an adjustment of 0.11448%, subject to 1.50% applicable floor, plus applicable margin of 5.65%, and a final payment fee of 2.50% of principal due at maturity date.

We may make voluntary prepayments, in whole or in part, subject to certain prepayment premiums and additional interest payments. The Credit Agreement also contains certain provisions, such as event of default and change in control provisions, which, if triggered, would require us to make mandatory prepayments on the term loan, which are subject to certain prepayment premiums and additional interest payments. The obligations under the amended Credit Agreement are secured by a perfected security interest in all of our assets including our intellectual property.

Interest expense, including amortization of the debt discount and accretion of the final fees related to the Credit Agreement for the years ended December 31, 2024, 2023 and 2022 were \$7.9 million, \$6.8 million and \$3.0 million, respectively. Accrued interest of \$2.1 million and \$1.5 million as of December 31, 2024 and 2023, respectively, was included within other accrued liabilities in the balance sheet.

The following table presents the future minimum principal payments of the outstanding loan as of December 31, 2024 (in thousands):

For the year ending December 31,	
2025	\$ 7,500
2026	30,000
2027	 22,500
Principal amount (Tranches 1, 2, 3 and 4)	\$ 60,000

The amended Credit Agreement contains certain covenants which, among others, require us to deliver financial reports at designated times of the year and maintain minimum unrestricted cash and trailing net revenues. As of December 31, 2024, we were not in violation of any covenants.

12. COMMITMENTS AND CONTINGENCIES

Operating Leases

We have a sublease agreement with Atara entered in October 2022 to sublease an office space currently used as headquarters located in South San Francisco, California. Subject to the terms of the sublease agreement, the lease term commenced in November 2022 and shall expire in May 2025. As of December 31, 2024, the future minimum lease payments related to our sublease agreement with Atara amounted to \$0.3 million, and the weighted average remaining term of the lease was 0.42 years.

In February 2025, we entered into a lease agreement with 611 Gateway to lease the same office space currently subleased from Atara. Subject to the terms of the lease agreement, the lease term shall commence following the expiration of the sublease with Atara and shall expire in July 2027. Future minimum lease payments related to such lease amounted to approximately \$1.4 million, of which, \$0.3 million, \$0.7 million and \$0.4 million are due for the years ending December 31, 2025, 2026 and 2027, respectively.

We previously leased our prior headquarters office space located in South San Francisco, California with Healthpeak Properties, Inc. (formerly known as HCP BTC, LLC), and had a sublease agreement with an unrelated third-party to sublet a portion of the leased facility. Both the lease and the sublease expired in January 2023.

The components of our operating lease expense were as follows (in thousands):

	 Year Ended December 31,					
	2024		2023		2022	
Fixed operating lease expense	\$ 663	\$	1,109	\$	5,470	
Variable operating lease expense	112		134		818	
Total operating lease expense	\$ 775	\$	1,243	\$	6,288	

Supplemental information related to our operating lease expense was as follows (in thousands):

			Year E	nded December 31,	
	2024			2023	2022
Cash payments included in the measurement of operating lease	<u>-</u>				
liabilities	\$	739	\$	1,534	\$ 10,485

Supplemental information related to our operating sublease was as follows (in thousands):

	 Year Ended December 31,						
	 2024		2023		2022		
Fixed sublease expense	\$ 	\$	365	\$	4,381		
Variable sublease expense	_		77		911		
Sublease income	_		(442)		(5,292)		
Net	\$ _	\$	_	\$	_		

Purchase Commitments and Obligations

In the ordinary course of business, we enter into agreements with contract manufacturers to manufacture our inventory products. Although the agreements generally provide a termination clause with or without cause, we may still be subjected to payment of cancellation fees. The level of cancellation fees is generally dependent on the timing of the written notice in relation to the commencement of work, with the maximum cancellation fees equal to the full price of the work order. In October 2024, we entered into an agreement with a third-party contract manufacturer to manufacture TAVALISSE that is expected to be delivered starting in 2026 through 2029. As of December 31, 2024, the contractual obligation not included in our financial statements related an agreement that may potentially be subjected to cancellation fees amounted to approximately \$24.1 million, with approximately \$6.8 million due in one year and \$9.3 million due within two to three years. As of December 31, 2024, we have not incurred any cancellation fees under our agreements with contract manufacturers

Legal Contingencies

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not presently a party to any material legal proceedings that, if determined adversely us, would have a material adverse effect on us. For more information, see "Part I, Item 3, Legal Proceedings" of this Annual Report on Form 10-K.

13. STOCKHOLDERS' EQUITY

Preferred Stock

We are authorized to issue 10,000,000 shares of preferred stock. As of December 31, 2024 and 2023, there were no issued and outstanding shares of preferred stock. Our Board of Directors is authorized to fix or alter the designation, powers, preferences and rights of the shares of each series of preferred shares, and the qualifications, limitations or restrictions of any wholly unissued shares, to establish from time to time the number of shares constituting any such series, and to increase or decrease the number of shares, if any.

Common Stock

Our Certificate of Incorporation as amended and restated in May 2018, authorizes us to issue 400,000,000 shares of common stock

Open Market Sale Agreement

In August 2020, we entered into an Open Market Sale Agreement with Jefferies, as a sole agent, pursuant to which we may sell from time to time, through Jefferies, shares of our common stock in sales deemed to be "at-the-market offerings" as defined in Rule 415 under the Securities Act, subject to conditions specified in the Open Market Sale Agreement, including maintaining an effective registration statement covering the sale of shares under the Open Market Sale Agreement. We have an active Registration Statement filed with the SEC, which registered, among other securities, a base prospectus which covers the offering, issuance, and sale by us of up to \$250.0 million in the aggregate of the securities identified from time to time in one or more offerings, which include the \$100.0 million of shares of our common stock that may be offered, issued and sold under the Open Market Sale Agreement. As of December 31, 2024, no shares had been sold under the Open Market Sale Agreement.

14. INCOME TAXES

The provision for income tax for the year ended December 31, 2024 of \$0.9 million was related to foreign withholding tax and state taxes. We have not recorded federal income taxes due to the sufficient NOL carryforwards that were generated prior to the enactment of the Tax Act, as well as significant research and development credit carryforwards. We continue to record a full valuation allowance on our deferred tax assets considering our cumulative losses in prior years. For the years ended December 31, 2023 and 2022, there was no foreign withholding tax, and we have not recorded state and federal income taxes due to our pre-tax book losses and a full valuation allowance was recorded against our deferred tax assets.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets are as follows (in thousands):

	_	As of Dec	er 31,	
		2024		2023
Deferred tax assets				
Net operating loss carryforwards	\$	222,744	\$	229,967
Orphan drug and research and development credits		62,314		62,457
Capitalized research and development credits		19,604		21,017
Deferred revenue		10,181		11,223
Deferred compensation		11,701		10,365
Other, net		2,751		3,898
Deferred tax liabilities				
Others		(61)		(296)
Total net deferred tax assets		329,234		338,631
Less: valuation allowance		(329,234)		(338,631)
Deferred tax assets, net of allowance	\$		\$	

The valuation allowance decreased by approximately \$9.4 million, and increased by \$1.0 million and \$15.3 million for the years ended December 31, 2024, 2023 and 2022, respectively.

The realization of deferred tax assets is dependent if there are sufficient positive evidences that exist to conclude that it is more-likely-than-not that our deferred tax assets will be realized. This assessment requires significant judgment. In making this determination, all available evidence, both positive and negative, shall be considered to determine whether, based on the weight of that evidence, a valuation allowance for deferred tax assets is needed. If sufficient positive evidence may become available to allow us to reach a conclusion that a portion of the valuation allowance against the deferred tax assets may be reversed, the reversal would result in an income tax benefit for the quarterly and annual fiscal period in which we determine to release such valuation allowance.

The reconciliation of the statutory federal income tax rate to the effective tax rate was as follows:

	Year Ended December 31,				
	2024	2023	2022		
Federal statutory tax rate	21.0 %	(21.0)%	(21.0)%		
State, net of federal benefit	1.5 %	0.1 %	0.0 %		
Valuation allowance	(30.3)%	13.9 %	20.2 %		
Stock compensation	6.4 %	5.3 %	2.5 %		
Orphan drug and research and development credits	3.1 %	0.2 %	(2.6)%		
Foreign tax	3.2 %	— %	— %		
Other, net	(0.1)%	1.5 %	1.0 %		
Effective tax rate	4.8 %	0.0 %	0.1 %		

In general, under Section 382 of the Internal Revenue Code (Section 382), a corporation that undergoes an ownership change is subject to limitations on its ability to utilize its pre-change NOL carryovers and tax credits to offset future taxable income. Our existing NOL carryforwards and tax credits are subject to limitations arising from ownership changes which occurred in previous periods. We finalized our analysis of potential ownership changes and concluded our Section 382 owner shift analysis during the year ended December 31, 2012. We have updated our NOL carryforwards to reflect the results of the Section 382 owner shift analysis as of December 31, 2024. We did not experience any significant changes in ownership in the periods presented. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 and result in additional limitations.

As of December 31, 2024, we had NOL carryforwards for federal income tax purposes of approximately \$940.9 million. Of the federal NOL carryforward, \$801.7 million, which expire beginning in the year 2026 and the remaining NOL carryforwards can be carried forward indefinitely, subject to annual limitation of 80% of taxable income. We also had state NOL carryforwards of approximately \$375.1 million, which expire beginning in the year 2028.

We have general business credits of approximately \$44.6 million, which will expire beginning in 2025, if not utilized, and is consisted of research and development credits and orphan drug credits. We also have state research and development tax credits of approximately \$32.4 million, which have no expiration date.

The following table summarizes the activity related to our gross unrecognized tax benefits (in thousands):

	Year Ended December 31,					
		2024		2023		2022
Balance at the beginning of the year	\$	8,672	\$	9,426	\$	9,186
Decrease related to prior year tax positions		_		(843)		_
Increase related to current year tax positions		108		89		240
Balance at the end of the year	\$	8,780	\$	8,672	\$	9,426

During the years ended December 2024, 2023 and 2022, the amount of unrecognized tax benefits increased due to additional research and development and orphan drug credits generated during those years. In 2023, we engaged our tax consultant to perform an orphan credits study for years 2015 to 2020. The results of the study decreased the unrecognized tax benefits by \$4.7 million. The reversal of the uncertain tax benefits did not affect our effective tax rate as we continue to maintain a full valuation allowance against our deferred tax assets.

We are subject to federal income tax and various state taxes. Because of NOL and research credit carryovers, substantially all of our tax years remain open to examination.

Our policy is to recognize interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. We currently have no tax positions that would be subject to interest or penalties.

15. SEGMENT INFORMATION

The following table presents segment information for the periods presented:

	Year Ended December 31,						
	2024		2024 2023			2022	
			(in	thousands)			
Total Revenues	\$	179,278	\$	116,882	\$	120,242	
Less:							
Employee related expenses		69,807		63,429		69,477	
Commercial related expenses		26,996		24,310		23,846	
Cost of product sales		18,647		7,110		1,749	
Consultants and third-party services		15,532		17,942		22,218	
Outside clinical trial related expenses		10,978		9,694		29,981	
Other segment items		13,126		14,888		28,521	
Interest expense, net		5,826		4,600		3,023	
Provision for income taxes		881		_		_	
Segment income (loss)	\$	17,485	\$	(25,091)	\$	(58,573)	

There is no reconciling items or adjustments between segment income (loss) presented above and net income (loss) as presented in our statements of operations. The CODM does not review assets in evaluating the segment results and therefore such information is not presented.

For details of revenues disaggregated by category, see "Note 3 – Revenues".

Employee related expenses primarily comprised salaries, employee benefits, other employee related expenses and stock-based compensation expense. For details of stock-based compensation expense, see "Note 6 – Stock-Based Compensation."

Other segment items for the periods presented primarily comprised travel related expenses, business insurance, taxes and licenses, and facility related expenses. Other segment items for the year ended December 31, 2022 also include restructuring costs and IPR&D.

16. RESTRUCTURING CHARGES

During the year ended December 31, 2022, we recorded restructuring charges of \$1.3 million as a result of workforce reduction, primarily from development and administration group. Restructuring charges comprised cash severance, bonus and related employee benefits and taxes paid to affected employees.

SUPPLEMENTARY DATA

Schedule II - Valuation and Qualifying Accounts

All schedules are omitted because they are not applicable, or the required information is shown in the financial statements or notes thereto.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None

Item 9A. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Exchange Act. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Annual Report.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on our evaluation under the framework in *Internal Control—Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2024.

The effectiveness of our internal control over financial reporting as of December 31, 2024 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its attestation report which is set forth below in this Annual Report on Form 10-K.

Changes in Internal Controls over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the fourth quarter of 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Rigel Pharmaceuticals, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Rigel Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Rigel Pharmaceuticals, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the balance sheets of the Company as of December 31, 2024 and 2023, the related statements of operations, comprehensive income (loss), stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2024, and the related notes and our report dated March 4, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

San Francisco, California March 4, 2025

Item 9B. Other Information

Securities Trading Plans of Directors and Executive Officers

During the three months ended December 31, 2024, none of our directors or executive officers adopted or terminated any contract, instruction or written plan for the purchase or sale of our securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement" as defined in Item 408 of Regulation S-K under the Securities Exchange Act of 1934, as amended.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding our directors, executive officers and corporate governance is incorporated by reference to the information set forth under the captions "Election of Directors" and "Management—Executive Officers" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information is incorporated herein by reference.

Information regarding compliance with Section 16(a) of the Exchange Act is incorporated by reference to the information set forth under the caption "Delinquent Section 16(a) Reports" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information, if any, is incorporated herein by reference.

We have insider trading policies and procedures that set forth acceptable transactions involving the purchase, sale and other disposition of our securities by employees and directors, as well as certain designated consultants and contractors. We believe these policies and procedures are reasonably designed to promote compliance with insider trading laws, rules and regulations and listing standards applicable to the Company. A copy of our Insider Trading Policy is filed with this Annual Report on Form 10-K as Exhibit 19.1.

Item 11. Executive Compensation

Information regarding executive and director compensation is incorporated by reference to the information set forth under the captions "Compensation Discussion and Analysis," "Executive Compensation" and "Director Compensation" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information is incorporated herein by reference.

Information regarding Compensation Committee interlocks and insider participation is incorporated by reference to the information set forth under the caption "Compensation Committee Interlocks and Insider Participation" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information is incorporated herein by reference.

Information regarding our Compensation Committee's review and discussion of our Compensation Discussion and Analysis is incorporated by reference to the information set forth under the caption "Compensation Committee Report" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information regarding security ownership of certain beneficial owners and management and securities authorized for issuance under our equity compensation plans is incorporated by reference to the information set forth under the caption "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information regarding certain relationships and related transactions and director independence is incorporated by reference to the information set forth under the captions "Transactions with Related Persons" and "Information Regarding the Board of Directors and Corporate Governance" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Information regarding principal accounting fees and services is incorporated by reference to the information set forth under the caption "Ratification of Selection of Independent Registered Public Accounting Firm" in our Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024. Such information is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

The following documents are being filed as part of this Annual Report on Form 10-K:

- Financial Statements—Index to Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.
- 2. See Exhibit Index at the end of this Annual Report, which is incorporated herein by reference. The Exhibits listed in the accompanying Exhibit Index are filed as part of this report.

EXHIBIT INDEX

- 1.1 Amended and Restated Open Market Sale Agreement, dated August 2, 2024, by and between Rigel Pharmaceuticals, Inc. and Jefferies LLC (filed as an exhibit to Rigel's Registration Statement on Form S-3, dated August 2, 2024 and incorporated herein by reference).
- 3.1 Amended and Restated Certificate of Incorporation (filed as an exhibit to Rigel's Current Report on Form 8-K dated June 24, 2003 and incorporated herein by reference).
- 3.2 Amended and Restated Bylaws (filed as an exhibit to Rigel's Current Report on Form 8-K, dated November 3, 2022 and incorporated herein by reference).
- 3.3 Certificate of Amendment to the Amended and Restated Certificate of Incorporation (filed as an exhibit to Rigel's Current Report on Form 8-K, dated May 29, 2012 and incorporated herein by reference).
- 3.4 Certificate of Amendment to the Amended and Restated Certificate of Incorporation (filed as an exhibit to Rigel's Current Report on Form 8-K, dated May 18, 2018 and incorporated herein by reference).
- 3.5 Certificate of Amendment to the Amended and Restated Certificate of Incorporation (filed as an exhibit to Rigel's Current Report on Form 8-K, dated June 27, 2024 and incorporated herein by reference).
- 4.1 Description of Capital Stock (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2020 filed on February 27, 2020 and incorporated herein by reference).
- 4.2 Form of warrant to purchase shares of common stock (filed as an exhibit to Rigel's Registration Statement on Form S-1, filed on September 15, 2000, as amended and incorporated herein by reference).
- 4.3 Specimen Common Stock Certificate (filed as an exhibit to Rigel's Current Report on Form 8-K dated June 24, 2003 and incorporated herein by reference).
- 10.1+ Form of Stock Option Agreement pursuant to 2000 Equity Incentive Plan (filed as an exhibit to Rigel's Registration Statement on Form S-1, as amended and incorporated herein by reference).
- 10.2+ 2000 Equity Incentive Plan, as amended (filed as an exhibit to Rigel's Registration Statement on Form S-8 filed on June 21, 2013 and incorporated herein by reference).
- 10.3+ 2000 Non-Employee Directors' Stock Option Plan, as amended (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the guarter ended June 30, 2017 filed on August 21, 2017 and incorporated herein by reference).
- 10.4+ 2000 Employee Stock Purchase Plan, as amended (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 filed on August 3, 2021 and incorporated herein by reference).
- 10.5+ 2011 Equity Incentive Plan, as amended (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 filed on August 21, 2017 and incorporated herein by reference).
- 10.6+ Form of Stock Option Agreement pursuant to 2011 Equity Incentive Plan (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2011 and incorporated herein by reference).
- 10.7+ Form of Stock Option Grant Notice, Option Agreement and Notice of Exercise under the Rigel Inducement Plan (filed as an exhibit to Rigel's Current Report on Form 8-K filed on October 11, 2016, and incorporated herein by reference).
- 10.8+ 2018 Equity Incentive Plan, as amended (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended June 30, 2024 filed on August 6, 2024 and incorporated herein by reference).
- 10.9+# Rigel Pharmaceuticals, Inc. Inducement Plan, as amended.
- 10.10+ Form of Indemnity Agreement (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, as amended, and incorporated herein by reference).

- 10.11+ Amended and Restated Executive Severance Plan (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 filed on November 7, 2023 and incorporated herein by reference).
- 10.12+ Non-Employee Director Compensation Policy, as amended (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2021 filed on March 1, 2022 and incorporated herein by reference).
- 10.13+ Offer Letter from Rigel Pharmaceuticals, Inc. to Dean Schorno, dated May 22, 2018 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 filed on August 8, 2018 and incorporated herein by reference).
- 10.14+ Offer Letter from Rigel Pharmaceuticals, Inc. to David Santos, dated July 13, 2020 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 filed on November 5, 2020 and incorporated herein by reference).
- 10.15+ Offer Letter from Rigel Pharmaceuticals, Inc. to Raymond Furey, dated November 17, 2022 (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2022 filed on March 7, 2023 and incorporated herein by reference).
- 10.16+ *# Offer Letter from Rigel Pharmaceuticals, Inc. to Lisa Rojkjaer, M.D., dated December 20, 2023.
 - 10.17 License and Transition Services Agreement with Forma Therapeutics, Inc. dated July 27, 2022 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 filed on November 3, 2022 and incorporated herein by reference).
 - 10.18 Amendments 1, 2 and 3 to License and Transition Services Agreement with Forma Therapeutics, Inc. (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 filed on August 1, 2023 and incorporated herein by reference).
 - 10.19 License and Collaboration Agreement with Eli Lilly and Company, dated February 28, 2021 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 filed on May 5, 2021 and incorporated herein by reference)
 - 10.20 Amendment 1 to License and Collaboration Agreement with Eli Lilly and Company, dated September 28, 2023 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 filed on November 7, 2023 and incorporated herein by reference).
 - 10.21 Amendment No. 2 to the License and Collaboration Agreement with Eli Lilly and Company, dated March 11, 2024 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 filed on May 7, 2024 and incorporated herein by reference).
 - 10.22 Collaboration and License Agreements with Kissei Pharmaceutical Co., Ltd., dated October 29, 2018 (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2018 filed on February 28, 2019 and incorporated herein by reference).
 - 10.23 Supply Agreements with Kissei Pharmaceutical Co., Ltd., dated October 29, 2018 (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2018 filed on February 28, 2019 and incorporated herein by reference).
 - 10.24 Amendments 1, 2, 3, and 4 to the Collaboration and License Agreement with Kissei Pharmaceutical Co., Ltd., dated October 29, 2018 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 filed on November 7, 2024 and incorporated herein by reference).
 - 10.25^{*#} Amendment 5 to the Collaboration and License Agreement with Kissei Pharmaceutical Co., Ltd., dated October 23, 2024.
 - 10.26 Exclusive Commercialization License Agreement with Grifols Worldwide Operations Limited, dated January 22, 2019 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 filed on May 7, 2019 and incorporated herein by reference).

- 10.27 Collaboration Agreement between Rigel and Daiichi Pharmaceutical Co., Ltd., dated August 1, 2002 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2002 and incorporated herein by reference).
- 10.28 Credit and Security Agreement, dated as of September 27, 2019, among Rigel Pharmaceuticals, Inc. MidCap Financial Trust, as agent and lender, and the additional lenders from time to time party thereto (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 filed on November 5, 2019 and incorporated herein by reference).
- 10.29 First Amendment to the Credit and Security Agreement with MidCap Financial Trust, dated March 29, 2021 (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2021 filed on March 1, 2022 and incorporated herein by reference).
- 10.30 Second Amendment to the Credit and Security Agreement with MidCap Financial Trust, dated February 11, 2022 (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2021 filed on March 1, 2022 and incorporated herein by reference).
- 10.31 Third Amendment to the Credit and Security Agreement with MidCap Financial Trust, dated July 27, 2022 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 filed on November 3, 2022 and incorporated herein by reference).
- 10.32 Fourth Amendment to the Credit and Security Agreement with MidCap Financial Trust, dated April 11, 2024 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 filed on May 7, 2024 and incorporated herein by reference).
- 10.33 Sublease Agreement with Atara Biotherapeutics, Inc., dated October 28, 2022 (filed as an exhibit to Rigel's Annual Report on Form 10-K for the year ended December 31, 2022 filed on March 7, 2023 and incorporated herein by reference)
- 10.34# Amendment No. 1 to Sublease Agreement with Atara Biotherapeutics, Inc., dated October 10, 2024.
- 10.35 # Lease Agreement with 611 Gateway Center LP, dated February 25, 2025.
- 10.36 Asset Purchase Agreement with Blueprint Medicines Corporation, dated February 22, 2024 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 filed on May 7, 2024 and incorporated herein by reference).
- 10.37 Collaboration and License Agreement with Kissei Pharmaceutical Co., Ltd., dated September 3, 2024 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 filed on November 7, 2024 and incorporated herein by reference).
- 10.38 Supply Agreement with Kissei Pharmaceutical Co., Ltd., dated September 3, 2024 (filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 filed on November 7, 2024 and incorporated herein by reference).
- 19.1# Rigel Pharmaceuticals, Inc. Insider Trading Policy.
- 23.1# Consent of Independent Registered Public Accounting Firm.
- 24.1# Power of Attorney (included on signature page).
- 31.1# Certification required by Rule 13a-14(a) or Rule 15d-14(a).
- 31.2# Certification required by Rule 13a-14(a) or Rule 15d-14(a).
- 32.1*# Certification required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. 1350).
 - 97 Incentive Compensation Recoupment Policy (Clawback Policy), dated August 10, 2023 (filed as an exhibit to Rigel's Annual Report on Form 10-K for the December 31, 2024 filed on March 5, 2024 and incorporated herein by reference).

Table of Contents

- 101.INS Inline XBRL Instance Document the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
- 101.SCH Inline XBRL Taxonomy Extension Schema Document.
- 101.CAL# Inline XBRL Taxonomy Extension Calculation Linkbase Document.
- 101.LAB# Inline XBRL Taxonomy Extension Labels Linkbase Document.
- 101.PRE# Inline XBRL Taxonomy Extension Presentation Linkbase Document.
- 101.DEF# Inline XBRL Taxonomy Extension Definition Linkbase Document.
 - 104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).
- + Indicates a management contract or compensatory plan or arrangement.
- * The certification attached as Exhibit 32.1 accompanies this Annual Report on Form 10-K pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the registrant for purposes of Section 18 of the Exchange Act.
- Certain marked information has been omitted from this exhibit because it is both not material and is the type that the registrant treats as private and confidential.
- # Filed herewith.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on March 4, 2025.

Rigel Pharmaceuticals, Inc.

By: /s/ RAUL R. RODRIGUEZ

Raul R. Rodriguez

Chief Executive Officer
(Principal Executive Officer)

By: /s/ Dean L. Schorno

Dean L. Schorno

Chief Financial Officer
(Principal Financial Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Raul R. Rodriguez and Dean L. Schorno, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place, and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or any of them or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Raul R. Rodriguez Raul R. Rodriguez	Chief Executive Officer and Director (Principal Executive Officer)	March 4, 2025
/s/ Dean L. Schorno Dean L. Schorno	Chief Financial Officer (Principal Financial Officer)	March 4, 2025
/s/ Gregg Lapointe Gregg Lapointe	Chairman of the Board	March 4, 2025
/s/ Kamil Ali-Jackson Kamil Ali-Jackson	Director	March 4, 2025
/s/ Alison L. Hannah Alison L. Hannah	Director	March 4, 2025
/s/ Walter H. Moos Walter H. Moos	Director	March 4, 2025
/s/ Jane Wasman Jane Wasman	Director	March 4, 2025

RIGEL PHARMACEUTICALS, INC.

INDUCEMENT PLAN

Adopted by the Compensation Committee: October 10, 2016 Amended by the Compensation Committee: January 3, 2017 AMENDED BY THE COMPENSATION COMMITTEE: AUGUST 16, 2017 Amended by the Compensation Committee: November 7, 2017 AMENDED BY THE COMPENSATION COMMITTEE: DECEMBER 23, 2017 AMENDED BY THE COMPENSATION COMMITTEE: JANUARY 24, 2018 AMENDED BY THE COMPENSATION COMMITTEE: AUGUST 19, 2020 AMENDED BY THE COMPENSATION COMMITTEE: SEPTEMBER 30, 2021 Amended by the Compensation Committee: January 4, 2022 AMENDED BY THE COMPENSATION COMMITTEE: APRIL 4, 2022 AMENDED BY THE COMPENSATION COMMITTEE: DECEMBER 8, 2022 AMENDED BY THE COMPENSATION COMMITTEE: APRIL 4, 2023 AMENDED BY THE COMPENSATION COMMITTEE: JUNE 29, 2023 Amended by the Compensation Committee: October 3, 2023 AMENDED BY THE COMPENSATION COMMITTEE: DECEMBER 26, 2023 AMENDED BY THE COMPENSATION COMMITTEE: MARCH 26, 2024 AMENDED BY THE COMPENSATION COMMITTEE: APRIL 4, 2024 AMENDED BY THE COMPENSATION COMMITTEE: JULY 8, 2024 Amended by the Compensation Committee: October 3, 2024 AMENDED BY THE COMPENSATION COMMITTEE: DECEMBER 23, 2024

1. GENERAL.

- (a) Eligible Stock Award Recipients. The only persons eligible to receive grants of Stock Awards under this Plan are individuals who satisfy the standards for inducement grants under NASDAQ Marketplace Rule 5635(c)(4) and the related guidance under NASDAQ IM 5635-1. A person who previously served as an Employee or Director will not be eligible to receive Stock Awards under the Plan, other than following a bona fide period of non-employment. Persons eligible to receive grants of Stock Awards under this Plan are referred to in this Plan as "Eligible Employees". These Stock Awards must be approved by either a majority of the Company's "Independent Directors" (as such term is defined in NASDAQ Listing Rule 5605(a)(2)) or the Company's compensation committee, provided such committee is comprised solely of Independent Directors (the "Independent Compensation Committee") in order to comply with the exemption from the stockholder approval requirement for "inducement grants" provided under Rule 5635(c) (4) of the NASDAQ Listing Rules. NASDAQ Marketplace Rule 5635(c)(4) and the related guidance under NASDAQ IM 5635-1 are referred to in this Plan as the "Inducement Award Rules".
- **(b)** Available Awards. The Plan provides for the grant of Options and Restricted Stock Unit Awards. All Options will be Nonstatutory Stock Options. Awards intended to qualify as stockholder-approved performance based compensation for purposes of Section 162(m) of the Code may not be granted under this Plan.

(c) Purpose. This Plan, through the granting of Stock Awards, is intended to provide (i) an inducement material for certain individuals to enter into employment with the Company within the meaning of Rule 5635(c)(4) of the NASDAQ Listing Rules, (ii) incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and (iii) a means by which Eligible Employees may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Stock Awards.

2. Administration.

- (a) Administration by Board. The Board will administer the Plan, provided, however, that Stock Awards may only be granted by either (i) a majority of the Company's Independent Directors or (ii) the Independent Compensation Committee. Subject to those constraints and the other constraints of the Inducement Award Rules, the Board may delegate some of its powers of administration of the Plan to a Committee, as provided in Section 2(c).
- **(b) Powers of Board.** The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan and the Inducement Award Rules:
- (i) To determine: (A) who will be granted Stock Awards; (B) when and how each Stock Award will be granted; (C) what type of Stock Award will be granted; (D) the provisions of each Stock Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Stock Award; (E) the number of shares of Common Stock subject to, or the cash value of, a Stock Award; and (F) the Fair Market Value applicable to a Stock Award; provided, however, that Stock Awards may only be granted by either (i) a majority of the Company's Independent Directors or (ii) the Independent Compensation Committee.
- (ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Stock Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it will deem necessary or expedient to make the Plan or Stock Award fully effective.
 - (iii) To settle all controversies regarding the Plan and Stock Awards granted under it.
- (iv) To accelerate, in whole or in part, the time at which a Stock Award may be exercised or vest (or at which cash or shares of Common Stock may be issued).
- (v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or a Stock Award Agreement, suspension or termination of the Plan will not materially impair a Participant's rights under his or her then-outstanding Stock Award without his or her written consent except as provided in subsection (viii) below.
- (vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, adopting amendments relating to nonqualified deferred compensation under Section 409A of the Code and/or making the Plan or Stock Awards granted under the Plan exempt from or compliant with the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. If required by applicable law or listing requirements, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Stock Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the Plan, or (F) materially expands the types of Stock Awards available for issuance under the Plan. Except as otherwise provided in the Plan (including subsection (viii) below) or a Stock Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Stock Award without the Participant's written consent.
- (vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Rule 16b-3 of Exchange Act or any successor rule.

- (viii) To approve forms of Stock Award Agreements for use under the Plan and to amend the terms of any one or more outstanding Stock Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Stock Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion. A Participant's rights under any Stock Award will not be impaired by any such amendment unless the Company requests the consent of the affected Participant, and the Participant consents in writing. However, a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights. In addition, subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Stock Awards without the affected Participant's consent (A) to clarify the manner of exemption from, or to bring the Stock Award into compliance with, Section 409A of the Code, or (B) to comply with other applicable laws or listing requirements.
- (ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan and/or Stock Award Agreements.
- (x) To adopt such procedures and sub-plans as are necessary or appropriate (A) to permit participation in the Plan by individuals who are foreign nationals or employed outside the United States or (B) allow Stock Awards to qualify for special tax treatment in a foreign jurisdiction; *provided* that Board approval will not be necessary for immaterial modifications to the Plan or any Stock Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction.

(c) Delegation to Committee.

- (i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Committee may, at any time, abolish the subcommittee and/or revest in the Committee any powers delegated to the subcommittee. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated.
- (ii) Rule 16b-3 Compliance. The Committee may consist solely of two or more Non-Employee Directors, in accordance with Rule 16b-3 of the Exchange Act.
- (d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.
- (e) Cancellation and Re-Grant of Stock Awards. Neither the Board nor any Committee will have the authority to: (i) reduce the exercise, purchase or strike price of any outstanding Option, or (ii) cancel any outstanding Option that has an exercise price or strike price greater than the current Fair Market Value of the Common Stock in exchange for cash or other Stock Awards under the Plan, unless the stockholders of the Company have approved such an action within twelve (12) months prior to such an event.

3. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve.

- (i) Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards will not exceed 784,967 shares (the "Share Reserve").
- (ii) Shares may be issued under the terms of this Plan in connection with a merger or acquisition as permitted by NASDAQ Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.
- **(b)** Reversion of Shares to the Share Reserve. If a Stock Award or any portion of a Stock Award (i) expires or otherwise terminates without all of the shares covered by the Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will nevertheless reduce (or otherwise offset) the number of shares of Common Stock that are available for issuance under the Plan. If any shares of Common Stock issued under a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will not revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will not again become available for issuance under the Plan.
- (c) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

4. Eligibility.

- (a) Eligibility for Specific Stock Awards. Stock Awards may only be granted to persons who are Eligible Employees described in Section 1(a) of the Plan, where the Stock Award is an inducement material to the individual's entering into employment with the Company or an Affiliate within the meaning of Rule 5635(c)(4) of the NASDAQ Listing Rules, provided however, that Stock Awards may not be granted to Eligible Employees who are providing Continuous Service only to any "parent" of the Company, as such term is defined in Rule 405 of the Securities Act, unless (i) the stock underlying such Stock Awards is treated as "service recipient stock" under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), or (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from or comply with the distribution requirements of Section 409A of the Code.
- **(b) Approval Requirements.** All Stock Awards must be granted either by a majority of the Company's independent directors or the Independent Compensation Committee.

5. Provisions Relating to Options.

Each Option will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be Nonstatutory Stock Options. The provisions of separate Options need not be identical; *provided, however*, that each Option Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Option Agreement or otherwise) the substance of each of the following provisions:

- (a) Term. No Option will be exercisable after the expiration of 10 years from the date of its grant or such shorter period specified in the Option Agreement.
- **(b) Exercise Price.** The exercise or strike price of each Option will be not less than 100% of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the

foregoing, an Option may be granted with an exercise price lower than 100% of the Fair Market Value of the Common Stock subject to the Option if such Option is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A of the Code.

- (c) Purchase Price for Options. The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:
 - (i) by cash, check, bank draft or money order payable to the Company;
- (ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;
 - (iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;
- (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; provided, however, that the Company will accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations; or
- (v) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Option Agreement.
- (d) Transferability of Options. The Board may, in its sole discretion, impose such limitations on the transferability of Options as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options will apply:
- (i) Restrictions on Transfer. An Option will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided in the Plan, an Option may not be transferred for consideration.
- (ii) Domestic Relations Orders. Subject to the approval of the Board or a duly authorized Officer, an Option may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument.
- (iii) Beneficiary Designation. Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, on the death of the Participant, will thereafter be entitled to exercise the Option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of the Participant's estate will be entitled to exercise the Option and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit

designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

- (e) Vesting Generally. The total number of shares of Common Stock subject to an Option may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of performance goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options may vary. The provisions of this Section 5(e) are subject to any Option provisions governing the minimum number of shares of Common Stock as to which an Option may be exercised.
- (f) Termination of Continuous Service. Except as otherwise provided in the applicable Option Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option (to the extent that the Participant was entitled to exercise such Option as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date which occurs 3 months following the termination of the Participant's Continuous Service, and (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option within the applicable time frame, the Option will terminate.
- **Extension of Termination Date.** Except as otherwise provided in the applicable Stock Award Agreement, if the exercise of an Option following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option will terminate on the earlier of (i) the expiration of a total period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option as set forth in the applicable Option Agreement. In addition, unless otherwise provided in a Participant's Option Agreement, if the sale of any Common Stock received upon exercise of an Option following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option will terminate on the earlier of (i) the expiration of a period of days or months (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option as set forth in the applicable Option Agreement.
- (h) Disability of Participant. Except as otherwise provided in the applicable Option Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option (to the extent that the Participant was entitled to exercise such Option as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service and (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option within the applicable time frame, the Option will terminate.
- (i) Death of Participant. Except as otherwise provided in the applicable Option Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Option Agreement for exercisability after the termination of the Participant's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Participant was entitled to exercise such Option as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the Option upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death, and (ii) the expiration of the term of such Option as set forth in the Option Agreement. If, after the Participant's death, the Option is not exercised within the applicable time frame, the Option will terminate.
- (j) Termination for Cause. Except as explicitly provided otherwise in a Participant's Stock Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a

Participant's Continuous Service is terminated for Cause, the Option will terminate upon the date on which the event giving rise to the termination for Cause first occurred, and the Participant will be prohibited from exercising his or her Option from and after the date on which the event giving rise to the termination for Cause first occurred (or, if required by applicable law, the date of termination of Continuous Service). If a Participant's Continuous Service is suspended pending an investigation of the existence of Cause, all of the Participant's rights under the Option will also be suspended during the investigation period, except to the extent prohibited by applicable law.

(k) Non-Exempt Employees. If an Option is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option will not be first exercisable for any shares of Common Stock until at least 6 months following the date of grant of the Option (although the Option may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option is not assumed, continued, or substituted, or (iii) upon the non-exempt Employee's retirement (as such term may be defined in the non-exempt Employee's Option Agreement in another agreement between the non-exempt Employee and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options may be exercised earlier than 6 months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option will be exempt from his or her regular rate of pay. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt Employee in connection with the exercise, vesting or issuance of any shares under any other Option will be exempt from such Employee's regular rate of pay, the provisions of this paragraph will apply to all Options and are hereby incorporated by reference into such Option Agreements.

6. Provisions Relating to Restricted Stock Unit Awards.

Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the Board deems appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

- (a) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law
- **(b) Vesting.** At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.
- (c) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.
- (d) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.
- (e) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents

will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(f) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

7. COVENANTS OF THE COMPANY.

- (a) Availability of Shares. The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Stock Awards.
- (b) Securities Law Compliance. The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; provided, however, that this undertaking will not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of a Stock Award or the subsequent issuance of cash or Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities law.
- (c) No Obligation to Notify or Minimize Taxes. The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

8. MISCELLANEOUS.

- (a) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Stock Awards will constitute general funds of the Company.
- **(b)** Corporate Action Constituting Grant of Stock Awards. Corporate action constituting a grant by the Company of a Stock Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Stock Award Agreement as a result of a clerical error in the papering of the Stock Award Agreement, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Stock Award Agreement.
- (c) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to a Stock Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Stock Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to such Stock Award has been entered into the books and records of the Company.
- (d) No Employment or Other Service Rights. Nothing in the Plan, any Stock Award Agreement or any other instrument executed thereunder or in connection with any Stock Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, including, but not limited to, Cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service

of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

- (e) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Stock Award to the Participant, the Board has the right in its sole discretion to (i) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Stock Award that is scheduled to vest or become payable after the date of such change in time commitment, and (ii) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Stock Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Stock Award that is so reduced or extended.
- (f) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award, and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (i) the issuance of the shares upon the exercise of a Stock Award or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (ii) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.
- (g) Withholding Obligations. Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any U.S. federal, state, local, foreign or other tax withholding obligation relating to a Stock Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Stock Award; provided, however, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such other amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from a Stock Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant, including proceeds from the sale of shares of Common Stock issued pursuant to a Stock Award; or (v) by such other method as may be set forth in the Stock Award Agreement.
- (h) Electronic Delivery. Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto), or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).
- (i) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Stock Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code (to the extent applicable to a Participant). Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Stock Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

- (j) Compliance with Section 409A. Unless otherwise expressly provided for in a Stock Award Agreement and the Plan will be interpreted to the greatest extent possible in a manner that makes the Plan and the Stock Awards granted hereunder exempt from Section 409A of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Stock Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, the Stock Award Agreement evidencing such Stock Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent a Stock Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Stock Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Stock Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding a Stock Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code) will be issued or paid before the date that is six (6) months following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six (6) month period elapses, with the balance paid thereafter on the original schedule.
- (k) Clawback/Recovery. All Stock Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in a Stock Award Agreement as the Board determines necessary or appropriate, including, but not limited to, a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of an event constituting Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company or an Affiliate.

9. Adjustments upon Changes in Common Stock; Other Corporate Events.

- (a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a) and (ii) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.
- **(b) Dissolution or Liquidation.** In the event of a dissolution or liquidation of the Company, then all outstanding Stock Awards shall terminate immediately prior to such event.
- (c) Corporate Transaction. In the event of (i) a sale, lease or other disposition of all or substantially all of the securities or assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise (a "Corporate Transaction"), then any surviving corporation or acquiring corporation may assume any Stock Awards outstanding under the Plan or may substitute similar stock awards (including an award to acquire the same consideration paid to the stockholders in such Corporate Transaction) for those outstanding under the Plan. In the event any surviving corporation or acquiring corporation does not assume such Stock Awards or substitute similar stock awards for those outstanding under the Plan, then with respect to Stock Awards held by Participants whose Continuous Service has not terminated, the vesting of such Stock Awards (and, if applicable, the time during which such Stock Awards may be exercised) shall be accelerated in full, and the Stock Awards shall terminate if not exercised (if applicable) at or prior to such event. With respect to any other Stock Awards outstanding under the Plan, such Stock Awards shall terminate if not exercised (if applicable) prior to such event.

10. TERMINATION OR SUSPENSION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

11. EFFECTIVE DATE OF PLAN; TIMING OF FIRST GRANT OR EXERCISE.

The Plan will come into existence on the Effective Date. No Stock Award may be granted prior to the Effective Date.

12. CHOICE OF LAW.

The laws of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

- 13. Definitions. As used in the Plan, the following definitions will apply to the capitalized terms indicated below:
 - (a) "Affiliate" means, at the time of determination, any "parent" or "subsidiary" of the Company, as such terms are defined in Rule 405 of the Securities Act. The Board will have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.
 - (b) "Board" means the Board of Directors of the Company.
 - (c) "Capitalization Adjustment" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.
 - (d) "Cause" will have the meaning ascribed to such term in any written agreement between the Participant and the Company or any Affiliate defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's conviction of any felony or any crime involving moral turpitude or dishonesty, (ii) such Participant's participation in a fraud or act of dishonesty against the Company, (iii) such Participant's conduct that, based upon a good faith and reasonable factual investigation and determination by the Board, demonstrates the Participant's gross unfitness to serve, or (iv) such Participant's intentional, material violation of any contract between the Company and the Participant or any statutory duty that the Participant has to the Company that the Participant does not correct within 30 days after written notice to the Participant thereof. The determination as to whether a Participant is being terminated for Cause will be made in good faith by the Company and will be final and binding on the Participant. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Stock Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company, any Affiliate or such Participant for any other purpose.
 - (e) "Code" means the U.S. Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder
 - (f) "Committee" means a committee of one (1) or more Independent Directors to whom authority has been delegated by the Board in accordance with Section 2(c).
 - (g) "Common Stock" means the common stock of the Company.
 - (h) "Company" means Rigel Pharmaceuticals, Inc., a Delaware corporation.

- (i) "Consultant" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.
- "Continuous Service" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. If the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board in its sole discretion, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. In addition, if required for exemption from or compliance with Section 409A of the Code, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of "separation from service" as defined under Treasury Regulation Section 1.409A-1(h). A leave of absence will be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.
- (k) "Director" means a member of the Board. Directors are not eligible to receive Stock Awards under the Plan with respect to their service in such capacity.
- (1) "Disability" means the permanent and total disability of a person within the meaning of Section 22(e)(3) of the Code.
- (m) "Effective Date" means October 10, 2016.
- (n) "Employee" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.
- (o) "Entity" means a corporation, partnership, limited liability company or other entity.
- (p) "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
- (q) "Fair Market Value" means, as of any date, the value of the Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the last market trading day prior to the date of determination, as reported in a source the Board deems reliable.

- (ii) Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.
- (iii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Section 409A of the Code.
 - (r) "Independent Director" has the meaning set forth in Section 1(a) above.
 - (s) "Non-Employee Director" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("Regulation S-K")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3 of the Exchange Act.
 - (t) "Nonstatutory Stock Option" means any option granted pursuant to Section 4(b) of the Plan that does not qualify as an "incentive stock option" within the meaning of Section 422 of the Code.
 - (u) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.
 - (v) "Option" means a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.
 - (w) "Option Agreement" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.
 - (x) "Optionholder" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.
 - (y) "Participant" means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.
 - (z) "Plan" means this Rigel Pharmaceuticals, Inc. Inducement Plan, as it may be amended.
 - (aa) "Restricted Stock Unit Award" means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).
 - **(bb)**"*Restricted Stock Unit Award Agreement*" means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.
 - (cc) "Rule 16b-3" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.
 - (dd)"Securities Act" means the Securities Act of 1933, as amended.
 - (ee) "Stock Award" means any right to receive Common Stock granted under the Plan, including an Option or a Restricted Stock Unit Award.

(ff) "Stock Award Agreement" means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

Exhibit 10.16

December 20, 2023

Lisa Rojkjaer

[*]

Re: Employment Terms

Dear Lisa

Rigel Pharmaceuticals, Inc. (the Company) is pleased to offer you the position of Executive VP, Chief Medical Officer (CMO) on the terms set forth in this letter

This is a full-time, exempt position reporting to Raul Rodriguez, President/ CEO. You will be responsible for all duties customarily associated with this position and such duties as may be assigned to you by the Company from time to time. You will work remotely, and at our facility located at 611 Gateway Blvd, Suite 900, South San Francisco, California. Of course, the Company may change your position, duties and work location from time to time, as it deems necessary.

If you accept this offer (the "Agreement"), your annual salary will be \$495,000 (Four Hundred Ninety Five Thousand Dollars and No Cents), less all required withholdings and any voluntary payroll deductions, which salary will be reviewed periodically. In addition, as a participant in Rigel's Annual Cash Incentive Plan (CIP), you will be eligible for an annual target bonus of 50% of your eligible wages earned within the fiscal year. The annual bonus is based upon the achievement of your individual and the Company's goals, as well as such other criteria, each as determined at the sole discretion of the Company. Additionally, you are eligible for the Company's Amended and Restated Severance Plan of 8/10/2023, attached here, or such similar plan as the Company may have in effect at the relevant time.

You will be eligible for the Company's standard benefits, available to similarly situated employees, including medical insurance, vacation, sick leave, and holidays, subject to the terms and conditions of such plans. Details about these benefits are included for your review. The Company may modify compensation and benefits from time to time, as it deems necessary.

Subject to the approval of Rigel's Board of Directors or its designee, and after commencement of your employment, you will be granted an option to purchase a total of 375,000 (Three hundred and seventy-five thousand) shares of the Company's common stock, which is comprised of three components: (1) 187,500 (one hundred eighty seven thousand, five hundred) shares which has a four year vesting period initiated on your start-date, 1/4th (onefourth) of the shares vest one year after your hire date, and 1/48th (one forty-eighth) of the shares vest monthly thereafter over the next three years ("time-based option grant") and (2) 93,750 (Ninety three thousand, seven hundred fifty) shares which will vest upon [*] ("performance-based option grant(s)") and (3) 93,750 (Ninety three thousand, seven hundred fifty) shares which will vest upon achieving [*] ("performance-based option grant(s)"). The strike price for the time-based and performance-based option grants shall be the same as the close price on NASDAQ on the day that your equity grant is approved by the Rigel Board of Directors or its designee.

Within 30 days of your date of hire, you will receive a sign-on bonus in the amount of \$50,000 (fifty thousand), less all required withholdings. The Company will also reimburse weekly air travel expenses to and from South San Francisco and South San Francisco lodging expenses, in accordance with Company travel policies as applicable, estimated at approximately \$50,000 (fifty thousand) per year, in addition to such business travel as your role may require. In addition, the Company will either pay for, or reimburse the cost of, applying for the necessary visa.

This offer is contingent upon Rigel receiving successful results from a background check conducted on you by our third-party vendor and your compliance with our COV ID-19 vaccination policy.

As a Rigel employee, you will be required to sign and comply with the Company Proprietary Information and Inventions Agreement, attached hereto as Exhibit 1, which prohibits unauthorized use or disclosure of Company proprietary information.

You may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company. Likewise, the Company may terminate your employment at any time and for any reason whatsoever, with or without cause or advance notice. This at-will employment relationship cannot be changed except in writing signed by you and a Company officer.

You agree that, for one (1) year following the termination of your employment with the Company, you will not personally initiate or participate in the solicitation of any employee of the Company or any of its affiliates to terminate his or her relationship with the Company or any of its affiliates to become an employee for any other person or business entity.

To ensure rapid and economical resolution of any disputes which may arise under this Agreement, you and the Company agree that any and all disputes or controversies, whether of law or fact of any nature whatsoever (including, but not limited to, all state and federal statutory and discrimination claims) arising from or regarding your employment or the termination thereof, or the interpretation, performance, enforcement or breach of this Agreement shall be resolved, pursuant to the Federal Arbitration Act, 9 U.S.C. § 1-16, to the fullest extent permitted by law, by confidential, final and binding arbitration conducted by JAMS or its successor, under JAMS' then applicable rules and procedures for employment disputes before a single arbitrator (available upon request and also currently available at http://www.jamsadr.com/rulesemployment-arbitration/) and conducted in San Francisco, California. You acknowledge that by agreeing to this arbitration procedure, both you and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding. In addition, all claims, disputes, or causes of action under this section, whether by you or the Company, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences regarding class claims or proceedings are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration. This paragraph shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, the California Fair Employment and Housing Act, as amended, and the California Labor Code, as amended, to the extent such claims are not permitted by applicable law(s) to be submitted to mandatory arbitration and the applicable law(s) are not preempted by the Federal Arbitration Act or otherwise invalid (collectively, the "Excluded Claims"). In the $eventy ou intend to bring multiple\ claims, including one of the\ Excluded\ Claims listed above, the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ a\ court, while\ account of the\ Excluded\ Claims may be filed with\ account of the\ Excluded\ Claims may b$ any other claims will remain subject to mandatory arbitration. You will have the right to be represented by legal counsel at any arbitration proceeding. Questions of whether a claim is subject to arbitration under this agreement shall be decided by the arbitrator. Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the arbitrator. The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written statement signed by the arbitrator regarding the disposition of each claim and the relief, if any, awarded as to each claim, the reasons for the award, and the arbitrator's essential findings and conclusions on which the award is based. The arbitrator shall be authorized to award all relief that you or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS arbitration fees in excess of the administrative fees that you would be required to pay if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

This Agreement, including Exhibit 1, constitutes the complete, final, and exclusive embodiment of the entire agreement between you and the Company with respect to the terms and conditions of your employment. This Agreement is entered into without reliance upon any promise, warranty, or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties, representations or agreements. It may not be amended or modified except by a written instrument signed by you and a duly authorized representative of the Company (except with respect to terms reserved to the Company's discretion). This Agreement may be delivered and executed via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000

Uniform Electronic Transactions Act or other applicable law) or other transmission method and shall be deemed to have been duly and validly delivered and executed and be valid and effective for all purposes.

If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination will not affect any other provision of this Agreement. This Agreement shall be construed and interpreted in accordance with the laws of the State of California and shall be deemed drafted by both parties.

As required by law, this offer is subject to satisfactory proof of your right to work in the United States.

We are very excited about your acceptance to our offer and look forward to you joining us [*]. Pleasesign and date this Agreement and Exhibit 1,[*]. Please feel free to call me at [*] if you have any questions or need more information. If you have specific benefits questions, please reach out to [*] at [*].

We look forward to a productive and enjoyable work relationship. Sincerely,

/s/ Raul Rodriguez Raul Rodriguez President and CEO

Accepted:

/s/ Lisa Rojkjaer Lisa Rojkjaer CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [**], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

5th Amendment to the COLLABORATION AND LICENSE AGREEMENT

This 5th Amendment to the COLLABORATION AND LICENSE AGREEMENT (the "Amendment") is made and entered into as of October 23, 2024, by and between RIGEL PHARMACEUTICALS, INC., a Delaware company having an address at 611 Gateway Blvd., Suite 900, South San Francisco, CA 94080, USA ("Rigel") and KISSEI PHARMACEUTICAL CO. LTD., a Japanese company having an address at 19-48 Yoshino, Matsumoto, Nagano 399-8710, Japan ("Kissei"). Rigel and Kissei may be referred to herein individually as a "Party" or collectively as the "Parties".

WHEREAS, Rigel and Kissei entered into and executed the COLLABORATION AND LICENSE AGREEMENT on Fostamatinib dated as of October 29, 2018, as amended by the 1st Amendment dated November 9, 2022, the 2nd Amendment dated October 18, 2023, the 3nd Amendment dated August 30, 2024, and the 4th Amendment dated September 3, 2024 (the "License Agreement"); and

WHEREAS Rigel and Kissei have agreed to amend certain provisions of the License Agreement in relation to ** sublicensing in Taiwan.

NOW, THEREFORE, pursuant to Section 16.2 of the License Agreement, and in consideration of the covenants and obligations contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

- 1. Section 4.8(c) of the License Agreement is hereby deleted and replaced in its entirety with the following:
- "(c) Sublicensing Requirements. If by the ** of the Effective Date Kissei has accomplished none of the following in China or Korea, and by ** Kissei has accomplished none of the following in Taiwan: (i) ** for the Product, or (ii) ** for the Product, or (iii) ** the Product, then Rigel shall inform Kissei of its decision to regain the right to the Product in the applicable country or region and the Parties shall promptly, and in any event within ** after Rigel so informs Kissei, confirm in writing that such country or region shall no longer be included in the Kissei Territory under this Agreement and shall become part of the Rigel Territory. For clarity, if the Parties fail to so confirm in writing that any such country or region is no longer included in the Kissei Territory within such twenty-one (21)-day period, such country or region shall automatically be deemed part of the Rigel Territory and excluded from the Kissei Territory upon the expiration of such ** period. In addition, prior to Kissei's **, if Rigel or Kissei receives a sublicensing request under the licenses granted to Kissei under this Agreement to Develop and Commercialize the Product in such country, Kissei shall use good faith efforts to negotiate a sublicense agreement with the requesting party on commercially reasonable terms and in accordance with Section 2.2."
- Capitalized terms not otherwise defined herein shall have the same meaning as set forth in the License Agreement. All other provisions in the License Agreement that have not been changed by this Amendment shall remain in full force and effect.

3. This Amendment may be executed by the Parties individually or in any combination, in one or more counterparts, each of which shall be an original and all of which shall together constitute one and the same agreement. Signatures transmitted by facsimile transmission, by electronic mail in "portable document format" (".pdf") form, or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, shall have the same force and effect as physical execution and delivery of the paper document bearing the original signature.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed and entered into by their duly authorized representatives as of the date hereof.

RIGEL PHARMACEUTICALS, INC.

KISSEI PHARMACEUTICAL CO. LTD.

By: <u>/s/ Raul R. Rodriguez</u>
Name: Raul R. Rodriguez
Title: President and CEO

By: /s/ Mutsuo Kanzawa Name: Mutsuo Kanzawa Title: Chairman and CEO

Amendment No. 1 to Sublease Agreement

This Amendment No. 1 ("Amendment No. 1") is made and effective the date of last signature below ("First Amendment Effective Date") between Atara Biotherapeutics, Inc. ("Sublandlord") and Rigel Pharmaceuticals, Inc. ("Subtenant"). Defined terms used but not otherwise defined herein have the meaning ascribed to them in the Sublease (as defined below).

RECITALS

- A. WHEREAS, on October 28, 2022, Sublandlord and Subtenant entered into that certain Sublease Agreement (the "Sublease") by which Sublessor sublet the Subleased Premises to Subtenant.
- B. WHEREAS, Sublandlord and Subtenant, subject to the approval of the Prime Landlord, have agreed to extend the Sublease Term.

NOW, BE IT THEREFORE AGREED, the following provisions of the Sublease are hereby amended as of the First Amendment Effective Date as follows:

- 1. The Sublease Expiration Date is extended to May 31, 2025 (i.e. the scheduled expiration date of the term of the Primary Lease).
- 2. The first sentence of Section 17 is hereby deleted in its entirety and replaced as follows:

"Subtenant shall indemnify and hold harmless Sublandlord from any claims, liabilities and damages that Sublandlord may sustain as a result of, arising out of, or in connection with: (i) the use or occupancy of the Subleased Premises by Subtenant, its agents, contractors, employees, invitees, licensees, servants, subcontractors or subtenants, (ii) any gross negligence or willful misconduct of Subtenant or any of Subtenant's agents, contractors, employees, invitees, licensees, subcontractors or subtenants, (iii) any failure by Subtenant to fully and promptly perform any of Subtenant's obligations under this Sublease, and (iv) the restoration of the Subleased Premises to the condition existing as of the Sublease Commencement Date."

- 3. This Amendment No. 1 is expressly conditioned upon obtaining the written consent of Prime Landlord ("Prime Landlord Amendment Consent") in the form and substance reasonably approved by Sublandlord and Subtenant. If the Prime Landlord Amendment Consent is not obtained within thirty (30) days from the date of this Amendment No. 1, either party may terminate this Amendment No. 1 upon written notice to the other, whereupon this Amendment No. 1 shall have no effect, and the terms of the original Sublease shall remain in full force and effect.
- 4. Except as modified herein, all other terms and conditions of the Sublease remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 1 to be duly executed as of the date first above written.

Sublandlord:		Subtenant:	
Name/Title: Date:	/s/ Amar Murugan Amar Murugan Chief Legal Officer 10/4/2024	Name/Title: Date:	/s/ Dean Schorno Dean Schorno EVP, CFO 10/10/2024

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

Exhibit 10.35

LEASE AGREEMENT

THIS LEASE AGREEMENT (this "Lease") is made this 25th day of February, 2025 (the "Effective Date"), between 611 GATEWAY CENTER LP, a Delaware limited partnership ("Landlord"), and RIGEL PHARMACEUTICALS, INC., a Delaware corporation ("Tenant").

BASIC LEASE PROVISIONS

Building: 611 Gateway Boulevard, South San Francisco, California

Premises: That portion of the Building, commonly known as Suite 900, containing approximately 13,670 rentable square

feet, as determined by Landlord, as shown on Exhibit A.

Project: That certain project comprised of the real property owned by Landlord on which the Building is located and real

property owned by affiliates of Landlord, all as described on **Exhibit B**, which together are operated as a single mixed use project. The Project includes the Building, those certain buildings located at 601, 651, 681, 685, 701 and 751 Gateway Boulevard, South San Francisco, and any additional buildings, improvements and land that

Landlord may elect to include in the future.

Base Rent: Initially, \$4.15 per rentable square foot of the Premises per month. Base Rent shall be subject to adjustment as

set forth in the table below, subject to calculation of the Adjustment Date (in the event that the Commencement

Date does not occur on the first calendar day of the month) pursuant to <u>Section 4</u> hereof:

Lease Months	Base Rent per Rentable Square Foot per Month
Months 1 – 2	Base Rent abated
Months 3 – 12	\$4.15
Month 13 – End of Base Term	\$4.27

Rentable Area of Premises: 13,670 sq. ft.

Rentable Area of Building: 259,584 sq. ft.

Rentable Area of Project: 1,654,432 sq. ft.

Tenant's Share of Operating Expenses of Building: 5.27%

Building's Share of Operating Expenses of Project: 15.69%

Security Deposit Amount: \$56,730.50



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Rent Adjustment Percentage: 3%

Base Year: 2026

Base Term: Beginning on the Commencement Date and ending 26 months from the first day of the first full month

following the Commencement Date. For clarity, if the Commencement Date occurs on the first day of a month, the expiration of the Base Term shall be measured from that date. If the Commencement Date occurs on a day other than the first day of a month, the expiration of the Base Term shall be measured from the first day of the

following month.

Permitted Use: Office and related uses consistent with the character of the Project and otherwise in compliance with the

provisions of Section 7 hereof.

Address for Rent Payment:Landlord's Notice Address:Gateway Portfolio Holdings LLC26 North Euclid AvenueP.O. Box 102430Pasadena, CA 91101Pasadena, CA 91189-2430Attention: Corporate Secretary

Email: ***

Tenant's Notice Address:

611 Gateway Boulevard, Suite 900 South San Francisco, California 94080 Attention: General Counsel

Email: ***

The following Exhibits are attached hereto and incorporated herein by this reference:

[X] EXHIBIT A – PREMISES DESCRIPTION [X] EXHIBIT B – DESCRIPTION OF PROJECT
[] EXHIBIT C – INTENTIONALLY OMITTED [X] EXHIBIT D – COMMENCEMENT DATE

[X] EXHIBIT E – RULES AND REGULATIONS [X] EXHIBIT F – OPERATING EXPENSE EXCLUSIONS

- 1. Lease of Premises. Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project that are for the non-exclusive use of tenants of the Project are collectively referred to herein as the "Common Areas." The Common Areas shall include, without limitation, any common amenities now or hereafter located in, on or otherwise serving the Project, if any, as may exist from time to time, as determined by Landlord in Landlord's sole and absolute discretion (each, a "Project Amenity" and collectively, the "Project Amenities"). Landlord reserves the right to modify the Common Areas, provided that such modifications do not materially adversely affect Tenant's use of the Premises for the Permitted Use. From and after the Commencement Date through the expiration of the Term (as defined in Section 2), Tenant shall have access to the Building and the Premises 24 hours a day, 7 days a week, except in the case of emergencies, as the result of Legal Requirements, the performance by Landlord of any installation, maintenance or repairs, or any other temporary interruptions, and otherwise subject to the terms of this Lease.
- 2. **Delivery; Acceptance of Premises; Commencement Date**. The "Commencement Date" shall be the earlier to occur of (i) June 1, 2025, and (ii) if the Atara Lease (as defined below) terminates prior to May 31, 2025, the day immediately following the date that the Atara Lease terminates. The "Rent Commencement Date" shall be the date that is 2 months after the Commencement Date. For illustration purposes, if the Commencement Date occurs on June 5, 2025, then the Rent Commencement Date shall be August 5, 2025. Tenant hereby accepts the Premises on the Commencement Date on an "as-is" basis, and Landlord is hereby expressly relieved and released from any duty or obligation to make any improvements or alterations to the Premises or remove any furniture from the Premises prior to the Commencement Date. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date, the Rent Commencement Date and the expiration date of the Term when such are established in the form of the "Acknowledgment of Commencement Date" attached to this Lease as Exhibit D; provided, however, Tenant's failure to execute and deliver such acknowledgment shall not affect



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Landlord's rights hereunder. The "**Term**" of this Lease shall be the Base Term, as defined in the Basic Lease Provisions and the Extension Term which Tenant may exercise pursuant to <u>Section 39</u> of this Lease.

Landlord and Tenant acknowledge that (a) Tenant occupied the Premises prior to the Commencement Date pursuant to that certain Sublease Agreement between Tenant and Atara Biotherapeutics, Inc., a Delaware corporation ("Atara"), dated as of October 28, 2022 (as the same has been and may in the future be amended, the "Sublease"), and (b) Atara's existing lease with respect to the Premises (the "Atara Lease") is expiring and the Sublease is expiring concurrently therewith.

Except as otherwise expressly set forth in this Lease: (A) Tenant shall accept the Premises in their condition as of the Commencement Date; (B) Landlord shall have no obligation for any defects in the Premises; and (C) Tenant's continued possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken.

Landlord shall, at its sole cost and expense (which shall not constitute an Operating Expense), be responsible for any repairs that are required to be made to the Building Systems (as defined in Section 13) serving the Premises of which Tenant notifies Landlord in writing within 30 calendar days after the Commencement Date, unless Tenant or any Tenant Party was responsible for the cause of such repair, in which case Tenant shall pay the cost.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises, the Building or the Project, and/or the suitability of the Premises, the Building or the Project for the conduct of Tenant's business, and Tenant waives any implied warranty that the Premises, the Building or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations that are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant's representations, warranties, acknowledgments and agreements contained herein.

Following the Effective Date (which may be after the Commencement Date), Landlord shall perform, at Landlord's cost, the following work in the Common Areas on the 9th floor of the Building (the "Landlord's Work"), which Landlord shall endeavor to complete prior to the date that is 6 weeks following the Commencement Date: (i) repaint the 9th floor elevator lobby and common area, (ii) repaint the restrooms on the 9th floor, and (iii) install touchless faucets and soap dispensers in the restrooms on the 9th floor. During Landlord's completion of the Landlord's Work in the restrooms Tenant will be permitted and required to use the restrooms on a different floor. Tenant waives all claims against Landlord for rent abatement in connection with the Landlord's Work.

3. Rent

(a) Base Rent. Tenant shall deliver to Landlord, concurrent with Tenant's delivery of an executed copy of this Lease to Landlord, the Base Rent due for the calendar month in which the Rent Commencement Date occurs (or, if the Rent Commencement Date does not occur on the first day of a calendar month, Base Rent for the first full calendar month following the Rent Commencement Date). Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof after the Rent Commencement Date, in lawful currency of the United States of America, to the physical address designated by Landlord for the payment of Rent set forth above or by federally insured electronic fund transfer ("EFT") via wire, Society for Worldwide Interbank Financial Communications (SWIFT) or automated clearing house (ACH) pursuant to the instructions provided by Landlord to Tenant (the "EFT Payment Instructions"). All EFT payments made by Tenant pursuant to this Section 3(a) must include a reference to 611 Gateway Center LP, as well as the address of the Building (i.e., 611 Gateway Boulevard, South San Francisco, California). Payments of Base Rent for any fractional calendar month shall be prorated. Notwithstanding anything to the contrary contained herein, if the Rent Commencement Date occurs on a day other than the first day of a calendar month, then Tenant shall pay to Landlord the prorated Base Rent for such partial month on the Rent Commencement Date and the prepaid Base Rent delivered by Tenant pursuant to the first sentence of this Section 3(a) shall be applied to the first full calendar month following the Rent Commencement Date. The obligation of Tenant to pay Base Rent and other sums to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant



shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 3(b)) due hereunder except for any abatement as may be expressly provided in this Lease.

- (b) Additional Rent. In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent ("Additional Rent"): (i) Tenant's Share of "Excess Operating Expenses" (as defined in Section 5) as provided in Section 5, and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period. Tenant shall pay to Landlord any and all Additional Rent due hereunder by EFT in accordance with the EFT Payment Instructions. All EFT payments made by Tenant pursuant to this Section 3(b) must include a reference to 611 Gateway Center LP, as well as the address of the Building (i.e., 611 Gateway Boulevard, South San Francisco, California). Base Rent and all other amounts payable by Tenant to Landlord hereunder collectively are referred to herein as "Rent."
- 4. Adjustments. Base Rent shall be increased on each annual anniversary of the Commencement Date (provided, however, that if the Commencement Date occurs on a day other than the first day of a calendar month, then Base Rent shall be increased on each annual anniversary of the first day of the first full calendar month immediately following the Commencement Date) (each an "Adjustment Date") by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided herein. Base Rent adjustments for any fractional calendar month shall be prorated.

5. Operating Expense Payments.

- Landlord shall deliver to Tenant a written estimate of Operating Expenses for each calendar year during the Term (a) after the Base Year (the "Annual Estimate"), which may be revised by Landlord from time to time during such calendar year. Commencing on January 1, 2027, and continuing thereafter on the first day of each calendar month during the Term, Tenant shall pay Landlord an amount equal to 1/12th of Tenant's Share of Excess Operating Expenses. Payments for any fractional calendar month shall be prorated. The term "Excess Operating Expenses" means Operating Expenses for the applicable year in excess of Operating Expenses for the Base Year. In no event shall Operating Expenses attributable to the Base Year include (i) costs attributable to temporary market-wide labor-rate increases and/or utility rate increases due to extraordinary circumstances, including, but not limited to Force Majeure, conservation surcharges, boycotts, embargoes, or other shortages, (ii) non-recurring special assessments, charges, costs or fees or extraordinary charges or costs incurred in the Base Year only, or (iii) amortization of any capital items including, but not limited to, capital improvements, capital repairs and capital replacements (including such amortized costs where the actual improvement, repair or replacement was made in prior years). Separately metered or submetered Utilities furnished to the Premises shall not be subject to the Base Year and Tenant shall commence paying for Utilities as of the Commencement Date as provided in Section 11 below. Notwithstanding anything to the contrary contained in this Lease, Landlord shall have the right to pass through any new line item or category of costs or expenses arising during the Term which was not included in the Base Year (including subsidies) (each, a "New Expense Item"), but the first 12 months of such expense shall be deemed the Base Year amount for such New Expense Item.
- (b) The term "Operating Expenses" means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Building (including the Building's Share of all costs and expenses of any kind or description incurred or accrued by Landlord with respect to the Project) including, without limitation, (1) Taxes (as defined in Section 9), (2) the cost of upgrades to the Building or Project or enhanced services provided at the Building and/or Project which are intended to encourage social distancing, promote and protect health and physical well-being and/or intended to limit the spread of Infectious Conditions (as defined in Section 26), (3) the cost of the Project Amenities (including, without limitation, reimbursement by Landlord to affiliates of Landlord for market rent paid by such affiliates to Landlord for Project Amenities space, commercially reasonable reduced rent, commercially reasonable subsidies or other commercially reasonable concessions which Landlord may provide in connection with the Project Amenities), (4) transportation services (including Shuttle Service Costs (as defined in Section 40(r)), (5) the cost of repairs, improvements and replacements, provided that to the extent that such repairs, improvements and/or replacements are reasonably determined by Landlord to be Capital Items (as defined on Exhibit F), such costs shall be amortized over the useful life of such Capital Item, as reasonably determined



by Landlord taking into account all relevant factors including, without limitation, the 24/7 operation of the Building, with interest at 8.5% per annum, excluding only those costs and expenses listed on **Exhibit F**. Operating Expenses shall include the costs of Landlord's third party property manager or, if there is no third party property manager, administration rent in the amount of 3% of Base Rent.

In addition, notwithstanding anything to the contrary contained in this Lease, Operating Expenses incurred or accrued by Landlord with respect to any Capital Items that are reasonably expected by Landlord to reduce overall Operating Expenses (for example, without limitation, by reducing energy usage at the Project) (the "Energy Savings Costs") shall be amortized over a period of years equal to the least of (A) 10 years, (B) the useful life of such Capital Item, and (C) the quotient of (i) the Energy Savings Costs, divided by (ii) the annual amount of Operating Expenses reasonably expected by Landlord to be saved as a result of such Capital Item.

- Within 90 days after the end of the Base Year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement showing in reasonable detail the Operating Expenses incurred or accrued during the Base Year. Thereafter, within 90 days after the end of each subsequent calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "Annual Statement") showing in reasonable detail: (i) the total of Tenant's Share of actual Excess Operating Expenses for the previous calendar year, and (ii) the total of Tenant's payments in respect of Excess Operating Expenses for such calendar year. If Tenant's Share of actual Excess Operating Expenses for such year exceeds Tenant's payments of Excess Operating Expenses for such calendar year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Excess Operating Expenses for such calendar year exceed Tenant's Share of actual Excess Operating Expenses for such calendar year Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. Landlord's and Tenant's obligations to pay any overpayments or deficiencies due pursuant to this paragraph shall survive the expiration or earlier termination of this Lease. Following the date that is 18 months after Landlord's delivery of an Annual Statement to Tenant, Tenant shall not be responsible for the payment of items of Excess Operating Expenses not reflected in such Annual Statement, except for Taxes for which Tenant is responsible under this Lease and/or any costs for which Landlord is billed after the expiration of such 18 month period.
- The Annual Statement shall be final and binding upon Tenant unless Tenant, within 60 days after Landlord's delivery to Tenant of the Annual Statement, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 60 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Excess Operating Expenses, Landlord will provide Tenant with access to Landlord's books and records relating to the operation of the Project and such information as Landlord reasonably determines to be responsive to Tenant's questions (the "Expense Information"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Excess Operating Expenses, then Tenant shall have the right to have a regionally or nationally recognized independent public accounting firm selected by Tenant and approved by Landlord (which approval shall not be unreasonably withheld or delayed), working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense), audit and/or review the Expense Information for the calendar year in question (the "Independent Review"). The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Excess Operating Expenses for the calendar year in question exceeded Tenant's Share of Excess Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Excess Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Excess Operating Expenses for such calendar year were less than Tenant's Share of Excess Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Excess Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all actual, out-of-pocket costs incurred by Tenant for the Independent Review. Tenant shall not disclose the results of any Independent Review to any third parties; provided, however, that Tenant may disclose such information to Tenant's employees, attorneys and accountants in connection with Tenant's business at the Premises or if required in connection with any dispute resolution proceeding between Landlord and Tenant.



- (e) Excess Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated. If the Building is not at least 95% occupied on average during the Base Year or any following calendar year during the Term, Landlord may elect to make appropriate adjustments to Operating Expenses for the Base Year or any following calendar year, as applicable, to determine the amount of Operating Expenses that would have been incurred had the Building been 95% occupied on average during such period and the amount so determined shall be deemed to have been the amount of Operating Expenses for the Base Year or any following calendar year, as applicable.
- (f) "Tenant's Share" shall be the percentage set forth on the first page of this Lease as "Tenant's Share of Operating Expenses of Building," and "Building's Share" shall be the percentage set forth on the first page of this Lease as "Building's Share of Operating Expenses of Project," each as may be reasonably adjusted by Landlord for changes in the physical size of the Premises, Building and/or Project occurring thereafter. Landlord may equitably increase Tenant's Share for any Operating Expenses that relate to any item of expense or cost (1) equitably and reasonably allocated only to the Premises or the Building, (2) equitably and reasonably allocated to only a portion of the Building or Project that includes the Premises, or (3) a greater proportion of which is equitably and reasonably allocated to the Premises, or a portion of the Building or Project that includes the Premises, as reasonably determined by Landlord. Landlord may equitably increase the Building's Share for any Operating Expenses that relate to any items of expense or cost (A) equitably and reasonably allocated to only the Building or a portion of the Project that includes the Building, or (B) a greater proportion of which is equitably and reasonably allocated to the Building or a portion of the Project that includes the Building, as reasonably determined by Landlord. Base Rent, Tenant's Share of Operating Expenses and all other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "Rent."
- Security Deposit. Concurrently with Tenant's delivery of an executed copy of this Lease to Landlord, Tenant shall deliver to Landlord a security deposit (the "Security Deposit") for the performance of all of Tenant's obligations hereunder in the Security Deposit Amount set forth in the Basic Lease Provisions, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the "Letter of Credit"): (i) in form and substance satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft in the state of Landlord's choice, or by facsimile or overnight guaranty courier. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Upon each occurrence of a Default (as defined in Section 20), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, future rent damages under California Civil Code Section 1951.2, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Landlord's right to use the Security Deposit under this Section 6 includes the right to use the Security Deposit to pay future rent damages following the termination of this Lease pursuant to Section 21(c) below. Upon any draw down on the Letter of Credit pursuant to this paragraph, Tenant shall deliver to Landlord, within 5 days after written demand from Landlord, a new Letter of Credit complying with all of the requirements hereof (a "Replacement Letter of Credit") for the full Security Deposit Amount set forth in the Basic Lease Provisions. Tenant hereby waives the provisions of any law, now or hereafter in force, including, without limitation, California Civil Code Section 1950.7, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon. Upon bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods prior to the filing of such proceedings. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 90 days after the expiration or earlier termination of this Lease.

Tenant shall deliver a Replacement Letter of Credit to Landlord at least 30 days before the stated expiration date of any then current Letter of Credit for the full Security Deposit Amount set forth in the Basic Lease Provisions.



Copyright © 2005-2022 Alexandria Real Estate Equities, Inc. All rights reserved. Confidential and Proprietary – Do Not Copy or Distribute. ALEXANDRIA and the Lighthouse Logo are registered trademarks of Alexandria Real Estate Equities, Inc. If Tenant does not provide Landlord with a Replacement Letter of Credit as required pursuant to the immediately preceding sentence, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit until Tenant delivers a Replacement Letter of Credit to Landlord, at which time Landlord shall refund to Tenant the amount of the cash Security Deposit to Tenant less any amount applied under this Lease.

If at any time during the Term the issuer of the Letter of Credit is declared insolvent or is placed into receivership by the FDIC or any other Governmental Authority, or if the issuer is downgraded by S&P/Moody's (if the issuer is credit-rated) or the issuer's 5-year Credit Default Swap spread (as quoted, and if available on Bloomberg Professional Services) goes above 250 bps at any point during the Term, then following the delivery of written notice from Landlord to Tenant, (x) Landlord shall have the right to immediately draw the full amount of the existing Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit, and (y) Tenant shall have 30 days to deliver a Replacement Letter of Credit to Landlord. If Landlord is unable to draw on the existing Letter of Credit as provide for in clause (x) above then, within 3 business days after Landlord's delivery of written request to Tenant, Tenant shall deliver to Landlord cash in the Security Deposit Amount set forth in the Basic Lease Provisions as an interim Security Deposit until such time as Tenant delivers a Replacement Letter of Credit to Landlord. Upon Tenant's delivery of a Replacement Letter of Credit to Landlord, Landlord shall refund to Tenant the amount of the cash Security Deposit to Tenant less any amount applied under this Lease.

Notwithstanding anything to the contrary contained in this Lease, if Tenant notifies Landlord at any time during the Term that Tenant intends to assign the Lease pursuant to Section 22 and Landlord reasonably determines that a material change in Tenant's financial condition has occurred since the Effective Date, then Landlord shall have the right to increase the Security Deposit Amount, to an amount reasonably determined by Landlord (the "Increased Security Deposit Amount"), as a condition to and/or in connection with such proposed assignment, in which case Tenant shall be required to deliver to Landlord a Replacement Letter of Credit in the amount of the Increased Security Deposit Amount or an amendment to the existing Letter of Credit increasing the amount of the existing Letter of Credit to the Increased Security Deposit Amount.

If Landlord transfers its interest in the Project or this Lease, Landlord shall transfer any Security Deposit then held by Landlord to such transferee of Landlord's interest. Upon such transfer, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee.

7. Use

(a) Generally. The Premises shall be used solely for the Permitted Use set forth in the Basic Lease Provisions, and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "ADA") (collectively, "Legal Requirements" and each, a "Legal Requirement"). Tenant shall, upon 5 business days' written notice from Landlord, discontinue any use of the Premises that is declared by any Governmental Authority (as defined in Section 9) having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant's or Landlord's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Tenant shall reimburse Landlord promptly upon demand for any additional premium charged for any such insurance policy by reason of Tenant's failure to comply with the provisions of this Section 7. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar Legal Requirement. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project. In no event shall Tenant conduct any auction, liquidation, or going out of business sale on the Premises, or use or allow the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment which would overload the floor in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord. Tenant shall not, without the prior written consent of Landlord, use the Premises in any



manner that will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Building as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use.

- (b) Compliance. Landlord shall make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements and the cost of such alterations or modifications shall (x) constitute an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located), or (y) be at Tenant's expense (to the extent such Legal Requirement is triggered by reason of Tenant's, as compared to other tenants of the Project, particular use of the Premises or Alterations (as defined in Section 12 below)). Tenant, at its sole expense, shall make any alterations or modifications to the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA) related to Tenant's particular use or occupancy of the Premises and any Alterations. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all Claims (as defined in Section 16) arising out of or in connection with Legal Requirements related to Tenant's particular use or occupancy of the Premises or Alterations, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all Claims arising out of or in connection with any failure of the Premises to comply with any Legal Requirement related to Tenant's use or occupancy of the Premises or Alterations.
- (c) Sustainability. Tenant acknowledges that Landlord may, but shall not be obligated to, seek to obtain Leadership in Energy and Environmental Design (LEED), WELL Building Standard, or other similar "green" certification with respect to the Project and/or the Premises, and Tenant agrees to reasonably cooperate with Landlord, and to provide such information and/or documentation as Landlord may reasonably request, in connection therewith.
- 8. Holding Over. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (a) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to (i) 150% of Base Rent in effect during the last 30 days of the Term, plus (ii) Tenant's Share of Operating Expenses, plus (iii) all other amounts payable by Tenant under this Lease, and (b) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over including, without limitation, consequential damages. No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section 8 shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.
- Taxes. Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "Taxes"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "Governmental Authority") during the Term, including, without limitation, all Taxes: (a) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (b) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (c) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (d) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (e) imposed as a license or other fee, charge, tax, or assessment on Landlord's business or occupation of leasing space in the Project. Taxes shall not include net income taxes of Landlord or the owner of any interest in the Project or franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein (except to the extent such taxes are in substitution for any Taxes payable hereunder). Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. If any such Taxes are levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and regardless of whether such improvements or alterations are affixed to the real property so as to become a



part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's reasonable determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord within 10 business days of demand.

10. **Parking.** Subject to all applicable Legal Requirements, Force Majeure, a Taking (as defined in Section 19 below) and the exercise by Landlord of its rights under this paragraph, Tenant shall have the right at no additional cost to Tenant during the Term, in common with other tenants of the Project pro rata in accordance with the rentable area of the Premises and the rentable areas of the Project occupied by such other tenants, to park in those areas designated for non-reserved parking, on a first-come, first-served basis, subject in each case to Landlord's rules and regulations. Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project.

11. Utilities; Services.

(a) Generally. Landlord shall provide, or cause to be provided to the Premises, subject to the terms of this Section 11, (i) water, (ii) electricity (including lights and plugs), (iii) heat, ventilation and air conditioning (collectively, "HVAC"), (iv) power, and (v) sewer (collectively, "Utilities"). The hours of operation of the Project are 6:00 a.m. to 6:00 p.m., Monday through Friday, legal holidays excepted. During such periods, Landlord shall provide, subject to the terms of this Section 11, HVAC to the Premises. Upon reasonable advance notice from Tenant to Landlord, Landlord shall make available after-hours HVAC. Commencing on the Commencement Date, Tenant shall be required to pay to Landlord a fee at the rate of \$266.97 per operating hour for providing such after-hours HVAC, which fee may be amended by Landlord from time to time upon reasonable advance written notice to Tenant. The minimum use of after-hours HVAC shall be reasonably determined by Landlord and may thereafter be amended by Landlord as the same may change from time to time upon reasonable advance notice to Tenant. Except as otherwise set forth in this paragraph with respect to after-hours HVAC, Utilities shall be available to the Premises 24 hours per day, 7 days per week, except in the case of emergencies, as the result of Legal Requirements, the failure of any Utility provider to provide such Utilities, the performance by Landlord or any Utility provider of any installation, maintenance or repairs, or any other temporary interruptions.

Landlord shall pay, as Operating Expenses or subject to Tenant's direct payment obligation as provided for below, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any Taxes, penalties, surcharges or similar charges thereon. Tenant shall pay, as part of Excess Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. Tenant shall pay directly to the Utility provider, prior to delinquency, any telephone and internet service which may be furnished to Tenant or the Premises during the Term. No interruption or failure of Utilities from any cause whatsoever shall result in eviction or constructive eviction of Tenant, termination of this Lease or, except as otherwise provided in the immediately following paragraph, the abatement of Rent. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

Notwithstanding anything to the contrary set forth herein, if (i) a stoppage of a Utility Service (as defined below) to the Premises shall occur and such stoppage is due solely to the gross negligence or willful misconduct of Landlord and not due in any part to any act or omission on the part of Tenant or any Tenant Party or any matter beyond Landlord's reasonable control (any such stoppage of a Utility Service being hereinafter referred to as a "Service Interruption"), and (ii) such Service Interruption continues for more than 5 consecutive business days after Landlord shall have received written notice thereof from Tenant, and (iii) as a result of such Service Interruption, the conduct of Tenant's normal operations in the Premises are materially and adversely affected, then there shall be an abatement of one day's Base Rent for each day during which such Service Interruption continues after such 5 business day period; provided, however, that if any part of the Premises is reasonably useable for Tenant's normal business operations or if Tenant conducts all or any part of its operations in any portion of the Premises notwithstanding such Service Interruption, then the amount of each daily abatement of Base Rent shall only be proportionate to the nature and extent of the interruption of Tenant's normal operations or ability to use the Premises. The rights granted to Tenant under this paragraph shall be Tenant's sole and exclusive remedy resulting from a failure of Landlord to provide services,



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and Landlord shall not otherwise be liable for any loss or damage suffered or sustained by Tenant resulting from any failure or cessation of services. For purposes hereof, the term "Utility Service" shall mean the following services: HVAC service, water, sewer and electricity, but in each case only to the extent that Landlord has an obligation to provide same to Tenant under this Lease. The provisions of this paragraph shall only apply as long as the original Tenant is the tenant occupying the Premises under this Lease and shall not apply to any assignee or sublessee.

- (b) **Janitorial**. Landlord shall, as part of Operating Expenses, provide or cause to be provided, refuse and trash collection and janitorial services to the Premises and the Common Areas of the Project.
- (c) Energy Usage Data. With respect to separately metered Utilities provided to the Premises that are paid for by Tenant directly to the Utility provider, if any, Tenant agrees to provide Landlord with access to Tenant's water and energy usage data on a monthly basis, by providing Tenant's applicable utility login credentials to Landlord's designated online portal. The costs and expenses incurred by Landlord in connection with receiving and analyzing such water and energy usage data (including, without limitation, as may be required pursuant to applicable Legal Requirements) shall be included as part of Operating Expenses.

12. Alterations.

- Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional (a) locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems ("Alterations") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the Building structure or Building Systems and shall not be otherwise unreasonably withheld, conditioned or delayed. Tenant may, subject to this terms of this Section 12, construct nonstructural, cosmetic Alterations in the Premises without Landlord's prior approval if the aggregate cost of all such work in any 12 month period does not exceed \$50,000 (a "Notice-Only Alteration"), provided Tenant notifies Landlord in writing, which notice shall be delivered to Landlord not less than 15 business days in advance of any proposed construction, of such intended Notice-Only Alteration along with a description of the scope of such Notice-Only Alteration (and, if applicable, the plans and specifications for such Notice-Only Alteration) and a list of the identities and mailing addresses of all persons performing work or supplying materials. Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of Alterations, including Notice-Only Alterations, as Landlord may deem appropriate in Landlord's reasonable discretion. Any request for approval of an Alteration shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with applicable insurance requirements and applicable Legal Requirements, and shall, subject to Section 7, implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, on demand an amount equal to 5% of all charges incurred by Tenant or its contractors or agents in connection with any Alteration to cover Landlord's overhead and expenses for plan review, coordination, scheduling and supervision. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.
- (b) Upon Landlord's written request, Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens. With respect to all Alterations, Tenant shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all



contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

- All Alterations shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term and shall remain upon and be surrendered with the Premises as a part thereof upon the expiration or earlier termination of this Lease. Notwithstanding the foregoing, Landlord shall, if requested by Tenant at the time Landlord's approval of an Alteration is requested, or at the time it receives notice of a Notice-Only Alteration, notify Tenant that Landlord requires that Tenant remove such Alteration upon the expiration or earlier termination of the Term, in which event Tenant shall remove such Alteration in accordance with the immediately succeeding sentence. Upon the expiration or earlier termination of the Term, Tenant shall remove (i) any Alteration for which Landlord has given Tenant notice of removal in accordance with the immediately preceding sentence, and (ii) all personal property or equipment of Tenant that may be removed without material damage to the Premises ("Tenant's Property"), and Tenant shall restore and repair any damage caused by or occasioned as a result of such removal, including, without limitation, capping off all such connections behind the walls of the Premises and repairing any holes. Any restoration period beyond the expiration or earlier termination of the Term shall constitute a holdover by Tenant subject to Section 8. If Landlord is requested by Tenant or any lender, lessor or other person or entity claiming an interest in any of Tenant's Property to waive any lien Landlord may have against any of Tenant's Property, and Landlord consents to such waiver, then Landlord shall be entitled to reimbursement from Tenant for its actual, reasonable out-of-pocket costs incurred in connection with the preparation and negotiation of each such waiver of lien. Tenant shall not be required to remove or restore the improvements and alterations in the Premises as of the Effective Date (the "Existing Improvements") at the expiration or earlier termination of the Lease, nor shall Tenant have the right to remove any of the Existing Improvements at any time except as otherwise contemplated pursuant to this Section 12.
- Landlord's Repairs. Landlord, as part of Operating Expenses, shall maintain (a) all of the structural, exterior, parking and other Common Areas of the Project, and (b) all Building systems serving both the Premises and other portions of the Project including, without limitation, HVAC, plumbing, fire sprinklers ("Building Systems"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's assignees, sublessees, licensees, agents, servants, employees, invitees and contractors (or any of Tenant's assignees, sublessees and/or licensees respective agents, servants, employees, invitees and contractors) (collectively, "Tenant Parties") excluded. Losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord, to the extent not covered by insurance that Landlord is required to maintain pursuant to Section 17, at Tenant's sole cost and expense. Landlord reserves the right to stop Building Systems services when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until such repairs, alterations or improvements shall have been completed. Landlord shall have no responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in case of emergency, give Tenant at least 2 business days' advance notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall use commercially reasonable efforts to promptly give Landlord written notice of any repair required by Landlord pursuant to this paragraph, after which Landlord shall make a commercially reasonable effort to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18.
- 14. **Tenant's Repairs**. Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition all non-structural portions of the Premises, including, without limitation, entries, doors, ceilings, non-structural components of windows, interior walls, the interior side of demising walls and any mechanical systems or equipment exclusively serving the Premises. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 30 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 30 days after demand therefor; provided, however, that if such failure by Tenant creates or could reasonably be expected to create an emergency (i.e., a condition creating a threat of imminent danger to person or property), Landlord may immediately commence cure of such failure



and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

- 15. **Mechanic's Liens**. Tenant shall fully discharge of record from title or from the public record, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant within 10 days after Tenant receives notice of the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to fully discharge of record any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the costs incurred by Landlord in connection therewith shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or creditor of Tenant will upon its face or by exhibit thereto indicate that such Financing Statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in the suite number designated to the Premises in the Basic Lease Provisions.
- 16. Indemnification. Tenant hereby indemnifies and agrees to defend, save and hold Landlord, its officers, directors, employees, managers, members, partners, agents, sub-agents, affiliates and lease signators (collectively, "Landlord Indemnified Parties") harmless from and against any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "Claims") for injury or death to persons or damage to property occurring within or about the Premises or the Project arising directly or indirectly out of the use or occupancy of the Premises or the Project by Tenant or any Tenant Parties (including, without limitation, any act, omission or neglect by Tenant or any Tenant Parties in or about the Premises or at the Project) or a breach or default by Tenant in the performance of any of its obligations hereunder, except to the extent caused by the willful misconduct or gross negligence of Landlord Indemnified Parties. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises). Tenant further waives any and all Claims for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord Indemnified Parties shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party or Tenant Parties.

The provisions of this <u>Section 16</u> shall survive the expiration or earlier termination of this Lease.

17. **Insurance**. Landlord shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project. Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than \$2,000,000 for bodily injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary. All such insurance shall be included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord based upon the insurer's cost calculations).

Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with employers liability limits of \$1,000,000 bodily injury by accident – each accident, \$1,000,000 bodily injury by disease – policy limit, and \$1,000,000 bodily injury by disease – each employee; and commercial general liability insurance, with a minimum limit of not less than \$2,000,000 per occurrence for bodily injury and property damage with respect to the Premises. The commercial general liability insurance maintained by Tenant shall include Alexandria Real Estate Equities, Inc., Gateway Center GP LLC, Gateway Portfolio Member LLC, Gateway Center TRS LLC, ARE-San Francisco No. 83, LLC,



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BioProperties Management, Inc., Boston Properties Limited Partnership, BXP Gateway Member LLC, Boston Properties LLC, BXP California GP LLC, Boston Properties, Inc., BP Management, L.P., Gateway Portfolio Holdings LLC, and Landlord, its officers, directors, employees, managers, members, partners, agents, sub-agents, constituent entities and lease signators (collectively, "Landlord Insured Parties"), as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; not contain a hostile fire exclusion; contain a contractual liability endorsement; and provide primary coverage to Landlord Insured Parties (any policy issued to Landlord Insured Parties providing duplicate or similar coverage shall be deemed excess over Tenant's policies, regardless of limits). Tenant shall (i) provide Landlord with 30 days advance written notice of cancellation of such commercial general liability policy, and (ii) request Tenant's insurer to endeavor to provide 30 days advance written notice to Landlord of cancellation of such commercial general liability policy (or 10 days in the event of a cancellation due to non-payment of premium). Certificates of insurance showing the limits of coverage required hereunder and showing the Landlord Insured Parties and Additional Insured Parties (as defined below) as an additional insureds, shall be delivered to Landlord by Tenant (A) concurrent with Tenant's delivery to Landlord of a copy of this Lease executed by Tenant, and (B) prior to each renewal of said insurance. Tenant's policy may be a "blanket policy" with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 days prior to the expiration of such policies, furnish Landlord with renewal certificates.

Upon written request from Landlord, Tenant shall, in addition to the Landlord Insured Parties, include the following parties as additional insureds under Tenant's commercial general liability insurance (collectively, "Additional Insured Parties"): (i) any Holder of a Mortgage encumbering the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, agents, invitees and contractors ("Related Parties"), in connection with any loss or damage thereby insured against. Notwithstanding anything to the contrary contained in this Lease, neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

Landlord may require insurance policy limits to be raised to conform with requirements of any Holder of a Mortgage encumbering the Project or any portion thereof and/or to bring coverage limits to levels then being generally required of new tenants within the Project; provided, however, that the increased amount of coverage is consistent with coverage amounts then being required by institutional owners of similar projects with tenants occupying similar size premises in the geographical area in which the Project is located.

18. **Restoration**. If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other casualty, Landlord shall notify Tenant within 60 days after discovery of such damage as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable (the "**Restoration Period**"). If the Restoration Period is estimated to exceed 12 months (the "**Maximum Restoration Period**"), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction; provided, however, that notwithstanding Landlord's election to restore, Tenant may elect to terminate this Lease by written notice from Tenant to Landlord delivered within 10 business days of receipt of a notice from Landlord estimating a Restoration Period for the Premises longer than the Maximum Restoration Period. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject



to delays arising from the collection of insurance proceeds or from Force Majeure events; <u>provided</u>, <u>however</u>, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Landlord may, in its sole and absolute discretion, elect not to proceed with such repair and restoration, or Tenant may by written notice from Tenant to Landlord delivered within 5 business days of the expiration of the Maximum Restoration Period or, if longer, the Restoration Period, elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is 75 days after the date of discovery of such damage or destruction, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant

Promptly following the date that Landlord makes the Premises available to Tenant for Tenant's repairs and/or restoration, Tenant shall, at Tenant's expense, promptly perform, subject to delays arising from the collection of insurance proceeds or from Force Majeure events, all repairs or restoration (which restoration shall be performed as an Alteration in accordance with Section 12) not required to be done by Landlord and shall promptly re-enter the Premises and commence doing business in accordance with this Lease. Notwithstanding the foregoing, either Landlord or Tenant may terminate this Lease upon written notice to the other if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 2 months to repair such damage; provided, however, that such notice is delivered within 10 business days after the date that Landlord provides Tenant with written notice of the estimated Restoration Period. Notwithstanding anything to the contrary contained herein, Landlord shall also have the right to terminate this Lease if insurance proceeds are not available for such restoration. Base Rent shall be abated from the date of discovery of the damage or destruction until the Premises are repaired and restored, in the proportion that the area of the Premises, if any, that is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space in the Project during the period of repair that is suitable for the temporary conduct of Tenant's business. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18, Tenant waives any right to terminate this Lease by reason of damage or casualty loss.

The provisions of this Lease, including this <u>Section 18</u>, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation that is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this <u>Section 18</u> sets forth their entire understanding and agreement with respect to such matters.

- 19. **Condemnation**. If the whole or any material part of the Premises or the Project is taken for any public or quasipublic use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a "Taking" or "Taken"), and the Taking would either prevent or materially interfere with Tenant's use of the Premises or materially interfere with or impair Landlord's ownership or operation of the Project, then upon written notice by Landlord or Tenant to the other this Lease shall terminate and Rent shall be apportioned as of such date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant's Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be adjusted accordingly under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.
 - 20. **Events of Default**. Each of the following events shall be a default ("**Default**") by Tenant under this Lease:
- (a) **Payment Defaults**. Tenant shall fail to pay any installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent



within 3 days of any such notice not more than once in any 12 month period and Tenant agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law.

- (b) **Insurance**. Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance before the expiration of the current coverage.
- (c) **Abandonment**. Tenant shall abandon the Premises. Tenant shall not be deemed to have abandoned the Premises if Tenant provides Landlord with reasonable advance notice prior to vacating and, at the time of vacating the Premises, (i) Tenant has made reasonable arrangements with Landlord for the security of the Premises for the balance of the Term, and (ii) Tenant continues during the balance of the Term to satisfy and perform all of Tenant's obligations under this Lease as they come due.
- (d) **Improper Transfer**. Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.
- (e) Liens. Tenant shall fail to fully discharge of record or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 10 business days after any such lien is filed against the Premises.
- Insolvency Events. Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "Proceeding for Relief"); (C) become the subject of any Proceeding for Relief that is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).
- (g) **Estoppel Certificate or Subordination Agreement**. Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 5 business days after a second notice is delivered to Tenant requesting such document.
- (h) **Financial Information**. Tenant fails to provide any financial information required to be delivered by Tenant to Landlord pursuant to Section 40(c) following written request from Landlord, within 5 business days after a second notice is delivered to Tenant requesting such financial information.
 - (i) **Security Deposit**. Tenant fails to comply with the requirements of <u>Section 6</u>.
- (j) Other Defaults. Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 30 days after written notice thereof from Landlord to Tenant. Any notice given under Section 20(j) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice. Notwithstanding the foregoing, if the nature of Tenant's default pursuant to Section 20(j) is such that it cannot be cured by the payment of funds, does not affect the safety, security or integrity of the Building or Building Systems or affect other occupants of the Project and reasonably requires more than 30 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 30 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 90 days from the date of Landlord's notice.



21. Landlord's Remedies.

- (a) **Payment By Landlord; Interest**. Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law (the "**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.
- Late Payment Rent. Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges that may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 business days after the date such payment is due, Tenant shall pay to Landlord an additional sum equal to 6% of the overdue Rent as a late charge. Notwithstanding the foregoing, before assessing a late charge the first time in any calendar year, Landlord shall provide Tenant written notice of the delinquency and will waive the right if Tenant pays such delinquency within 5 business days thereafter. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.
- (c) Remedies. Upon the occurrence of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.
 - (i) Terminate this Lease, or at Landlord's option, Tenant's right to possession only, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy that it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim or damages therefor;
 - (ii) Upon any termination of this Lease, whether pursuant to the foregoing <u>Section 21(c)(i)</u> or otherwise, Landlord may recover from Tenant the following:
 - (A) The worth at the time of award of any unpaid rent that has been earned at the time of such termination; plus
 - (B) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus
 - (C) The worth at the time of award of the amount by which the unpaid rent for the balance of the Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus
 - (D) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or that in the ordinary course of things would be likely to result therefrom, specifically including, but not limited to, brokerage commissions and advertising expenses incurred, expenses of remodeling the Premises or any portion thereof for a new tenant, whether for the same or a different use, and any special concessions made to obtain a new tenant; and
 - (E) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law.



The term "rent" as used in this Section 21 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Sections 21(c)(ii)(A) and (B), above, the "worth at the time of award" shall be computed by allowing interest at the Default Rate. As used in Section 21(c)(ii)(C) above, the "worth at the time of award" shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus 1%.

- (iii) Landlord may continue this Lease in effect after Tenant's Default and recover rent as it becomes due (Landlord and Tenant hereby agreeing that Tenant has the right to sublet or assign hereunder, subject only to the terms of Section 22). Accordingly, if Landlord does not elect to terminate this Lease following a Default by Tenant, Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies hereunder, including the right to recover all Rent as it becomes due.
- (iv) Whether or not Landlord elects to terminate this Lease following a Default by Tenant, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. Upon Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.
- (v) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in <u>Section 30(c)</u> hereof, at Tenant's expense.
 - (vi) Landlord shall have the right to suspend performance of the Landlord's Work.
- Effect of Exercise. Exercise by Landlord of any remedies hereunder or otherwise available shall not be deemed to be an acceptance of surrender of the Premises and/or a termination of this Lease by Landlord, it being understood that such surrender and/or termination can be effected only by the express written agreement of Landlord and Tenant. Any law, usage, or custom to the contrary notwithstanding, Landlord shall have the right at all times to enforce the provisions of this Lease in strict accordance with the terms hereof; and the failure of Landlord at any time to enforce its rights under this Lease strictly in accordance with same shall not be construed as having created a custom in any way or manner contrary to the specific terms, provisions, and covenants of this Lease or as having modified the same and shall not be deemed a waiver of Landlord's right to enforce one or more of its rights in connection with any subsequent default. A receipt by Landlord of Rent or other payment with knowledge of the breach of any covenant hereof shall not be deemed a waiver of such breach, and no waiver by Landlord of any provision of this Lease shall be deemed to have been made unless expressed in writing and signed by Landlord. To the greatest extent permitted by law, Tenant waives the service of notice of Landlord's intention to re-enter, re-take or otherwise obtain possession of the Premises as provided in any statute, or to institute legal proceedings to that end, and also waives all right of redemption in case Tenant shall be dispossessed by a judgment or by warrant of any court or judge. Any reletting of the Premises or any portion thereof shall be on such terms and conditions as Landlord in its sole discretion may determine. Landlord shall not be liable for, nor shall Tenant's obligations hereunder be diminished because of, Landlord's failure to relet the Premises or collect rent due in respect of such reletting or otherwise to mitigate any damages arising by reason of Tenant's Default.

22. Assignment and Subletting.

(a) General Prohibition. Without Landlord's prior written consent subject to and on the conditions described in this Section 22, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease, including, without limitation, to a corporation or other entity which is a successor-in-interest to Tenant by the purchase of all or substantially all of the assets or the ownership interests of Tenant, or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof that are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 49% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred



(but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities that were owners thereof as of the Effective Date to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability company as of the Effective Date, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22. Notwithstanding the foregoing, any public offering of shares or other ownership interest in Tenant shall not be deemed an assignment.

Permitted Transfers. If Tenant desires, following the Commencement Date, to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises, then at least 15 business days, but not more than 90 days, before the date Tenant desires the assignment or sublease to be effective (the "Assignment Date"), Tenant shall give Landlord a notice (the "Assignment Notice") containing such information about the proposed assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent (provided that Landlord shall further have the right to review and approve or disapprove the proposed form of sublease prior to the effective date of any such subletting), (ii) refuse such consent, in its reasonable discretion; or (iii) terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an "Assignment Termination"). Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (1) the proposed assignee or subtenant is a governmental agency; (2) in Landlord's reasonable judgment, the use of the Premises by the proposed assignee or subtenant would entail any alterations that would lessen the value of the leasehold improvements in the Premises, or would require increased services by Landlord: (3) intentionally omitted: (4) in Landlord's reasonable judgment, the proposed assignee or subtenant lacks the creditworthiness to support the financial obligations it will incur under the proposed assignment or sublease; (5) in Landlord's reasonable judgment, the character, reputation, or business of the proposed assignee or subtenant is inconsistent with the desired tenant-mix or the quality of other tenancies in the Project or is inconsistent with the type and quality of the nature of the Building; (6) Landlord or an affiliate of Landlord has received from any prior landlord to the proposed assignee or subtenant a negative report concerning such prior landlord's experience with the proposed assignee or subtenant; (7) Landlord or an affiliate of Landlord has experienced previous defaults by or is in litigation with the proposed assignee or subtenant; (8) the use of the Premises by the proposed assignee or subtenant will violate any applicable Legal Requirement; (9) the proposed assignee or subtenant, or any entity that, directly or indirectly, controls, is controlled by, or is under common control with the proposed assignee or subtenant, is then an occupant of the Project and Landlord has space available in the Project sufficient to meet the needs of the proposed assignee or subtenant; (10) the proposed assignee or subtenant is an entity with whom Landlord is then-currently actively negotiating to lease space in the Project; or (11) the assignment or sublease is prohibited by the Holder of a Mortgage encumbering all or a portion of the Project. If Landlord delivers notice of its election to exercise an Assignment Termination, Tenant shall have the right to withdraw such Assignment Notice by written notice to Landlord of such election within 5 business days after Landlord's notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord's consent to the proposed assignment, sublease or other transfer. Tenant shall pay to Landlord a fee equal to Three Thousand Five Hundred Dollars (\$3,500) in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents.

Notwithstanding the foregoing, Landlord's consent to an assignment of this Lease or a subletting of any portion of the Premises to any entity controlling, controlled by or under common control with Tenant (a "Control Permitted Assignment") shall not be required, provided that Tenant and any assignee or sublessee shall execute a reasonable form of acknowledgment of assignment or sublease, as applicable, acceptable to Landlord on or before the effective date of the Control Permitted Assignment. In addition, Tenant shall have the right to assign this Lease, upon 30 days prior written notice to Landlord but without obtaining Landlord's prior written consent, to a corporation or other entity which is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, provided that (i) such merger, consolidation, or corporate reorganization, as the case may be, is for a good business purpose and not principally for the purpose of transferring this Lease, and (ii) the net worth (as determined in



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accordance with generally accepted accounting principles ("GAAP")) of the assignee is not less than the greater of the net worth (as determined in accordance with GAAP) of Tenant as of (A) the Commencement Date, or (B) as of the date of Tenant's most current quarterly or annual financial statements, and (iii) if the then-current Tenant is not the surviving entity, then on or before the effective date of the Corporate Permitted Assignment, Tenant and the assignee shall execute a reasonable form of acknowledgment of assignment acceptable to Landlord pursuant to which, among other things, such assignee shall agree to assume all of the terms, covenants and conditions of this Lease, and the assignee shall deliver a certificate of insurance to Landlord satisfying the Tenant's insurance requirements under Section 17 (a "Corporate Permitted Assignment"). Control Permitted Assignments and Corporate Permitted Assignments are hereinafter referred to as "Permitted Assignments." Notwithstanding anything to the contrary contained in this Lease or in the Work Letter, in no event shall Landlord be required to agree to any Changes (as such term is defined in the Work Letter) to Landlord's Work in connection with any assignment or sublease, including any Permitted Assignment.

- (c) Additional Conditions. As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under this Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment.
- No Release of Tenant, Sharing of Excess Rents. Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. Except with respect to a Permitted Assignment, if the rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the sum of the Base Rent and Excess Operating Expenses payable under this Lease with respect to the applicable portion of the Premises (excluding however, any Rent payable under this Section) and actual and reasonable and customary brokerage fees, legal costs, market inducements and improvement allowances (collectively, the "Sublease/Assignment Costs") directly related to and required pursuant to the terms of any such sublease or assignment ("Excess Rents"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 business days following receipt thereof by Tenant. For the purpose of calculating Excess Rents, the Sublease/Assignment Costs shall be amortized on a straight-lined basis over the term of the applicable sublease or assignment. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and Landlord or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.
- (e) No Waiver. The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under this Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.
- 23. **Estoppel Certificate**. Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging that, to the best of Tenant's knowledge, there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Lease or the Premises as may be requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part. Tenant's failure to deliver such statement within 5 business days after Tenant's receipt of a second written notice from Landlord shall be conclusive upon Tenant that this Lease is in



full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution.

- 24. Quiet Enjoyment. So long as Tenant is not in Default under this Lease, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.
- 25. **Prorations**. All prorations required or permitted to be made hereunder shall be made on the basis of a 360 day year and 30 day months.
- Rules and Regulations. Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project, provided that Tenant shall not be subject to any rules or regulations other than those attached hereto as Exhibit E if such rules or regulations would materially increase Tenant's obligations or materially decrease Tenant's rights under this Lease. Such rules and regulations may include, without limitation, rules and regulations relating to the use of the Project Amenities and/or rules and regulations which are intended to encourage social distancing, promote and protect health and physical well-being within the Building and the Project and/or intended to limit the spread of communicable diseases and/or viruses of any kind or nature that are more virulent than the seasonal flu (collectively, "Infectious Conditions"). The current rules and regulations are attached hereto as Exhibit E. If there is any conflict between such rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.
- Subordination. This Lease and Tenant's interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises pursuant to the terms of this Lease shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such commercially reasonable instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate nondisturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Notwithstanding the foregoing, any such Holder may at any time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. The term "Mortgage" whenever used in this Lease shall be deemed to include deeds of trust, security assignments and any other encumbrances, and any reference to the "Holder" of a Mortgage shall be deemed to include the beneficiary under a deed of trust. As of the Effective Date, there is no existing Mortgage encumbering the Project.
- 28. **Surrender**. Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in broom clean condition (a) in the same condition as of the Effective Date (except for any Alterations permitted by Landlord to remain in the Premises pursuant to Section 12), subject to ordinary wear and tear and casualty loss and condemnation covered by Sections 18 and 19, (b) with all wires, cables or similar equipment which Tenant has installed in the Premises or in the risers or plenums of the Building removed, and (c) free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than Landlord or any of Landlord's employees, agents and contractors.

Upon the expiration or earlier termination of the Term, Tenant shall promptly return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which



such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages or loss resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. Waiver of Jury Trial. TO THE EXTENT PERMITTED BY LAW, TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS RELATED HERETO.

30. Environmental Requirements.

- Prohibition/Compliance. Except for Hazardous Material contained in products customarily used by tenants in de minimis quantities for ordinary cleaning and office purposes, Tenant shall not permit or cause any party to bring any Hazardous Material upon the Premises or the Project or use, store, handle, treat, generate, manufacture, transport, release or dispose of any Hazardous Material in, on or from the Premises or the Project without Landlord's prior written consent which may be withheld in Landlord's sole discretion. Tenant, at its sole cost and expense, shall operate its business in the Premises in strict compliance with all Environmental Requirements and shall remove or remediate in a manner satisfactory to Landlord any Hazardous Materials released on or from the Project by Tenant or any Tenant Party. Tenant shall complete and certify disclosure statements as requested by Landlord from time to time relating to Tenant's use, storage, handling, treatment, generation, manufacture, transportation, release or disposal of Hazardous Materials on or from the Premises. The term "Environmental Requirements" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. The term "Hazardous Materials" means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "operator" of Tenant's "facility" and the "owner" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.
- (b) Indemnity. Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, reasonable attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses which arise during Tenant's occupancy of the Premises, during the Term or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Building, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Building, the Project or any adjacent property, Tenant shall promptly take



all actions at its sole expense and in accordance with applicable law as are necessary to return the Premises, the Building, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises, the Building or the Project.

- Landlord's Tests. Landlord shall have access to, and a right to perform inspections and tests of, the Premises to determine Tenant's compliance with Environmental Requirements, its obligations under this Section 30, or the environmental condition of the Premises or the Project. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. Access shall be granted to Landlord upon Landlord's prior notice to Tenant and at such times so as to minimize, so far as may be reasonable under the circumstances, any disturbance to Tenant's operations. Such inspections and tests shall be conducted at Landlord's expense, unless such inspections or tests reveal that Tenant has not complied with any Environmental Requirement, in which case Tenant shall reimburse Landlord for the reasonable cost of such inspection and tests. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights that Landlord may have against Tenant.
- (d) **Tenant's Obligations**. Tenant's obligations under this <u>Section 30</u> shall survive the expiration or earlier termination of this Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials shall constitute a hold over pursuant to <u>Section 8</u>.
- 31. **Tenant's Remedies/Limitation of Liability**. Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term "Landlord" in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner's ownership.

32. Inspection and Access. Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease and for any other business purpose. Landlord and Landlord's representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last 9 months of the Term, to prospective tenants or for any other business purpose. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Premises, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant's use or occupancy of the Premises for the Permitted Use. At Landlord's request, Tenant shall execute such instruments as may be necessary for such easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord's access rights hereunder. Landlord and Landlord's representatives shall comply with Tenant's reasonable security measures in connection with any entry into



the Premises, provided, however, that Tenant has notified Landlord of such safety measures prior to Landlord's entry into the Premises

- 33. Security. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.
- **34. Force Majeure**. Except for the payment of Rent, neither Landlord nor Tenant shall be held responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, sinkholes or subsidence, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, local, regional or national epidemic or pandemic, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, cyberattacks, ransomware attacks and similar events, fire or other casualty, and other causes or events beyond their reasonable control ("**Force Majeure**"). Notwithstanding anything to the contrary contained herein, in no event shall Force Majeure excuse Tenant's obligation to vacate and surrender timely the Premises in accordance with the terms and conditions of this Lease.
- 35. **Brokers**. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no Broker brought about this transaction, other than CBRE, representing Tenant, and Newmark, representing Landlord. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than CBRE and Newmark, claiming a commission or other form of compensation, if any, by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction. Landlord shall be responsible for all commissions due to CBRE and Newmark arising out of the execution of this Lease in accordance with the terms of a separate written agreements between Landlord and each of CBRE and Newmark.
- Limitation on Landlord's Liability. NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, RESEARCH, PRODUCT, SPECIMENS, SAMPLES, AND/OR BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LANDLORD IN CONNECTION WITH THIS LEASE NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, MEMBERS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.



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Tenant acknowledges and agrees that measures and/or services implemented at the Project, if any, intended to encourage social distancing, promote and protect health and physical well-being and/or intended to limit the spread of Infectious Conditions, may not prevent the spread of such Infectious Conditions. Neither Landlord nor any Landlord Indemnified Parties shall have any liability and Tenant waives any claims against Landlord and the Landlord Indemnified Parties with respect to any loss, damage or injury in connection with (x) the implementation, or failure of Landlord or any Landlord Indemnified Parties to implement, any measures and/or services at the Project intended to encourage social distancing, promote and protect health and physical well-being and/or intended to limit the spread of Infectious Conditions, or (y) the failure of any measures and/or services implemented at the Project, if any, to limit the spread of any Infectious Conditions.

- 37. **Severability**. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable.
- 38. Signs; Exterior Appearance. Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can be viewed from the exterior of the Premises. Landlord and Tenant acknowledge that as of the Effective Date, there is suite entry signage for Tenant, and Tenant's name and suite number are included on the Building lobby directory. Such suite entry signage shall be permitted to remain in place during the Term, and Tenant's name and suite number shall continue to be included on the Building lobby directory. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The Building lobby directory shall be provided exclusively for the display of the name and location of tenants.
- 39. **Right to Extend Term**. Tenant shall have the right to extend the Term of this Lease upon the following terms and conditions:
- (a) Extension Right. Tenant shall have 1 right (the "Extension Right") to extend the term of this Lease for 1 year (the "Extension Term") on the same terms and conditions as this Lease (other than with respect to Base Rent and the Landlord's Work) by giving Landlord written notice of its election to exercise the Extension Right at least 9 months prior, and no earlier than 12 months prior, to the expiration of the Base Term of this Lease.

Upon the commencement of the Extension Term, Base Rent shall be payable at the Market Rate (as defined below). As used herein, "Market Rate" shall mean the rate that comparable landlords of comparable buildings have accepted in current transactions from non-equity (i.e., not being offered equity in the buildings) and nonaffiliated tenants of similar financial strength for space of comparable size, quality (including the Landlord's Work, Alterations and other improvements) and floor height in comparable Class A office buildings in the South San Francisco area for a comparable term, with the determination of the Market Rate to take into account all relevant factors, including tenant inducements, rental abatements, views, the Project Amenities, parking costs, leasing commissions, allowances or concessions, if any.

If, on or before the date which is 180 days prior to the expiration of the Base Term of this Lease, Tenant has not agreed with Landlord's determination of the Market Rate and the rent escalations during the Extension Term after negotiating in good faith, Tenant shall be deemed to have elected arbitration as described in Section 39(b). Tenant acknowledges and agrees that, if Tenant has elected to exercise the Extension Right by delivering notice to Landlord as required in this Section 39(a), Tenant shall have no right thereafter to rescind or elect not to extend the term of this Lease for the Extension Term.



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(b) Arbitration.

- (i) Within 10 days of Tenant's notice to Landlord of its election (or deemed election) to arbitrate Market Rate and escalations, each party shall deliver to the other a proposal containing the Market Rate and escalations that the submitting party believes to be correct ("Extension Proposal"). If either party fails to timely submit an Extension Proposal, the other party's submitted proposal shall determine the Base Rent and escalations for the Extension Term. If both parties submit Extension Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Extension Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Rate and escalations. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall determine the Base Rent for the Extension Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.
- (ii) The decision of the Arbitrator(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate and escalations are not determined by the first day of the Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the Extension Term and increased by the Rent Adjustment Percentage until such determination is made. After the determination of the Market Rate and escalations, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Rate and escalations for the Extension Term.
- (iii) An "Arbitrator" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech industrial real estate in the greater San Francisco Bay metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years' experience representing landlords and/or tenants in the leasing of high tech or life sciences space in the greater San Francisco Bay metropolitan area, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested.
- (c) Exceptions. Notwithstanding anything set forth above to the contrary, the Extension Right shall not be in effect and Tenant may not exercise the Extension Right:
 - (i) during any period of time that Tenant is in default under any provision of this Lease (beyond any applicable notice and cure periods); or
 - (ii) during any period that Tenant or a transferee pursuant to a Permitted Transfer is occupying less than 100% of the Premises; or
 - (iii) if Tenant has been in default (beyond any applicable notice and cure periods) under any provision of this Lease 3 or more times, whether or not such defaults have been cured, during the 12 month period prior to the date on which Tenant seeks to exercise the Extension Right.
- (d) **Rights Personal**. The Extension Right is personal to Tenant and is not assignable without Landlord's prior written consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in this Lease, except that it may be assigned in connection with any assignment of this Lease that constitutes a Permitted Assignment of this Lease.



- (e) **No Extensions**. The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.
- (f) Termination. The Extension Right shall, at Landlord's option, terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease (beyond any applicable notice and cure periods); or (ii) Tenant has defaulted (beyond any applicable notice and cure periods) 3 or more times during the period commencing on the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such defaults have been cured.

40. Miscellaneous.

- Notices. All notices or other communications between the parties shall be in writing and shall be delivered by (i) (a) reputable overnight courier, (ii) hand delivery with signature confirming receipt, or (iii) email transmission to the email address set forth in the Basic Lease Provisions for the applicable party, which email includes in the subject line (x) the Project address, (y) Tenant name and (z) "NOTICE UNDER LEASE" in all caps, provided a hard copy of any email notice is also sent the same day by one of the delivery methods provided in sub-sections (i) or (ii) (each, a "Follow Up Notice"). Notices delivered pursuant to the delivery methods provided in sub-sections (i) or (ii) shall be deemed duly given when actually received by the addressee or when delivery thereof is refused. Notices delivered via email and sent during the hours of 8:00 a.m. and 3:00 p.m. Pacific time shall be deemed duly given on the day sent; provided, however, that any email notice delivered on a Saturday, Sunday or legal holiday observed in the State of California, or after 3:00 p.m. Pacific time shall be deemed given on the next day that is not a Saturday, Sunday or legal holiday observed in the State of California. For the avoidance of doubt, for an email notice to be effective as provided in the immediately preceding sentence, a Follow Up Notice must be delivered to the addressee of the email notice within 48 hours of the date that the email notice is delivered. If a Follow Up Notice is not received within such 48-hour period, actual notice will be deemed to have been given on the date that the Follow Up Notice is delivered rather than on the date of delivery of the email notice. Notwithstanding anything to the contrary contained herein, notice sent via email shall in no event constitute a notice hereunder if the sender receives notice or otherwise has knowledge that the email notice was not properly transmitted or otherwise received by the addressee. All notices shall be delivered to the parties at their addresses set forth in the Basic Lease Provisions. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.
- (b) **Joint and Several Liability**. If and when included within the term "**Tenant**," as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.
- (c) **Financial Information**. Tenant shall furnish to Landlord true and complete copies of (i) upon Landlord's written request on an annual basis, Tenant's most recent audited annual financial statements, provided, however, that Tenant shall not be required to deliver to Landlord such annual financial statements for any particular year sooner than the date that is 90 days after the end of each of Tenant's fiscal years during the Term, and (ii) upon Landlord's written request on a quarterly basis, Tenant's most recent unaudited quarterly financial statements; provided, however, that Tenant shall not be required to deliver to Landlord such quarterly financial statements for any particular quarter sooner that the date that is 45 days after the end of each of Tenant's fiscal quarters during the Term. Notwithstanding anything to the contrary contained in this Lease, Landlord's written request for financial information pursuant to this Section 40(c) may delivered to Tenant via email. So long as Tenant is a "public company" and its financial information is publicly available, then the foregoing delivery requirements of this Section 40(c) shall not apply.

Landlord agrees to hold the financial statements and other financial information provided under this section in confidence using at least the same degree of care that Landlord uses to protect its own confidential information of a similar nature; provided, however, that Landlord may disclose such information to Landlord's auditors, attorneys, consultants, lenders, affiliates, prospective purchasers and investors and other third parties as reasonably required in the ordinary course of Landlord's operations, provided that Landlord shall request that such parties treat the information as confidential. The obligations of confidentiality hereunder shall not apply to information that was in the public domain at the time it was disclosed to Landlord, entered into the public domain subsequent to the time it was disclosed to Landlord through no fault of Landlord, or was disclosed by Tenant to a third party without any



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confidentiality restrictions. In addition, Landlord may disclose such information without violating this section to the extent that disclosure is reasonably necessary (x) for Landlord to enforce its rights or defend itself under this Lease; (y) for required submissions to any state or federal regulatory body; or (z) for compliance with a valid order of a court or other governmental body having jurisdiction, or any law, statute, or regulation, provided that, other than in an emergency, before disclosing such information, Landlord shall give Tenant 5 business days' prior notice of the same to allow Tenant to obtain a protective order or such other judicial relief.

- (d) **Recordation**. Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease.
- (e) Interpretation. The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.
- (f) **Not Binding Until Executed**. The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.
- (g) Limitations on Interest. It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.
- (h) **Choice of Law**. Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.
 - (i) **Time**. Time is of the essence as to the performance of Tenant's and Landlord's obligations under this Lease.
- (j) OFAC. Tenant is currently (a) in compliance with and shall at all times during the Term of this Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("OFAC") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "OFAC Rules"), (b) not listed on, and shall not during the term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identification List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.
- (k) **Incorporation by Reference**. All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.
- (I) Entire Agreement. This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, letters of intent, negotiations and discussions, whether oral or written,



of the parties, and there are no warranties, representations or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein.

- (m) No Accord and Satisfaction. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.
- (n) Landlord's Proprietary Operations. Tenant acknowledges that Landlord's business operations are proprietary to Landlord or its affiliates. Absent prior written consent from Landlord or its affiliates, Tenant shall hold confidential and will not disclose to third parties, and shall require Tenant Parties to hold confidential and not disclose to third parties, information regarding the systems, controls, equipment, programming, vendors, tenants, and specialized amenities of Landlord or its affiliates. Tenant shall notify Landlord immediately if Tenant becomes aware of any third party contacting Tenant or any Tenant Parties requesting information regarding Landlord's or its affiliate's business operations.
- Redevelopment of Project. Tenant acknowledges that Landlord, in its sole discretion, may from time to time expand, renovate and/or reconfigure the Project as the same may exist from time to time and, in connection therewith or in addition thereto, as the case may be, from time to time without limitation: (a) change the shape, size, location, number and/or extent of any improvements, buildings, structures, lobbies, hallways, entrances, exits, parking and/or parking areas relative to any portion of the Project; (b) modify, eliminate and/or add any buildings, improvements, and parking structure(s) either above or below grade, to the Project, the Common Areas and/or any other portion of the Project and/or make any other changes thereto affecting the same; and (c) make any other changes, additions and/or deletions in any way affecting the Project and/or any portion thereof as Landlord may elect from time to time, including without limitation, additions to and/or deletions from the land comprising the Project, the Common Areas and/or any other portion of the Project. Tenant acknowledges and agrees that construction noise, vibrations and dust associated with normal construction activities in connection with any redevelopment of the Project are to be expected during the course of such construction. Notwithstanding anything to the contrary contained in this Lease, Tenant shall have no right to seek damages (including abatement of Rent) or to cancel or terminate this Lease because of any proposed changes, expansion, renovation or reconfiguration; provided, however, the same shall not materially adversely affect Tenant's access to and/or use of the Premises for the Permitted Use, and Landlord shall not change the size, dimensions, location or Tenant's Permitted Use of the Premises.
- EV Charging Stations. To the extent that the Project is not exempt Section 1952.7 of the California Civil Code, Landlord shall not unreasonably withhold its consent to Tenant's written request to install 1 or more electric vehicle car charging stations ("EV Stations") in the parking area serving the Project; provided, however, that Tenant complies with all reasonable requirements, standards, rules and regulations which may be imposed by Landlord, at the time Landlord's consent is granted, in connection with Tenant's installation, maintenance, repair and operation of such EV Stations, which may include, without limitation, the charge to Tenant of a reasonable monthly rental amount for the parking spaces used by Tenant for such EV Stations, Landlord's designation of the location of Tenant's EV Stations, and Tenant's payment of all costs whether incurred by Landlord or Tenant in connection with the installation, maintenance, repair and operation of each Tenant's EV Station(s). Nothing contained in this paragraph is intended to increase the number of parking spaces which Tenant is otherwise entitled to use at the Project under Section 10 of this Lease nor impose any additional obligations on Landlord with respect to Tenant's parking rights at the Project.
- (q) California Accessibility Disclosure. For purposes of Section 1938(a) of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that the Project has not undergone inspection by a Certified Access Specialist (CASp). In addition, the following notice is hereby provided pursuant to Section 1938(e) of the California Civil Code: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject



premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises.' In furtherance of and in connection with such notice: (i) Tenant, having read such notice and understanding Tenant's right to request and obtain a CASp inspection, hereby elects not to obtain such CASp inspection and forever waives its rights to obtain a CASp inspection with respect to the Premises, Building and/or Project to the extent permitted by Legal Requirements; and (ii) if the waiver set forth in clause (i) hereinabove is not enforceable pursuant to Legal Requirements, then Landlord and Tenant hereby agree as follows (which constitutes the mutual agreement of the parties as to the matters described in the last sentence of the foregoing notice): (A) Tenant shall have the one-time right to request for and obtain a CASp inspection, which request must be made, if at all, in a written notice delivered by Tenant to Landlord; (B) any CASp inspection timely requested by Tenant shall be conducted (1) at a time mutually agreed to by Landlord and Tenant, (2) in a professional manner by a CASp designated by Landlord and without any testing that would damage the Premises, Building or Project in any way, and (3) at Tenant's sole cost and expense, including, without limitation, Tenant's payment of the fee for such CASp inspection, the fee for any reports prepared by the CASp in connection with such CASp inspection (collectively, the "CASp Reports") and all other costs and expenses in connection therewith; (C) the CASp Reports shall be delivered by the CASp simultaneously to Landlord and Tenant; (D) Tenant, at its sole cost and expense, shall be responsible for making any improvements, alterations, modifications and/or repairs to or within the Premises to correct violations of construction-related accessibility standards including, without limitation, any violations disclosed by such CASp inspection; and (E) if such CASp inspection identifies any improvements, alterations, modifications and/or repairs necessary to correct violations of construction-related accessibility standards relating to those items of the Building and Project located outside the Premises that are Landlord's obligation to repair as set forth in this Lease, then Landlord shall perform such improvements, alterations, modifications and/or repairs as and to the extent required by Legal Requirements to correct such violations, and Tenant shall reimburse Landlord for the cost of such improvements, alterations, modifications and/or repairs within 10 business days after Tenant's receipt of an invoice therefor from Landlord. Landlord and Tenant expressly acknowledge and agree that the foregoing provisions of this Section 40(q) shall apply only in the event that Tenant elects to obtain a CASp inspection.

(r) **Shuttle Services**. Genentech Inc., a Delaware corporation ("**Genentech**"), an employer located in South San Francisco, California and in the vicinity of the Project, is a party to a shuttle service agreement with SFO Airporter, Inc. and/or other provider(s) (collectively, "**Operator**") (the "**Shuttle Agreement**"). Genentech has agreed to extend shuttle services ("**Shuttle Services**") under the Shuttle Agreement to tenants at the Project.

Tenant acknowledges that as an amenity to Tenant, Landlord plans to offer the Shuttle Services to Tenant and other tenants at the Project; provided, however, that neither Landlord nor any affiliate of Landlord shall be obligated to provide the Shuttle Services (or to continue to contract with Genentech to provide the Shuttle Services for any specific period of time) or to cause the Shuttle Services to follow any specific route, make any specific stops, or adhere to any specific schedule or hours of operation. Upon Tenant's request, Landlord shall provide the planned route, stops, schedule, and hours of operation. Tenant's employees actually employed at the Project shall be permitted, upon evidence to Operator that they are tenants at the Project, to use the Shuttle Services. Commencing on the Commencement Date through the earlier of the expiration of the Term or the date that the Shuttle Services cease, Operating Expenses shall include the cost incurred by Landlord in connection with the Shuttle Services (the "Shuttle Service Costs"). Tenant acknowledges and agrees that Landlord has not made any representations or warranties regarding the reliability or continued availability of the Shuttle Services throughout the Term. Tenant further acknowledges that the wi-fi provided by the Shuttle Services, if any, is unsecured, has no guarantee of security and Tenant agrees to inform Tenant's employees to take appropriate precautions when using the Shuttle Services.

Landlord and the Landlord Indemnified Parties shall not have any liability to Tenant or any of Tenant's employees for any matters in connection with the Shuttle Services and Landlord (and the Landlord Indemnified Parties) shall not be liable for any damages arising from any act, omission or neglect of Genentech or Operator. Tenant hereby waives all Claims against Landlord (and the Landlord Parties) for losses or damages resulting from any accident or occurrence arising in connection with the Shuttle Services.

(s) **Project Specific Requirements.** This Lease is made and accepted subject to the provisions, covenants, conditions and restrictions set forth in that certain Declaration of Restrictive Covenants to Run with Certain Land, recorded November 25, 1981 in the official records of San Mateo County (the "**Official Records**") as



Instrument No. 11467AT, as amended by that certain First Amendment to Declaration of Restrictive Covenants to Run with Certain Land, recorded April 9, 1985 in the Official Records as Instrument No. 85033403, the provisions of which are incorporated herein by this reference.

- (t) Counterparts. This Lease may be executed in 2 or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature process complying with the U.S. federal ESIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this Lease and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.
- (u) Prevailing Party's Fees. In the event that either party should bring suit or commence any suit or proceeding related to this Lease against the other party, then all reasonable costs and expenses, including reasonable attorneys' fees and expert fees, incurred by the prevailing party relating to such legal action shall be paid by the other party, which obligation on the part of the other party shall be deemed to have accrued on the date of the commencement of such action and shall be enforceable whether or not the action is prosecuted to judgment.

[Signatures on next page]



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TENANT:

RIGEL PHARMACEUTICALS, INC.,

a Delaware corporation

By: /s/ Dean Schorno Name: Dean Schorno

Its: CFO

 $\hfill \square$ I hereby certify that the signature, name, and title above are my signature, name and title

LANDLORD:

611 GATEWAY CENTER LP,

a Delaware limited partnership

By: Gateway Center GP LLC,

a Delaware limited liability company,

general partner

By: Gateway Portfolio Member LLC,

a Delaware limited liability company,

managing member

By: Gateway Portfolio Holdings LLC,

a Delaware limited liability company,

managing member

By: ARE-San Francisco No. 83, LLC,

a Delaware limited liability company,

managing member

By: Alexandria Real Estate Equities, L.P.,

a Delaware limited partnership,

managing member

By: ARE-QRS Corp.,

a Maryland corporation,

general partner

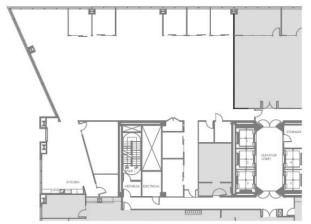
By: /s/ Kristen Childs
Name: Kristen Childs
Its: Vice President – Real Estate



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EXHIBIT A TO LEASE

DESCRIPTION OF PREMISES





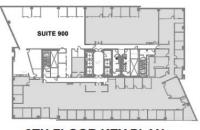
611 GATEWAY 9th Floor SOUTH SAN FRANCISCO, CA

SUITE 900









9TH FLOOR KEY PLAN

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EXHIBIT B TO LEASE

DESCRIPTION OF PROJECT



*Shaded buildings are not part of the Project

¹ Landlord reserves the right, in its sole and absolute discretion, to modify the Project (and any aspects of the same) at any time(s) including, without limitation, the existence and/or location of the parking structure(s), buildings and amenities



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EXHIBIT C TO LEASE

INTENTIONALLY OMITTED



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EXHIBIT D TO LEASE

ACKNOWLEDGMENT OF COMMENCEMENT DATE

This ACKNOWLEDGMENT OF COMMENCEMENT DATE is made this day of, 2025, between 611 GATEWAY CENTER LP, a Delaware limited partnership ("Landlord"), and RIGEL PHARMACEUTICALS, INC.,		
a Delaware corporation (" Tenant "), and is attached to and made a part of the Lease dated, 2025 (the " Lease "), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.		
Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date of the Base Term of the Lease is, 2025, the Rent Commencement Date is, 2025, and the termination date of the Base Term of the Lease shall be 11:59 p.m. Pacific time on In case of a conflict between the terms of the Lease and the terms of this Acknowledgment of Commencement Date, this Acknowledgment of Commencement Date shall control for all purposes.		
IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.		
TENANT:		
RIGEL PHARMACEUTICALS, INC., a Delaware corporation		
By: Name: Its:		
□ I hereby certify that the signature, name, and title above are my signature, name and title		
[continued on following page]		

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registered trademarks of Alexandria Real Estate Equities, Inc.

LANDLORD:

611 GATEWAY CENTER LP,

a Delaware limited partnership

By: Gateway Center GP LLC, a Delaware limited liability company, general partner

> By: Gateway Portfolio Member LLC, a Delaware limited liability company, managing member

> > By: Gateway Portfolio Holdings LLC, a Delaware limited liability company, managing member

> > > By: ARE-San Francisco No. 83, LLC, a Delaware limited liability company, managing member

> > > > By: Alexandria Real Estate Equities, L.P., a Delaware limited partnership, managing member

> > > > > By: ARE-QRS Corp., a Maryland corporation, general partner



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EXHIBIT E TO LEASE

Rules and Regulations

- 1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.
- 2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.
 - 3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.
- 4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.
- 5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.
- 6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.
- 7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.
 - 8. Tenant shall maintain the Premises free from rodents, insects and other pests.
- 9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.
- 10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.
- 11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.
- 12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.
- 13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.
 - 14. No auction, public or private, will be permitted on the Premises or the Project.



611 Gateway - Suite 900/Rigel Pharmaceuticals - Page 2

- 15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.
- 16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.
- 17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.
 - 18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.
- 19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.
- 20. Tenant shall cause any vendors and other service providers providing regular service at the Project (including, service providers hired by Tenant to perform services with respect to the Building Systems or to perform janitorial services with respect to the Premises) hired by Tenant to perform services at the Premises or the Project to maintain in effect workers' compensation insurance as required by Legal Requirements and reasonable commercial general liability insurance with coverage amounts reasonably acceptable to Landlord. Tenant shall cause such vendors and service providers to name Landlord and Alexandria Real Estate Equities, Inc. as additional insureds under such policies and shall provide Landlord with certificates of insurance evidencing the required coverages (and showing Landlord and Alexandria Real Estate Equities, Inc. as additional insureds under such policies) prior to the applicable vendor or service provider providing any services to Tenant at the Project.
- 21. Neither Tenant nor any of the Tenant Parties shall have the right to photograph, videotape, film, digitally record or by any other means record, transmit and/or distribute any images, pictures or videos of all or any portion of the Premises or the Project that could identify the Project or the name of the Project, or that identify Landlord or any other tenants or any affiliates of Landlord or any other tenants. The foregoing is not meant to prohibit individual employees from taking and disseminating photos of themselves or other people within the Premises or at the Project so long as neither the Building nor any proprietary information, equipment or improvements of Landlord are included within such photos.
- 22. Tenant shall regularly review the guidelines published by the Centers for Disease Control (CDC) and any state and/or local Governmental Authorities, and will implement the practices and procedures suggested thereby, as well as industry standard best practices, to prevent the spread of Infectious Conditions, including, without limitation, COVID-19.
- 23. Landlord may exclude or expel from the Project any person that is exhibiting symptoms associated with any currently known or unknown Infectious Condition.



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EXHIBIT F TO LEASE

OPERATING EXPENSE EXCLUSIONS

- (i) the original construction costs of the Project and renovation prior to the Commencement Date and costs of correcting defects in such original construction or renovation;
- (ii) capital expenditures except for repairs, improvements or replacements, to the extent reasonably determined by Landlord in accordance with sound real estate accounting principles to be capital in nature, and: (1) are required in order to comply with Legal Requirements first imposed after the Commencement Date; (2) are intended to reduce Operating Expenses and/or to maintain or improve the utility or efficiency of the Project including any Building Systems, (3) maintain or improve the safety, security or sustainability of the Project, or (4) are required to replace capital items that have reached the end of their useful life or to extend the life of any capital items, including the replacements of parts or components of capital items (collectively, "Capital Items");
- (iii) interest, principal and other payments of Mortgage debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured, and all payments of base rent (but not operating expenses or taxes, except to the extent such item of operating expenses or taxes would otherwise not be permitted to be passed through pursuant to Section 5 and this **Exhibit F** of this Lease) under any ground lease or other underlying lease of all or any portion of the Project;
 - (iv) depreciation of the Project (except for Capital Items, the cost of which are includable in Operating Expenses);
- (v) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;
 - (vi) legal and other expenses incurred in the negotiation or enforcement of leases;
- (vii) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;
- (viii) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;
- salaries, wages, benefits and other compensation paid to (i) personnel of Landlord or its agents or contractors above the position of the person, regardless of title, who has day-to-day management responsibility for the Project or (ii) officers and employees of Landlord or its affiliates who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project; provided, however, that with respect to any such person who does not devote substantially all of his or her employed time to the Project, the salaries, wages, benefits and other compensation of such person shall be prorated to reflect time spent on matters related to operating, managing, maintaining or repairing the Project in comparison to the time spent on matters unrelated to operating, managing, maintaining or repairing the Project;
- (x) costs incurred for off-site offices or facilities maintained in connection with the management, operation, engineering, sustainability, Utility and/or security services provided to the Project and other properties owned by Landlord or affiliates of Landlord, except to the extent of the Project's share of such costs as proportionately allocated among the Project and such other properties owned by Landlord or affiliates of Landlord served by such off-site offices or facilities;
- (xi) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;



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- (xii) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;
- (xiii) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 7);
- (xiv) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;
- (xv) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;
 - (xvi) costs of Landlord's charitable or political contributions, or of fine art acquired for and/or maintained at the Project;
- (xvii) costs in connection with services or items which are not available to all tenants of the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;
 - (xviii) costs incurred in the sale or refinancing of the Project;
- (xix) net income taxes of Landlord or the owner of any interest in the Project or franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein (except to the extent such taxes are in substitution for any Taxes payable hereunder); and
- (xx) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.



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RIGEL PHARMACEUTICALS, INC. INSIDER TRADING AND WINDOW PERIOD POLICY ADOPTED AUGUST 15, 2018 AMENDED AND RESTATED MARCH 1, 2021 AMENDED AND RESTATED April 7, 2022 AMENDED AND RESTATED June 29, 2023

INTRODUCTION

During the course of your relationship with Rigel Pharmaceuticals, Inc. ("Rigel"), you may receive material information that is not yet publicly available ("material nonpublic information") about Rigel or other publicly traded companies that Rigel has business relationships with. Material nonpublic information may give you or someone you pass that information on to an advantage over others when deciding whether to buy, sell, gift or otherwise deal in Rigel's securities or the securities of another publicly traded company. This policy sets forth acceptable transactions involving Rigel securities by our employees and directors, as well as certain designated consultants and contractors. Generally, the designated consultants and contractors are those that are in Rigel meetings on a recurring, regular basis and will be notified in writing that this policy is applicable to them ("regular consultants/contractors").

INSIDER TRADING AND WINDOW PERIOD POLICY

Securities Transactions

Using material nonpublic information for personal gain or passing this information (also known as a "tip") to someone who uses it for personal gain (a "tippee") is illegal and squarely prohibited by this policy. Exploiting material nonpublic information like this remains unlawful regardless of how many shares are bought or sold. You can be held liable for your own transactions, as well as the transactions by a tippee and even the transactions of a tippee's tippee. Although it is imperative to refrain from any insider trading, it is equally important to avoid even the appearance of insider trading.

Material nonpublic information

It is not always easy to figure out whether you possess material nonpublic information. But there is one important factor to determine whether nonpublic information you know about a public company is material: whether sharing the information would likely affect the market price of that company's securities or be considered important or "material" by investors who are considering trading that company's stock. If the information makes you want to trade, it would probably have the same effect on others. Keep in mind that both positive and negative information can be material.

Depending on the specific details, the following items may be considered material nonpublic information until publicly disclosed. There may be other types of information that would qualify as material nonpublic information as well; use this list merely as a non-exhaustiveguide:

- · financial results or forecasts;
- distribution/shipments of product(s) (eg. TAVALISSE and/or REZLIDHIA) as a whole picture for the quarter;
- status of product or product candidate development or regulatory approvals;
- clinical data relating to products or product candidates;
- acquisitions or dispositions of assets, divisions or companies;
- · public or private sales of debt or equity securities;
- stock splits, dividends or changes in dividend policy;
- gain or loss of a significant licensor, licensee or supplier;
- · changes or new corporate partner relationships or collaborations;
- · regulatory developments;

- · management or control changes;
- · employee layoffs;
- a disruption in the company's operations or breach or unauthorized access of its property or assets, including its facilities and information technology infrastructure;
- · tender offers or proxy fights;
- accounting restatements;
- · litigation or settlements; and
- · impending bankruptcy.

If you do possess material nonpublic information, you may not trade in a company's securities or advise anyone else whether to do so, even if your decision to trade is not based on such material nonpublic information. In addition, if you possess material nonpublic information, you may not communicate the information to anyone else (other than employees whose job responsibilities require the information and who are bound by this policy) until you know that the information has been publicly disseminated and sufficient time (at least one full trading day) has passed to allow securities markets to receive and evaluate the information. You should never recommend to another person that they buy, hold, gift or sell our securities. In some circumstances, you may need to forgo a planned transaction even if you had planned it before learning of the material nonpublic information. This prohibition is absolute. So even if you believe you may suffer an economic loss or sacrifice an anticipated profit by waiting to trade, you must wait.

"Trading" includes not only purchases, sales and gifts of common stock in the public market but also any other purchases, sales, gifts or transfers of common or preferred equity, options, warrants and other securities (including debt securities and distributions of securities by an investment fund to its equity holders) and other arrangements that affect economic exposure to changes in the prices of these securities

This policy also applies not only to you but to members of your immediate family, persons with whom you share a household, persons who are your economic dependents and any other individuals or entities whose transactions in securities you influence, direct or control (including, for example, a venture or other investment fund, if you influence, direct or control transactions by the fund). You are responsible for making sure that these other individuals and entities comply with this policy. However, this insider trading policy does not apply to any such entity that invests in securities in the ordinary course of its business (e.g., an investment fund or partnership) if such entity has established its own insider trading controls and procedures in compliance with applicable securities laws.

The prohibition on trading when you have material nonpublic information continues until that information becomes publicly disseminated. But for information to be considered publicly disseminated, it must be widely disclosed through a press release, a filing with the Securities and Exchange Commission (the "SEC") or other public announcement and enough time must have passed for the information to be widely known. Generally speaking, information will be considered publicly disseminated after one full trading day has elapsed since the information was publicly disclosed. For example, if we announce material nonpublic information before trading begins on Wednesday, then you may execute a transaction in our securities on Thursday; if we announce material nonpublic information after trading ends on Wednesday, then you may execute a transaction in our securities on Friday.

TRADING BY RIGEL EMPLOYEES, DIRECTORS AND REGULAR CONSULTANTS/CONTRACTORS

Rigel employees, directors and regular consultants/contractors will be able to trade Rigel securities unless the window is closed due to a specific event (which can be company-wide or to individual(s) or group(s)); or, because the window is closed to you on a regular basis because you have been designated as a Regular Quarterly Insider ("RQF"). If you are an employee and were employed at the end of the prior quarter, you would have received such an e-mail from a member of the legal department on or about that date stating you have been designated an RQI.

Open Window - Generally

Except as described in this policy, all Rigel employees, directors and regular consultants/contractors may buy, sell or gift Rigel securities only during an "open window." Generally, the window will open after one full trading day has elapsed since the public dissemination of the information that was the reason the window was closed.

Regular Quarterly Insiders Closed Window

For those employees identified in writing as Regular Quarterly Insiders, the trading window will close at the end of the day on the last day of the quarter and will open after one full trading day has elapsed since the public dissemination of Rigel's quarterly financial results or other material information concerning Rigel's sales and/or distribution of product(s) (eg. TAVALISSE and/or REZLIDHIA). Additionally, to minimize even the appearance of insider trading, the trading window for Directors, Executives, designated employees, and heads of certain functions (which shall be notified as such in writing, e.g., head of finance and head of IR/CC) will close at the end of the day on the 15th day of the last month of the quarter. Keep in mind that when the window is open for Regular Quarterly Insiders, Preclearance is required, as described below.

Event-Specific Closed Window

From time to time, an event may occur that is material to Rigel and is known by a limited number of directors, officers and/or employees. The potential impact of this information may be sufficiently material in a particular fiscal period that, in the judgment of the General Counsel, all employees, directors and regular consultants/contractors should not trade in the Rigel's securities. Or, it may be that the window is closed to certain individuals or groups of individuals. In that situation, Rigel will notify you by e-mail about the closed trading window. Usually, these e-mails will come from the General Counsel, but they may come from the legal department, CFO or CEO on occasion.

An employee, director or regular consultant/contractor who believes that special circumstances require them to trade outside the open window should consult the General Counsel. Permission to trade outside the open window will be granted only where the circumstances are extenuating and there appears to be no significant risk that the trade may subsequently be questioned.

ESPP Purchases

Individuals who are eligible to do so may purchase stock under the Company's Employee Stock Purchase Plan ("*ESPP*") on periodic designated dates in accordance with the ESPP without restriction to any particular period. However, the subsequent sale or gift of the stock acquired pursuant to the ESPP is subject to all provisions of this policy, including those provisions concerning RQIs.

10b5-1 Automatic Trading Programs

Under Rule 10b5-1 of the Securities Exchange Act of 1934, as amended ("Exchange Act"), employees, directors and consultants may establish a trading plan under which a broker is instructed to buy and sell Rigel securities based on pre-determined criteria (a "Trading Plan"). So long as a Trading Plan is properly established in compliance with the requirements of Rule 10b5-1 of the Exchange Act and any applicable 10b5-1 trading plan guidelines of Rigel, purchases, sales and gifts of Rigel securities pursuant to that plan may be made at any time pursuant to the pre-determined criteria -- even in a closed window, or trading blackout period. An employee's, director's or consultant's Trading Plan must be established in compliance with the requirements of Rule 10b5-1 of the Exchange Act and any applicable 10b5-1 trading plan guidelines of Rigel at a time when they lacked material nonpublic information about Rigel and when Rigel was not in a closed window or trading blackout period.

Prohibition of Speculative or Short-term Trading

No employee, director or regular consultant/contractor may engage in short sales, transactions in put or call options, hedging transactions, margin accounts, pledges or other inherently speculative transactions with respect to Rigel's stock.

Preclearance and Advance Notice of Transactions -Use of Preclearance@Rigel.com

In addition to the requirements above, individuals who have been notified that they are Regular Quarterly Insiders or otherwise subject to preclearance requirements face a further restriction. Even during an open trading window, these individuals may not engage in any transaction in Rigel's securities, including any purchase or sale in the open market, gift, loan or other transfer of beneficial ownership without first obtaining preclearance of the transaction from Rigel's General Counsel or his or her designee before the proposed transaction by writing an e-

mail to Preclearance@Rigel.com. No details are required, the clearance is to check that the window is in fact open at the time, and is certifying that the requester is not in possession of material non-public information. The General Counsel or his or her designee will then determine whether the transaction may proceed and write back by e-mail. Pre-cleared transactions not completed within five business days will require new preclearance, which may be requested prior to the five business days being over. Rigel may choose to shorten this period.

Directors and officers subject to the reporting obligations under Section 16 of the Exchange Act ("Section 16 Officers") must give advance notice of gifts or plans to exercise any outstanding stock option, to the General Counsel. Once any such transaction takes place, Section 16 Officers must immediately notify the General Counsel so that Rigel may assist in any Section 16 reporting obligations.

Of note, wherein the General Counsel is seeking preclearance, he or she must first obtain such preclearance from Rigel's Chief Financial Officer.

Short-Swing Trading, Control Stock and Section 16 Reports

Section 16 Officers may not violate the prohibition on short-swing trading (Section 16(b) of the Exchange Act) and the restrictions on sales by control persons (Rule 144 under the Securities Act of 1933, as amended). In addition, Section 16 Officers will file all appropriate Section 16(a) reports (Forms 3, 4 and 5), which are described in Rigel's Section 16 Compliance Program, and any notices of sale required by Rule 144.

POLICY'S DURATION

This policy continues to apply to your transactions in Rigel's securities or the securities of other public companies engaged in business transactions with Rigel even after your relationship with Rigel has ended. If you possess material nonpublic information when your relationship with Rigel ends, you may not trade Rigel's securities or the securities of other companies until the material nonpublic information has been publicly disseminated or is no longer material.

PENALTIES

Anyone who engages in insider trading or otherwise violates this insider trading and window period policy may be subject to both civil liability and criminal penalties. Violators also risk disciplinary action by Rigel, including termination. Anyone who has questions about this policy should contact their own attorney or Rigel's General Counsel. Please also see Frequently Asked Questions, which are attached as **EXHIBIT A**.

AMENDMENTS

Rigel is committed to continuously reviewing and updating its policies and procedures. Rigel therefore reserves the right to amend, alter or terminate this policy at any time and for any reason, subject to applicable law.

EXHIBIT A INSIDER TRADING AND WINDOW PERIOD POLICY FREQUENTLY ASKED QUESTIONS

1. What is insider trading?

A: Insider trading is the buying, selling or gifting of stocks, bonds, futures or other securities by someone who possesses material nonpublic information. Insider trading also includes gifts of securities and trading in options (puts and calls) where the price is linked to the underlying price of a company's stock. It does not matter how many shares you buy, sell or gift, or whether it has an effect on the stock price. Bottom line: If you have material nonpublic information and you trade, you have broken the law.

2. Why is insider trading illegal?

A: If company insiders are able to use their confidential knowledge to their financial advantage, other investors would not have confidence in the fairness and integrity of the market. This ensures that there is an even playing field by requiring those who have material nonpublic information to disclose the information to the public or refrain from trading.

3. What is material nonpublic information?

A: Information is material if it would influence a reasonable investor to buy, sell or gift a stock, bond future or other security. This could mean many things: financial results, clinical or regulatory results, potential acquisitions or major contracts to name just a few. Information is nonpublic if it has not yet been released and disseminated to the public.

4. Who can be guilty of insider trading?

A: Anyone who buys, sells or gifts a security while possessing material nonpublic information, or provides material nonpublic information that someone else uses to buy, sell or gift a security, can be guilty of insider trading. This applies to all individuals, including officers, directors and others who don't even work at Rigel. Regardless of who you are, if you know something material about the value of a security that not everyone knows and you or one of your associate's trades using that material information, you can be found guilty of insidertrading.

5. What if I work in a foreign office?

A: The same rules apply to U.S. and foreign employees. Because our common stock trades on a U.S. securities exchange, the insider trading laws of the United States apply. The Securities and Exchange Commission (the U.S. government agency in charge of investor protection) and the Financial Industry Regulatory Authority (a private regulator that oversees U.S. securities exchanges) routinely investigate trading in a company's securities conducted by individuals and firms based abroad. In addition, as a Rigel employee, our policies apply to you no matter where you work.

6. What if I don't buy, sell or gift anything, but I tell someone else the information and they buy, sell or gift?

A: That is called "tipping." You are the "tipper", and the other person is called the "tippee." If the tippee buys, sells or gifts based on that material nonpublic information, you might still be guilty of insider trading. In fact, if you tell family members who tell others and those people then trade on the information, those family members might be guilty of insider trading too. To prevent this, you should not discuss material nonpublic information about the company with anyone outside Rigel, including spouses, family members, friends or business associates. This includes anonymous discussions on the internet about Rigel or companies with which Rigel doesbusiness.

7. What if I don't tell them the information itself; I just tell them whether theyshould buy, sell or gift?

A: That is still tipping, and you can still be responsible for insider trading. You should not recommend to another person that they buy, hold, gift or sell our common stock or any derivative security related to our common

8. What are the penalties if I trade on material nonpublic information or tip off someone else?

A: In addition to disciplinary action by Rigel—which may include termination—you may be liable for civil penalties for trading on material nonpublic information. The penalties for doing so may include paying the U.S. government up to three times any profit made, or any loss avoided. Persons found liable for tipping material nonpublic information, even if they did not trade themselves, may also face a penalty of up to three times the amount of any profit gained, or loss avoided by everyone in the chain of tippees. In addition, anyone convicted of criminal insider trading could face prison and additional fines.

9. What is "loss avoided"?

A: If you sell or gift common stock or a related derivative security before negative news is publicly announced, and as a result of the announcement the stock price declines, you have avoided the loss caused by the negative news.

10. Am I restricted from trading securities of any companies other than Rigel, for example a customer or competitor of Rigel?

A: Possibly. U.S. insider trading laws restrict everyone from trading in a company's securities based on material nonpublic information about that company, regardless of whether the person is directly connected with that company. Therefore, if you have material nonpublic information about another company, you should not trade in that company's securities. You should be particularly conscious of this restriction if, through your position at Rigel, you sometimes obtain sensitive, material information about other companies and their business dealings with Rigel.

11. So, when can I buy, sell or gift my Rigel securities?

A: If you have material nonpublic information, you may not buy, sell or gift our common stock until after a full trading day has occurred following the information is released or announced to the public. At that point, the information is considered public. Even if you do not have material, nonpublic information, you may not trade our common stock during any trading "blackout" period. Our insider trading and window period policy describes the quarterly blackout period, and additional trading blackout periods may be announced by email.

12. If I have an open order to buy, sell or gift Rigel securities on the date the trading window closes, can I leave it to my broker to cancel the open order and avoid executing the trade?

A: No. If you have any open orders when the trading window closes, it is your responsibility to cancel these orders with your broker. If you have an open order and it executes after the trading window closes, you will have violated our insider trading and window period policy and may also have violated insider trading laws.

13. Am I allowed to trade derivative securities of Rigel? Or short Rigel common stock?

A: No. Under our policies, you may not trade in derivative securities related to our common stock, which include publicly traded call and put options. In addition, under our policies, you may not engage in short selling of our common stock at any time.

"Derivative securities" are securities other than common stock that are speculative in nature because they permit a person to leverage their investment using a relatively small amount of money. Examples of derivative securities include "put options" and "call options." These are different from employee options, which are not derivative securities.

"Short selling" is profiting when you expect the price of the stock to decline, and includes transactions in which you borrow stock from a broker, sell it, and eventually buy it back on the market to return the borrowed shares to the broker. Profit is realized if the stock price decreases during the period of borrowing.

14. Why does Rigel prohibit trading in derivative securities and shortselling?

A: Many companies with volatile stock prices have adopted similar policies because of the temptation it represents to try to benefit from a relatively low-cost method of trading on short- term swings in stock prices, without actually holding the underlying common stock, and encourages speculative trading. We are dedicated to building stockholder value, short selling our common stock conflicts with our values and would not be well-received by ourstockholders.

15. Can I purchase Rigel securities on margin or hold them in a marginaccount?

A: Under our policies, you may not purchase our common stock on margin or hold it in a margin account at any time.

"Purchasing on margin" is the use of borrowed money from a brokerage firm to purchase our securities. Holding our securities in a margin account includes holding the securities in an account in which the shares can be sold to pay a loan to the brokerage firm.

16. Why does Rigel prohibit me from purchasing Rigel securities on margin orholding them in a margin account?

A: Margin loans are subject to a margin call whether or not you possess material nonpublic information at the time of the call. If a margin call were to be made at a time when you had insider information and you could not or did not supply other collateral, you and Rigel may be restricted based on your insider trading activities because of the sale of the securities (through the margin call) when you possessed material nonpublic information. The sale would be attributed to you even though the lender made the ultimate determination to sell. The Securities and Exchange Commission takes the view that you made the determination to not supply the additional collateral and you are therefore responsible for the sale.

17. Can I pledge my Rigel shares as collateral for a personalloan?

A: No. Pledging your shares as collateral for a personal loan could cause you to transfer your shares during a trading blackout period. As a result, you may not pledge your shares as collateral for a loan.

18. Can I exercise options during a trading blackout period or when I possessmaterial nonpublic information?

A: Yes. You may exercise the options and receive shares, but you may not sell or gift the shares during a trading blackout period or any time that you have material nonpublic information. Also note that if you choose to exercise and hold the shares, you will be responsible at that time for any taxes due.

19. Am I subject to the trading blackout period if I am no longer an employee, director or regular consultant/contractor of Rigel?

A: It depends. Generally, if your employment with Rigel ends during a trading blackout period that you are subject to, you will be subject to the remainder of that trading blackout period. If your employment with Rigel ends on a day that the trading window is open, you will not be subject to the next trading blackout period. However, even if you are not subject to our trading blackout period after you leave Rigel, you should not trade in Rigel securities if you possess material nonpublic information. That restriction stays with you as long as the information you possess is material and not released by Rigel.

20. Can I gift stock while I possess material nonpublic information or during a trading blackout period?

A: No, you may not make gifts, whether to charities, a trust or otherwise, of our common stock when you possess material nonpublic information or during a trading blackout period.

21. What if I purchased publicly traded options or other derivative securities before I became a Rigel employee, contractor or consultant?

A: The same rules apply as for employee stock options. You may exercise the publicly traded options at any time, but you may not sell or gift the securities during a trading blackout period or at any time that you have material nonpublic information.

22. May I own shares of a mutual fund that invests in Rigel?

A: Yes.

23. Are mutual fund shares holding Rigel common stock subject to the trading blackout periods?

A: No. You may trade in mutual funds holding Rigel common stock at any time.

24. What happens if I violate our insider trading policy?

A: Violating our policies may result in disciplinary action, which may include termination of your employment or other relationship with Rigel. In addition, you may be subject to criminal and civil actions.

25. Who should I contact if I have questions about our insider trading andwindow period policy?

A: You should contact our General Counsel.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statements (Form S-8 Nos. 333-51184, 333-106532, 333-125895 and 333-148132) pertaining to the 2000 Equity Incentive Plan, the 2000 Employee Stock Purchase Plan and the 2000 Non-Employee Directors' Stock Option Plan of Rigel Pharmaceuticals, Inc.,
- (2) Registration Statements (Form S-8 Nos. 333-155031 and 333-168495) pertaining to the 2000 Equity Incentive Plan and the 2000 Non-Employee Directors' Stock Option Plan of Rigel Pharmaceuticals, Inc.,
- (3) Registration Statement (Form S-8 No. 333-134622) pertaining to the 2000 Equity Incentive Plan and 2000 Employee Stock Purchase Plan of Rigel Pharmaceuticals, Inc.,
- (4) Registration Statement (Form S-8 No. 333-72492) pertaining to the 2001 Non-Officer Equity Incentive Plan of Rigel Pharmaceuticals, Inc.,
- (5) Registration Statements (Form S-8 Nos. 333-107062, 333-139516 and 333-196535) pertaining to the 2000 Employee Stock Purchase Plan of Rigel Pharmaceuticals, Inc.,
- (6) Registration Statement (Form S-8 No. 333-111782) pertaining to the 2000 Equity Incentive Plan of Rigel Pharmaceuticals, Inc.,
- (7) Registration Statements (Form S-8 Nos. 333-175977 and 333-189523) pertaining to the 2011 Equity Incentive Plan, the 2000 Equity Incentive Plan and the 2000 Non-Employee Directors' Stock Option Plan of Rigel Pharmaceuticals, Inc.,
- (8) Registration Statement (Form S-8 Nos. 333-212878 and 333-183130) pertaining to the 2011 Equity Incentive Plan of Rigel Pharmaceuticals, Inc.,
- (9) Registration Statements (Form S-8 Nos. 333-214370, 333-216516, 333-221400, 333-263187 and 333-270329) pertaining to the Rigel Pharmaceuticals, Inc. Inducement Plan,
- (10) Registration Statement (Form S-8 No. 333-219610) pertaining to the 2000 Non-Employee Directors' Stock Option Plan and the 2011 Equity Incentive Plan of Rigel Pharmaceuticals, Inc.,
- (11) Registration Statement (Form S-8 Nos. 333-281306, 333-226700, 333-266501 and 333-273575) pertaining to the 2018 Equity Incentive Plan and the Inducement Plan of Rigel Pharmaceuticals, Inc.,
- (12) Registration Statements (Form S-8 Nos. 333-233064 and 333-240371) pertaining to the 2018 Equity Incentive Plan of Rigel Pharmaceuticals, Inc.,
- (13) Registration Statements (Form S-8 No. 333-257226) pertaining to the 2018 Equity Incentive Plan and the 2000 Employee Stock Purchase Plan of Rigel Pharmaceuticals, Inc., and
- (14) Registration Statement (Form S-3 No. 333-281230) of Rigel Pharmaceuticals, Inc. and in the related Prospectuses;

of our reports dated March 4, 2025, with respect to the financial statements of Rigel Pharmaceuticals, Inc. and the effectiveness of internal control over financial reporting of Rigel Pharmaceuticals, Inc. included in this Annual Report (Form 10-K) of Rigel Pharmaceuticals, Inc. for the year ended December 31, 2024.

/s/ Ernst & Young LLP San Francisco, California March 4, 2025

CERTIFICATION

I, Raul R. Rodriguez, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Rigel Pharmaceuticals, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions
 about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on
 such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 4, 2025	
	/s/ Raul R. Rodriguez
	Raul R. Rodriguez Chief Executive Officer

CERTIFICATION

I, Dean L. Schorno, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Rigel Pharmaceuticals, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions
 about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on
 such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Dean L. Schorno
Dean L. Schorno Executive Vice President and Chief Financial Officer

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Raul R. Rodriguez, Chief Executive Officer of Rigel Pharmaceuticals, Inc. (the "Company"), and Dean L. Schorno, Executive Vice President and Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

- The Company's Annual Report on Form 10-K for the period ended December 31, 2024, to which this Certification is attached
 as Exhibit 32.1 (the "Annual Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange
 Act: and
- The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of March 4, 2025.

/s/ Raul R. Rodriguez /s/ Dean L. Schorno
Raul R. Rodriguez Dean L. Schorno
Chief Executive Officer Executive Vice President and Chief Financial Officer

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Rigel Pharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10- K), irrespective of any general incorporation language contained in such filing.