UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____to

Commission file number: 001-38443

COGENT BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**46-5308248**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
275 Wyman Street, 3rd Floor Waltham, Massachusetts	**02451**
(Address of principal executive offices)	**(Zip Code)**

(617) 945-5576
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of exchange on which registered
Common Stock, $0.001 Par Value	**COGT**	**The Nasdaq Global Select Market**

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 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 report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☒

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of Common Stock held by non-affiliates of the registrant computed by reference to the price of the registrant's Common Stock as of June 30, 2024, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $869.3 million (based on the last reported sale price on the Nasdaq Global Select Market as of such date).

As of February 21, 2025, there were 113,850,090 shares of the registrant's Common Stock, $0.001 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of this report, to the extent not set forth herein, is incorporated herein by reference from our definitive proxy statement relating to the 2025 Annual Meeting of Stockholders, which definitive proxy statement shall be filed with the Securities and Exchange Commission within 120 days after the end of the annual period to which this report relates.

Cogent Biosciences, Inc.
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Summary of the Material Risks Associated with Our Business

Our business is subject to numerous risks and uncertainties that you should be aware of in evaluating our business. These risks include, but are not limited to, the following:

- Our business is highly dependent on the success of our bezuclastinib program and our ability to discover and develop additional product candidates. We may not be successful in our efforts to develop bezuclastinib or expand our pipeline of drug candidates.
- We will require substantial additional funding. If we fail to obtain additional financing when needed, or on attractive terms, we may be unable to complete the development and commercialization of our product candidates.
- If unacceptable side effects are identified during the development of our drug candidates, we may need to abandon or limit such development.
- We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.
- The incidence and prevalence for target patient populations of our drug candidates have not been established with precision. If the market opportunities for our drug candidates are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue potential and ability to achieve profitability will be adversely affected.
- Interim, "top-line" and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available, may be interpreted differently if additional data are disclosed, and are subject to audit and verification procedures that could result in material changes in the final data.
- Regulatory authorities, including the U.S. Food and Drug Administration ("FDA"), may disagree with our regulatory plan and we may fail to obtain regulatory approval of our product candidates.
- We currently rely and for the foreseeable future will continue to rely on third parties to conduct our clinical trials and to assist with various research, discovery, manufacturing and supply activities. If these third parties do not properly and successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates or discover new product candidates.
- The third parties upon whom we rely for the supply of the API and drug product used in bezuclastinib are our sole source of supply, and the loss of any of these suppliers could significantly harm our business.
- If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.
- We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.
- We have incurred net losses in every year since our inception and anticipate that we will continue to incur net losses in the future.
- The price of our stock may be volatile, and you could lose all or part of your investment.

The summary risk factors described above should be read together with the text of the full risk factors in Item 1A. "Risk Factors" and the other information set forth in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes, as well as in other documents that we file with the SEC. The risks summarized above or described in full below are not the only risks that we face. Additional risks and uncertainties not precisely known to us, or that we currently deem to be immaterial may also materially adversely affect our business, financial condition, results of operations and future growth prospects.

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements, which reflect our current views with respect to, among other things, our operations and financial performance. All statements other than statements of historical facts contained in this Annual Report on Form 10-K, including statements regarding our future results of operations and financial position, business strategy and plans, and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties, and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "should," "expects," "might," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," "seek," "would" or "continue," or the negative of these terms or other similar expressions. The forward-looking statements in this Annual Report on Form 10-K are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to a number of risks, uncertainties and assumptions described in the "Risk Factors" section and elsewhere in this Annual Report on Form 10-K. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Some of the key factors that could cause actual results to differ from our expectations include:

- the potential impacts of raising additional capital, including dilution to our existing stockholders, restrictions on our operations or requirements that we relinquish rights to our technologies or product candidates;
- the success, cost, and duration of our product development activities and clinical trials, including the enrollment rates in our clinical trials;
- the timing of our planned regulatory submissions to the FDA for our bezuclastinib product candidate and any other product candidates we may develop;
- our ability to obtain and maintain regulatory approval for our bezuclastinib product candidate and any other product candidates we may develop, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- the potential for our identified research priorities to advance our bezuclastinib product candidate or for our teams to discover and develop additional product candidates;
- the ability to license additional intellectual property rights relating to our bezuclastinib product candidate or future product candidates from third-parties and to comply with our existing or future license agreements and/or collaboration agreements;
- our ability to commercialize our bezuclastinib product candidate and future product candidates in light of the intellectual property rights of others;
- our ability to obtain funding for our operations, including funding necessary to complete further discovery, development and commercialization of our existing and future product candidates;
- the scalability and commercial viability of our manufacturing methods and processes;
- the commercialization of our product candidates, if approved;
- our ability to attract collaborators with development, regulatory, and commercialization expertise;
- future agreements with third parties in connection with the commercialization of our product candidates and any other approved product;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- the rate and degree of market acceptance of our product candidates;
- the pricing and reimbursement of our product candidates, if approved;

- regulatory developments in the United States and foreign countries, including pharmaceutical and biological product marketing regulation;
- the impact of adverse business and economic conditions including inflationary pressures, general economic slowdown or a recession, high interest rates, changes in monetary policy, banking institution instability, changes in trade policies, including tariffs or other trade restrictions or the threat of such actions, and the prospect of a shutdown of the U.S. federal government;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- the development and success of competing therapies that are or may be under development in clinical trials or become available commercially;
- our ability to attract and retain key scientific and management personnel;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements, and needs for additional financing;
- our use of the proceeds from the private placements, sales of our preferred stock and public offerings of our common stock from time to time; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our bezuclastinib product candidate and future product candidates.

While we may elect to update these forward-looking statements at some point in the future, whether as a result of any new information, future events, or otherwise, we have no current intention of doing so except to the extent required by applicable law.

PART I

Unless the context otherwise requires, we use the terms "Cogent," "company," "we," "us," and "our" to refer to Cogent Biosciences, Inc. and, where appropriate, our subsidiaries.

ITEM 1. BUSINESS

Overview

We are a clinical-stage biotechnology company focused on developing precision therapies for genetically defined diseases. Our approach is to design rational precision therapies that treat the underlying cause of disease and improve the lives of patients. Our most advanced program is bezuclastinib, also known as CGT9486, a highly selective tyrosine kinase inhibitor that is designed to potently inhibit the KIT D816V mutation as well as other mutations in KIT exon 17. In the vast majority of cases, KIT D816V is responsible for driving Systemic Mastocytosis ("SM"), a serious and rare disease caused by unchecked proliferation of mast cells. Exon 17 mutations are also found in patients with advanced gastrointestinal stromal tumors ("GIST"), a type of cancer with strong dependence on oncogenic KIT signaling. Bezuclastinib is a highly selective and potent KIT inhibitor with the potential to provide a new treatment option for these patient populations. We are developing bezuclastinib to treat patients living with Non-Advanced Systemic Mastocytosis ("Non-AdvSM"), Advanced Systemic Mastocytosis ("AdvSM") and GIST. We also have an ongoing Phase 1 study of our novel internally developed FGFR2 inhibitor, CGT4859. In addition, the Cogent Research Team is developing a portfolio of novel targeted therapies to help patients fighting serious, genetically driven diseases initially targeting mutations in ErbB2, PI3Kα and KRAS.

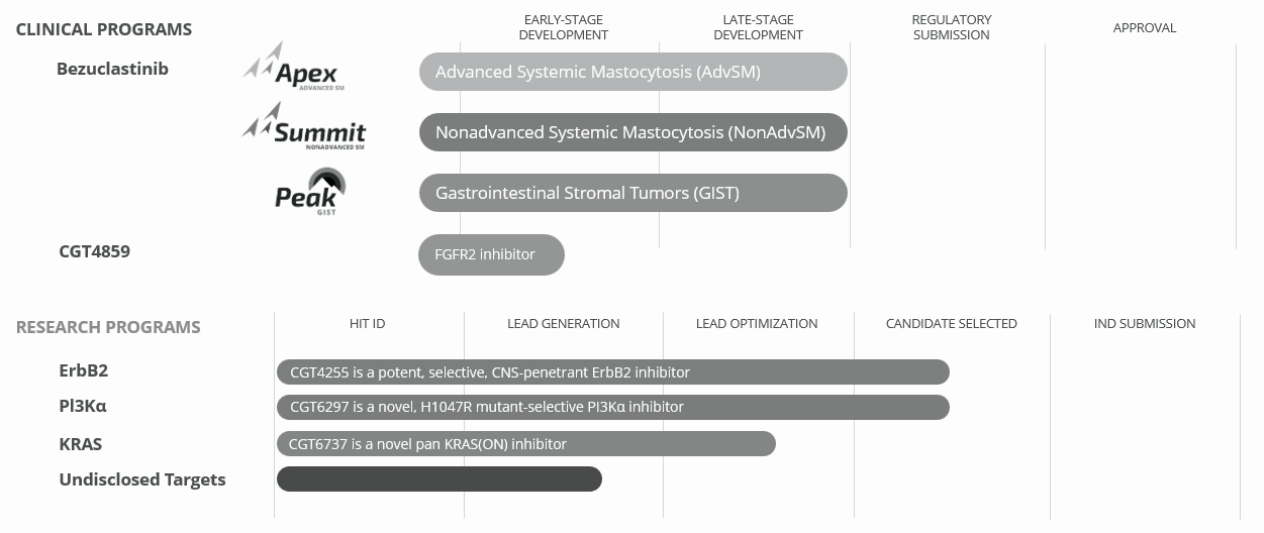
We have assembled a management team with extensive experience in the research, development, manufacturing and commercialization of pharmaceutical products, specifically including numerous successful precision medicines for genetically defined diseases. With the support of our board of directors and their expertise, we believe that the Company is well positioned to develop and commercialize novel precision medicines. Beginning with bezuclastinib, our mission is to develop and commercialize pharmaceutical products that improve the lives of patients fighting rare, genetically driven diseases.

Our Strategy

Our vision is to discover, develop, and commercialize best-in-class therapies that have a meaningful impact for patients with genetically defined diseases. The principal components of our strategy include:

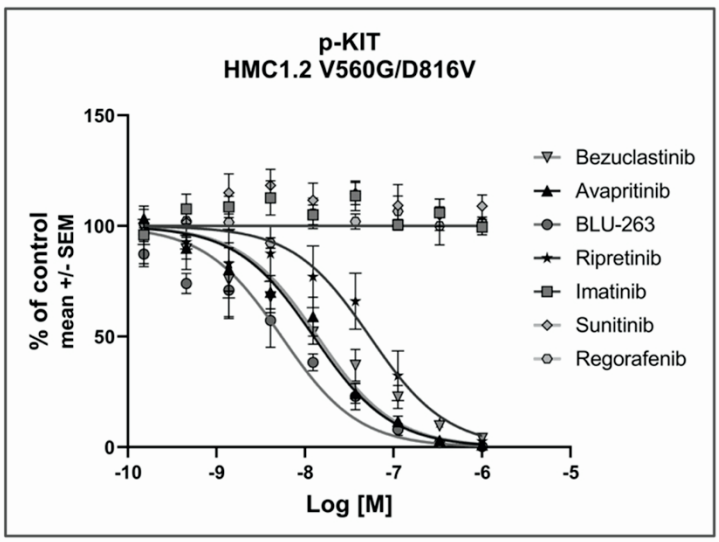
- Explore the clinical utility of bezuclastinib in patients with Non-AdvSM;
- Explore the clinical utility of bezuclastinib in patients with AdvSM;
- Explore the clinical utility of bezuclastinib in combination with sunitinib as a second-line treatment for patients with GIST;
- Prepare to commercialize bezuclastinib should any or all of our active clinical trials demonstrate clinical benefit for patients with high unmet medical need;
- Explore the clinical utility of CGT4859, a reversible, selective FGFR2 inhibitor in patients with documented FGFR mutations, including advanced cholangiocarcinoma;
- Advance our ErbB2, PI3Kα and KRAS preclinical programs, as well as our other undisclosed preclinical programs; and
- Discover and develop additional precision medicines for patients with genetically defined diseases.

Our Pipeline



Bezuclastinib Overview

Bezuclastinib is designed to target mutations within the KIT receptor tyrosine kinase, including KIT D816V. As a Type I inhibitor, bezuclastinib is designed to selectively bind the active conformation of mutant KIT. In preclinical studies, bezuclastinib has demonstrated comparable potency relative to other FDA-approved KIT mutant inhibitors, and clear selectivity for KIT mutations versus other kinase targets frequently associated with other KIT inhibitors including, but not limited to PDGFRα, PDGFRβ, VEGFR2, FLT3, CSF1R and KDR. In preclinical studies of bezuclastinib, limited blood-brain-barrier penetration was observed, and there have been no clinically significant CNS toxicities identified. This preclinical profile of selectivity against kinases that have been associated with off-target toxicities and limited blood-brain-barrier penetration differentiate bezuclastinib from other KIT mutant inhibitors, and support the potential for a best-in-class clinical profile. The figures below provide a summary of potency and selectivity preclinical data.



HMC1.2 human mast cells (V560G/D816V) were treated with inhibitors for 1 hour followed by analysis for phosphorylated c-KIT ELISA (R&D Systems)

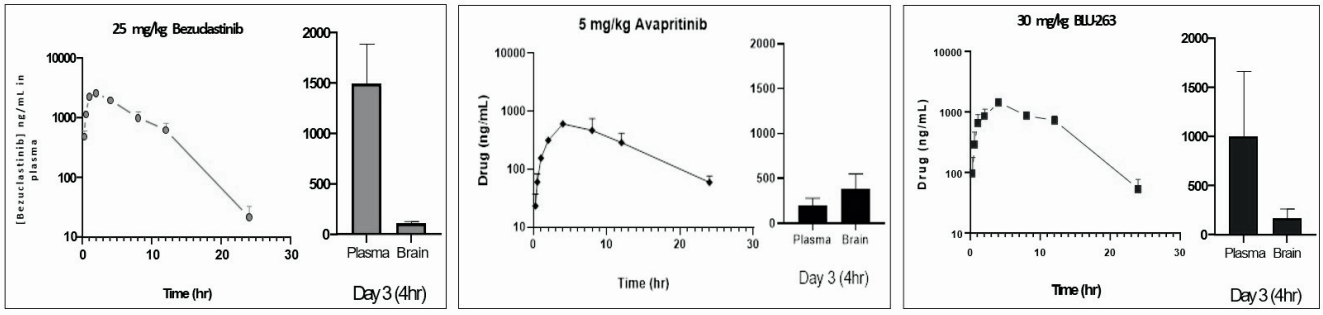
Compound	Cell IC_{50} (nM)
	KIT V560G/D816V (HMC 1.2)
Bezuclastinib	**14**
Avapritinib	13
BLU-263	6
Ripretinib	54
Imatinib	>1000
Sunitinib	>1000
Regorafenib	>1000

IC_{50} values from ELISA in (A) in nM are represented for bezuclastinib and other KIT inhibitors

Figure 1. Potent Inhibitor of KIT Activation Loop Mutants, Including D816V (Source: AACR 2022)

Compound	KIT D816V (HMC 1.2)	WT KIT	PDGFRα	PDGFRβ	CSF1R	FLT3	KDR
Bezuclastinib	14	121	> 10,000	> 10,000	> 10,000	> 1000	> 1000
Avapritinib	13	114	53	10	249	305	> 1000
BLU-263	6	355	21	6	161	345	> 1000

Figure 2. Selectivity Against Related Kinases (Source: AACR 2022)



$t_{1/2}$ (h)	C_{max} (ng/mL)	AUC_{last} (ng·hr/mL)	Brain:Plasma ratio
7	2592 ± 364	21509 ± 2558	0.07

$t_{1/2}$ (h)	C_{max} (ng/mL)	AUC_{last} (ng·hr/mL)	Brain:Plasma ratio
13	672 ± 102	6980 ± 1156	2.0

$t_{1/2}$ (h)	C_{max} (ng/mL)	AUC_{last} (ng·hr/mL)	Brain:Plasma ratio
4	1470 ± 222	16200 ± 414	0.18

Figure 3. Bezuclastinib Demonstrates Minimal Brain Penetration (Source: AACR 2022)

We licensed the exclusive worldwide rights to develop and commercialize bezuclastinib from Plexxikon Inc., a Daiichi Sankyo subsidiary ("Plexxikon"). Under the terms of the license agreement, Plexxikon received an upfront payment and is eligible for additional development and regulatory milestone payments along with mid- to high- single-digit royalty payments.

Clinical Trials and Disease Overviews

Bezuclastinib – SM

SM is driven by KIT D816V mutations causing a perpetual 'on' state within mast cells, a type of white blood cell, leading to proliferation and accumulation in various internal organs and bone marrow. Key biomarkers of SM include but are not limited to, elevated serum tryptase, high mass cell burden in bone marrow and the KIT D816V variant allele frequency. As a highly selective and potent KIT inhibitor, bezuclastinib has the potential to provide a new treatment option for patients with SM. SM occurs when mast cells inappropriately accumulate in various internal organs in the body. Approximately 90% of SM patients present with Non-AdvSM and 10% of patients present with AdvSM, a rare and very aggressive form of SM. There are three subtypes of AdvSM: aggressive SM ("ASM"), SM with associated hematologic neoplasm ("SM-AHN") and mast cell leukemia ("MCL").

Patients diagnosed with Non-AdvSM experience a life-long illness with chronic symptoms including headaches, urticaria pigmentosa, skin lesions, skin redness and warmth (flushing), abdominal pain, bloating, vomiting, diarrhea, and gastroesophageal reflux ("GERD"), that significantly impact the patient's quality of life. Many patients are also at high risk for severe, life-threatening anaphylactic reactions to various triggers such as insect bites or stings. Patients with Non-AdvSM suffer from a poor quality of life and are in need of new treatment options.

Patients with AdvSM may suffer from a multitude of debilitating symptoms such as anemia, thrombocytopenia, ascites, bone fractures, gastrointestinal abnormalities, and enlargement of the liver, spleen, and lymph nodes, which ultimately lead to organ failure and early death. Patients with AdvSM have a significantly diminished lifespan with a median survival of less than 3.5 years.

Based on the characteristics of bezuclastinib, we are pursuing development of the compound in both patients living with AdvSM and patients with Non-AdvSM, the vast majority of whom have a KIT D816V mutation. Emerging clinical data for other kinase inhibitors with activity against KIT D816V have shown that SM patients are highly sensitive to inhibition of the target. Bezuclastinib was specifically designed to selectively inhibit KIT mutations, including KIT D816V.

The underlying SM patient population is not yet well understood. The prevalence of SM in the United States is estimated to be up to 30,000 patients, with the prevalence of Non-AdvSM being approximately 25,000 patients. We believe there is a significant unmet medical need for clinically active, well tolerated treatment options for this patient population. We believe bezuclastinib is well suited to meet this need and target the direct underlying cause of SM. The FDA has granted orphan drug designation to bezuclastinib for the treatment of Mastocytosis.

We expect to report top-line results from our SUMMIT trial in July 2025 and from our APEX trial in the second half of 2025, and we plan to submit the first bezuclastinib New Drug Application ("NDA") by the end of 2025 for patients with SM.

In the first quarter of 2025, we expect to initiate an expanded access program in the United States for SM patients to receive investigational bezuclastinib after meeting certain eligibility criteria.

SUMMIT (Non-AdvSM)

SUMMIT is our registration-directed randomized, global, multicenter, double-blind, placebo-controlled, multi-part Phase 2 clinical trial for patients with Non-AdvSM. The study is designed to explore the safety and efficacy of bezuclastinib in patients with moderate to severe Non-AdvSM, which includes Indolent Systemic Mastocytosis ("ISM"), Smoldering Systemic Mastocytosis ("SSM") and Bone Marrow Mastocytosis. Based on the performance of bezuclastinib's optimized formulation in the PEAK lead-in trial, as well as in a healthy normal volunteer study, the SUMMIT trial protocol was amended to allow for the optimized formulation to be introduced during the Phase 1b dose optimization phase. SUMMIT Part 1 completed enrollment in the third quarter of 2023, including over enrollment at 54 patients across Part 1a and Part 1b. SUMMIT Part 2 completed enrollment in the fourth quarter of 2024, including over enrollment at 179 patients. We expect to report top-line results in July 2025.

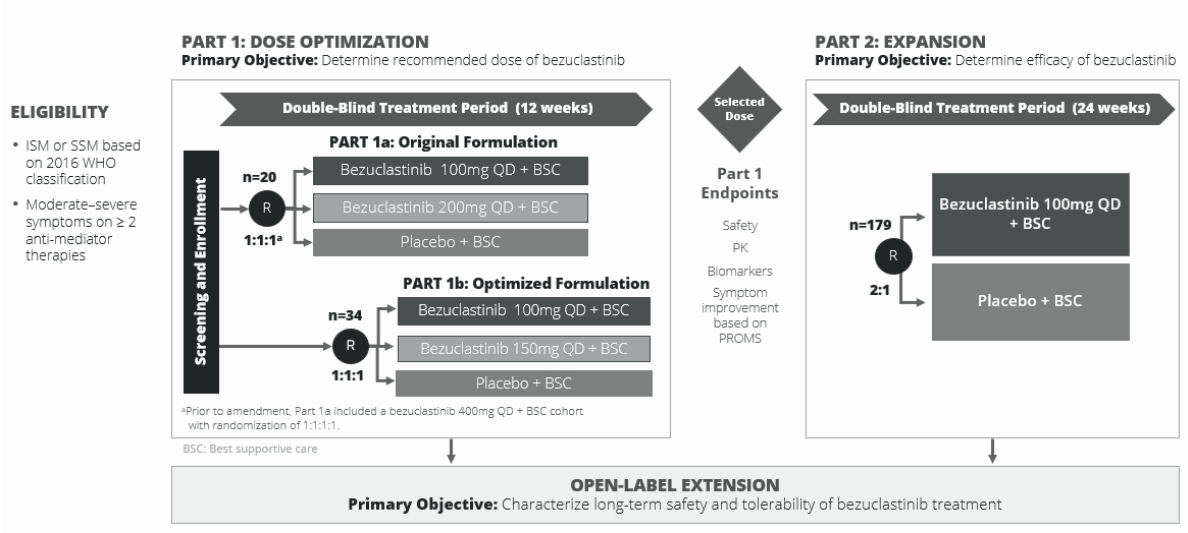


Figure 4. SUMMIT study design graphic

From the data collected in Part 1 of SUMMIT and in accordance with FDA guidelines, we have developed a novel patient reported outcomes measure ("PROM") called Mastocytosis Symptom Severity Daily Diary ("MS2D2"). Based on literature review, patient and physician interviews, data from SUMMIT Part 1 and our interactions with the FDA, we believe our MS2D2 is a reliable, valid and fit-for-purpose PROM. The MS2D2 Total Symptom Score ("TSS") is comprised of 11 items, and scored on a 0-110 scale. The primary endpoint of SUMMIT Part 2 is a comparison of week 24 mean absolute change from baseline in MS2D2 TSS between bezuclastinib and placebo. In June 2024, we announced a positive discussion with the FDA and that we reached alignment with the FDA on the use of MS2D2 in Part 2 of SUMMIT.

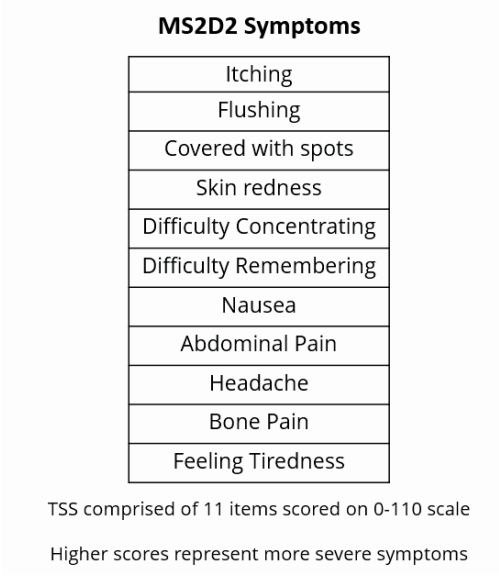


Figure 5. Mastocytosis Symptom Severity Daily Diary ("MS2D2") Total Symptom Score

In February 2024, we presented data from SUMMIT Part 1b at the 2024 American Academy of Allergy, Asthma and Immunology. Thirty-four patients were enrolled in Part 1b and were treated with either bezuclastinib or placebo plus best supportive care. These patients were evaluated for signs of clinical activity over 12 weeks, including well-accepted biomarkers of disease burden. Based on the totality of the results from SUMMIT Part 1, the data support 100 mg QD as the optimal dose of bezuclastinib in Part 2 of SUMMIT for patients with Non-AdvSM. After the initial 12-week period, all patients were given the opportunity to receive bezuclastinib in the SUMMIT Open Label Extension ("OLE"). In December 2024 at the 2024 American Society of Hematology ("ASH") Annual Meeting, we presented updated data on the 27 patients who were randomized in either Part 1 or the OLE to receive the 100 mg QD dose.

At the 100 mg QD dose and as of the cut-off date of August 29, 2024, 89% of patients had >50% decrease in serum tryptase by four weeks of treatment with bezuclastinib and 95% of patients with elevated baseline tryptase achieved serum tryptase levels <20 ng/ml by week 24. Additionally, 84% of patients with baseline serum tryptase >11.4ng/ml achieved <11.4ng/mL by week 24.

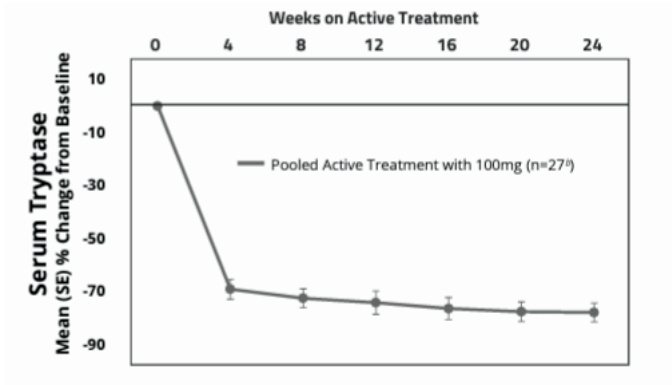


Figure 6. Mean Percent Change from Baseline in Serum Tryptase in Pooled[a] Patients Receiving 100mg Bezuclastinib
a Includes all patients who received bezuclastinib 100mg QD during Part 1 or OLE. Change from baseline is taken during 24 weeks of active therapy. bn=24, 25, or 26 at some timepoints 26 D

After 24 weeks of active treatment, the 27 patients randomized to receive 100 mg QD were evaluated for signs of clinical activity using multiple PRO measures, including the Mastocytosis Symptom Severity Daily Diary ("MS2D2") and the Mastocytosis Quality-of-Life ("MC-QoL") scale. These patients reported at 56% mean improvement in TSS from baseline.

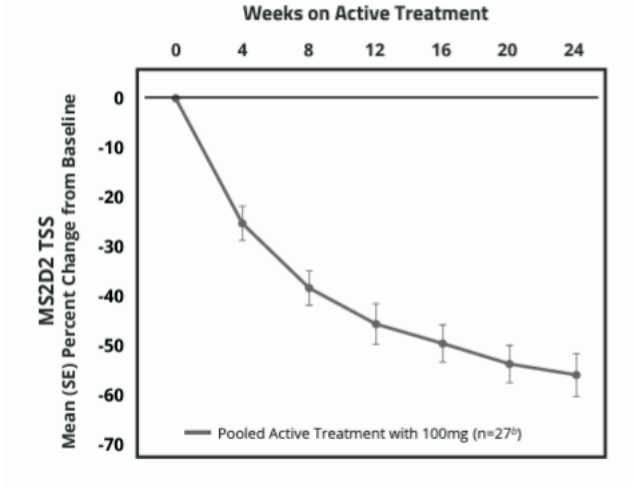


Figure 7. Mean Percent Change from Baseline in MS2D2 Total Symptom Score Over Time in Pooled[a] Patients Receiving 100mg Bezuclastinib
a Includes all patients who received bezuclastinib 100mg QD during Part 1 or OLE. Change from baseline is taken during 24 weeks of active therapy. bn=24, 25, or 26 at some timepoints 26 D

Additionally, 76% of patients demonstrated >50% reduction from baseline in MS2D2 TSS with 88% of patients exceeding 30% reduction from baseline after 24 weeks. At 24 weeks of treatment 31% of patients have already reduced or discontinued best supportive care medications.

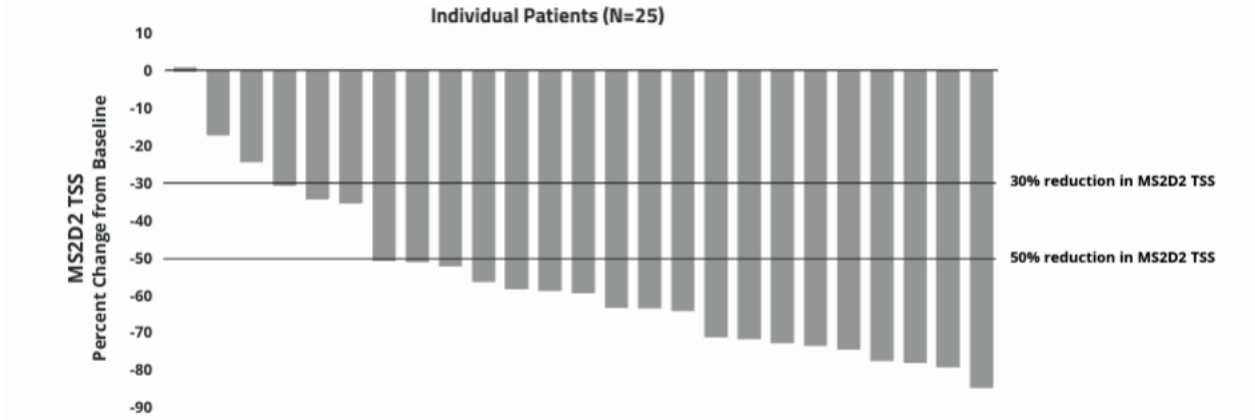


Figure 8. Percent Change from Baseline in MS2D2 Total Symptom Score after 24 Weeks Active Treatment in Individual Patients Receiving 100mg Bezuclastinib

These same patients saw a 49% mean improvement in MC-QOL Total Score at 24 weeks.

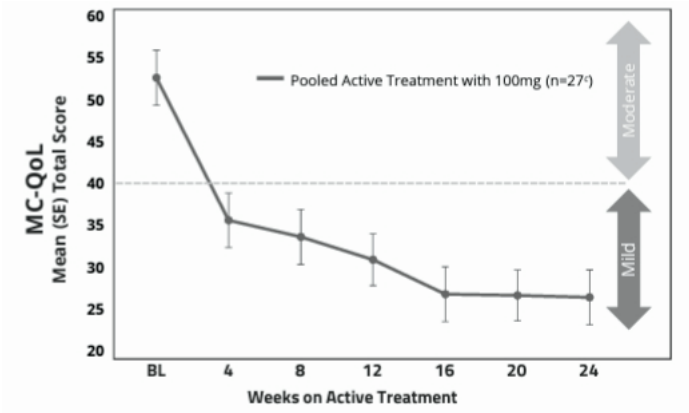


Figure 9. Mean Total Score in MC-QoL, a Quality-of-Life Measure[a], in Pooled[b] Patients Receiving 100mg Bezuclastinib
a MC-QoL is a disease-specific HRQoL questionnaire with 27 items in 4 domains. Total score is linearly transformed to a 0-100 scale
b Includes patients who received bezuclastinib 100mg QD through 24 weeks of active treatment.
c N=23-25 depending on timepoint.

As of the data cutoff, August 29, 2024, the median duration of bezuclastinib treatment was 56 weeks for patients in the active arm and 40 weeks for placebo patients who crossed over to the OLE. The majority of treatment emergent adverse events were low grade and reversible with no treatment-related bleeding or cognitive impairment events reported. The most common treatment-emergent adverse events were hair color changes and transaminase elevations. All patients experiencing elevated transaminases were asymptomatic and reversible: five patients resolved without any dose modifications and remained on study; two patients resolved with dose reduction and remained on study, one of whom re-escalated to the original dose; and two patients resolved following discontinuation. All of the safety data were previously reported at ASH 2024. There were no other discontinuations due to adverse events.

Double-blind + Open-Label Extension 100mg		
Preferred Term	Total Active[a] (n=27)	
	Gr1/2	Gr3
Hair color changes	21	-
ALT/AST increased	6	3
Nausea	7	-
URTI	7	-
Diarrhea	6	-
Headache	6	-
Pruritus	5	-
Arthralgia	5	-
GERD	5	-
Peripheral edema	4	-
Alopecia	4	-

[a]Among the nine patients randomized to placebo, only TEAEs that occurred after crossover to bezuclastinib treatment are included.

Figure 10. All Cause Treatment-Emergent Adverse Events (TEAE) ≥ 15 %

APEX (AdvSM)

APEX is our registration-directed global, open-label, multi-center, Phase 2 clinical trial in patients with AdvSM evaluating the safety, efficacy, pharmacokinetic, and pharmacodynamic profiles of bezuclastinib. In April 2023, we initiated Part 2 of the APEX trial using the optimized formulation of bezuclastinib at 150 mg daily dose. An additional APEX cohort was initiated in the third quarter of 2023 and is designed to allow concomitant administration of bezuclastinib with azacitadine in patients with SM-AHN. We completed enrollment in APEX Part 2 in the first quarter of 2025 with 58 patients and expect to present top-line results in the second half of 2025.

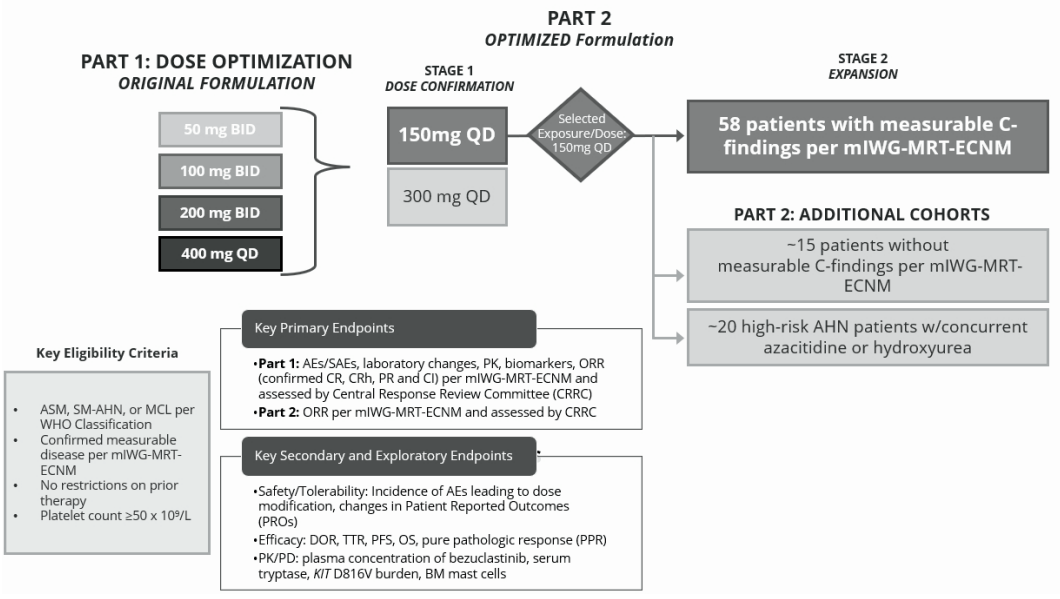


Figure 11. APEX study design graphic

In December 2024, at the 2024 ASH meeting, we reported updated positive clinical data from Part 1 of the APEX trial. Thirty-two patients were treated in Part 1 at one of four dose levels (50 mg BID, 100 mg BID, 200 mg BID or 400 mg QD). In 2024, we announced APEX Part 2 would be conducted at the optimized 150mg QD dose, which closely matches the exposure from 100 mg BID dose in APEX Part 1. Patients were enrolled with the following sub-types: seven patients with ASM, 23 patients with SM-AHN, and two patients with MCL.

As of the cutoff date of October 11, 2024, 32 patients enrolled were evaluated for signs of clinical activity, 27 of whom were mIWG-MRT-ECNM evaluable. An objective response rate ("ORR") of 52% (including complete remission ("CR"), CR with partial hematologic remission ("CRh"), partial remission ("PR"), and clinical improvement ("CI")) was achieved, including 61% ORR for TKI-treatment-naïve patients. An ORR of 88% was achieved by pure pathological response ("PPR") criteria. The median time to achieve response was 2.2 months and median duration of response has not yet been reached. Median progression-free survival ("PFS") was not yet reached at median follow-up of 20 months and the PFS rate at 24 months was 82%.

	Confirmed mIWG-MRT-ECNM Responses per CRRC		
Best Response, n (%) Ω	All	TKI‡ Therapy Naïve	Prior TKI‡ Exposure
	N=27	N=18	N=9
Overall response rate			
CR + CRh + PR + CI†	14 (52)	11 (61)	3 (33)
CR + CRh + PR	13 (48)	10 (56)	3 (33)
Complete Response (CR + CRh)	7 (26)	7 (39)	0
Partial Response (PR)	6 (22)	3 (17)	3 (33)
Clinical Improvement (CI)	1 (4)	1 (6)	0
Stable Disease (SD)	10 (37)	6 (33)	4 (44)
Not evaluable	3 (11)	1 (6)	2 (22)

Best PPR$^{\alpha}$ Response, n (%)	All
	N=32
Overall response rate (CR + PR)	28 (88)
Complete Response (CR/CRh)	14 (44)
Partial Response (PR)	14 (44)
Stable Disease (SD)	1 (3)
Not Evaluable	3 (9)

Figure 12. Part 1 Responses Observed by mIWG-MRT-ECNM and PPR Criteria (Source: ASH conference 2024)
Ω 5 patients without measurable C-finding at baseline were excluded for being non-evaluable per mIWG-MRT-ECNM criteria; one additional patient was excluded due to discontinuation prior to first dose (not dosed [ND]).
‡ SM-directed therapy with midostaurin only (n=4) or midostaurin and avapritinib (n=5)
† Primary endpoint of Apex study

As of October 11, 2024, 94% of patients achieved a ≥ 50% reduction in serum tryptase levels, with 100% of patients receiving at least two cycles of treatment achieving a ≥ 50% reduction and 66% of patients achieved a reduction of serum tryptase below 20 ng/ml. Additionally, 93% of KIT D9816V-positive patients achieved a ≥ 50% reduction in KIT D816V VAF and 100% of evaluable patients achieved ≥ 50% reduction in bone marrow mast cell burden, with 83% of patients achieving a complete clearance of mast cell aggregates.

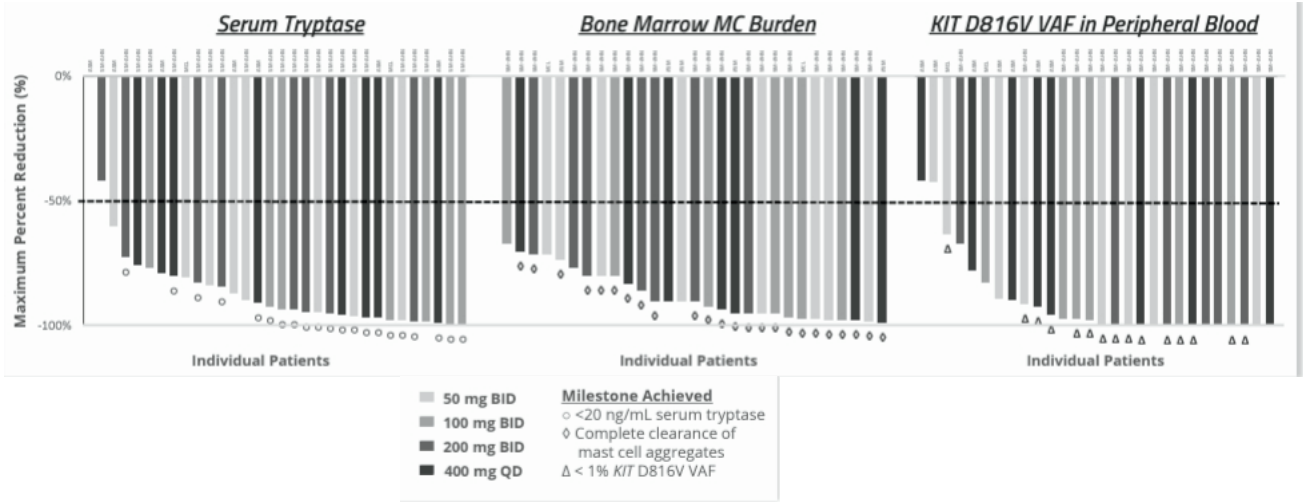


Figure 13. Reductions in markers of mast cell burden (Source: ASH conference 2024)

As of the data cutoff date of October 11, 2024, bezuclastinib continues to demonstrate a differentiated safety and tolerability profile across doses. The majority of hematological adverse events were low grade and reversible. There have been no new treatment-related serious adverse events or discontinuations reported since the 2023 ASH annual meeting. Twelve patients required dose reduction, eight of whom were treated at a 400 mg daily dose.

Bezuclastinib – GIST

GIST is characterized by uncontrolled cell growth in the interstitial cells of the gastrointestinal ("GI") tract. At diagnosis, about 80% of GIST patients' tumors are the result of primary KIT mutations. Imatinib is the current standard of care for treating GIST patients in the first line setting, with a median PFS of 19 months. However, the majority of GIST patients eventually develop resistance to imatinib due to secondary KIT mutations, most notably in exon 17 and exon 13. There are an estimated 2,000 to 3,500 patients with imatinib-resistant GIST eligible for treatment each year in the United States. We believe there is a significant unmet medical need for clinically active, well tolerated treatment options for this patient population and results from our clinical trial of bezuclastinib in combination with sunitinib demonstrated the potential for this novel combination to address the underlying drivers of imatinib resistance. Bezuclastinib has been granted orphan drug designation for the treatment of GIST by the FDA and under the Orphan Drug Act and the European Medicines Agency ("EMA").

Bezuclastinib is designed to be a potent and selective inhibitor of KIT exon 17 mutations. By combining bezuclastinib with sunitinib, a tyrosine kinase inhibitor known to inhibit KIT exon 13 mutations, we believe this combination has the potential to offer a new, active treatment option for imatinib resistant GIST patients.

The safety profile of bezuclastinib was clinically evaluated in approximately 50 GIST patients both as a single agent and as part of a combination therapy. Clinical data from this trial were published in the Journal of American Medical Association ("JAMA") and were presented at several scientific conferences, including by us at the 2020 annual Connective Tissue Oncology Society ("CTOS") meeting, and previously by Plexxikon at the 2018 annual American Society of Clinical Oncology ("ASCO") meeting and the 2017 annual CTOS meeting. In November 2020, we presented final results from a Phase 1/2 trial testing the combination of bezuclastinib with sunitinib in 18 heavily pre-treated GIST patients at 2020 CTOS. In the subset of 15 patients who had not been previously treated with bezuclastinib as a single-agent, the estimated mPFS reached 12 months, the confirmed ORR was 20% and the clinical benefit rate (CR+PR+SD) was 80%, with 27% of patients remaining on therapy out 27-34 months. Importantly, there were no dose limiting toxicities in the three dose levels tested, and the most common Treatment Emergent Adverse Events that were grade 3 or higher included anemia (5 patients, 27.8%), hypophosphatemia (3 patients, 16.7%), diarrhea, fatigue, hypertension, and lymphopenia (each 2 patients, 11.1%).

PEAK (GIST)

PEAK is our randomized open-label, global Phase 3 clinical trial designed to evaluate the safety, tolerability, and efficacy of bezuclastinib in combination with sunitinib compared to sunitinib alone in patients with locally advanced, unresectable or metastatic GIST who have received prior treatment with imatinib. Patient enrollment for the pivotal portion of the PEAK trial was completed in the third quarter of 2024. Based on strong global patient interest, a total of 413 patients were enrolled in the trial. In addition, we completed a pre-planned interim futility analysis, and the Independent Data Monitoring Committee ("IDMC") recommended continuing the PEAK study without modification. This pre-specified analysis was based on an assessment of PFS as determined by independent central review and did not include the option for early stopping due to efficacy. Top-line results are expected by the end of 2025.

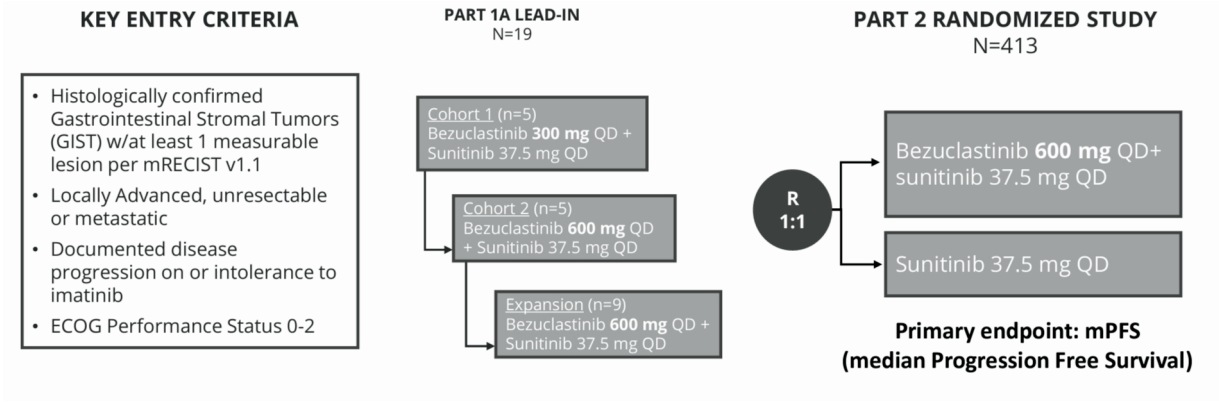


Figure 14. PEAK study design graphic

Based on the data from the lead-in portion of the PEAK trial, we initiated the randomized portion of PEAK using a 600 mg dose of our optimized formulation of bezuclastinib, supplied as 75 mg tablets, which in the lead-in portion of the study demonstrated clinical exposure comparable to the 1,000 mg original formulation used in our GIST Phase 1/2 clinical trial. Initial safety and pharmacokinetic data from the PEAK lead-in study was presented at the CTOS annual meeting in November 2022.

In June 2024, we presented updated positive clinical data from the lead-in portion of the PEAK trial at the 2024 annual ASCO meeting. As of the cutoff date, April 1, 2024, the 42 patients in Part 1 have been on study for a median of 15.3 months. The median progression-free survival ("mPFS") on the combination of bezuclastinib and sunitinib was 10.2 months in all patients. In a subset of second-line GIST patients with only prior imatinib, a population that most closely resembles patients currently enrolling in the Phase 3 pivotal PEAK study, the data demonstrate a mPFS of 19.4 months. In addition, the ORR in all patients treated with bezuclastinib and sunitinib was 27.5% and in the subset of second-line patients the ORR was 33.3%, per investigator assessment. Combination treatment resulted in a disease control rate of 80% in all patients and 100% in second-line patients with prior imatinib only. As of the data cutoff, the combination of bezuclastinib and sunitinib does not appear to add to the severity of adverse events known to be associated with sunitinib monotherapy and is well-tolerated. The majority of treatment-emergent adverse events ("TEAEs") were low-grade and reversible and discontinuations due to TEAEs remain limited.

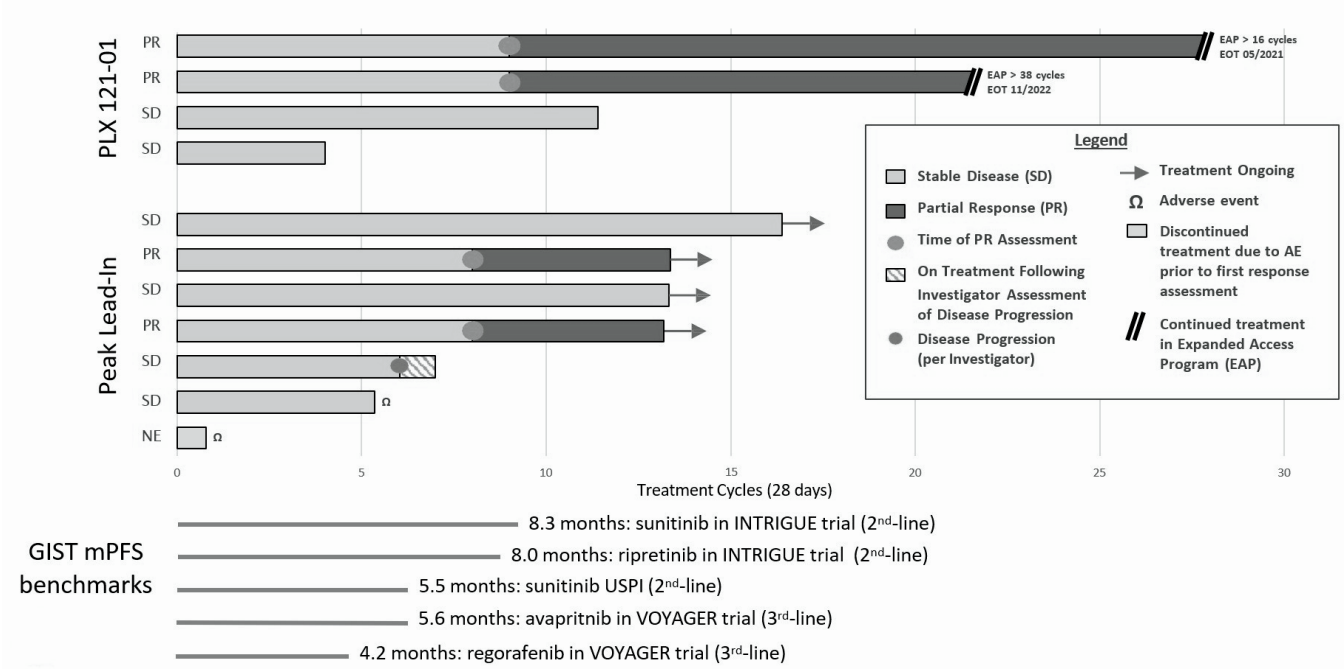


Figure 15. PEAK ORR and Durability

In May 2024, we also announced the initiation of a new advanced Phase 2 clinical trial of bezuclastinib plus sunitinib in later line GIST patients that is being sponsored by the Sarcoma Alliance for Research through Collaboration and in collaboration with The Life Raft Group and Dana-Farber Cancer Institute. The open label, single arm Phase 2 trial is designed to evaluate the mPFS as well as the safety and tolerability of bezuclastinib plus sunitinib in 40 patients with GIST who have previously progressed on sunitinib. This trial is focused on later line patients that are not eligible for PEAK and have limited treatment options.

In the first quarter of 2025, we initiated an expanded access program in the United States for patients affected with advanced, metastatic, and/or unresectable GIST, intolerant to imatinib or received prior imatinib therapy for treatment that resulted in disease progression, and who meet other inclusion and exclusion criteria.

CGT4859

Our research team is building a pipeline of small molecule inhibitors, with our first efforts aimed toward targeting currently undrugged mutations in fibroblast growth factor receptor ("FGFR"). FGFR mutations are well-established oncogenic drivers in multiple diseases, but approved medicines fail to capture the full landscape of FGFR altered tumor types, with FGFR1-mediated hyperphosphatemia serving as the most common dose-limiting toxicity for pan-FGFR inhibitors. In April 2023, we reported preclinical data at the American Association for Cancer Research ("AACR") 2023 Annual Meeting providing the first published evidence of CGT4859 a reversible, selective FGFR2 inhibitor with coverage of activating and emerging resistance mutations that spares inhibition of FGFR1. Preclinical data demonstrate a profile that delivers equipotent coverage across both key gatekeeper and molecular brake mutations (V564X, N549X) in FGFR2, while avoiding any evidence of FGFR1-linked hyperphosphatemia at efficacious plasma concentrations. In October 2023, we presented updated preclinical data at the 2023 EORTC-NCI-AACR International Symposium on Molecular Targets and Cancer Therapeutics ("EORTC-NCI-AACR"). Preclinical data demonstrate a profile that exhibits low namomolar potency on WT FGFR2 and FGFR2 mutations and is selective against the kinome, as well as a panel of ion channels and receptors. Exploratory pharmacokinetics studies conducted across species showed CGT4859 to be a low-clearance compound with high oral bioavailability. Further, in a mutant-driven mouse model, CGT4859 demonstrated dose-responsive tumor growth inhibition with complete regressions at 5 mg/kg PO and was well-tolerated. In addition, as a reversible inhibitor, the Cogent program retains enzymatic potency against potential cysteine 491 mutations. We are actively enrolling our Phase 1 study of CGT4859 in patients with FGFR2 mutations, including advanced cholangiocarcinoma. The trial will explore the safety, tolerability and clinical activity of escalating doses of CGT4859 with a goal of selecting an active and well tolerated dose for further clinical investigation.

Research Programs

The Cogent Research Team, based in Boulder, Colorado, is focused on pioneering best-in-class, small molecule therapeutics to expand our pipeline and deliver novel precision therapies for patients living with unmet medical needs. For ErbB2, PI3K and KRAS we see opportunities to provide a more robust molecular response compared to existing therapies.

ErbB2

Our research team is also advancing a novel, ErbB2 mutant program, which is focused on actionable and underserved mutations in a variety of solid tumor indications. In April 2023, we reported preclinical data at AACR describing a series of novel compounds which potently inhibit several key ErbB2 mutations, including YVMA insertions, while sparing inhibition of EGFR. An exemplar compound from these series demonstrates advantages versus tucatinib, an approved benchmark compound, on tumor growth inhibition in a peripheral ErbB2 L755S driven mutant model, as well as in an ErbB2 driven intracranial model. Recent program advances with a novel chemotype have further improved ErbB2 mutational potency and selectivity and improved human whole blood stability to nearly 24 hours, suggesting a favorable profile for optimal clinical efficacy. Updated data was presented in December 2024 at the San Antonio Breast Cancer Symposium ("SABCS"). The updated data presented shows that CGT4255 demonstrated low nM potency against ErbB2 wild-type and oncogenic ErbB2 mutations with greater than 100-fold selectivity over wild-type-EGFR. In addition to impressive selectivity across a broad range of kinases, receptors and ion channels, CGT4255 has exceptional half-life in human whole blood and liver cytosol fractions. Dose ascending PK data in mice showed low clearance and high oral bioavailability at all doses, with best-in-class 80% brain penetrance at 100 mg/kg. Maximum inhibition of ErbB2 was observed at a 30 mg/kg PO dose in both NIH/3T3 ErbB2-YVMA and ErbB2-L755S tumor models, with complete regressions at 100 mg/kg PO BID in the NIH3T3 ErbB2-L755S TGI model and was well tolerated. In addition, at the 2024 SABCS meeting, CGT4255 demonstrated robust efficacy in combination with T-DXd in an NCI-N87-luc Intracranial Her2+ Model, highlighting the ability to treat challenging intercranial tumors. These advances continue to highlight a favorable profile for optimal clinical efficacy. We selected our ErbB2 clinical candidate in 2024 and plan to submit an IND application in 2025.

PI3Kα

Our research team is also developing a potential best-in-class, wild-type-sparing, PI3Kα inhibitor that provides coverage for the H1047R mutation, which affects >30,000 cancer patients each year. The phosphoinositide 3-kinase ("PI3K") pathway is a key cell cycle regulating pathway that has an established role in tumor growth and development. PI3Kα mutations are highly prevalent in many solid tumors and are present in 36% of all breast cancer patients. The approved agents for these patients often lead to dose limitations, resulting from activity against wild-type PI3Kα. Preclinical data was presented at the 2024 EORTC-NCI-AACR meeting in October 2024 as well as the December 2024 SABCS, which highlighted that CGT6297 is an allosteric inhibitor of PI3K, was well-tolerated in the tumor growth inhibition efficacy models and has been profiled based on its selectivity for H1047R over WT PI3K. CGT6297 demonstrated low nM potency in H1047R mutant PI3K cell lines, differentiated dose ascending PK in mice with high bioavailability and low clearance. CGT6297 also showed >95% inhibition of pAKT in a H1047R PD model, without increases in insulin or C-peptide. Its efficacy profile was superior to a clinically-relevant dose of Alpelisib in the NCI H1048 mouse tumor growth inhibition model. CGT6297 has been selected as our clinical candidate for the PI3K 1047 mutation focused project. IND-enabling studies have been initiated and we expect to submit an IND application in 2025.

KRAS

Our research team is also developing a potent and selective KRAS inhibitor. Mutations in KRAS are among the most prevalent mutations found in cancer, occurring most often in colorectal cancer, non-small cell lung cancer and pancreatic cancer. Preclinical data was presented at the 2024 EORTC-NCI-AACR meeting and highlighted our internally-developed pan KRAS(ON) inhibitor with selectivity over HRAS and NRAS and picomolar (pM) activity across KRAS mutations without the potential liabilities of molecules in the class. Following oral administration, CGT6737 demonstrated robust PK/PD and tumor growth inhibition with 90% PD inhibition in mouse xenograft models. Lead optimization of CGT6737 is ongoing.

Intellectual Property

One key to our success will be our ability to establish and maintain protection for our product candidates and know-how, in order to enforce and defend our intellectual property rights and to operate without infringing on the rights of others. We rely on our know-how, trade secrets and continuing technological innovation as well as on in-licensing of third-party intellectual property to develop and maintain our proprietary position. Our patent portfolio consists of U.S. patents and foreign patents and patent applications that we in-licensed exclusively from Plexxikon, as well as additional patent applications we have filed on our own.

Bezuclastinib

With the acquisition of Kiq Bio LLC (formerly Kiq LLC) ("Kiq") on July 6, 2020, we obtained an exclusive, sublicensable, worldwide license to patents and applications owned by Plexxikon pursuant to a license agreement between Plexxikon and Kiq (the "License Agreement"). The licensed patents and applications under the License Agreement cover bezuclastinib, its therapeutic uses, and methods of making bezuclastinib and intermediates. These patents and applications include issued patents in multiple territories, including, but not limited to, Australia, Brazil, Canada, China, Colombia, Europe (validated in Germany, Spain, France, Great Britain, Italy, the Netherlands, as well as various other EU countries), Hong Kong, India, Indonesia, Israel, Japan, Mexico, New Zealand, Peru, the Philippines, Republic of Korea, Russia, Singapore, South Africa, Taiwan, and the United States. The pending applications also include patent applications pending in Australia, Brazil, Canada, China, Egypt, Europe, Hong Kong, India, Indonesia, Israel, Japan, Korea, Mexico, Philippines, Singapore, South Africa, and the United States. The issued U.S. patents covering bezuclastinib and its therapeutic uses are expected to expire in 2033 and 2034, and the issued foreign patents covering bezuclastinib and its therapeutic uses are expected to expire in 2033, without consideration of potential patent term extensions. Patent applications covering methods of making bezuclastinib and intermediates could potentially provide exclusivity through at least 2041. In 2023, we filed US and international patent applications seeking to protect our optimized formulation of bezuclastinib, which could potentially provide exclusivity through at least 2043. We may seek to obtain rights under additional patent applications relating to bezuclastinib and its use to treat SM and GIST in the United States and in other countries as we proceed with this development program.

FGFR2

We own two patent families directed to inhibitors of FGFR2 mutations. A first patent family covers compositions of matter of certain inhibitors of FGFR2 and methods of use. As of December 31, 2024, this patent family has one pending US application and one pending international application. Any patents issuing from or claiming priority to these applications would be expected to expire in 2044 without consideration of potential patent term extensions. A second patent family covers compositions of matter of certain inhibitors of FGFR2 mutations and methods of use. As of December 31, 2024, this patent family has one pending US application and one pending international application. Any patents issuing from or claiming priority to these applications would be expected to expire in 2044 without consideration of potential patent term extensions.

ErbB2

We own one patent family directed to inhibitors of ErbB2 mutations. This patent family covers compositions of matter of certain inhibitors of ErbB2 mutations and methods of use. As of December 31, 2024, this patent family has one pending US application and one pending international application. Any patents issuing from or claiming priority to these applications would be expected to expire in 2044 without consideration of potential patent term extensions.

We are not currently a party to and have not been a party to any legal proceedings involving patent rights.

In addition to the protection afforded by patents, we seek to protect our technology and product candidates, in part, by trade secret and confidentiality agreements with those who have access to our confidential information, including our employees, contractors, consultants, collaborators, and advisors. We also seek to preserve the integrity and confidentiality of our proprietary technology and processes by maintaining physical security of our premises and physical and electronic security of our information technology systems. Although we have confidence in these individuals, organizations, and systems, agreements or security measures may be breached and we may not have adequate remedies for any breach. Furthermore, the laws of some foreign countries may not protect proprietary rights to the same extent or in the same manner as the laws of the United States.

In addition, our trade secrets may otherwise become known or may be independently discovered by competitors. To the extent that our employees, contractors, consultants, collaborators, and advisors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Moreover, we may be subject to claims challenging the inventorship or ownership of our or our licensors' patents and other intellectual property. Disputes regarding ownership or inventorship of our or our licensors' patents or other intellectual property can arise in various contexts, including collaborations and sponsored research. If we are subject to a dispute challenging our rights in or to patents or other intellectual property, such a dispute could be expensive and time consuming. If we are unsuccessful, we could lose valuable rights in intellectual property that we regard as our own.

For more comprehensive risks related to our proprietary technology, inventions, improvements and products, please see the section on "Risk Factors—Risks Related to Intellectual Property."

Licenses and Third-Party Research Collaborations

License Agreement with Plexxikon Inc.

In July 2020, we obtained an exclusive, sublicensable, worldwide license to certain patents and other intellectual property rights to research, develop, and commercialize bezuclastinib. Under the terms of the License Agreement, we are required to pay Plexxikon aggregate payments of up to $7.5 million upon the satisfaction of certain clinical milestones and up to $25.0 million upon the satisfaction of certain regulatory milestones. During the second quarter of 2022, as a result of the progression of the PEAK study, the first clinical milestone was achieved, resulting in payment of $2.5 million to Plexxikon in June 2022. As of December 31, 2024, no other milestone payments have been made or are considered probable of occurring, however, $5.0 million may become payable in the next twelve months as a result of future regulatory filings.

We are also required to pay Plexxikon tiered royalties ranging from a low-single digit percentage to a high-single digit percentage on annual net sales of products. These royalty obligations last on a product-by-product basis and country-by-country basis until the latest of (i) the date on which there is no valid claim of a licensed Plexxikon patent covering a subject product in such country or (ii) the 10th anniversary of the date of the first commercial sale of the product in such country. In addition, if we sublicense the rights under the License Agreement, we are required to pay a certain percentage of the sublicense revenue to Plexxikon ranging from mid-double digit percentages to mid-single digit percentages, depending on whether the sublicense is entered into prior to or after certain development and regulatory milestones.

The License Agreement will expire on a country-by-country and licensed product-by-licensed product basis until the later of the last to expire of the patents covering such licensed products or services or the 10-year anniversary of the date of first commercial sale of the licensed product in such country. Plexxikon may terminate the License Agreement within 30 days after written notice in the event of a breach of contract that remains uncured. Plexxikon may also terminate the agreement upon written notice in the event of our bankruptcy, liquidation, or insolvency. In addition, we have the right to terminate the License Agreement in its entirety at will upon 90 days' advance written notice to Plexxikon.

Competition

The pharmaceutical and biotechnology industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary drugs. While we believe that our technology, development experience, and scientific knowledge provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions governmental agencies, and public and private research institutions. Any drug candidates that we successfully develop and commercialize will compete with existing drugs and new drugs that may become available in the future.

We compete in the segments of the pharmaceutical, biotechnology, and other related markets that address precision medicines for patients with genetically defined diseases. There are several other companies working to develop therapies in this field using a similar strategy. These companies include divisions of large pharmaceutical companies and biotechnology companies of various sizes.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved drugs than we do. Mergers and acquisitions in the pharmaceutical, biotechnology, and diagnostic industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize drugs that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any drugs that we or our collaborators may develop. Our competitors also may obtain FDA or other regulatory approval for their drugs more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we or our collaborators are able to enter the market. The key competitive factors affecting the success of all of our drug candidates, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of companion diagnostics, the level of generic competition, and the availability of reimbursement from government and other third-party payors.

Bezuclastinib, if approved for the indications for which we are currently enrolling clinical trials, will compete with the drugs discussed below and will likely compete with other drugs that are currently in development.

In SM, the only approved drugs for the treatment of AdvSM are Blueprint Medicines Corporation's ("Blueprint") avapritinib and Novartis AG's midostaurin. Additionally, Novartis AG's imatinib is approved for AdvSM patients without the KIT D816V mutation or mutational status unknown. Blueprint's avapritinib has also been approved for the treatment of Non-AdvSM. We may also face competition from other drug candidates in preclinical or clinical development for SM.

In GIST, the current approved standards of care for unresectable or metastatic patients are first-line imatinib, followed by second-line sunitinib upon imatinib progression, followed by third-line regorafenib upon sunitinib progression, followed by fourth-line ripretinib for patients who have received three or more prior kinase inhibitors. In addition, avapritinib was approved by the FDA in January 2020 for patients with GIST harboring a PDGFRα exon 18 mutation, including PDGFRA D842V mutations only. We may face competition from other drug candidates in preclinical or clinical development including, Deciphera Pharmaceuticals, LLC., a member of Ono Pharmaceuticals, Co. Ltd, Taiho Pharmaceutical Co. Ltd, and GSK plc.

In cholangiocarcinoma ("CC"), the only approved drugs for the treatment of FGFR related CC are Incyte's Pemigatinib, and Taiho Pharma's Futibatinib. We may face competition from other drug candidates in preclinical or clinical development including, Elevar Therapeutics Inc., Tyra Biosciences Inc., Abbisko Therapeutics Co., Ltd., TransThera Sciences (Nanjing), Inc., HutchMed (China) Limited and Amgen Inc.

Manufacturing and Supply

We do not own or operate, and have no current plans to establish, any manufacturing facilities. We currently rely, and expect to continue to rely, on third parties to manufacture our drug candidates for preclinical and clinical testing, as well as for future commercial supply of any drugs that we may commercialize. To date, we have obtained API and drug product from third-party manufacturers for bezuclastinib and our other drug candidates to support preclinical and clinical testing. We obtain our supplies from these manufacturers on a purchase-order basis and do not have any long-term supply arrangements. We do not currently have a validated manufacturing process in place for any product candidate which would be required to support commercialization of any of our drug candidates, if approved.

Our drug candidates are compounds of low molecular weight, generally called small molecules. They can be manufactured from readily available starting materials in reliable and reproducible synthetic processes. The manufacturing process is amenable to scale-up. As we continue our clinical development of bezuclastinib, we expect to continue to enhance our manufacturing process to allow for drug candidates that are safer, more effective, have superior dosing regimens and are cost-effective.

Government Regulation

Government authorities in the United States, at the federal, state and local levels, and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, product approval, manufacture, quality control, manufacturing changes, packaging, storage, recordkeeping, labeling, promotion, advertising, sales, distribution, marketing, and import and export of drugs and biologic products. Our current product candidates are expected to be regulated as drugs. The processes for obtaining regulatory approval in the United States and in foreign countries and jurisdictions, along with compliance with applicable statutes and regulations and other regulatory authorities both pre- and post-commercialization, are a significant factor in the production and marketing of our products and our research and development activities and require the expenditure of substantial time and financial resources.

Review and Approval of Drugs in the United States

In the United States, the FDA and other government entities regulate drugs under the Federal Food, Drug, and Cosmetic Act, or the FDCA, and the regulations promulgated thereunder, as well as other federal and state statutes and regulations. Failure to comply with applicable legal and regulatory requirements in the United States at any time during the product development process, approval process, or after approval, may subject us to a variety of administrative or judicial sanctions, such as a delay in approving or refusal by the FDA to approve pending applications, withdrawal of approvals, delay or suspension of clinical trials, issuance of warning letters and other types of regulatory letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil monetary penalties, refusals of or debarment from government contracts, exclusion from the federal healthcare programs, restitution, disgorgement of profits, civil or criminal investigations by the FDA, U.S. Department of Justice, State Attorneys General, and/or other agencies, False Claims Act suits and/or other litigation, and/or criminal prosecutions.

An applicant seeking approval to market and distribute a new drug in the United States must typically undertake the following:

- completion of preclinical laboratory tests, which may include animal and *in vitro* studies, and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND for human clinical testing, which must become effective without FDA objection before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with the FDA's good clinical practice, or GCP, regulations, to establish the safety and effectiveness of the proposed drug product for each indication for which approval is sought;
- preparation and submission to the FDA of an NDA;
- satisfactory review of the NDA by an FDA advisory committee, where applicable;
- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the drug product, and the active pharmaceutical ingredient or ingredients thereof, are produced to assess compliance with current good manufacturing practice, or GMP, regulations and to assure that the facilities, methods, and controls are adequate to ensure the product's identity, strength, quality, and purity;
- payment of user fees, as applicable, and securing FDA approval of the NDA; and
- compliance with any post-approval requirements, such as any Risk Evaluation and Mitigation Strategies, or REMS, or post-approval studies required by the FDA.

Preclinical Studies and an IND

Preclinical studies can include in vitro and animal studies to assess the potential for adverse events and, in some cases, to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. Other studies include laboratory evaluation of the purity, stability and physical form of the manufactured drug substance or active pharmaceutical ingredient and the physical properties, stability and reproducibility of the formulated drug or drug product. An IND sponsor must submit 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, to the FDA as part of an IND. Some preclinical testing, such as longer-term toxicity testing, animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to a proposed clinical trial and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

Following commencement of a clinical trial under an IND, the FDA may place a clinical hold on that trial. A clinical hold is an order issued by the FDA to the sponsor to delay a proposed clinical investigation or to suspend an ongoing investigation. A partial clinical hold is a delay or suspension of only part of the clinical work requested under the IND. For example, a specific protocol or part of a protocol is not allowed to proceed, while other protocols may do so. No more than 30 days after imposition of a clinical hold or partial clinical hold, the FDA will provide the sponsor a written explanation of the basis for the hold. Following issuance of a clinical hold or partial clinical hold, an investigation may only resume after the FDA has notified the sponsor that the investigation may proceed. The FDA will base that determination on information provided by the sponsor correcting the deficiencies previously cited or otherwise satisfying the FDA that the investigation can proceed.

Human Clinical Studies in Support of an NDA

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. Clinical trials are conducted under written study protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. In addition, 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. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations.

Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health for public dissemination on its ClinicalTrials.gov website.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

Phase 1: The product candidate is initially introduced into healthy human subjects or 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.

Phase 2: The product candidate 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: The product candidate 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, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur. Phase 1, Phase 2, and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. Furthermore, the FDA or the sponsor 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. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. The FDA will typically inspect one or more clinical sites in late-stage clinical trials to assure compliance with GCP and the integrity of the clinical data submitted.

A sponsor may choose, but is not required, to conduct a foreign clinical study under an IND. When a foreign clinical study is conducted under an IND, all IND requirements must be met unless waived. When the foreign clinical study is not conducted under an IND, the sponsor must ensure that the study complies with certain FDA regulatory requirements in order to use the study as support for an IND or application for marketing approval or licensure, including that the study was conducted in accordance with GCP, including review and approval by an independent ethics committee and use of proper procedures for obtaining informed consent from subjects, and the FDA is able to validate the data from the study through an onsite inspection if the FDA deems such inspection necessary. The GCP requirements encompass both ethical and data integrity standards for clinical studies.

Submission of an NDA to the FDA

Assuming successful completion of required clinical testing and other requirements, the results of the preclinical and clinical studies, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the drug product for one or more indications. Under federal law, the submission of most NDAs is additionally subject to an application user fee, currently approximately $4.0 million for fiscal year 2024, for applications requiring clinical data, and the sponsor of an approved NDA is also subject to an annual program fee, currently approximately $0.4 million for fiscal year 2024. These fees are adjusted annually.

Under certain circumstances, the FDA will waive the application fee for the first human drug application that a small business, defined as a company with less than 500 employees, including employees of affiliates, submits for review. An affiliate is defined as a business entity that has a relationship with a second business entity if one business entity controls, or has the power to control, the other business entity, or a third-party controls, or has the power to control, both entities. In addition, an application to market a prescription drug product that has received orphan designation is not subject to a prescription drug user fee unless the application includes an indication for other than the rare disease or condition for which the drug was designated. Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a disease or condition that affects fewer than 200,000 individuals in the United States, or for which there is no reasonable expectation that U.S. sales will be sufficient to recoup the development and production costs.

The FDA conducts a preliminary review of an NDA within 60 days of its receipt and informs the sponsor by the 74th day after the FDA's receipt of the submission to determine whether the application 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 specified performance goals in the review process of NDAs. Most such applications are meant to be reviewed within ten months from the date of filing, and most applications for "priority review" products are meant to be reviewed within six months of filing. The review process may be extended by the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with GMP requirements and adequate to ensure 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 cGCP.

The FDA also may require submission of a REMS plan to mitigate any identified or suspected serious risks. The REMS plan could include medication guides, physician communication plans, assessment plans, and elements to assure safe use, such as restricted distribution methods, patient registries, or other risk minimization tools.

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.

The FDA's Decision on an NDA

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 has committed to reviewing 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 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. After approval, the FDA may seek to prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. Some 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 FDA review and approval.

Expedited Review and Accelerated Approval Programs

A sponsor may seek approval of its product candidate under programs designed to accelerate the FDA's review and approval of NDAs. For example, Fast Track Designation may be granted to a drug intended for treatment of a serious or life-threatening disease or condition and data demonstrate its potential to address unmet medical needs for the disease or condition. The key benefits of Fast Track Designation are the eligibility for priority review, rolling review (submission of portions of an application before the complete marketing application is submitted), and accelerated approval, if relevant criteria are met. The FDA may grant the NDA a priority review designation, which sets the target date for FDA action on the application at six months after the FDA accepts the application for filing. Priority review is granted where there is evidence that the proposed product would be a significant improvement in the safety or effectiveness of the treatment, diagnosis, or prevention of a serious condition. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

The FDA may approve an NDA under the accelerated approval program if the drug treats a serious condition, provides a meaningful advantage over available therapies, and demonstrates an effect on either (1) a surrogate endpoint that is reasonably likely to predict clinical benefit, or (2) on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Post-marketing studies or completion of ongoing studies after marketing approval are generally required to verify the drug's clinical benefit in relationship to the surrogate endpoint or ultimate outcome in relationship to the clinical benefit. Under the Food and Drug Omnibus Reform Act of 2022 ("FDORA"), the FDA may require, as appropriate, that such studies be underway prior to approval or within a specific time period after the date of approval for a product granted accelerated approval. The FDA also has increased authority for expedited procedures to withdraw approval of a product or indication approved under accelerated approval if the sponsor fails to conduct the required post-marketing studies or if such studies fail to verify the predicted clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

In addition, the Food and Drug Administration Safety and Innovation Act of 2012, or FDASIA, established the Breakthrough Therapy designation. A sponsor may seek FDA designation of its product candidate as a breakthrough therapy if the drug is intended, alone or in combination with one or more other drugs, to treat a serious or life- threatening disease or condition and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. If a drug is designated as breakthrough therapy, FDA will provide more intensive guidance on the drug development program and expedite its review.

Fast track designation, breakthrough therapy designation, priority review, and accelerated approval do not change the standards for approval, but may expedite the development or approval process. Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or that the time period for FDA review or approval will not be shortened. We may explore some of these opportunities for our product candidates as appropriate.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, 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. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

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 or problems with manufacturing processes of unanticipated severity or frequency, 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. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

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 in accordance 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 criminal and civil liability.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Abbreviated New Drug Applications for Generic Drugs

In 1984, with passage of the Drug Price Competition and Patent Term Restoration Act of 1984 (commonly referred to as the "Hatch-Waxman Amendments") amending the FDCA, Congress authorized the FDA to approve generic drugs that are the same as drugs previously approved by the FDA under the NDA provisions of the statute. To obtain approval of a generic drug, an applicant must submit an abbreviated new drug application ("ANDA") to the agency. Upon approval of an ANDA, the FDA indicates that the generic product is "therapeutically equivalent" to the drug product previously approved under an NDA, known as the reference listed drug ("RLD"), and it assigns a therapeutic equivalence rating to the approved generic drug in its publication "Approved Drug Products with Therapeutic Equivalence Evaluations," also referred to as the "Orange Book." Physicians and pharmacists consider the therapeutic equivalence rating to mean that a generic drug is fully substitutable for the RLD. In addition, by operation of certain state laws and numerous health insurance programs, the FDA's designation of a therapeutic equivalence rating often results in substitution of the generic drug without the knowledge or consent of either the prescribing physician or patient.

Under the Hatch-Waxman Amendments, the FDA may not approve an ANDA until any applicable period of nonpatent exclusivity for the RLD has expired. The FDCA provides a period of five years of data exclusivity for NDAs containing a new chemical entity. In cases where such exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification (discussed further below), 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.

Hatch-Waxman Patent Certification and the 30 Month Stay

Upon approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant's product or a method of using the product. 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.

A certification that the new product will not infringe the already approved product's listed patents or that such patents are invalid or unenforceable is called a Paragraph IV certification. If the applicant does not challenge the listed patents or indicate that it is not seeking approval of a patented method of use, the ANDA application will not be approved until all the listed patents claiming the referenced product have expired. 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 after 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.

505(b)(2) New Drug Applications

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.

To the extent that a 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. As a result, approval of a 505(b)(2) NDA can be stalled until all the listed patents claiming the referenced product have expired, until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the referenced product has expired, and, in the case of a Paragraph IV certification and subsequent patent infringement suit, until the earlier of 30 months, settlement of the lawsuit or a decision in the infringement case that is favorable to the Section 505(b)(2) applicant.

U.S. Data Privacy and Security Laws

There are numerous U.S. federal, state, and local laws and regulations, as well as foreign legislation, in particular in the EU and UK, which regulate personal information, including health-related information and how that information may be used, processed, and disclosed. These regulations also cover sensitive and confidential personal information, including medical and health information, and impose requirements on entities that handle such information to implement certain privacy and security measures. We and/or our partners may be subject to these laws.

In the United States, numerous federal and state laws and regulations, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws and regulations, govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our partners.

For example, at the federal level, the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH Act"), and their respective implementing regulations imposes data privacy, security, and breach notification obligations on certain health care providers, health plans, and health care clearinghouses, known as covered entities, as well as their business associates and their covered subcontractors that perform certain services that involve using, disclosing, creating, receiving, maintaining, or transmitting individually identifiable protected health information ("PHI") for or on behalf of such covered entities. These requirements imposed by HIPAA and the HITECH Act on covered entities and business associates include entering into agreements that require business associates protect PHI provided by the covered entity against improper use or disclosure, among other things; following certain standards for the privacy of PHI, which limit the disclosure of a patient's past, present, or future physical or mental health or condition or information about a patient's receipt of health care if the information identifies, or could reasonably be used to identify, the individual; ensuring the confidentiality, integrity, and availability of all PHI created, received, maintained, or transmitted in electronic form, to identify and protect against reasonably anticipated threats or impermissible uses or disclosures to the security and integrity of such PHI; and reporting of breaches of PHI to individuals and regulators.

Entities that are found to be in violation of HIPAA may be subject to significant civil, criminal, and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance. A covered entity or business associate is also liable for civil money penalties for a violation that is based on an act or omission of any of its agents, which may include a downstream business associate, as determined according to the federal common law of agency. HITECH also increased the civil and criminal penalties applicable to covered entities and business associates and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce HIPAA and seek attorneys' fees and costs associated with pursuing federal civil actions. To the extent that we submit electronic healthcare claims and payment transactions that do not comply with the electronic data transmission standards established under HIPAA and HITECH, payments to us may be delayed or denied.

In addition, state health information privacy laws, such as California's Confidentiality of Medical Information Act and Washington's My Health My Data Act, govern the privacy and security of health-related information, specifically, may apply even when HIPAA does not and impose additional requirements.

Even when HIPAA and state health information privacy laws do not apply, according to the FTC and state Attorneys General, violating consumers' privacy rights or failing to take appropriate steps to keep consumers' personal information secure may constitute unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act and state consumer protection laws.

In addition, certain state laws, such as the California Consumer Privacy Act of 2018, as amended by the California Privacy Rights Act of 2020 ("CCPA"), govern the privacy and security of personal information, including health-related information in certain circumstances, some of which are more stringent than HIPAA in various ways. Numerous other states have passed similar laws, but many differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. The CCPA applies to personal data of consumers, business representatives, and employees, and imposes obligations on certain businesses that do business in California, including to provide specific disclosures in privacy notices, and affords rights to California residents in relation to their personal information. Health information falls under the CCPA's definition of personal information where it identifies, relates to, describes, or is reasonably capable of being associated with or could reasonably be linked, directly or indirectly, with a particular consumer or household—unless it is subject to HIPAA—and is included under a new category of personal information, "sensitive personal information," which is offered greater protection. The numerous other comprehensive privacy laws that have passed or are being considered in other states, as well as at the federal and local levels, also exempt some data processed in the context of clinical trials; but others exempt covered entities and business associates subject to HIPAA altogether, further complicating compliance efforts, and increasing legal risk and compliance costs for us and the third parties upon whom we rely.

Failure to comply with these laws, where applicable, can result in the imposition of significant civil and/or criminal penalties and private litigation. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Review and Approval of Drug Products in the European Union and United Kingdom

In order to market any pharmaceutical product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions governing, among other things, research and development, testing, manufacturing, quality control, safety, efficacy, labeling, clinical trials, marketing authorization, packaging, storage, record keeping, reporting, export and import, advertising, marketing and other promotional practices involving pharmaceutical products, as well as commercial sales, distribution, authorization, approval and post-approval monitoring and reporting of our products. Whether or not it obtains FDA approval for a pharmaceutical product, the Company would need to obtain the necessary approvals by the comparable foreign regulatory authorities before it can commence clinical trials or marketing of the pharmaceutical product in those countries or jurisdictions. The approval process ultimately varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

The United Kingdom ("UK") formally left the EU on January 31, 2020 and EU laws now only apply to the UK in respect of Northern Ireland as laid out in the Protocol on Ireland and Northern Ireland. The EU and the UK agreed on a trade and cooperation agreement ("TCA"), which includes provisions affecting the life sciences sector (including on customs and tariffs). There are some specific provisions concerning pharmaceuticals, including the mutual recognition of Good Manufacturing Practice ("GMP") and issued GMP documents. The TCA does not, however, contain wholesale mutual recognition of UK and EU pharmaceutical regulations and product standards.

The UK government has enacted the Medicines and Medical Devices Act 2021. The purpose of the act is to enable the existing regulatory frameworks in relation to human medicines, clinical trials of human medicines, veterinary medicines and medical devices to be updated. The powers under the act may only be exercised in relation to specified matters and must safeguard public health.

The Medicines and Medical Devices Act 2021 supplements the UK Medical Devices Regulations 2002 ("UK Regulations"), which are based on the EU Medical Devices Directive as amended to reflect the UK's post-Brexit regulatory regime. Notably, the UK Regulations do not include any of the revisions that have been made by the EU Medical Devices Regulation (EU) 2017/745, which, since May 26, 2021, now applies in all EU Member States.

The UK's Medicines and Healthcare products Regulatory Agency conducted a comprehensive consultation in 2021 on proposals to develop a new UK regime for medical devices in the UK. The proposals include more closely aligning definitions for medical devices and in vitro medical devices with internationally recognized definitions and changing the classification of medical devices according to levels or risk. The proposals are intended to improve patient and public safety and increase the appeal of the UK market. Core aspects of the new regime are planned to come into force on July 1, 2025, with strengthened post-market surveillance proposals to be introduced in advance of such date.

Under the Medical Devices (Amendment) (Great Britain) Regulations 2023, CE marked European medical devices will continue to be accepted for sale in the UK until 2028 or 2030 (depending on the type of device).

Drug Development Process

The conduct of clinical trials is currently governed by the EU Clinical Trials Directive 2001/20/EC, or Clinical Trials Directive, and will be replaced by the EU Clinical Trials Regulation (EU) No. 536/2014 ("CTR") once the latter comes into effect. The CTR introduces a complete overhaul of the existing regulation of clinical trials for medicinal products in the EU. It entered into force on January 31, 2022. Under the current regime, which will expire after a transition period of one or three years, respectively, as outlined below in more detail, before a clinical trial can be initiated it must be approved in each EU Member State where there is a site at which the trial is to be conducted. The approval must be obtained from two separate entities: the National Competent Authority ("NCA") and one or more Ethics Committees. The NCA of the EU Member States in which the clinical trial will be conducted must authorize the conduct of the trial, and the independent Ethics Committee must grant a positive opinion in relation to the conduct of the clinical trial in the relevant EU Member State before the commencement of the trial. Any substantial changes to the trial protocol or other information submitted with the clinical trial applications must be submitted to or approved by the relevant NCA and Ethics Committees. Under the current regime all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial must be reported to the NCA and to the Ethics Committees of the EU Member State where they occur.

A more unified procedure will apply under the new CTR. A sponsor will be able to submit a single application for approval of a clinical trial through a centralized EU clinical trials portal (the Clinical Trials Information System or "CTIS"). One national regulatory authority (the reporting EU Member State proposed by the applicant) will take the lead in validating and evaluating the application consult and coordinate with the other concerned Member States. If an application is rejected, it may be amended and resubmitted through the EU clinical trials portal. If an approval is issued, the sponsor may start the clinical trial in all concerned Member States. However, a concerned EU Member State may in limited circumstances declare an "opt-out" from an approval and prevent the clinical trial from being conducted in such Member State. The CTR also aims to streamline and simplify the rules on safety reporting, and introduces enhanced transparency requirements such as mandatory submission of a summary of the clinical trial results to the EU Database. The CTR foresees a three-year transition period. Member States will work in CTIS immediately after the system has gone live. For one year, until January 31, 2023, clinical trial sponsors can still choose whether to submit an initial clinical trial application in line with the current system (Clinical Trials Directive) or via CTIS. Since January 31, 2023, submission of initial CTA via CTIS is mandatory and CTIS serves as the single-entry point for submission of clinical trial-related information and data. By January 31, 2025, all ongoing trials approved under the current Clinical Trials Directive will need to comply with the CTR and have to be transitioned to CTIS.

Under both the current regime and the new CTR, national laws, regulations, and the applicable Good Clinical Practice ("GCP") and Good Laboratory Practice standards must also be respected during the conduct of the trials, including the International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use ("ICH") guidelines on GCP and the ethical principles that have their origin in the Declaration of Helsinki.

During the development of a medicinal product, the European Medicines Agency ("EMA") and national regulators within the EU provide the opportunity for dialogue and guidance on the development program. At the EMA level, this is usually done in the form of scientific advice, which is given by the Committee for Medicinal Products for Human Use ("CHMP") on the recommendation of the Scientific Advice Working Party ("SAWP"). A fee is incurred with each scientific advice procedure, but is significantly reduced for designated orphan medicines. Advice from the EMA is typically provided based on questions concerning, for example, quality (chemistry, manufacturing and controls testing), nonclinical testing and clinical studies, and pharmacovigilance plans and risk-management programs. Advice is not legally binding with regard to any future Marketing Authorization Application ("MAA") of the product concerned.

Marketing Authorization Procedures

In the EU and in Iceland, Norway and Liechtenstein (together the European Economic Area or "EEA"), after completion of all required clinical testing, pharmaceutical products may only be placed on the market after obtaining a Marketing Authorization ("MA"). To obtain an MA of a drug under European Union regulatory systems, an applicant can submit a MAA through, amongst others, a centralized or decentralized procedure.

The centralized procedure provides for the grant of a single MA by the European Commission (EC) that is valid for all EU Member States and, after respective national implementing decisions, in the three additional EEA Member States (Iceland, Norway and Liechtenstein). The centralized procedure is compulsory for specific medicinal products, including for medicines developed by means of certain biotechnological processes, products designated as orphan medicinal products, advanced therapy medicinal products ("ATMP") and medicinal products with a new active substance indicated for the treatment of certain diseases (AIDS, cancer, neurodegenerative disorders, diabetes, auto- immune and viral diseases). For medicinal products containing a new active substance not yet authorized in the EEA before May 20, 2004 and indicated for the treatment of other diseases, medicinal products that constitute significant therapeutic, scientific or technical innovations or for which the grant of a MA through the centralized procedure would be in the interest of public health at EU level, an applicant may voluntarily submit an application for a marketing authorization through the centralized procedure.

Under the centralized procedure, the Committee for Medicinal Products for Human Use ("CHMP"), established at the EMA, is responsible for conducting the initial assessment of a drug. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure, the timeframe for the evaluation of an MAA by the EMA's CHMP is, in principle, 210 days from receipt of a valid MAA. However, this timeline excludes clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP, so the overall process typically takes a year or more, unless the application is eligible for an accelerated assessment. Accelerated assessment might be granted by the CHMP in exceptional cases when a medicinal product is expected to be of major public health interest, particularly from the point of therapeutic innovation. On request, the CHMP can reduce the time frame to 150 days if the applicant provides sufficient justification for an accelerated assessment. The CHMP will provide a positive opinion regarding the application only if it meets certain quality, safety and efficacy requirements. However, the EC has final authority for granting the MA within 67 days after receipt of the CHMP opinion.

The decentralized procedure permits companies to file identical MA applications for a medicinal product to the competent authorities in various EU Member States simultaneously if such medicinal product has not received marketing approval in any EU Member State before. This procedure is available for pharmaceutical products not falling within the mandatory scope of the centralized procedure. The competent authority of a single EU Member State, known as the reference EU Member State, is appointed to review the application and provide an assessment report. Under this procedure, an applicant submits an application based on identical dossiers and related materials, including a draft summary of product characteristics, and draft labeling and package leaflet, to the reference EU Member State and concerned EU Member States. The reference EU Member State prepares a draft assessment report and drafts of the related materials within 120 days after receipt of a valid application. Subsequently each concerned EU Member State must decide whether to approve the assessment report and related materials.

If an EU Member State cannot approve the assessment report and related materials on the grounds of potential serious risk to public health, the disputed points are subject to a dispute resolution mechanism and may eventually be referred to the EC, whose decision is binding for all EU Member States.

All new MAAs must include a Risk Management Plan ("RMP"), describing the risk management system that the company will put in place and documenting measures to prevent or minimize the risks associated with the product. RMPs are continually modified and updated throughout the lifetime of the medicine as new information becomes available. New RMPs are required to be submitted (i) at the request of EMA or a national competent authority, or (ii) whenever the risk-management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit-risk profile or as a result of an important pharmacovigilance or risk-minimization milestone being reached. The regulatory authorities may also impose specific obligations as a condition of the MA. Since October 20, 2023, all RMPs for centrally authorized products are published by the EMA subject to only limited redactions.

Marketing Authorizations have an initial duration of five years. After these five years, the authorization may subsequently be renewed on the basis of a reevaluation of the risk-benefit balance. Once renewed, the MA is valid for an unlimited period unless the EC or the national competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with only one additional five-year renewal. Applications for renewal must be made to the EMA at least nine months before the five-year period expires.

On April 26, 2023, the EC submitted a proposal for the reform of the European pharmaceutical legislation. The current draft envisages, for example, a shortening of the periods of data exclusivity, however, there is currently neither a final version of this draft nor a date for its entry into force. While the European Parliament adopted its approving position on the reform on April 10, 2024, no further required legislative steps have been taken since.

Data and Market Exclusivity in the European Union

As in the United States, it may be possible to obtain a period of market and/or data exclusivity in the EU that would have the effect of postponing the entry into the marketplace of a competitor's generic, hybrid or biosimilar product (even if the pharmaceutical product has already received a MA) and prohibiting another applicant from relying on the MA holder's pharmacological, toxicological and clinical data in support of another MA for the purposes of submitting an application, obtaining MA or placing the product on the market. Innovative medicinal products, referred to as New Chemical Entities ("NCE"), approved in the EU qualify for eight years of data exclusivity and 10 years of marketing exclusivity.

An additional non-cumulative one-year period of marketing exclusivity is possible if during the data exclusivity period (the first eight years of the 10-year marketing exclusivity period), the MA holder obtains an authorization for one or more new therapeutic indications that are deemed to bring a significant clinical benefit compared to existing therapies.

The data exclusivity period begins on the date of the product's first MA in the EU. After eight years, a generic product application may be submitted and generic companies may rely on the MA holder's data. However, a generic product cannot launch until two years later (or a total of 10 years after the first MA in the EU of the innovator product), or three years later (or a total of 11 years after the first MA in the EU of the innovator product) if the MA holder obtains MA for a new indication with significant clinical benefit within the eight-year data exclusivity period. Additionally, another noncumulative one-year period of data exclusivity can be added to the eight years of data exclusivity where an application is made for a new indication for a well-established substance, provided that significant preclinical or clinical studies were carried out in relation to the new indication. Another year of data exclusivity may be added to the eight years, where a change of classification of a pharmaceutical product has been authorized on the basis of significant pre-trial tests or clinical trials (when examining an application by another applicant for or holder of market authorization for a change of classification of the same substance the competent authority will not refer to the results of those tests or trials for one year after the initial change was authorized).

Products may not be granted data exclusivity since there is no guarantee that a product will be considered by the European Union's regulatory authorities to include a NCE. Even if a compound is considered to be a NCE and the MA applicant is able to gain the prescribed period of data exclusivity, another company nevertheless could also market another version of the medicinal product if such company can complete a full MAA with their own complete database of pharmaceutical tests, preclinical studies and clinical trials and obtain MA of its product.

Orphan Designation and Exclusivity

The criteria for designating an orphan medicinal product in the European Union are similar in principle to those in the United States. The EMA grants orphan drug designation if the medicinal product is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting no more than five in 10,000 persons in the European Union (prevalence criterion). In addition, Orphan Drug Designation can be granted if, for economic reasons, the medicinal product would be unlikely to be developed without incentives and if there is no other satisfactory method approved in the European Union of diagnosing, preventing, or treating the condition, or if such a method exists, the proposed medicinal product is a significant benefit to patients affected by the condition. An application for orphan drug designation (which is not a marketing authorization, as not all orphan-designated medicines reach the authorization application stage) must be submitted first before an application for marketing authorization of the medicinal product is submitted. The applicant will receive a fee reduction for the marketing authorization application if the orphan drug designation has been granted, but not if the designation is still pending at the time the marketing authorization is submitted, and sponsors must submit an annual report to EMA summarizing the status of development of the medicine. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. Designated orphan medicines are eligible for conditional marketing authorization.

The EMA's Committee for Orphan Medicinal Products reassesses the orphan drug designation of a product in parallel with the review for a marketing authorization; for a product to benefit from market exclusivity it must maintain its orphan drug designation at the time of marketing authorization review by the EMA and approval by the EC. Additionally, any marketing authorization granted for an orphan medicinal product must only cover the therapeutic indication(s) that are covered by the orphan drug designation. Upon the grant of a marketing authorization, orphan drug designation provides up to ten years of market exclusivity in the orphan indication.

During the 10-year period of market exclusivity, with a limited number of exceptions, the regulatory authorities of the EU Member States and the EMA may not accept applications for marketing authorization, accept an application to extend an existing marketing authorization or grant marketing authorization for other similar medicinal products for the same therapeutic indication. A similar medicinal product is defined as a medicinal product containing a similar active substance or substances as contained in a currently authorized orphan medicinal product, and which is intended for the same therapeutic indication. An orphan medicinal product can also obtain an additional two years of market exclusivity for an orphan-designated condition when the results of specific studies are reflected in the Summary of Product Characteristics ("SmPC"), addressing the pediatric population and completed in accordance with a fully compliant Pediatric Investigation Plan ("PIP"). No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications.

The 10-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, i.e. the condition prevalence or financial returns criteria under Article 3 of Regulation (EC) No. 141/2000 on orphan medicinal products. When the period of orphan market exclusivity for an indication ends, the orphan drug designation for that indication expires as well. Orphan exclusivity runs in parallel with normal rules on data exclusivity and market protection. Additionally, a marketing authorization may be granted to a similar medicinal product (orphan or not) for the same or overlapping indication subject to certain requirements.

In the UK, following the post-Brexit transition period, a system for incentivizing the development of orphan medicines was introduced. Overall, the requirements for orphan designation largely replicate the requirements in the EU and the benefit of market exclusivity has been retained. Products with an orphan designation in the EU can be considered for an orphan MA in Great Britain, but a UK-wide orphan MA can only be considered in the absence of an active EU orphan designation. The MHRA will review applications for orphan designation at the time of a MA, and will offer incentives, such as market exclusivity and full or partial refunds for MA fees to encourage the development of medicines in rare diseases.

Pediatric Development

In the European Union, companies developing a new medicinal product are obligated to study their product in children and must therefore submit a PIP together with a request for agreement to the EMA. The EMA issues a decision on the PIP based on an opinion of the EMA's Pediatric Committee, or PDCO. Companies must conduct pediatric clinical trials in accordance with the PIP approved by the EMA, unless a deferral (e.g., until enough information to demonstrate its effectiveness and safety in adults is available) or waiver (e.g., because the relevant disease or condition occurs only in adults) has been granted by the EMA. The marketing authorization application for the product must include the results of all pediatric clinical trials performed and details of all information collected in compliance with the approved PIP, unless a waiver or a deferral has been granted, in which case the pediatric clinical trials may be completed at a later date. Medical products that are granted a marketing authorization on the basis of the pediatric clinical trials conducted in accordance with the approved PIP are eligible for a six month extension of the protection under a supplementary protection certificate (if any is in effect at the time of approval) or, in the case of orphan medicinal products, a two year extension of the orphan market exclusivity. This pediatric reward is subject to specific conditions and is not automatically available when data in compliance with the approved PIP are developed and submitted. An approved PIP is also required when a marketing-authorization holder wants to add a new indication, pharmaceutical form or route of administration for a medicine that is already authorized and covered by intellectual property rights.

In the UK, the MHRA has published guidance on the procedures for UK Paediatric Investigation Plans ("PIPs") which, where possible, mirror the submission format and requirements of the EU system. EU PIPs remain applicable for Northern Ireland and EU PIPs agreed by the EMA prior to January 1, 2021 have been adopted as UK PIPs.

PRIME Designation

In March 2016, the EMA launched an initiative to facilitate development of product candidates in indications, often rare, for which few or no therapies currently exist. The Priority Medicines ("PRIME") scheme is intended to encourage drug development in areas of unmet medical need and provides accelerated assessment of products representing substantial innovation reviewed under the centralized procedure. Products from small-and medium-sized enterprises may qualify for earlier entry into the PRIME scheme than larger companies on the basis of compelling non-clinical data and tolerability data from initial clinical trials. Many benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and potentially accelerated MAA assessment once a dossier has been submitted. Importantly, once a candidate medicine has been selected for the PRIME scheme, a dedicated contact point and rapporteur from the CHMP or from CAT are appointed facilitating increased understanding of the product at EMA's Committee level. A kick-off meeting with the CHMP/CAT rapporteur initiates these relationships and includes a team of multidisciplinary experts to provide guidance on the overall development plan and regulatory strategy. PRIME eligibility does not change the standards for product approval, and there is no assurance that any such designation or eligibility will result in expedited review or approval.

Post-Approval Regulation

Similar to the United States, both MA holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA, the EC and/or the competent regulatory authorities of the EU Member States. This oversight applies both before and after grant of manufacturing licenses and marketing authorizations. It includes control of compliance with EU good manufacturing practices rules, manufacturing authorizations, pharmacovigilance rules and requirements governing advertising, promotion, sale, and distribution, recordkeeping, importing and exporting of medicinal products.

Failure by us or by any of our third-party partners, including suppliers, manufacturers and distributors to comply with EU laws and the related national laws of the individual EU Member States governing the conduct of clinical trials, manufacturing approval, MA of pharmaceutical products and marketing of such products, both before and after grant of MA, manufacturing of pharmaceutical products, statutory health insurance, bribery and anti-corruption or with other applicable regulatory requirements may result in administrative, civil or criminal penalties. These penalties could include delays or refusal to authorize the conduct of clinical trials or to grant MA, product withdrawals and recalls, product seizures, suspension, withdrawal or variation of the MA, total or partial suspension of production, distribution, manufacturing or clinical trials, operating restrictions, injunctions, suspension of licenses, fines and criminal penalties.

The holder of a MA for a medicinal product must also comply with EU pharmacovigilance legislation and its related regulations and guidelines, which entail many requirements for conducting pharmacovigilance, or the assessment and monitoring of the safety of medicinal products.

These pharmacovigilance rules can impose on holders of MAs the obligation to conduct a labor intensive collection of data regarding the risks and benefits of marketed medicinal products and to engage in ongoing assessments of those risks and benefits, including the possible requirement to conduct additional clinical studies or post-authorization safety studies to obtain further information on a medicine's safety, or to measure the effectiveness of risk-management measures, which may be time consuming and expensive and could impact our profitability. MA holders must establish and maintain a pharmacovigilance system and appoint an individual qualified person for pharmacovigilance, who is responsible for oversight of that system. Key obligations include expedited reporting of suspected serious adverse reactions and submission of PSURs in relation to medicinal products for which they hold MAs. The EMA reviews PSURs for medicinal products authorized through the centralized procedure. If the EMA has concerns that the risk-benefit profile of a product has varied, it can adopt an opinion advising that the existing MA for the product be suspended, withdrawn or varied. The agency can advise that the MA holder be obliged to conduct post-authorization Phase IV safety studies. If the EC agrees with the opinion, it can adopt a decision varying the existing MA. Failure by the MA holder to fulfill the obligations for which the EC's decision provides can undermine the ongoing validity of the MA.

More generally, non-compliance with pharmacovigilance obligations can lead to the variation, suspension or withdrawal of the MA for the product or imposition of financial penalties or other enforcement measures.

The manufacturing process for pharmaceutical products in the European Union is highly regulated and regulators may shut down manufacturing facilities that they believe do not comply with regulations. Manufacturing requires a manufacturing authorization, and the manufacturing authorization holder must comply with various requirements set out in the applicable EU laws, regulations and guidance, including Directive 2001/83/EC, Directive 2003/94/EC (repealed by Directive 2017/1572 on January 31, 2022), Regulation (EC) No 726/2004 and the European Commission Guidelines for Good Manufacturing Practice ("GMP"). These requirements include compliance with EU GMP standards when manufacturing pharmaceutical products and active pharmaceutical ingredients, including the manufacture of active pharmaceutical ingredients outside of the European Union with the intention to import the active pharmaceutical ingredients into the European Union. Amendments or replacements of at least Directive 2001/83/EC and Regulation (EC) No 726/2004 are part of the reform proposal for European pharmaceutical legislation.

Similarly, the distribution of pharmaceutical products into and within the European Union is subject to compliance with the applicable EU laws, regulations and guidelines, including the requirement to hold appropriate authorizations for distribution granted by the competent authorities of the EU Member States. The manufacturer or importer must have a qualified person who is responsible for certifying that each batch of product has been manufactured in accordance with GMP, before releasing the product for commercial distribution in the European Union or for use in a clinical trial. Manufacturing facilities are subject to periodic inspections by the competent authorities for compliance with GMP.

Advertising and Promotion

The advertising and promotion of our products is also subject to EU laws concerning promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices. In addition, other national legislation of individual EU Member States may apply to the advertising and promotion of medicinal products and may differ from one country to another. These laws require that promotional materials and advertising in relation to medicinal products comply with the product's SmPC as approved by the competent regulatory authorities. The SmPC is the document that provides information to physicians concerning the safe and effective use of the medicinal product. It forms an intrinsic and integral part of the marketing authorization granted for the medicinal product. Promotion of a medicinal product that does not comply with the SmPC is considered to constitute off-label promotion. All advertising and promotional activities for the product must be consistent with the approved SmPC and therefore all off-label promotion is prohibited. Direct-to-consumer advertising of prescription-only medicines is also prohibited in the EU. Violations of the rules governing the promotion of medicinal products in the European Union could be penalized by administrative measures, fines and imprisonment. These laws may further limit or restrict the advertising and promotion of our products to the general public and may also impose limitations on its promotional activities with healthcare professionals.

Pricing and Reimbursement Environment

Even if a pharmaceutical product obtains a marketing authorization in the European Union, there can be no assurance that reimbursement for such product will be secured on a timely basis or at all. The EU Member States are free to restrict the range of pharmaceutical products for which their national health insurance systems provide reimbursement, and to control the prices and reimbursement levels of pharmaceutical products for human use. An EU Member State may approve a specific price or level of reimbursement for the pharmaceutical product, or alternatively adopt a system of direct or indirect controls on the profitability of the company responsible for placing the pharmaceutical product on the market, including volume-based arrangements, caps and reference pricing mechanisms.

Reference pricing used by various EU Member States and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. In some countries, we may be required to conduct a clinical study or other studies that compare the cost-effectiveness of our product candidates, if any, to other available therapies in order to obtain or maintain reimbursement or pricing approval. 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. Historically, pharmaceutical products launched in the European Union do not follow price structures of the United States and generally published and actual prices tend to be significantly lower. Publication of discounts by third-party payers or authorities and public tenders may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries.

The so-called health technology assessment ("HTA"), of pharmaceutical products is becoming an increasingly common part of the pricing and reimbursement procedures in some EU Member States, including France, Germany, Ireland, Italy and Sweden. The HTA process, which is governed by the national laws of these countries, is the procedure according to which the assessment of the public health impact, therapeutic impact, and the economic and societal impact of use of a given pharmaceutical product in the national healthcare systems of the individual country is conducted. HTA generally focuses on the clinical efficacy and effectiveness, safety, cost, and cost-effectiveness of individual pharmaceutical products as well as their potential implications for the healthcare system. Those elements of pharmaceutical products are compared with other treatment options available on the market. The outcome of HTA regarding specific pharmaceutical products will often influence the pricing and reimbursement status granted to pharmaceutical products by the regulatory authorities of individual EU Member States. A negative HTA of one of our products by a leading and recognized HTA body could not only undermine our ability to obtain reimbursement for such product in the EU Member State in which such negative assessment was issued, but also in other EU Member States. For example, EU Member States that have not yet developed HTA mechanisms could rely to some extent on the HTA performed in other countries with a developed HTA framework, when adopting decisions concerning the pricing and reimbursement of a specific pharmaceutical product.

On January 31, 2018, the European Commission adopted a proposal for a regulation on health technology assessment. This legislative proposal is intended to boost EU level cooperation among EU Member States in assessing health technologies, including new pharmaceutical products, and providing the basis for cooperation at the EU level for joint clinical assessments in these areas. The proposal provides that EU Member States will be able to use common HTA tools, methodologies and procedures across the European Union, working together in four main areas, including joint clinical assessment of the innovative health technologies with the most potential impact for patients, joint scientific consultations whereby developers can seek advice from HTA authorities, identification of emerging health technologies to identify promising technologies early, and continuing voluntary cooperation in other areas. Individual EU Member States will continue to be responsible for assessing non-clinical (e.g., economic, social, ethical) aspects of health technology, and making decisions on pricing and reimbursement. While EU Member States could choose to delay participation in the joint work until three years after the rules enter into force, it will become mandatory after six years. The European Commission has stated that the role of the HTA regulation is not to influence pricing and reimbursement decisions in the individual EU Member States, but there can be no assurance that the HTA regulation will not have effects on pricing and reimbursement decisions. The HTA entered into force on January 11, 2022 and applies as of January 2025 followed by a further three-year transitional period during which EU member states must fully adapt to the new system.

To obtain reimbursement or pricing approval in some countries, including the EU Member States, we may be required to conduct studies that compare the cost-effectiveness of our product candidates to other therapies that are considered the local standard of care. There can be no assurance that any country will allow favorable pricing, reimbursement and market access conditions for any of our products, or that we will be feasible to conduct additional cost-effectiveness studies, if required.

In certain of the EU Member States, pharmaceutical products that are designated as orphan pharmaceutical products may be exempted or waived from having to provide certain clinical, cost-effectiveness and other economic data in connection with their filings for pricing/reimbursement approval.

European Data Privacy and Security Laws

The collection and use of personal health data and other personal data in the European Union is governed by the provisions of the European General Data Protection Regulation (EU) 2016/679 ("GDPR"), which came into force in May 2018 and related data protection laws in individual EU Member States.

The GDPR imposes a number of strict obligations and restrictions on the ability to process, including collecting, analyzing and transferring, personal data of individuals, in particular with respect to health data from clinical trials and adverse event reporting. The GDPR includes requirements relating to the legal basis of the processing (such as obtaining consent of the individuals to whom the personal data relates), the information provided to the individuals prior to processing their personal data, the personal data breaches which may have to be notified to the national data protection authorities and data subjects, the measures to be taken when engaging processors, and the security and confidentiality of the personal data. EU Member States may also impose additional requirements in relation to health, genetic and biometric data through their national legislation.

In addition, the GDPR imposes specific restrictions on the transfer of personal data to countries outside of the EEA that are not considered by the European Commission to provide an adequate level of data protection. Appropriate safeguards are required to enable such transfers. Among the appropriate safeguards that can be used, the data exporter may use the standard contractual clauses ("SCCs") adopted by the European Commission. When relying on SCCs, data exporters are also required to conduct a transfer risk assessment to verify if anything in the law and/or practices of the third country to which the data is being transferred may impinge on the effectiveness of the SCCs in the context of the transfer at stake and, if so, to identify and adopt supplementary measures that are necessary to bring the level of protection of the transferred data to the EU standard of 'essential equivalence'. Where no supplementary measure is suitable, the data exporter should avoid, suspend or terminate the transfer. With regard to the transfer of data from the EEA, UK and Switzerland to the United States, the EU-U.S. Data Privacy Framework (DPF), UK Extension to the EU-U.S. DPF, and Swiss-U.S. DPF were developed by the U.S. Department of Commerce and the European Commission, UK Government, and Swiss Federal Administration respectively, to provide U.S. organizations with reliable mechanisms for the transfer of personal data from the EU, United Kingdom (UK), and Switzerland to the U.S., while ensuring data protection that is consistent with EU, UK, and Swiss law. With regard to the transfer of data from the EU to the United Kingdom (UK), personal data may freely flow from the EEA to the UK since the UK is deemed to have an adequate data protection level. However, the adequacy decisions include a 'sunset clause' which entails that the decisions will automatically expire four years after their entry into force, unless renewed.

Failure to comply with the requirements of the GDPR and the related national data protection laws of the EU Member States may result in significant monetary fines for noncompliance of up to €20 million or 4% of the annual global revenues of the noncompliant company, whichever is greater, other administrative penalties and a number of criminal offenses for organizations and in certain cases their directors and officers as well as civil liability claims from individuals whose personal data was processed. Data protection authorities from the different EU Member States may still implement certain variations, enforce the GDPR and national data protection laws differently, and introduce additional national regulations and guidelines, which adds to the complexity of processing personal data in the EU.

Furthermore, there are specific requirements relating to processing health data from clinical trials, including public disclosure obligations provided in the new EU CTR, EMA disclosure initiatives and voluntary commitments by industry. Failure to comply with these obligations could lead to government enforcement actions and significant penalties against us, harm to our reputation, and adversely impact our business and operating results.

Additionally, following the UK's withdrawal from the EU and the EEA, companies also have to comply with the UK's data protection laws (including the UK GDPR (as defined in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018 (the DPA 2018)), the DPA 2018, and related data protection laws in the UK). Separate from the fines that can be imposed by the GDPR, the UK regime has the ability to fine up to the greater of £17.5 million or 4% of global turnover. Companies are subject to specific transfer rules under the UK regime which broadly mirror the GDPR rules. On February 2, 2022, the UK Secretary of State laid before the UK Parliament the international data transfer agreement (IDTA) and the international data transfer addendum to the EC's standard contractual clauses for international data transfers (Addendum) and a document setting out transitional provisions. The IDTA and Addendum came into force on March 21, 2022 and replaced the old SCCs for the purposes of the UK regime. Regarding transfers from the UK to the EEA, personal data may flow freely since the EEA is deemed to have an adequate data protection level for purposes of the UK regime.

With regard to the transfer of data from the UK to the U.S., the UK government has adopted an adequacy decision for the US, the UK-US Data Bridge, which came into force on October 12, 2023. The UK-US Data Bridge recognizes the U.S. as offering an adequate level of data protection where the transfer is to a U.S. company participating in the EU-US Data Privacy Framework and its UK Extension.

Promotional Activities

In the European Union, interactions between pharmaceutical companies and physicians are also governed by strict laws, regulations, industry self-regulation codes of conduct and physicians' codes of professional conduct both at EU level and in the individual EU Member States (at a national or regional level). The provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of pharmaceutical products is prohibited in the EU. The provision of benefits or advantages to physicians is also governed by the national anti-bribery laws of the EU Member States. Violation of these laws could result in substantial fines and imprisonment.

Payments made to physicians in certain EU Member States must be publicly disclosed. Moreover, agreements with physicians must often be the subject of prior notification and approval by the physician's employer, his/her regulatory professional organization, and/or the competent authorities of the individual EU Member States. These requirements are provided in the national laws, industry codes, or professional codes of conduct, applicable in the individual EU Member States (at a national or regional level). Failure to comply with these requirements could result in reputational risk, public reprimands, exclusion from public tenders, administrative penalties, fines or imprisonment.

In the UK, the pharmaceutical sector is recognized as being particularly vulnerable to corrupt practices, some of which fall within the scope of the Bribery Act 2010. Due to the Bribery Act 2010's far-reaching territorial application, the potential penalized act does not have to occur in the UK to become within its scope. If the act or omission does not take place in the UK, but the person's act or omission would constitute an offense if carried out there and the person has a close connection with the UK, an offense will still have been committed.

The Bribery Act 2010 is comprised of four offenses that cover (i) individuals, companies and partnerships that give, promise or offer bribes, (ii) individuals, companies and partnerships that request, agree to receive or accept bribes, (iii) individuals, companies and partnerships that bribe foreign public officials and (iv) companies and partnerships that fail to prevent persons acting on their behalf from paying bribes. The penalties imposed under the Bribery Act 2010 depend on the offence committed, harm and culpability and penalties range from unlimited fines to imprisonment for a maximum term of ten years and in some cases both.

Other Legislation Regarding Marketing, Authorization and Pricing of Pharmaceutical Products in the European Union

Other core legislation relating to the marketing, authorization and pricing of pharmaceutical products in the European Union includes the following:

- Directive 2001/83/EC, establishing the requirements and procedures governing the marketing authorization for medicinal products for human use, as well as the rules for the constant supervision of products following authorization. This Directive has been amended several times, most recently by Directive 2012/26/EU regarding pharmacovigilance, and the Falsified Medicines Directive 2011/62/EU.
- Regulation (EC) 726/2004, as amended, establishing procedures for the authorization, supervision and pharmacovigilance of medicinal products for human and veterinary use and establishing the EMA.
- Regulation (EC) 469/2009, establishing the requirements necessary to obtain a Supplementary Protection Certificate, which extends the period of patent protection applicable to medicinal products at the EU-level.
- Directive 89/105/EEC, ensuring the transparency of measures taken by the European Union member states to set the prices and reimbursements of medicinal products. Specifically, while each member state has competence over the pricing and reimbursement of medicines for human use, they must also comply with this Directive, which establishes procedures to ensure that member state decisions and policies do not obstruct trade in medicinal products. The European Commission proposed to repeal and replace Directive 89/105/EEC, but this proposal was withdrawn in 2015.

- Directive 2003/94/EC, laying down the principles of good manufacturing practice in respect of medicinal products and investigational medicinal products for human use (the GMP Directive); repealed by Directive 2017/1572 on January 31, 2022; this directive also lays out standards and principles for manufacturing practices of medicinal products for human use and investigational medicinal products for human use.
- Directive 2005/28/EC of April 8 2005, laying down principles and detailed guidelines for good clinical practice as regards investigational medicinal products for human use, as well as the requirements for authorization of the manufacturing or importation of such products (the GCP Directive).

Pharmaceutical Coverage, Pricing and Reimbursement

In the United States and markets in other countries, patients generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance. Our ability to successfully commercialize 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 government health administration authorities, private health insurers and other organizations. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow it to establish or maintain pricing sufficient to realize a sufficient return on its investment. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels.

Significant uncertainty exists as to the coverage and reimbursement status of any pharmaceutical or biological product for which we obtain regulatory approval. Sales of any product, if approved, depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state, and foreign government healthcare programs, commercial insurance and managed healthcare organizations, and the level of reimbursement, if any, for such product by third-party payors. Decisions regarding whether to cover any of our product candidates, if approved, the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. Further, no uniform policy for coverage and reimbursement exists in the United States, and coverage and reimbursement can differ significantly from payor to payor. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement rates, but also have their own methods and approval process apart from Medicare determinations. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Factors payors consider in determining reimbursement are based on whether the product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- cost-effective; and
- neither experimental nor investigational.

Third-party payors are increasingly challenging the prices charged for medical products and services, examining the medical necessity and reviewing the cost effectiveness of pharmaceutical or biological products, medical devices and medical services, in addition to questioning safety and efficacy. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product that receives approval. Decreases in third-party reimbursement for any product or a decision by a third-party not to cover a product could reduce physician usage and patient demand for the product.

For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. Additionally, separate reimbursement for the product itself or the treatment or procedure in which the product is used may not be available, which may impact physician utilization. In addition, companion diagnostic tests require coverage and reimbursement separate and apart from the coverage and reimbursement for their companion pharmaceutical or biological products. Similar challenges to obtaining coverage and reimbursement, applicable to pharmaceutical or biological products, will apply to companion diagnostics.

In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. The Inflation Reduction Act ("IRA") provides the Centers for Medicaid & Medicare Services ("CMS") with significant new authorities intended to curb drug costs and to encourage market competition. For the first time, CMS will be able to directly negotiate prescription drug prices and to cap out-of-pocket costs. Each year, CMS will select and negotiate a preset number of high-spend drugs and biologics that are covered under Medicare Part B and Part D that do not have generic or biosimilar competition. On August 29, 2023, HHS announced the list of the first ten drugs subject to price negotiations. These price negotiations occurred in 2024. In January 2025, CMS announced a list of 15 additional Medicare Part D drugs that will be subject to price negotiations. The IRA also provides a new "inflation rebate" covering Medicare patients that took effect in 2023 and is intended to counter certain price increases in prescriptions drugs. The inflation rebate provision requires drug manufacturers to pay a rebate to the federal government if the price for a drug or biologic under Medicare Part B and Part D increases faster than the rate of inflation. To support biosimilar competition, beginning in October 2022, qualifying biosimilars may receive a Medicare Part B payment increase for a period of five years. Separately, if a biologic drug for which no biosimilar exists delays a biosimilar's market entry beyond two years, CMS will be authorized to subject the biologics manufacturer to price negotiations intended to ensure fair competition. Notwithstanding these provisions, the IRA's impact on commercialization and competition remains largely uncertain.

In addition, net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the U.S. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product candidate that we may commercialize and, if reimbursement is available, the level of reimbursement. In addition, many pharmaceutical manufacturers must calculate and report certain price reporting metrics to the government, such as average sales price and best price. Penalties may apply in some cases when such metrics are not submitted accurately and timely. Further, these prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs.

Finally, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost effectiveness of a particular product candidate to currently available therapies. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. 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 product candidates. Historically, products launched in the European Union do not follow price structures of the U.S. and generally prices tend to be significantly lower.

Healthcare Laws and Regulations

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of drug products that are granted marketing approval. Arrangements with healthcare providers, physicians, third-party payors and customers are subject to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal healthcare Anti-Kickback Statute prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering or paying remuneration, to induce, or in return for, either the referral of an individual, or the purchase or recommendation of an item or service for which payment may be made under any federal healthcare program. The term remuneration has been interpreted broadly to include anything of value. The AKS has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand, and prescribers and purchasers on the other. The government often takes the position that to violate the AKS, only one purpose of the remuneration need be to induce referrals, even if there are other legitimate purposes for the remuneration. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from AKS prosecution, but they are drawn narrowly and practices that involve remuneration, such as consulting agreements, that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Our practices may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the AKS. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal Foreign Corrupt Practices Act, or FCPA, prohibits, among other things, U.S. corporations and persons acting on their behalf from offering, promising, authorizing or making payments to any foreign government official (including certain healthcare professionals in many countries), political party, or political candidate in an attempt to obtain or retain business or otherwise seek preferential treatment abroad;
- the federal False Claims Act, which may be enforced by the U.S. Department of Justice or private whistleblowers to bring civil actions (qui tam actions) on behalf of the federal government, imposes civil penalties, as well as liability for treble damages and for attorneys' fees and costs, on individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent, making a false statement material to a false or fraudulent claim, or improperly avoiding, decreasing, or concealing an obligation to pay money to the federal government. 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 False Claims Act;
- the Department of Health and Human Services' Civil Monetary Penalties authorities, which imposes administrative sanctions for, among other things, presenting or causing to be presented false claims for government payment and providing remuneration to government health program beneficiaries to influence them to order or receive healthcare items or services;
- HIPAA, imposes criminal and civil liability for, among other conduct, executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters. 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 in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes criminal and civil liability and penalties on those who violate requirements, including mandatory contractual terms, intended to safeguard the privacy, security, transmission and use of individually identifiable health information;
- the federal false statements statute relating to healthcare matters prohibits falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;
- the federal Physician Payments Sunshine Act requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to annually report to the CMS information related to payments or other transfers of value to various healthcare professionals including physicians, physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, certified nurse-midwives, and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Beginning on January 1, 2023, California Assembly Bill 1278 requires California physicians and surgeons to notify patients of the Open Payments database established under the federal Physician Payments Sunshine Act;
- the FDCA addresses, among other things, the design, production, labeling, promotion, manufacturing, and testing of drugs, biologics and medical devices, and prohibits such acts as the introduction into interstate commerce of adulterated or misbranded drugs or devices. The Public Health Service Act ("PHSA") also prohibits the introduction into interstate commerce of unlicensed or mislabeled biological products;

- similar state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by nongovernmental third-party payors, including private insurers; and
- certain state laws require pharmaceutical companies to comply with voluntary compliance guidelines promulgated by a pharmaceutical industry association and relevant compliance guidance issues by HHS Office of Inspector General; bar drug manufacturers from offering or providing certain types of payments or gifts to physicians and other health care providers; and/or require disclosure of gifts or payments to physicians and other healthcare providers.

Various state and foreign laws also govern the privacy and security of health information in some circumstances; many of these laws differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. Violation of any of these laws or any other current or future governmental laws and regulations that may apply to drug manufacturers include significant civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if the manufacturer becomes subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of its operations, any of which could substantially disrupt its operations. If any of the physicians or other healthcare providers or entities with whom we do business is found to be not in compliance with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Regulations in the UK and Other Markets

The UK formally left the EU on January 31, 2020 and EU laws now only apply to the UK in respect of Northern Ireland as laid out in the Protocol on Ireland and Northern Ireland and as amended by the Windsor Framework sets out a long-term set of arrangements for the supply of medicines into Northern Ireland. The EU and the UK agreed on a trade and cooperation agreement, which includes provisions affecting the life sciences sector (including on customs and tariffs). There are some specific provisions concerning pharmaceuticals, including the mutual recognition of GMP, inspections of manufacturing facilities for medicinal products and GMP issued documents. The TCA does not, however, contain wholesale mutual recognition of UK and EU pharmaceutical regulations and product standards.

The UK government has adopted the Medicines and Medical Devices Act 2021 (the "MMDA") to enable the UK's regulatory frameworks to be updated following the UK's departure from the EU. The MMDA introduces regulation-making, delegated powers covering the fields of human medicines, clinical trials of human medicines, veterinary medicines and medical devices. The MHRA has since been consulting on future regulations for medicines and medical devices in the UK.

The MMDA supplements the UK Medical Devices Regulations 2002 (the "Regulations"), which are based on the EU Medical Devices Directive as amended to reflect the United Kingdom's post-Brexit regulatory regime. Notably, the Regulations do not include any of the revisions that have been made by the EU Medical Devices Regulation (EU) 2017/745, which has gained full application in all EU Member States since May 26, 2021 but is not applicable in the UK as "retained law". Additionally, the MHRA launched a comprehensive consultation in 2021 with proposals to amend the regulatory framework for medical devices in the United Kingdom. The stated objectives of the proposals include expansion of the scope of the Regulations (for example, by expanding the in vitro diagnostic medical device definition to include software and other products, including products without an intended medical purpose but with similar functioning and risk profiles) and potentially through use of internationally recognized definitions (for example, by excluding products that contain viable biological substances and excluding food), remove trade barriers, further the availability of medical devices and improve the favorability of the UK market. The consultation period closed on November 25, 2021 and on June 26, 2022, the MHRA published a response to its consultation, which sets out the proposed new UK regulatory framework for medical devices and in vitro diagnostic medical devices. The proposals are intended to improve patient safety and public health through appropriate regulatory oversight, improve the traceability of medical devices, improve the regulation of the rules governing software and AI as medical devices and introduce alternative routes to market to ensure the UK aligns with any superior international best practices. Core aspects of the new framework are expected to apply from July 1, 2025 with appropriate transitional measures and the introduction of secondary legislation.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials must be conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension of clinical trials, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Additional Regulation

In addition to the foregoing, local, state, and federal laws regarding such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservation and Recovery Act, and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling, and disposal of various biological, chemical, and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous or biohazardous substances, we could be liable for damages, environmental remediation, and/or governmental fines. We believe that we are in material compliance with applicable environmental laws and occupational health and safety laws that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations. We may incur significant costs to comply with such laws and regulations now or in the future.

Human Capital

As of December 31, 2024, we had 205 employees. To allow us flexibility in meeting varying workflow demands, we also engage consultants and temporary workers when needed.

We believe that our future success largely depends upon our continued ability to attract and retain a diverse group of highly skilled employees. We offer comprehensive compensation packages, including competitive base pay, incentive compensation and equity programs, and provide a broad range of benefits, including 401(k) plan with employer match, healthcare and insurance benefits, paid time off, paid family and medical leave, flexible work schedules, and various health and wellness programs. We also provide development programs that enable continued learning and growth.

Our Code of Business Conduct and Ethics ensures that our core values of respect, integrity, collaboration, innovation, trust, and excellence are applied throughout our operations. Our Code of Business Conduct and Ethics serves as a tool to help all of us recognize and report unethical conduct, while preserving our culture of honesty and accountability.

None of our employees are represented by a labor union or covered under a collective bargaining agreement. We consider our employee relations to be good.

Corporate Information

We were incorporated under the laws of the State of Delaware in March 2014 under the name Unum Therapeutics Inc. On April 3, 2018, we completed our initial public offering of our common stock under the ticker "UMRX." On October 2, 2020, we filed an amendment to our certificate of incorporation to change our name to Cogent Biosciences, Inc. The name change became effective on October 6, 2020. In connection with the name change, our common stock began trading under the ticker symbol "COGT."

As of December 31, 2024, we had 135,552,039 shares outstanding on an as-converted basis, which consists of (i) 110,461,729 shares of common stock outstanding, (ii) pre-funded warrants that are exercisable for 606,060 shares of common stock, (iii) 70,465 shares of Series A Preferred Stock that are convertible into 17,616,250 shares of common stock and (iv) 6,868 shares of Series B Preferred Stock that are convertible into 6,868,000 shares of common stock.

Available Information

Our Internet address is www.cogentbio.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, including exhibits, proxy and information statements and amendments to those reports filed or furnished pursuant to Sections 13(a), 14, and 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, are available through the "Investors" portion of our website free of charge as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Information on our website is not part of this Annual Report on Form 10-K or any of our other securities filings unless specifically incorporated herein by reference. In addition, our filings with the SEC may be accessed through the SEC's Interactive Data Electronic Applications system at *http://www.sec.gov*. All statements made in any of our securities filings, including all forward-looking statements or information, are made as of the date of the document in which the statement is included, and we do not assume or undertake any obligation to update any of those statements or documents unless we are required to do so by law.

ITEM 1A. RISK FACTORS

The following risk factors and other information included in this Annual Report on Form 10-K should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we presently deem less significant may also impair our business operations. You should carefully consider the risks described below, as well as the other information in this Annual Report on Form 10-K, including our financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as our other filings with the Securities and Exchange Commission, before deciding whether to invest in our common stock. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. Moreover, some of the factors, events and contingencies discussed below may have occurred in the past, but the disclosures below are not representations as to whether or not the factors, events or contingencies have occurred in the past and instead reflect our beliefs and opinions as to the factors, events, or contingencies that could materially and adversely affect us in the future.

Risks Related to the Discovery and Development of Our Drug Candidates

Our business is highly dependent on the success of our bezuclastinib program and our ability to discover and develop additional product candidates. We may not be successful in our efforts to develop bezuclastinib or expand our pipeline of drug candidates.

Our business and future success depend on our ability to develop, obtain regulatory approval for and then successfully commercialize bezuclastinib and any other product candidates that we may discover and develop. We are pursuing clinical development of bezuclastinib to target SM and GIST through our APEX, SUMMIT and PEAK clinical trials. There is no guarantee that any or all of these trials will be successful. Even if our trials are successful, bezuclastinib will require regulatory review and approval, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing efforts before we are able to generate any revenue from product sales, if ever.

Through the development of the research team, we are also working to build a pipeline of other product candidates. Researching, developing, obtaining regulatory approval for and commercializing additional product candidates will require substantial additional funding and is prone to the risks of failure inherent in medical product development. Even if we are successful in continuing to build and expand our pipeline, we cannot provide you any assurance that we will be able to successfully advance any of these additional product candidates through the development process, or that any such product candidates will be successfully commercialized, widely accepted in the marketplace or more effective than other commercially available alternatives.

If unacceptable side effects are identified during the development of our drug candidates, we may need to abandon or limit such development.

If our drug candidates are associated with unacceptable side effects in preclinical or clinical trials or have characteristics that are unexpected, we may need to abandon their development, limit development to more narrow uses or subpopulations in which the unacceptable side effects or other characteristics are less prevalent, less severe, or more acceptable from a risk-benefit perspective or highlight these risks, side effects, or other characteristics in the approved product label. In pharmaceutical development, many drugs that initially show promise in early-stage testing may later be found to cause side effects that prevent further development of the drug. Currently marketed therapies for the treatment of AdvSM and cancer are generally limited to some extent by their toxicity. In addition, some of our drug candidates would be chronic therapies, for which safety concerns may be particularly important. Use of our drug candidates as monotherapies may also result in adverse events consistent in nature with other marketed therapies. In addition, when used in combination with other therapies, our drug candidates could exacerbate adverse events associated with the other therapy. If unexpected side effects are identified during development, we may be required to develop a Risk Evaluation and Mitigation Strategy ("REMS") to mitigate those serious safety risks, which could impose significant distribution and/or use restrictions on our products.

We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The development and commercialization of new pharmaceutical and biotechnology products is highly competitive. We face competition with respect to our current clinical-stage drug candidates and will face competition with respect to any drug candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which we are developing our drug candidates. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization.

Any product candidates that we successfully develop and commercialize will compete with currently approved therapies and new therapies that may become available in the future from segments of the pharmaceutical, biotechnology and other related markets that pursue precision medicines. Our commercial opportunity could also be reduced or eliminated if our competitors develop and commercialize additional products that are safer, more effective, have superior dosing regimens, have fewer or less severe side effects, are approved for broader indications or patient populations, are approved for specific sub-populations, are more convenient or are less expensive than bezuclastinib or any other products that we may develop. Our competitors also may obtain FDA or other marketing approval for their products more rapidly than any approval we may obtain for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic products.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining marketing approvals, and marketing and selling approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. For further information, see "Business-Competition," which discusses the pharmaceutical and biotechnology companies developing or marketing treatments for cancer and hematologic diseases that are competitive with bezuclastinib and the drug candidates we are developing.

If difficulties arise enrolling patients in our clinical trials, clinical development activities could be delayed or otherwise adversely affected.

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the study until its conclusion. The enrollment of patients depends on many factors, including: the patient eligibility criteria defined in the protocol; the size of the patient population required for analysis of the trial's primary endpoints; and our ability to recruit clinical trial investigators with the appropriate competencies and experience.

In addition, our clinical trials compete with approved products as well as other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition reduces the number and types of patients available to us because some patients who might have opted to enroll in our trials may instead opt to take an approved product or otherwise enroll in a trial being conducted by one of our competitors. Any delays in patient enrollment may result in increased costs or may affect the timing or outcome of our ongoing and planned clinical trials, our expected timelines for delivering top-line results across all three of our active studies, and any subsequent regulatory approvals or commercialization activities.

The incidence and prevalence for target patient populations of our drug candidates have not been established with precision. If the market opportunities for our drug candidates are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue potential and ability to achieve profitability will be adversely affected.

The precise incidence and prevalence for GIST and SM are unknown. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with bezuclastinib, are based on estimates, which are inherently uncertain. The total addressable market opportunity for bezuclastinib, and any other drug candidates we may produce will ultimately depend upon, among other things, the diagnosis criteria included in the final label for our future approved drugs for sale for these indications, acceptance by the medical community and patient access, drug pricing, and reimbursement. The number of patients in our targeted commercial markets and elsewhere may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our drug, or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business.

Clinical trials are expensive, time-consuming, and difficult to design and implement.

Human clinical trials are expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. We are unable to predict when or if any of our drug candidates will prove effective or safe in humans or will obtain marketing approval. Before obtaining marketing approval from regulatory authorities for the sale of any drug candidate, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, interim or preliminary results of a clinical trial do not necessarily predict final results, and results for one indication may not be predictive of the success in additional indications. In particular, the small number of patients in our early clinical trials may make the results of these trials less predictive of the outcome of later clinical trials. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy, insufficient durability of efficacy, or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that commence clinical trials are never approved as products.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to obtain marketing approval or commercialize our drug or drug candidates. Our product development costs will increase if we experience delays in preclinical studies or clinical trials or in obtaining marketing approvals. We do not know whether any of our planned preclinical studies or clinical trials will begin on a timely basis or at all, will need to be restructured, or will be completed on schedule, or at all. Significant preclinical study or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our drug candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our drug candidates and may harm our business and results of operations.

Since the number of patients that we have dosed to date in our clinical trials is small, the results from such clinical trials may be less reliable than results achieved in larger clinical trials.

A study design that is considered appropriate for regulatory approval includes a sufficiently large sample size with appropriate statistical power, as well as proper control of bias, to allow a meaningful interpretation of the results. The preliminary results of trials with smaller sample sizes can be disproportionately influenced by the impact the treatment had on a few individuals, which limits the ability to generalize the results across a broader community, thus making the study results less reliable than studies with a larger number of patients. As a result, there may be less certainty that such product candidates would achieve a statistically significant effect in any future clinical trials. In our current and any future clinical trials, we may not achieve a statistically significant result or the same level of statistical significance, if any, that we may have seen in prior clinical trials or preclinical studies.

Interim, "top-line" and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available, may be interpreted differently if additional data are disclosed, and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we publicly disclose preliminary or "top-line" data from our clinical trials, which is based on a preliminary analysis of then-available data in a summary or "top-line" format, and the results and related findings may change as more patient data become available, may be interpreted differently if additional data are disclosed at a later time and are subject to audit and verification procedures that could result in material changes in the final data. If additional results from our clinical trials are not viewed favorably, our ability to obtain approval for and commercialize our drug candidates, our business, operating results, prospects, or financial condition may be harmed and our stock price may decrease.

We may choose not to develop a potential product candidate, or we may suspend, deprioritize or terminate one or more discovery programs or preclinical or clinical product candidates or programs.

At any time and for any reason, we may determine that one or more of our discovery programs or preclinical or clinical product candidates or programs does not have sufficient potential to warrant the allocation of resources toward such program or product candidate. Accordingly, we may choose not to develop a potential product candidate or elect to suspend, deprioritize or terminate one or more of our discovery programs or preclinical or clinical product candidates or programs. If we suspend, deprioritize or terminate a program or product candidate in which we have invested significant resources, we will have expended resources on a program or product candidate that will not provide a full return on our investment and may have missed the opportunity to have allocated those resources to potentially more productive uses, including existing or future programs or product candidates.

We may form or seek collaborations or strategic alliances or enter into additional licensing arrangements in the future, but we may not realize any resulting benefits.

We may form or seek strategic alliances, create joint ventures or collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. In particular, we may seek to enter into collaborations with our bezuclastinib program and other collaborations to progress the clinical development of the bezuclastinib program. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business.

We may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy and obtain marketing approval. Further, collaborations involving our product candidates are subject to numerous technical, business, and legal risks. Collaborative relationships are generally complex and can give rise to disputes regarding the relative rights, including the ownership of intellectual property and associated rights and obligations, especially when the applicable collaborative provisions have not been fully negotiated and documented. Even if we are successful in entering into a collaboration with respect to the development and/or commercialization of one or more product candidates, there is no guarantee that the collaboration will be successful.

We may not be able to file investigational new drug applications ("IND"s) or IND amendments or clinical trial authorization applications ("CTA"s) to commence additional clinical trials on the timelines we expect, and even if we are able to, the FDA or other regulatory authorities may not permit us to proceed.

Our timing of filing INDs or CTAs on our product candidates and initiating additional clinical trials is dependent on further research. We cannot be sure that submission of an IND or CTA will result in the FDA or other regulatory authority allowing further clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such clinical trials.

Our updated bezuclastinib formulation is unproven and may not work as intended in clinical trials.

In November 2021, we announced an updated formulation of bezuclastinib which is intended to reduce the number of daily tablets required for patients with GIST, thereby potentially improving the overall GIST patient experience. This formulation has now been incorporated into all three of our ongoing clinical trials. The formulation is unproven to date, and there is no guarantee that it will be successful or perform as desired.

The commercial success of any future approved drugs, including bezuclastinib, will depend upon the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community.

If bezuclastinib and any future approved drugs do not achieve an adequate level of acceptance by physicians, patients, third-party payors, and others in the medical community, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of bezuclastinib and of any current or future drug candidates, if approved for commercial sale, will depend on a number of factors, including the availability, perceived advantages, and relative cost, safety, and efficacy of alternative and competing treatments; and the prevalence and severity of any side effects, adverse reactions, misuse, or any unfavorable publicity in these areas, in particular compared to alternative treatments. Even if a potential drug displays a favorable efficacy and safety profile in preclinical and clinical studies, market acceptance of the drug will not be known until after it is launched.

A variety of risks associated with marketing our product candidates internationally could materially adversely affect our business.

We plan to seek regulatory approval of our product candidates outside of the United States (either ourselves or through a partner) and, accordingly, we expect that we or any future partner will be subject to additional risks and regulatory requirements related to operating in foreign countries if we or they obtain the necessary approvals. Risks associated with any international operations may materially adversely affect our ability to attain or maintain profitable operations.

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

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products.

Information obtained from expanded access studies may not reliably predict the efficacy of our future product candidates in company-sponsored clinical trials and may lead to adverse events that could limit approval.

We are initiating expanded access programs in the United States for patients with SM and GIST to receive investigational bezuclastinib after meeting certain eligibility criteria. These programs are uncontrolled, carried out by individual physicians and not typically conducted in strict compliance with GCPs, all of which can lead to a treatment effect that may differ from that in placebo-controlled trials. These programs provide only anecdotal evidence of efficacy and contain no control or comparator group for reference. This patient data is not designed to be aggregated or reported as study results. Moreover, expanded access programs provide supportive safety information for regulatory review, and many of the patients in our programs will have life-threatening illnesses where the risk for serious adverse events is high. If serious adverse events in these programs are determined to be bezuclastinib-related, they could have a negative impact on the safety profile of bezuclastinib, which could cause significant delays or an inability to successfully obtain regulatory approval with labeling that we consider desirable, if at all.

In addition, our supply capabilities may limit the number of patients who are able to enroll in the programs, which could prompt adverse publicity or other disruptions related to current or potential participants in these programs.

Risks Related to Our Reliance on Third Parties

We currently rely and for the foreseeable future will continue to rely on third parties to conduct our clinical trials and to assist with various research, discovery, manufacturing and supply activities. If these third parties do not properly and successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates or discover new product candidates on our intended timelines, if at all.

We depend and will depend upon independent investigators and collaborators, such as medical institutions, contract research organizations ("CROs"), contract manufacturing organizations ("CMO"s) and strategic partners to conduct our preclinical studies and clinical trials under agreements with us. We rely heavily on these third parties over the course of our clinical trials, and we control only certain aspects of their activities. As a result, we have less direct control over the conduct, timing and completion of these clinical trials and the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff. We and these third parties are required to comply with good clinical practices ("GCP"s), which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. In addition, failure or any failure by these third parties to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could affect their performance on our behalf.

If any CMO with whom we contract fails to perform its obligations, we may be forced to manufacture the materials ourselves, for which we may not have the capabilities or resources, or enter into an agreement with a different CMO, which we may not be able to do on reasonable terms, if at all. In either scenario, our clinical trials supply could be delayed significantly as we establish alternative supply sources. In some cases, the technical skills required to manufacture our products or product candidates may be unique or proprietary to the original CMO and we may have difficulty, or there may be contractual restrictions prohibiting us from, transferring such skills to a back-up or alternate supplier, or we may be unable to transfer such skills at all. Furthermore, a CMO may possess technology related to the manufacture of our product candidate that such CMO owns independently. This would increase our reliance on such CMO or require us to obtain a license from such CMO in order to have another CMO manufacture our product candidates. In addition, changes in manufacturers often involve changes in manufacturing procedures and processes, which could require that we conduct bridging studies between our prior clinical supply used in our clinical trials and that of any new manufacturer. We may be unsuccessful in demonstrating the comparability of clinical supplies which could require the conduct of additional clinical trials.

We also rely on third-party vendors and collaborators to support our research and discovery efforts and to help expand our drug candidate pipeline, including certain third parties located in China, and we expect to continue to use such third parties. A natural disaster, epidemic or pandemic disease outbreaks, trade war, political unrest or other local events could disrupt the business or operations of these third parties and thus negatively impact our research and discovery capabilities and timelines.

We contract with third parties for the manufacture of our drug candidates for preclinical development and clinical trials. This reliance on third parties increases the risk that we will not have sufficient quantities of our drug candidates or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not currently own or operate any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of our drug candidates for preclinical development and clinical testing, as well as for the commercial manufacture of our current and future drugs. This reliance on third parties increases the risk that we will not have sufficient quantities of our drug candidates or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

We do not have long-term supply agreements with our contract manufacturers, and purchase our required drug supply, including the API and drug product used in our drug candidates, on a purchase order basis with certain contract manufacturers. In addition, we may be unable to establish or maintain any agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish and maintain agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks. In addition, our drug candidates may compete with other drug candidates for access to manufacturing facilities. As a result, we may not obtain access to these facilities on a priority basis or at all. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

If any of our product candidates receive regulatory approval and we are not able to negotiate commercial supply terms with any third-party manufacturers, we may be unable to commercialize our products, and our business and financial condition would be materially harmed. If we are forced to accept unfavorable terms for our relationships with any such third-party manufacturer, our business and financial condition would be materially harmed.

Third-party manufacturers may not be able to comply with the FDA's cGMP regulations or similar regulatory requirements outside of the U.S. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, seizures or voluntary recalls of drug candidates or products, operating restrictions, and criminal prosecutions, any of which could significantly and adversely affect supplies of our products. Third-party manufacturers' failure to achieve and maintain high manufacturing standards, in accordance with applicable regulatory requirements, or the incidence of manufacturing errors, also could result in patient injury or death, product shortages, delays or failures in product testing or delivery, cost overruns, or other problems that could seriously harm our business. Third-party manufacturers often encounter difficulties involving production yields, quality control, and quality assurance, as well as shortages of qualified personnel.

The third parties upon whom we rely for the supply of the API and drug product used in bezuclastinib are our sole source of supply, and the loss of any of these suppliers could significantly harm our business.

The API and drug product used in bezuclastinib are currently supplied to us from single-source suppliers. Our ability to successfully develop our drug candidates and supply our drug candidates for clinical trials, depends in part on our ability to obtain the API and drug product for these drugs in accordance with regulatory requirements and in sufficient quantities and on sufficient timelines for clinical testing. We will need to enter into arrangements to establish redundant or second-source supply of some of the API and drug product. If any of our suppliers ceases its operations for any reason or is unable or unwilling to supply API or drug product in sufficient quantities or on the timelines necessary to meet our needs it could significantly and adversely affect our business, the supply of our current or future drug candidates or any future approved drugs and our financial condition.

For bezuclastinib and any other product candidates, we intend to identify and qualify additional manufacturers to provide such API and drug product prior to submission of a New Drug Application ("NDA") to the FDA and/or a Marketing Authorization Application ("MAA") to the EMA. We are not certain, however, that our single-source suppliers will be able to meet our demand for their products, either because of the nature of our agreements with those suppliers, our limited experience with those suppliers or our relative importance as a customer to those suppliers. It may be difficult for us to assess their ability to timely meet our demand in the future based on past performance and they may subordinate our needs in the future to their other customers.

While we seek to maintain adequate inventory of the API and drug product used in our current or future drug candidates and any future approved drugs, any interruption or delay in the supply of components or materials, or our inability to obtain such API and drug product from alternate sources at acceptable prices in a timely manner could impede, delay, limit or prevent our development efforts, which could harm our business, results of operations, financial condition and prospects.

Risks Related to Regulatory Approval of Our Drug Candidates and Other Legal Compliance Matters

The FDA regulatory approval process is lengthy and time-consuming, and we may experience significant delays in the clinical development and regulatory approval of our product candidates.

We currently have one drug candidate in clinical development for three indications and its risk of failure is high. We are unable to predict when or if any of our drug candidates will prove effective or safe in humans or will obtain marketing approval. Before obtaining marketing approval from regulatory authorities for the sale of any drug candidate, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans.

While bezuclastinib is a highly potent and selective KIT D816V inhibitor that is being developed to treat SM and GIST patients, we may find that patients treated with bezuclastinib have or develop mutations that confer resistance to treatment. If patients have or develop resistance to treatment with our drug candidates, we may be unable to successfully complete our clinical trials, and may not be able to obtain regulatory approval of, and commercialize, our drug candidates.

Our product development costs will increase if we experience delays in preclinical studies or clinical trials or in obtaining marketing approvals. We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to obtain marketing approval or commercialize our drug candidates. We may utilize companion diagnostics in our planned clinical trials in the future in order to identify appropriate patient populations for our drug candidates. If a satisfactory companion diagnostic is not commercially available, we may be required to create or obtain one that would be subject to regulatory approval requirements. The process of obtaining or creating such diagnostic is time consuming and costly.

Regulatory authorities, including the FDA, may disagree with our regulatory plan and we may fail to obtain regulatory approval of our product candidates.

We are conducting clinical trials with our lead product candidate, bezuclastinib, in patients with GIST, AdvSM and Non-AdvSM. The FDA may not agree with some or all of our regulatory plans for initial registration of bezuclastinib in some or all of these indications and may require additional clinical trials to be conducted prior to approval. Our clinical trial results may also not support approval.

In addition, our product candidates could fail to receive regulatory approval for many reasons, including if we are unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that our product candidates are safe and effective for any of their proposed indications, or that our product candidates' clinical and other benefits outweigh their safety risks. Moreover, our clinical trial results may also not support approval.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. We may also submit marketing applications in other countries. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

The impact of healthcare legislation and other changes in the healthcare industry and in healthcare spending on us is currently unknown, and may adversely affect our business model.

Our revenue prospects could be affected by changes in healthcare spending and policy in the United States and abroad. We operate in a highly regulated industry and new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to healthcare availability, the method of delivery or payment for healthcare products and services could negatively impact our business, operations and financial condition.

Many federal and state legislatures have considered, and adopted, healthcare policies intended to curb rising healthcare costs, such as the Inflation Reduction Act of 2022. These cost-containment measures may include, among other measures: requirements for pharmaceutical companies to negotiate prescription drug prices with government healthcare programs; controls on government-funded reimbursement for drugs; new or increased requirements to pay prescription drug rebates to government healthcare programs, including if drug prices increase at a higher rate than inflation; controls on healthcare providers; challenges to or limits on the pricing of drugs, including pricing controls or limits or prohibitions on reimbursement for specific products through other means; requirements to try less expensive products or generics before a more expensive branded product; and public funding for cost effectiveness research, which may be used by government and private third-party payors to make coverage and payment decisions. Political, economic and regulatory developments may further complicate developments in healthcare systems and pharmaceutical drug pricing. These developments could, for example, impact our potential licensing agreements as commercial and collaborative partners may also consider the impact of these pressures on their licensing strategies.

Any new laws or regulations that have the effect of imposing additional costs or regulatory burden on pharmaceutical manufacturers, or otherwise negatively affect the industry, could adversely affect our ability to successfully commercialize our product candidates. The implementation of any price controls, caps on prescription drugs or price transparency requirements could adversely affect our business, operating results and financial condition.

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of employee fraud or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under the regulations of the FDA and other similar foreign regulatory bodies will increase significantly, and our costs associated with compliance with such laws and regulations are also likely to increase. 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.

We face potential liability related to the privacy of health information we obtain from clinical trials sponsored by us.

Most healthcare providers, including research institutions from which we obtain patient health information, are subject to privacy and security regulations promulgated under HIPAA, as amended by the HITECH. We are not currently classified as a covered entity or business associate under HIPAA and thus are not directly subject to its requirements or penalties. However, any person may be prosecuted under HIPAA's criminal provisions either directly or under aiding-and-abetting or conspiracy principles. Consequently, depending on the facts and circumstances, we could face substantial criminal penalties if we knowingly receive individually identifiable health information from a HIPAA-covered healthcare provider or research institution that has not satisfied HIPAA's requirements for disclosure of individually identifiable health information. In addition, we may maintain sensitive personally identifiable information, including health information, that we receive throughout the clinical trial process, in the course of our research collaborations, and directly from individuals (or their healthcare providers) who enroll in our patient assistance programs. As such, we may be subject to state laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health information protected by HIPAA.

Furthermore, certain health privacy laws, data breach notification laws, consumer protection laws and genetic testing laws may apply directly to our operations and/or those of our collaborators and may impose restrictions on our collection, use and dissemination of individuals' health information. Patients about whom we or our collaborators obtain health information, as well as the providers who share this information with us, may have statutory or contractual rights that limit our ability to use and disclose the information. We may be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws. Claims that we have violated individuals' privacy rights or breached our contractual obligations, 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. Additionally, we are subject to state and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply regardless of the payor.

If we are unable to successfully develop companion diagnostic tests for our drug candidates that require such tests, or experience significant delays in doing so, we may not realize the full commercial potential of these drug candidates.

We may develop, either by ourselves or with collaborators, in vitro companion diagnostic tests for our drug candidates for certain indications. To be successful, we or our collaborators will need to address a number of scientific, technical, regulatory, and logistical challenges. The FDA regulates in vitro companion diagnostics as medical devices that will likely be subject to clinical trials in conjunction with the clinical trials for our drug candidates, and which will require regulatory clearance or approval prior to commercialization. We may rely on third parties for the design, development, and manufacture of companion diagnostic tests for our therapeutic drug candidates that require such tests. If these parties are unable to successfully develop companion diagnostics for these therapeutic drug candidates, or experience delays in doing so, the development of these therapeutic drug candidates may be adversely affected or may not obtain marketing approval, and we may not realize the full commercial potential of any of these therapeutics that obtain marketing approval.

Pharmaceutical and biological product marketing is subject to substantial regulation in the U.S. and any failure by us or our commercial and collaborative partners to comply with applicable statutes or regulations can adversely affect our business.

Any marketing activities associated with our product candidates, if approved for commercialization, will be subject to numerous federal and state laws governing the marketing and promotion of pharmaceutical and biological products. The FDA regulates post-approval promotional labeling and advertising to ensure that they conform to statutory and regulatory requirements. In addition to FDA restrictions, the marketing of prescription drugs is subject to laws and regulations prohibiting fraud and abuse under government healthcare programs. Similarly, many states have similar statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, and, in some states, such statutes or regulations apply regardless of the payor. In addition, government authorities may also seek to hold us responsible for any failure of our commercialization or collaborative partners to comply with applicable statutes or regulations. If we, or our commercial or collaborative partners, fail to comply with applicable FDA regulations or other laws or regulations relating to the marketing of our product candidates, if approved for commercialization, we could be subject to criminal prosecution, civil penalties, seizure of products, injunctions and exclusion of our product candidates from reimbursement under government programs, as well as other regulatory or investigatory actions against our future product candidates, our commercial or collaborative partners or us.

Risks Related to Our Intellectual Property

If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.

We rely upon a combination of patents, confidentiality agreements, trade secret protection and license agreements to protect the intellectual property related to our technologies. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market. While we undertake efforts to protect our trade secrets and other confidential information from disclosure, others may independently discover trade secrets and proprietary information, and in such cases, we may not be able to assert any trade secret rights against such party. Enforcing a claim that a party illegally obtained and is using our trade secrets is challenging and the outcome is unpredictable. In addition, courts outside of the U.S. may be less willing to protect trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Currently, we have patents issued from our in-licensed portfolio under our license agreement with Plexxikon. in multiple territories, including but not limited to, Australia, Brazil, Canada, China, Colombia, Europe (validated in Germany, Spain, France, Great Britain, Italy, the Netherlands, as well as various other EU countries), Hong Kong, India, Indonesia, Israel, Japan, Mexico, New Zealand, Peru, the Philippines, Republic of Korea, Russia, Singapore, South Africa, Taiwan, and the United States. We also have in-licensed patent applications pending in Australia, Brazil, Canada, China, Egypt, Europe, India, Indonesia, Israel, Japan, Korea, Mexico, Philippines, Singapore, South Africa, and the United States. In addition, we have our own US and international patent applications. We anticipate additional patent applications will be filed both in the United States and in other countries, as appropriate. There is no guarantee that patent applications will provide meaningful protection or result in patents being issued and granted.

In addition, patent grant standards by the U.S. Patent and Trademark Office (the "USPTO") and its foreign counterparts are not always uniform or predictable, and subject to change. For example, the America Invents Act enacted a number of changes to U.S. patent laws, which may prevent us from adequately protecting our or our licensors' inventions and discoveries, including our ability to seek injunctive relief, pursue infringement claims, and obtain substantial damage awards. An example of a major provision of the America Invents Act is the change in the U.S. patent policy from a first-to-invent to a first-to-file practice. Additionally, the USPTO and patent offices in other jurisdictions have often required that patent applications directed to pharmaceutical and/or biotechnology-related inventions be limited or narrowed substantially to cover only the specific innovations exemplified in the patent application, thereby limiting the scope of protection against competitive challenges. Accordingly, even if we or our licensors are able to obtain patents, the patents might be substantially narrower than anticipated. Thus, there is no assurance as to the degree and range of protections any of our or our licensors' patents, if issued, may afford us or whether patents will be issues. Foreign counterparts to this law are also not uniform, and there is no worldwide policy governing the subject matter and scope of claims granted in a pharmaceutical or biotechnology patent. Uncertainty arising from changing laws can impact our ability to protect our or our licensors' patents and other proprietary rights.

Third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, our or our licensors' patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. If the breadth or strength of protection provided by the patent applications we hold with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced.

We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others. In particular, bezuclastinib and other molecules are subject to a license from Plexxikon. We expect in the future to be party to additional material license or collaboration agreements. Any termination of our current or future licenses could result in the loss of significant rights and could harm our ability to commercialize our product candidates. These licenses do and future licenses may include provisions that impose obligations and restrictions on us. This could delay or otherwise negatively impact a transaction that we may wish to enter into. Disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement. If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. We are generally also subject to all of the same risks with respect to protection of intellectual property that we license, as we are for intellectual property that we own, which are described below. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize products could suffer.

We may not be successful in obtaining or maintaining necessary rights to product components and processes for our development pipeline through acquisitions and in-licenses.

Presently we have rights to certain intellectual property, through licenses from third parties and under patent applications that we own or will own, related to bezuclastinib, and certain other product candidates. Because additional product candidates may require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license or use these proprietary rights. Our product candidates may also require specific formulations to work effectively and efficiently and these rights may be held by others. Similarly, efficient production or delivery of our product candidates may also require specific compositions or methods, and the rights to these may be owned by third parties. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

Third-party claims of intellectual property infringement may prevent or delay our product discovery and development efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others. Third parties may assert that we are employing their proprietary technology without authorization. While we do not believe that any claims that could materially adversely affect commercialization of our product candidates, if approved, are valid and enforceable, we may be incorrect in this belief, or we may not be able to prove it in litigation. There may be third-party patents of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure.

We may fail to identify relevant patents or incorrectly conclude that a patent is invalid, not enforceable, exhausted, or not infringed by our activities. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of our product candidates, molecules used in or formed during the manufacturing process, or any final product itself, the holders of any such patents may be able to block our ability to commercialize the product candidate unless we obtained a license under the applicable patents, or until such patents expire or they are finally determined to be held invalid or unenforceable. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy or patient selection methods, the holders of any such patent may be able to block our ability to develop and commercialize the product candidate unless we obtained a license or until such patent expires or is finally determined to be held invalid or unenforceable. In either case, if we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, or at all, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Parties making claims against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. Defense of these claims, regardless of their merit, could involve substantial litigation expense and would be a substantial diversion of employee resources from our business. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need or may choose to obtain licenses from third parties to advance our research or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. An adverse result in any litigation or defense proceedings could put one or more of our or our licensors' patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our or our licensors' patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

An unfavorable outcome of any post-grant proceedings, including interference proceedings, provoked by third parties or brought by the USPTO could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or post-grant proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or the USPTO.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate, as applicable, is invalid and/or unenforceable. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such proceedings could result in revocation or amendment to our or our licensors' patents in such a way that they no longer cover our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection could have a material adverse impact on our business.

Patent terms may be inadequate to protect our competitive position on our product candidates and any future products for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. The patent term of a U.S. patent may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in granting a patent, or may be shortened if a patent is terminally disclaimed over another patent having an earlier expiration date.

Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized.

In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a Patent Term Extension, or PTE, of up to five years beyond the normal expiration of the patent to compensate patent owners for loss of enforceable patent term due to the lengthy regulatory approval process. A PTE grant cannot extend the remaining term of a patent beyond a total of 14 years from the date of the product approval. Further, PTE may only be applied once per product, and only with respect to an approved indication—in other words, only one patent (for example, covering the product itself, an approved use of said product, or a method of manufacturing said product) can be extended by PTE. Moreover, the scope of protection during the period of the PTE does not extend to the full scope of the claim, but instead only to the scope of the product as approved. We anticipate applying for PTE in the United States. Similar extensions may be available in other countries where we are prosecuting patents and we likewise anticipate applying for such extensions.

The granting of such patent term extensions is not guaranteed and is subject to numerous requirements. We might not be granted an extension because of, for example, failure to apply within applicable periods, failure to apply prior to the expiration of relevant patents, failure to exercise due diligence during the testing phase or regulatory review process or any other failure to satisfy any of the numerous applicable requirements. In addition, to the extent we wish to pursue patent term extension based on a patent that we in-license from a third party, we would need the cooperation of that third party. Moreover, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our or our licensors' patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to obtain approval of competing products following our or our licensors' patent expiration by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case. If this were to occur, it could have a material adverse effect on our ability to generate revenue.

Changes to patent law in the United States and in foreign jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our product candidates and future products.

As is the case with other biotechnology and biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biotechnology and biopharmaceutical industry involves both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain.

Moreover, recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our or our licensors' ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our or our licensors' ability to obtain new patents or to enforce our or our licensors' existing patents and patents that we or our licensors might obtain in the future. We cannot predict how future decisions by the courts, Congress or the USPTO may impact the value of our or our licensors' patents. Similarly, any adverse changes in the patent laws of other jurisdictions could have a material adverse effect on our business and financial condition. Changes in the laws and regulations governing patents in other jurisdictions could similarly have an adverse effect on our ability to obtain and effectively enforce our patent rights.

Further, a new court system recently became operational in the European Union. The Unified Patent Court, or UPC, began accepting patent cases on June 1, 2023. The UPC is a common patent court with jurisdiction over patent infringement and revocation proceedings effective for multiple member states of the European Union. The broad geographic reach of the UPC could enable third parties to seek revocation of any of our European patents in a single proceeding at the UPC rather than through multiple proceedings in each of the individual European Union member states in which the European patent is validated. Under the UPC, a successful revocation proceeding for a European Patent under the UPC would result in loss of patent protection in those European Union countries. Accordingly, a single proceeding under the UPC could result in the partial or complete loss of patent protection in numerous European Union countries. Such a loss of patent protection could have a material adverse impact on our business and our ability to commercialize our technology and product candidates. Moreover, the controlling laws and regulations of the UPC will develop over time and we cannot predict what the outcomes of cases tried before the UPC will be. The case law of the UPC may adversely affect our ability to enforce or defend the validity of our or our licensors' European patents. Patent owners have the option to opt-out their European Patents from the jurisdiction of the UPC, defaulting to pre-UPC enforcement mechanisms.

We may not be able to seek or obtain patent protection throughout the world or enforce such patent protection once obtained.

We may not be able to pursue patent coverage of our product candidates in certain countries outside of the United States. Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States may be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. The breadth and strength of our or our licensors' patents issued in foreign jurisdictions or regions may not be the same as the corresponding patents issued in the United States. Consequently, we may not be able to prevent third parties from practicing our or our licensors' inventions in all countries outside the United States, or from selling or importing products made using our or our licensors' inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to certain territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our product candidates and our or our licensors' patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protections, particularly those relating to biotechnology and biopharmaceutical products. This difficulty with enforcing patents could make it difficult for us to stop the infringement of our or our licensors' patents or marketing of competing products otherwise generally in violation of our proprietary rights. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our or our licensors' patents at risk of being invalidated or interpreted narrowly, put our or our licensors' patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our trademarks of interest and our business may be adversely affected.

Our current or future trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. As a means to enforce our trademark rights and prevent infringement, we may be required to file trademark claims against third parties or initiate trademark opposition proceedings. This can be expensive and time-consuming, particularly for a company of our size. We may not be able to protect our rights to our trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. During trademark registration proceedings, we may receive rejections. Although we would be given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. Moreover, any name we propose to use for our products in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. Similar requirements exist in Europe. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA (or an equivalent administrative body in a foreign jurisdiction) objects to any of our proposed product names, we may be required to expend significant additional resources in an effort to identify a usable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

Risks Related to Employee Matters and Managing Growth

We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our inability or failure to successfully attract and retain qualified personnel, particularly at the management level, could adversely affect our ability to execute our business plan and harm our operating results. We are highly dependent on our management, scientific and medical personnel, including our Chief Executive Officer and President, our Chief Financial Officer, our Chief Technology Officer, our Chief Scientific Officer, our Chief Medical Officer, our Chief Commercial Officer and our Chief Legal Officer. The loss of the services of any of our executive officers, other key employees and other scientific and medical advisors, and an inability to find suitable replacements could result in delays in product development and harm our business.

Competition for skilled personnel in our market is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. The employment agreements with our key employees provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice.

We have experienced significant growth and expect to continue to expand our company to support research, development and future commercial capabilities and may face challenges in managing our growth.

During the past two years we increased our headcount from 138 to 205 full time employees through the expansion of our research, development, manufacturing and G&A infrastructure. We need to continue to recruit, train and retain qualified personnel to support our growth and we may be unable to do so effectively.

We continue to enhance our operational, financial and management controls and systems, reporting systems and infrastructure, and policies and procedures to support the establishment and maintenance of effective disclosure and financial controls and corporate governance. Our management and other personnel devote a substantial amount of time to these compliance initiatives, and these increase our legal and financial costs and make some activities more time-consuming and costly. We may not be able to implement enhancements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems and controls. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our development timelines may be delayed, our ability to generate revenue could be reduced, and we may not be able to implement our business strategy.

Our business and operations could suffer in the event of system failures or unauthorized or inappropriate use of or access to our systems.

We are increasingly dependent on our information technology systems and infrastructure for our business. We collect, store, use and transmit personal information and sensitive information including intellectual property, proprietary business information, and health-related information, in connection with business operations. The secure maintenance of this information is critical to our operations and business strategy. Due to the size and complexity and the increasing amounts of confidential information that are maintained, our internal information technology systems and those of our third-party CROs, vendors and other contractors and consultants are potentially vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war and telecommunication and electrical failures, as well as security incidents or breaches from inadvertent or intentional actions by our employees and/or third parties with whom we do business, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, digital extortion, denial-of-service attacks, supply chain attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information), which may compromise our system infrastructure or those of our partners or lead to data leakage. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, similar events relating to the information technology systems of our third-party collaborators who we rely on for the manufacture of our product candidates and to conduct clinical trials could also have a material adverse effect on our business. In addition, changes in how our employees work and access our systems, when part of our workforce is working remotely, could also lead to opportunities for bad actors to launch cyber-attacks or for employees to cause inadvertent security risks or incidents. The prevalent use of mobile devices also increases the risk of data security incidents.

To the extent that any disruption, security breach or unauthorized or inappropriate use or access to our systems were to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, including but not limited to patient, employee or vendor information, we could, under certain circumstances, be subject to notification obligations to affected individuals and/or government agencies, liability, including potential lawsuits from patients, collaborators, employees, stockholders or other third parties and liability under foreign, federal and state laws that protect the privacy and security of personal information which could take the form of, amongst other things, administrative fines, and the development and potential commercialization of our product candidates could be delayed. While we maintain cyber insurance at levels that we believe are appropriate for our business, we cannot assure our investors that it will be sufficient in type or amount to cover us against all claims related to security compromises or breaches, cyberattacks and other related breaches.

Risks Related to Our Financial Position and Need for Additional Capital

We will require substantial additional funding. If we fail to obtain additional financing when needed, or on attractive terms, we may be unable to complete the development and commercialization of our product candidates.

Our operations have consumed substantial amounts of cash since inception. We expect to continue to spend substantial amounts to continue the clinical and preclinical development of our current and future product candidates, including our clinical trials for bezuclastinib. If approved, we will require significant additional amounts in order to launch and commercialize our product candidates. We cannot be certain that additional funding will be available on acceptable terms, or at all. Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Our license agreements may also be terminated if we are unable to meet the payment and other obligations under the agreements. We could be required to seek collaborators for our product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to our product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves.

Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of our common stock to decline.

We have incurred net losses in every year since our inception and anticipate that we will continue to incur net losses in the future.

We are a clinical-stage biopharmaceutical company with a limited operating history. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval and become commercially viable. We have no products approved for commercial sale and have not generated any revenue from product sales to date, and we continue to incur significant research and development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses in each period since our inception in March 2014. For further information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations."

There can be no assurance that the product candidates under development by us will be approved for sale in the United States or elsewhere. Furthermore, there can be no assurance that if such products are approved, they will be successfully commercialized, which would have an adverse effect on our business prospects, financial condition and results of operation. The commercial success of our products, if approved, will depend on many factors, including, but not limited to:

- the availability of coverage and adequate and timely reimbursement from managed care plans, private insurers, government payors (such as Medicare and Medicaid and similar foreign authorities) and other third-party payors for our products;
- patients' ability and willingness to pay out-of-pocket for our products in the absence of coverage and/or adequate reimbursement from third-party payors;
- patient demand for our products;
- our ability to establish and enforce intellectual property rights in and to our products; and
- our ability to avoid third-party patent interference, intellectual property challenges or intellectual property infringement claims.

Even if we succeed in commercializing one or more of our product candidates, we will continue to incur substantial research and development and other expenditures to develop and market additional product candidates. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

Our ability to use net operating losses and tax credit carryforwards to offset future taxable income may be subject to certain limitations.

In general, under Sections 382 and 383 of the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating losses or tax credits, or NOLs or credits, to offset future taxable income or taxes. As a result of the shares issued in July 2020 related to the acquisition of Kiq and the sale of Series A convertible preferred stock, the Company has experienced a change in ownership, as defined by Section 382. As a result of the ownership change, utilization of the federal and state net operating loss carryforwards and research and development tax credit carryforwards is subject to annual limitation under Section 382. Under Section 382, the annual limitation is determined by first multiplying the value of the Company's stock at the time of the ownership change by the applicable long-term tax-exempt rate, and then could be subject to additional adjustments, as required. As of December 31, 2024, approximately $73.0 million and $1.5 million of federal and state net operating losses, respectively, were subject to the July 2020 limitation of $0.3 million per year. A second ownership change occurred in December 2020 as a result of the underwritten public offering of common stock which resulted in a limitation of tax attributes generated from July 2020 to December 2020. The December 1, 2020 ownership change is not expected to have a material impact to the Company's net operating loss carryforwards or research and development tax credit carryforwards as these net operating losses and tax credit carryforwards may be utilized, subject to annual limitation, assuming sufficient taxable income is generated before expiration. The Company has not performed a Section 382 analysis since December 2020.

We may be subject to adverse legislative or regulatory tax changes that could negatively impact our financial condition.

The rules dealing with U.S. federal, state and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect our stockholders or us. We assess the impact of various tax reform proposals and modifications to existing tax treaties in all jurisdictions where we have operations to determine the potential effect on our business and any assumptions we have made about our future taxable income. We cannot predict whether any specific proposals will be enacted, the terms of any such proposals or what effect, if any, such proposals would have on our business if they were to be enacted. For example, the United States enacted the Inflation Reduction Act of 2022, which implements, among other changes, a 1% excise tax on certain stock buybacks. In addition, beginning in 2022, the Tax Cuts and Jobs Act eliminated the previously available option to deduct research and development expenditures and requires taxpayers to amortize them generally over five years for research activities conducted in the United States and over 15 years for research activities conducted outside the United States. Such changes, among others, may adversely affect our effective tax rate, results of operation and general business condition.

Risks Related to Ownership of our Common Stock

The price of our stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock is likely to continue to be highly volatile. Market prices for our common stock could be subject to wide fluctuations in response to various factors. In addition, the stock market in general, and The Nasdaq Global Select Market and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. If the market price of our common stock does not exceed your purchase price, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results, or financial condition.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant influence over matters subject to stockholder approval.

Our executive officers, directors, and ≥ 5% stockholders beneficially owned approximately 55.9% of our outstanding common stock as of December 31, 2024. These stockholders will have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of our directors, amendments to our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that may be in the best interests of our stockholders.

An active trading market for our common stock may not be sustained.

Given the low trading volumes of our common stock, there is a risk that an active trading market for our shares may not be sustained, which could put downward pressure on the market price of our common stock and thereby affect the ability of our stockholders to sell some or all of their shares at attractive prices, at the times and in the volumes that they would like to sell them, or at all.

Future sales and issuances of our common stock or rights to purchase common stock could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital may be needed in the future to continue our planned operations, including conducting clinical trials, commercialization efforts, research and development activities, and incurring costs associated with operating as a public company. To raise capital, we may sell common stock, convertible securities, or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities, or other equity securities, investors may be materially diluted by such sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences, and privileges senior to the holders of our common stock.

Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control, which could limit the market price of our common stock and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporate Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These anti-takeover provisions and other provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer, or proxy contest involving our company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the 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 directors, officers or employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws, any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or bylaws or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits against us and our directors, officers, and other employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Cyber Risk Management and Strategy

We have developed and maintain processes designed to assess, identify, and manage cybersecurity risks from potential unauthorized occurrences on or through our information technology systems that may result in adverse effects on the confidentiality, integrity, and availability of these systems and the data residing therein. The scope of these processes includes risks that may be associated with both our internally managed IT systems and key business functions and sensitive data operated or managed by or maintained at third-party service providers. These processes are managed and monitored by a dedicated information technology team, which is led by our Vice President, IT, who reports to our Chief Technology Officer, and include mechanisms, controls, technologies, systems, and other processes designed to prevent or mitigate data loss, theft, misuse, or other security incidents or vulnerabilities affecting the data and maintain a stable information technology environment. We constantly monitor our information technology environment for abnormal behavior, conduct penetration and vulnerability testing, data recovery testing, security audits, and ongoing risk assessments, including due diligence on our key technology vendors and other third-party service providers that have access to the personal information we collect, use, store, and transmit. We also conduct periodic employee trainings on cyber and information security, among other topics. We leverage standard industry tools from a software and hardware perspective and maintain a cybersecurity risk insurance policy.

We comply with the EU-U.S. DPF, the UK Extension to the EU-U.S. DPF, and the Swiss-U.S. DPF and have accordingly certified our adherence to the respective DPF principles to the U.S. Department of Commerce with regard to the processing of personal data received from the EU, UK and Switzerland respectively. This includes compliance with the information security requirements of the DPF that prescribe that organizations creating, maintaining, using or disseminating personal data must take reasonable and appropriate measures to protect it from loss, misuse and unauthorized access, disclosure, alteration and destruction, taking into due account the risks involved in the processing and the nature of the personal data.

In addition, we consult with outside advisors and experts on a regular basis to assist with assessing, identifying, and managing cybersecurity risks, including to anticipate future threats and trends, and their impact on our risk environment. We have retained VeraSafe, LLC ("VeraSafe") to help review and monitor our practices and processes related to personal data and compliance with applicable data protection laws. VeraSafe acts as our Data Protection Officer pursuant to the European Union and United Kingdom General Data Protection Regulation and has served in this capacity since May 2021.

We consider cybersecurity, along with other significant risks that we face, within our overall enterprise risk management framework. Since the beginning of the last fiscal year, we have not identified risks from known cybersecurity threats, including as a result of any prior cybersecurity incidents, that have materially affected us, but we face certain ongoing cybersecurity risks threats that, if realized, are reasonably likely to materially affect us. Additional information on cybersecurity risks we face is discussed in Part I, Item 1A, "Risk Factors," under the heading "Risks Related to Employee Matters and Managing Growth."

Governance Related to Cybersecurity Risks

The Board of Directors, as a whole and at the committee level, has oversight for the most significant risks facing us and for our processes to identify, prioritize, assess, manage, and mitigate those risks. The Audit Committee, which is comprised solely of independent directors, has been designated by our Board to oversee cybersecurity risks. The Audit Committee receives periodic updates on cybersecurity and information technology matters and related risk exposures. The Board also receives updates from management and the Audit Committee on cybersecurity risks on at least an annual basis.

Our Vice President, IT, who reports to the Chief Technology Officer, a member of the executive team, has over 20 years of experience managing information technology and cybersecurity matters. The Vice President, IT and the Chief Technology Officer, together with our senior leadership team, are responsible for assessing and managing cybersecurity risks and they work collaboratively across our company to implement policies and procedures designed to protect our information and systems from cybersecurity threats and to respond promptly to any material cybersecurity incidents in accordance with our incident response plans. A cross-functional team is responsible for responding to cybersecurity incidents.

ITEM 2. PROPERTIES

Waltham, Massachusetts

Our corporate headquarters are located in Waltham, Massachusetts, where we sublease approximately 17,749 square feet of office space pursuant to a sublease agreement that commenced in June 2022 and expires in September 2026. This facility primarily houses our clinical, regulatory, and administrative personnel.

Boulder, Colorado

We lease approximately 44,657 square feet of office and laboratory space in Boulder, Colorado. The lease has an initial term of 12 years, commencing in June 2022 and expiring in June 2035, with the option to extend for three successive five-year terms. This facility primarily houses our research and other administrative personnel.

We believe that our current facilities are adequate to meet our immediate needs.

ITEM 3. LEGAL PROCEEDINGS

We are not currently a party to any material legal proceedings. From time to time, we may be subject to various legal proceedings and claims that arise in the ordinary course of our business activities. Regardless of the outcome, litigation can have a material adverse effect on us because of defense and settlement costs, diversion of management resources, and other factors.

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

Certain Information Regarding the Trading of Our Common Stock

Our common stock trades under the symbol "COGT" on the Nasdaq Global Select Market and has been publicly traded since March 29, 2018. On October 2, 2020, we filed an amendment to our certificate of incorporation to change our name from Unum Therapeutics Inc. to Cogent Biosciences, Inc. The name change became effective on October 6, 2020. In connection with the name change, our common stock began trading under the ticker symbol "COGT." Our common stock previously traded under the ticker symbol "UMRX."

Holders of Our Common Stock

As of February 21, 2025, there were approximately 4 holders of record of shares of our common stock. This number does not include stockholders for whom shares are held in "nominee" or "street" name.

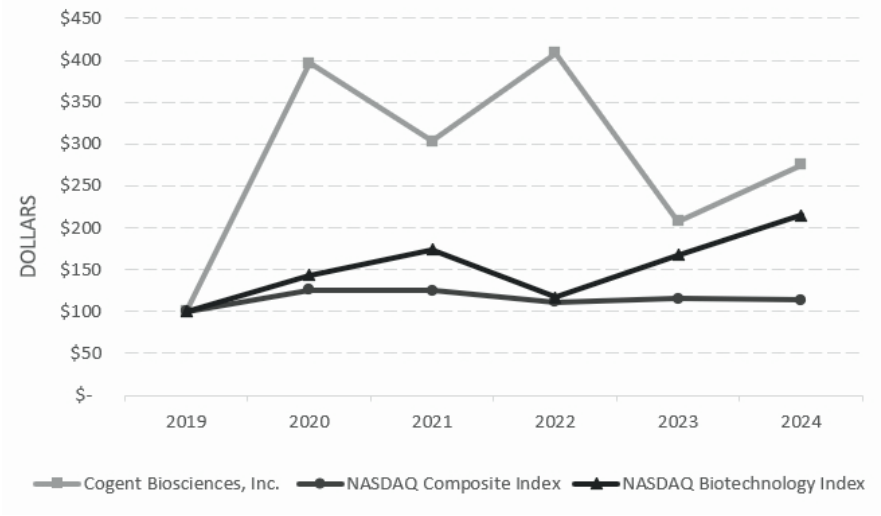
Dividends

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

Stock Performance Graph

The following performance graph and related information shall not be deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission, or SEC, for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, nor shall such information be incorporated by reference into any future filing under the Exchange Act or Securities Act of 1933, as amended, or the Securities Act, except to the extent that we specifically incorporate it by reference into such filing.

The following performance graph compares the performance of our common stock to the Nasdaq Composite Index and to the Nasdaq Biotechnology Index from December 31, 2019 through December 31, 2024. The comparison assumes $100 was invested in our common stock and in each of the foregoing indices after the market closed on December 31, 2019, and it assumes reinvestment of dividends, if any. The stock price performance included in this graph is not necessarily indicative of, nor is it intended to forecast, future stock price performance.



Recent Sales of Unregistered Equity Securities

None.

Issuer Purchases of Equity Securities

None.

ITEM 6. Reserved

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

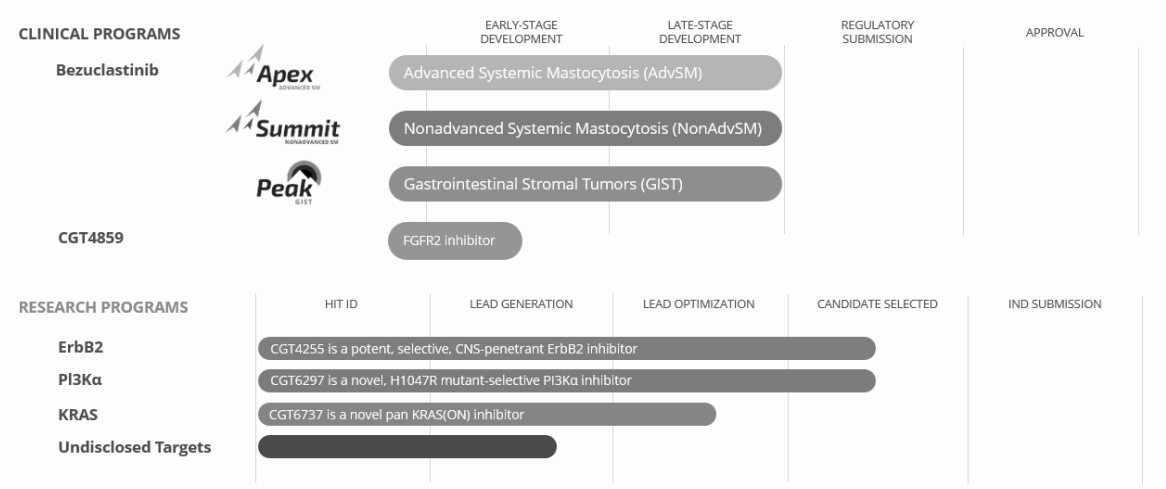
The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and related notes appearing at the end of this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this Annual Report on Form 10-K, our actual results could differ materially from the results described in, or implied by, the forward-looking statements contained in the following discussion and analysis. The discussion below presents a discussion of our financial condition and results of operations for fiscal years 2024 and 2023. See Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on February 26, 2024, for a discussion of our financial condition and results of operations for the fiscal year ended December 31, 2023 and comparison to the fiscal year ended December 31, 2022.

Overview

We are a clinical-stage biotechnology company focused on developing precision therapies for genetically defined diseases. Our approach is to design rational precision therapies that treat the underlying cause of disease and improve the lives of patients. Our most advanced program is bezuclastinib, also known as CGT9486, a highly selective tyrosine kinase inhibitor that is designed to potently inhibit the KIT D816V mutation as well as other mutations in KIT exon 17. In the vast majority of cases, KIT D816V is responsible for driving Systemic Mastocytosis ("SM"), a serious and rare disease caused by unchecked proliferation of mast cells. Exon 17 mutations are also found in patients with advanced gastrointestinal stromal tumors ("GIST"), a type of cancer with strong dependence on oncogenic KIT signaling. Bezuclastinib is a highly selective and potent KIT inhibitor with the potential to provide a new treatment option for these patient populations. We are developing bezuclastinib to treat patients living with Non-Advanced Systemic Mastocytosis ("Non-AdvSM"), Advanced Systemic Mastocytosis ("AdvSM") and GIST. We also have an ongoing Phase 1 study of our novel internally developed FGFR2 inhibitor. In addition to bezuclastinib, the Cogent Research Team is developing a portfolio of novel targeted therapies to help patients fighting serious, genetically driven diseases initially targeting mutations in ErbB2, PI3Kα and KRAS.

The following is an illustration of the status of our current clinical and preclinical programs:

Our Pipeline



Bezuclastinib - SM

The vast majority of AdvSM and Non-AdvSM patients have a KIT D816V mutation. Patients with AdvSM have a significantly diminished lifespan with a median survival of less than 3.5 years. For patients with Non-AdvSM, while their lifespan is not impacted by the disease, these patients suffer from a poor quality of life and new treatment options are badly needed. The FDA has granted orphan drug designation to bezuclastinib for the treatment of Mastocytosis.

We expect to report top-line results from our SUMMIT trial in July 2025 and from our APEX trial in the second half of 2025, and we plan to submit the first bezuclastinib New Drug Application ("NDA") by the end of 2025 for patients with SM.

In the first quarter of 2025, we expect to initiate an expanded access program in the United States for SM patients to receive investigational bezuclastinib after meeting certain eligibility criteria.

SUMMIT (Non-AdvSM)

SUMMIT is our registration-directed randomized, global, multicenter, double-blind, placebo-controlled, multi-part Phase 2 clinical trial for patients with Non-AdvSM. The study is designed to explore the safety and efficacy of bezuclastinib in patients with moderate to severe Non-AdvSM, which includes Indolent Systemic Mastocytosis ("ISM"), Smoldering Systemic Mastocytosis ("SSM") and Bone Marrow Mastocytosis. Based on the performance of bezuclastinib's optimized formulation in the PEAK lead-in trial, as well as in a healthy normal volunteer study, the SUMMIT trial protocol was amended to allow for the optimized formulation to be introduced during the Phase 1b dose optimization phase. SUMMIT Part 1 completed enrollment in the third quarter of 2023, including over enrollment at 54 patients across Part 1a and Part 1b. SUMMIT Part 2 completed enrollment in the fourth quarter of 2024, including over enrollment at 179 patients. We expect to report top-line results in July 2025.

From the data collected in Part 1 of SUMMIT and in accordance with FDA guidelines, we have developed a novel patient reported outcomes measure ("PROM") called Mastocytosis Symptom Severity Daily Diary ("MS2D2"). Based on literature review, patient and physician interviews, data from SUMMIT Part 1, and our interactions with the FDA, we believe our MS2D2 is a reliable, valid and fit-for-purpose PROM. The MS2D2 Total Symptom Score ("TSS") is comprised of 11 items, and scored on a 0-110 scale. The primary endpoint of SUMMIT Part 2 is a comparison of week 24 mean absolute change from baseline in MS2D2 TSS between bezuclastinib and placebo. In June 2024, we announced a positive discussion with the FDA and that we reached alignment with the FDA on the use of MS2D2 in Part 2 of SUMMIT.

In February 2024, we presented data from SUMMIT Part 1b at the 2024 American Academy of Allergy, Asthma and Immunology. Thirty-four patients were enrolled in Part 1b and were treated with either bezuclastinib or placebo plus best supportive care. These patients were evaluated for signs of clinical activity over 12 weeks, including well-accepted biomarkers of disease burden. Based on the totality of the results from SUMMIT Part 1, the data support 100 mg QD as the optimal dose of bezuclastinib in Part 2 of SUMMIT for patients with Non-AdvSM. After the initial 12-week period, all patients were given the opportunity to receive bezuclastinib in the SUMMIT Open Label Extension ("OLE"). In December 2024 at the 2024 American Society of Hematology ("ASH") Annual Meeting, we presented updated data on the 27 patients who were randomized in either Part 1 or the OLE to receive the 100 mg QD dose.

At the 100 mg QD dose and as of the cut-off date of August 29, 2024, 89% of patients had >50% decrease in serum tryptase by four weeks of treatment with bezuclastinib and 95% of patients with elevated baseline tryptase achieved serum tryptase levels <20 ng/ml by week 24. Additionally, 84% of patients with baseline serum tryptase >11.4ng/ml achieved <11.4ng/mL by week 24.

After 24 weeks of active treatment, the 27 patients randomized to receive 100 mg QD were evaluated for signs of clinical activity using multiple PRO measures, including the Mastocytosis Symptom Severity Daily Diary ("MS2D2") and the Mastocytosis Quality-of-Life ("MC-QoL") scale. These patients reported at 56% mean improvement in TSS from baseline. Additionally, 76% of patients demonstrated >50% reduction from baseline in MS2D2 TSS with 88% of patients exceeding 30% reduction from baseline after 24 weeks. At 24 weeks of treatment, 31% of patients have already reduced or discontinued best supportive care ("BSC") medications. These same patients saw a 49% mean improvement in MC-QOL Total Score at 24 weeks.

As of the data cutoff, August 29, 2024, the median duration of bezuclastinib treatment was 56 weeks for patients in the active arm and 40 weeks for placebo patients who crossed over to the OLE. The majority of treatment emergent adverse events were low grade and reversible with no treatment-related bleeding or cognitive impairment events reported. The most common treatment-emergent adverse events were hair color changes and transaminase elevations. All patients experiencing elevated transaminases were asymptomatic and reversible: five patients resolved without any dose modifications and remained on study; two patients resolved with dose reduction and remained on study, one of whom re-escalated to the original dose; and two patients resolved following discontinuation. All of the safety data were previously reported at ASH 2024. There were no other discontinuations due to adverse events.

APEX (AdvSM)

APEX is our registration-directed global, open-label, multi-center, Phase 2 clinical trial in patients with AdvSM evaluating the safety, efficacy, pharmacokinetic, and pharmacodynamic profiles of bezuclastinib. In April 2023, we initiated Part 2 of the APEX trial using the optimized formulation of bezuclastinib at 150 mg daily dose. An additional APEX cohort was initiated in the third quarter of 2023 and is designed to allow concomitant administration of bezuclastinib with azacitadine in patients with SM-AHN. We completed enrollment in APEX Part 2 in the first quarter of 2025 with 58 patients and expect to present top-line results in the second half of 2025.

In December 2024, at the 2024 ASH meeting, we reported updated positive clinical data from Part 1 of the APEX trial. Thirty-two patients were treated in Part 1 at one of four dose levels (50 mg BID, 100 mg BID, 200 mg BID or 400 mg QD). In 2024, we announced APEX Part 2 would be conducted at the optimized 150mg QD dose, which closely matches the exposure from 100 mg BID dose in APEX Part 1. Patients were enrolled with the following sub-types: seven patients with aggressive systemic mastocytosis ("ASM"), 23 patients with systemic mastocytosis with associated hematologic neoplasm ("SM-AHN"), and two patients with mast cell leukemia ("MCL").

As of the cutoff date of October 11, 2024, 32 patients enrolled were evaluated for signs of clinical activity, 27 of whom were mIWG-MRT-ECNM evaluable. An objective response rate ("ORR") of 52% (including complete remission ("CR"), CR with partial hematologic remission ("CRh"), partial remission ("PR"), and clinical improvement ("CI")) was achieved, including 61% ORR for TKI-treatment-naïve patients. An ORR of 88% was achieved by pure pathological response ("PPR") criteria. The median time to achieve response was 2.2 months and median duration of response has not yet been reached. Median progression-free survival ("PFS") was not yet reached at median follow-up of 20 months and the PFS rate at 24 months was 82%.

As of the cutoff date, 94% of patients achieved a ≥ 50% reduction in serum tryptase levels, with 100% of patients receiving at least two cycles of treatment achieving a ≥ 50% reduction and 66% of patients achieved a reduction of serum tryptase below 20 ng/ml. Additionally, 93% of KIT D9816V-positive patients achieved a ≥ 50% reduction in KIT D816V VAF and 100% of evaluable patients achieved ≥ 50% reduction in bone marrow mast cell burden, with 83% of patients achieving a complete clearance of mast cell aggregates.

As of the data cutoff date, bezuclastinib continues to demonstrate a differentiated safety and tolerability profile across doses. The majority of hematological adverse events were low grade and reversible. There have been no new treatment-related serious adverse events or discontinuations reported since ASH 2023. Twelve patients required dose reduction, eight of whom were treated at a 400 mg daily dose.

Bezuclastinib - GIST

We are also pursuing the development of bezuclastinib in combination with sunitinib as a potential second line treatment for patients living with GIST. GIST is a cancer frequently driven by KIT mutations, and resistance to currently available therapeutics is frequently associated with the emergence of other KIT mutations. First-line therapy for the vast majority of GIST patients is imatinib, followed by sunitinib monotherapy as the current second-line therapy for the majority of patients that eventually develop resistance to imatinib.

PEAK (GIST)

PEAK is our randomized open-label, global Phase 3 clinical trial designed to evaluate the safety, tolerability, and efficacy of bezuclastinib in combination with sunitinib compared to sunitinib alone in patients with locally advanced, unresectable or metastatic GIST who have received prior treatment with imatinib. The FDA and EMA have granted orphan drug designation to bezuclastinib for the treatment of GIST. Patient enrollment for the pivotal portion of the PEAK trial was completed in the third quarter of 2024. Based on strong global patient interest, a total of 413 patients were enrolled in the trial. In addition, we completed a pre-planned interim futility analysis, and the Independent Data Monitoring Committee ("IDMC") recommended continuing the PEAK study without modification. This pre-specified analysis was based on an assessment of PFS as determined by independent central review and did not include the option for early stopping due to efficacy. Top-line results are expected by the end of 2025.

In June 2024, we presented updated positive clinical data from the lead-in portion of the PEAK trial at the 2024 American Society of Clinical Oncology meeting. As of the cutoff date, April 1, 2024, the 42 patients in Part 1 have been on study for a median of 15.3 months. The median progression-free survival ("mPFS") on the combination of bezuclastinib and sunitinib was 10.2 months in all patients. In a subset of second-line GIST patients with only prior imatinib, a population that most closely resembles patients currently enrolling in the Phase 3 pivotal PEAK study, the data demonstrate a mPFS of 19.4 months. In addition, the ORR in all patients treated with bezuclastinib and sunitinib was 27.5% and in the subset of second-line patients the ORR was 33.3%, per investigator assessment. Combination treatment resulted in a disease control rate of 80% in all patients and 100% in second-line patients with prior imatinib only. As of the data cutoff, the combination of bezuclastinib and sunitinib does not appear to add to the severity of adverse events known to be associated with sunitinib monotherapy and is well-tolerated. The majority of treatment-emergent adverse events ("TEAEs") were low-grade and reversible and discontinuations due to TEAEs remain limited.

In May 2024, we also announced the initiation of a new advanced Phase 2 clinical trial of bezuclastinib plus sunitinib in later line GIST patients that is being sponsored by the Sarcoma Alliance for Research through Collaboration and in collaboration with The Life Raft Group and Dana-Farber Cancer Institute. The open label, single arm Phase 2 trial is designed to evaluate the mPFS as well as the safety and tolerability of bezuclastinib plus sunitinib in 40 patients with GIST who have previously progressed on sunitinib. This trial is focused on later line patients that are not eligible for PEAK and have limited treatment options.

In in the first quarter of 2025, we initiated an expanded access program in the United States for patients affected with advanced, metastatic, and/or unresectable GIST, intolerant to imatinib or received prior imatinib therapy for treatment that resulted in disease progression, and who meet other inclusion and exclusion criteria.

Worldwide rights to develop and commercialize bezuclastinib are exclusively licensed from Plexxikon Inc., a member of the Daiichi Sankyo Group ("Plexxikon"). Under the terms of the license agreement, Plexxikon received an upfront payment and is eligible for additional development milestones of up to $7.5 million upon the satisfaction of certain clinical milestones and up to $25.0 million upon the satisfaction of certain regulatory milestones. During the second quarter of 2022, as a result of the progression of the PEAK study, the first clinical milestone was achieved, resulting in payment of $2.5 million to Plexxikon in June 2022. As of December 31, 2024, no other milestone payments have been made. Patents protecting bezuclastinib include composition of matter claims which have been issued in the US and other key territories and provide exclusivity through 2033 and potentially beyond through patent term extensions. In addition, we filed a patent application in 2023 seeking to protect our optimized formulation of bezuclastinib that is currently being used in all three of our ongoing clinical trials, which could potentially provide exclusivity through at least 2043.

CGT4859

Our research team is building a pipeline of small molecule inhibitors, with our first efforts aimed toward targeting currently undrugged mutations in fibroblast growth factor receptor ("FGFR"). FGFR mutations are well-established oncogenic drivers in multiple diseases, but approved medicines fail to capture the full landscape of FGFR altered tumor types, with FGFR1-mediated hyperphosphatemia serving as the most common dose-limiting toxicity for pan-FGFR inhibitors. In April 2023, we reported preclinical data at the American Association for Cancer Research ("AACR") 2023 Annual Meeting providing the first published evidence of CGT4859 a reversible, selective FGFR2 inhibitor with coverage of activating and emerging resistance mutations that spares inhibition of FGFR1. Preclinical data demonstrate a profile that delivers equipotent coverage across both key gatekeeper and molecular brake mutations (V564X, N549X) in FGFR2, while avoiding any evidence of FGFR1-linked hyperphosphatemia at efficacious plasma concentrations. In October 2023, we presented updated preclinical data at the 2023 EORTC-NCI-AACR International Symposium on Molecular Targets and Cancer Therapeutics ("EORTC-NCI-AACR"). Preclinical data demonstrate a profile that exhibits low namomolar potency on WT FGFR2 and FGFR2 mutations and is selective against the kinome, as well as a panel of ion channels and receptors. Exploratory pharmacokinetics studies conducted across species showed CGT4859 to be a low-clearance compound with high oral bioavailability. Further, in a mutant-driven mouse model, CGT4859 demonstrated dose-responsive tumor growth inhibition with complete regressions at 5 mg/kg PO and was well-tolerated. In addition, as a reversible inhibitor, the Cogent program retains enzymatic potency against potential cysteine 491 mutations. We are actively enrolling our Phase 1 study of CGT4859 in patients with FGFR2 mutations, including advanced cholangiocarcinoma. The trial will explore the safety, tolerability and clinical activity of escalating doses of CGT4859 with a goal of selecting an active and well tolerated dose for further clinical investigation.

Research Programs

The Cogent Research Team, based in Boulder, Colorado, is focused on pioneering best-in-class, small molecule therapeutics to expand our pipeline and deliver novel precision therapies for patients living with unmet medical needs. For ErbB2, PI3K and KRAS we see opportunities to provide a more robust molecular response compared to existing therapies.

ErbB2

Our research team is also advancing a novel, ErbB2 mutant program, which is focused on actionable and underserved mutations in a variety of solid tumor indications. In April 2023, we reported preclinical data at AACR describing a series of novel compounds which potently inhibit several key ErbB2 mutations, including YVMA insertions, while sparing inhibition of EGFR. An exemplar compound from these series demonstrates advantages versus tucatinib, an approved benchmark compound, on tumor growth inhibition in a peripheral ErbB2 L755S driven mutant model, as well as in an ErbB2 driven intracranial model. Recent program advances with a novel chemotype have further improved ErbB2 mutational potency and selectivity and improved human whole blood stability to nearly 24 hours, suggesting a favorable profile for optimal clinical efficacy. Updated data was presented in December 2024 at the San Antonio Breast Cancer Symposium ("SABCS"). The updated data presented shows that CGT4255 demonstrated low nM potency against ErbB2 wild-type and oncogenic ErbB2 mutations with greater than 100-fold selectivity over wild-type-EGFR. In addition to impressive selectivity across a broad range of kinases, receptors and ion channels, CGT4255 has exceptional half-life in human whole blood and liver cytosol fractions. Dose ascending PK data in mice showed low clearance and high oral bioavailability at all doses, with best-in-class 80% brain penetrance at 100 mg/kg. Maximum inhibition of ErbB2 was observed at a 30 mg/kg PO dose in both NIH/3T3 ErbB2-YVMA and ErbB2-L755S tumor models, with complete regressions at 100 mg/kg PO BID in the NIH3T3 ErbB2-L755S TGI model and was well tolerated. In addition, at the 2024 SABCS meeting, CGT4255 demonstrated robust efficacy in combination with T-DXd in an NCI-N87-luc Intracranial Her2+ Model, highlighting the ability to treat challenging intercranial tumors. These advances continue to highlight a favorable profile for optimal clinical efficacy. We selected our ErbB2 clinical candidate in 2024 and plan to submit an IND application in 2025.

PI3Kα

Our research team is also developing a potential best-in-class, wild-type-sparing, PI3Kα inhibitor that provides coverage for the H1047R mutation, which affects >30,000 cancer patients each year. The phosphoinositide 3-kinase ("PI3K") pathway is a key cell cycle regulating pathway that has an established role in tumor growth and development. PI3Kα mutations are highly prevalent in many solid tumors and are present in 36% of all breast cancer patients. The approved agents for these patients often lead to dose limitations, resulting from activity against wild-type PI3Kα. Preclinical data was presented at the 2024 EORTC-NCI-AACR meeting in October 2024 as well as the December 2024 SABCS, which highlighted that CGT6297 is an allosteric inhibitor of PI3K, was well-tolerated in the tumor growth inhibition efficacy models and has been profiled based on its selectivity for H1047R over WT PI3K. CGT6297 demonstrated low nM potency in H1047R mutant PI3K cell lines, differentiated dose ascending PK in mice with high bioavailability and low clearance. CGT6297 also showed >95% inhibition of pAKT in a H1047R PD model, without increases in insulin or C-peptide. Its efficacy profile was superior to a clinically-relevant dose of Alpelisib in the NCI H1048 mouse tumor growth inhibition model. CGT6297 has been selected as our clinical candidate for the PI3K 1047 mutation focused project. IND-enabling studies have been initiated and we expect to submit an IND application in 2025.

KRAS

Our research team is also developing a potent and selective KRAS inhibitor. Mutations in KRAS are among the most prevalent mutations found in cancer, occurring most often in colorectal cancer, non-small cell lung cancer and pancreatic cancer. Preclinical data was presented at the 2024 EORTC-NCI-AACR meeting and highlighted our internally-developed pan KRAS(ON) inhibitor with selectivity over HRAS and NRAS and picomolar (pM) activity across KRAS mutations without the potential liabilities of molecules in the class. Following oral administration, CGT6737 demonstrated robust PK/PD and tumor growth inhibition with 90% PD inhibition in mouse xenograft models. Lead optimization of CGT6737 is ongoing.

Financial Operations Overview

Since our inception in 2014, we have focused significant efforts and financial resources on establishing and protecting our intellectual property portfolio, conducting research and development of our product candidates, manufacturing drug product material for use in preclinical studies and clinical trials, staffing our company, and raising capital. We do not have any products approved for sale and have not generated any revenue from product sales. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more of our product candidates. Our net loss was $255.9 million for the year ended December 31, 2024 compared to net loss of $192.4 million for the year ended December 31, 2023. As of December 31, 2024, we had an accumulated deficit of $859.5 million. We expect to continue to incur significant expenses and operating losses for at least the next several years. We expect that our expenses and capital requirements will increase substantially in connection with our ongoing activities, particularly if and as we:

- initiate and increase enrollment for our existing and planned clinical trials for our product candidates;
- continue to discover and develop additional product candidates;
- acquire or in-license other product candidates and technologies;
- maintain, expand, and protect our intellectual property portfolio;
- hire additional research, clinical, scientific, and commercial personnel;
- establish a commercial manufacturing source and secure supply chain capacity sufficient to provide commercial quantities of any product candidates for which we may obtain regulatory approval;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- establish a sales, marketing, and distribution infrastructure to commercialize any products for which we may obtain regulatory approval; and
- add operational, financial, and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts.

We will not generate revenue from product sales unless and until we successfully complete clinical development and obtain regulatory approval for our product candidates. If we obtain regulatory approval for any of our product candidates and do not enter into a commercialization partnership, we expect to incur significant expenses related to developing our internal commercialization capability to support product sales, marketing, and distribution.

As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances, and marketing, distribution, or licensing arrangements. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back, or discontinue the development and commercialization of one or more of our product candidates.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

As of December 31, 2024, we had cash, cash equivalents and marketable securities of $287.1 million. Based on our current plans, we expect that our current cash, cash equivalents and marketable securities will be sufficient to fund our operating expenses and capital expenditure requirements through clinical readouts from ongoing SUMMIT, PEAK, and APEX registration-directed trials and into late 2026.

Components of Our Results of Operations

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our drug discovery efforts, and the development of our product candidates, which include:

- expenses incurred in connection with the discovery, preclinical and clinical development of our product candidates, including under agreements with third parties, such as consultants, contractors and contract research organizations ("CROs");
- the cost of manufacturing drug products for use in our preclinical studies and clinical trials, including under agreements with third parties, such as consultants, contractors and contract manufacturing organizations ("CMOs");
- employee-related expenses, including salaries, related benefits and stock-based compensation expense for employees engaged in research and development functions;
- laboratory supplies and animal care;
- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities and insurance; and
- payments made under third-party licensing agreements.

We do not allocate employee costs, laboratory supplies, software and facilities, including depreciation or other indirect costs, to specific product development programs because these costs are deployed across multiple product development programs and, as such, are not separately classified. We expense research and development costs as incurred. Advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. The prepaid amounts are expensed as the related goods are delivered or the services are performed.

Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will increase substantially in connection with our planned clinical and preclinical development activities in the near term and in the future. At this time, we cannot reasonably estimate or know the nature, timing, and costs of the efforts that will be necessary to complete the preclinical and clinical development of any of our product candidates. The successful development and commercialization of our product candidates is highly uncertain. This is due to the numerous risks and uncertainties associated with product development and commercialization, including the following:

- the timing and progress of our preclinical and clinical development activities;
- the number and scope of preclinical and clinical programs we decide to pursue;
- the progress of the development efforts of parties with whom we have entered, or may enter, into collaboration arrangements;
- our ability to maintain our current research and development programs and to establish new ones;
- the enrollment rates in our clinical trials;
- our ability to establish new licensing or collaboration arrangements;
- the future productivity of the Cogent Research Team in Boulder, CO and its ability to discover new product candidates and build our pipeline;
- the successful completion of clinical trials with safety, tolerability, and efficacy profiles that are satisfactory to the FDA or any comparable foreign regulatory authority;
- the receipt of regulatory approvals from applicable regulatory authorities;
- the success in establishing and operating a manufacturing facility, or securing manufacturing supply through relationships with third parties;

- our ability to obtain and maintain patents, trade secret protection, and regulatory exclusivity, both in the United States and internationally;
- our ability to protect our rights in our intellectual property portfolio;
- the commercialization of our product candidates, if and when approved;
- the acceptance of our product candidates, if approved, by patients, the medical community, and third-party payors;
- competition with other products; and
- a continued acceptable safety profile of our therapies following approval.

A change in the outcome of any of these variables with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate. We may never succeed in obtaining regulatory approval for any of our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs, including stock-based compensation, for personnel in executive, finance, commercial and administrative functions. General and administrative expenses also include direct and allocated facility-related costs as well as professional fees for legal, patent, consulting, investor and public relations, accounting, and audit services. We anticipate that our general and administrative expenses will increase in the future as a result of the costs associated with the expansion of operations to support our ongoing discovery, preclinical and clinical activities and current and future commercialization activities.

Interest Income

Interest income consists of interest earned on our cash equivalents and marketable securities balances.

Other Income, Net

Other income consists of miscellaneous income and expense unrelated to our core operations, including income from subleasing a portion of our former headquarters facilities and a milestone payment related to the sale of our legacy assets.

Change in Fair Value of the CVR liability

This consists of changes in the fair value of the contingent value right ("CVR") liability.

Income Taxes

Since our inception, we have not recorded any current or deferred tax benefit for the net losses we have incurred in each year or for our tax credits generated, as we believe, based upon the weight of available evidence, that it is more likely than not that our net operating loss carryforwards and tax credits will not be realized. Accordingly, a full valuation allowance has been established against the deferred tax assets as of December 31, 2024. We reevaluate the utilization of net operating loss carryforwards and tax credits at each reporting period. As of December 31, 2024, we had U.S. federal and state net operating loss carryforwards of $268.1 million and $128.7 million, respectively, which may be available to offset future taxable income and begin to expire in 2035. Of the federal net operating loss carryforwards at December 31, 2024, $264.8 million is available to be carried forward indefinitely but we are permitted to offset a maximum of 80% of taxable income per year. As of December 31, 2024, we had U.S. federal and state research and development tax credit carryforwards of $19.7 million and $4.4 million, respectively, which may be available to offset future income tax liabilities and begin to expire in 2040 and 2035, respectively. We also had federal orphan drug tax credits of $25.7 million which may be available to offset future income tax liabilities and begin to expire in 2041.

Utilization of the U.S. federal and state net operating loss carryforwards and tax credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, and corresponding provisions of state law, due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of carryforwards that can be utilized annually to offset future taxable income. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain stockholders or public groups in the stock of a corporation by more than 50% over a three-year period.

We have recorded a full valuation allowance against our net deferred tax assets at each balance sheet date.

Results of Operations

Comparison of the Years Ended December 31, 2024 and 2023

The following table summarizes our results of operations for the years ended December 31, 2024 and 2023:

	Year Ended December 31,		
	2024	2023	Change
		(in thousands)	
Operating expenses:			
Research and development	$ 232,658	$ 173,755	$ 58,903
General and administrative	43,281	34,375	8,906
Total operating expenses	275,939	208,130	67,809
Loss from operations	(275,939)	(208,130)	(67,809)
Other income:			
Interest income	18,088	13,077	5,011
Other income, net	1,992	943	1,049
Change in fair value of CVR liability	—	1,700	(1,700)
Total other income, net	20,080	15,720	4,360
Net loss	$ (255,859)	$ (192,410)	$ (63,449)

Research and Development Expenses

The following table summarizes our research and development expenses for the year ended December 31, 2024 and 2023:

	Year Ended December 31,		
	2024	2023	Change
		(in thousands)	
Direct research and development expenses by program:			
Bezuclastinib	$ 120,862	$ 85,484	$ 35,378
Early stage, preclinical and discovery programs	28,141	19,171	8,970
Unallocated expenses:			
Personnel related (including stock-based compensation)	66,009	53,645	12,364
Laboratory supplies, facility related and other	17,646	15,455	2,191
Total research and development expenses	$ 232,658	$ 173,755	$ 58,903

Total research and development expense increased by $58.9 million for the year ended December 31, 2024 compared to the year ended December 31, 2023, driven by the development of bezuclastinib, including costs associated with the accelerated completion of enrollment of the SUMMIT and PEAK trials and ongoing costs of the APEX trial, as well as the continued progression of our early stage, preclinical and discovery programs. There was also an increase in unallocated expenses driven by higher personnel costs due to an increase in headcount, including stock-based compensation expense which increased by $4.4 million for the year ended December 31, 2024 compared to the year ended December 31, 2023.

General and Administrative Expenses

General and administrative expenses for the year ended December 31, 2024 were $43.3 million, compared to $34.4 million for the year ended December 31, 2023. The increase in general and administrative expenses was primarily due to higher personnel and support costs due to the growth of the organization. This includes stock-based compensation expense, which increased by $4.7 million for the year ended December 31, 2024 compared to the year ended December 31, 2023. Additionally, the costs include initial commercial readiness activities initiated in the third quarter of 2024.

Interest Income

Interest income for the year ended December 31, 2024 was $18.1 million, compared to $13.1 million for the year ended December 31, 2023. The increase in interest income was primarily due to higher average invested balances in cash equivalents and marketable securities and higher interest rates in the current year compared to the prior period.

Other Income, Net

Other income, net was $2.0 million for the year ended December 31, 2024, compared to $0.9 million for the year ended December 31, 2023. For the year ended December 31, 2024, other income represented a milestone payment received related to the 2020 sale of our legacy assets, while for the year ended December 31, 2023, other income primarily represented sublease income recognized resulting from the sublease of a portion of our former corporate headquarters space.

Change in fair value of CVR liability

The change in fair value of CVR liability for year ended December 31, 2024 was nil, compared to $1.7 million for the year ended December 31, 2023. We recorded a decrease in fair value of the liability of $1.7 million in the first quarter of 2023, reducing the liability to zero as the probability of additional CVR payments occurring prior to the expiration of the CVR term was remote. The CVRs expired on August 6, 2023 and no further payments will be made to CVR holders.

Liquidity and Capital Resources

Since our inception, we have incurred significant operating losses. We have generated limited revenue to date from funding arrangements with our former collaboration partner. We have not yet commercialized any of our product candidates and we do not expect to generate revenue from sales of any product candidates for several years, if at all. We have historically funded our operations primarily through the public offering and private placement of our securities and consideration received from our collaborative agreements.

On May 6, 2022, pursuant to a shelf registration statement on Form S-3, we entered into a Sales Agreement (the "Sales Agreement") with Guggenheim Securities, LLC ("Guggenheim Securities"), pursuant to which we may issue and sell, from time to time, shares of our common stock having an aggregate offering price of up to $75.0 million through Guggenheim Securities, as the sales agent. As of December 31, 2024, no shares have been sold under the Sales Agreement. In February 2025, we sold 2,587,992 shares under the Sales Agreement for gross proceeds of $25.0 million.

On February 10, 2023, we filed a Form S-3ASR with the SEC ("2023 Shelf Registration Statement") for the issuance of common stock, preferred stock, warrants, rights, debt securities and units, which became effective immediately upon filing. At the time any of the securities covered by the 2023 Shelf Registration Statement are offered for sale, a prospectus supplement will be prepared and filed with the SEC containing specific information about the terms of any such offering.

In June 2023, we completed an underwritten public offering of 14,375,000 shares of our common stock at a public offering price of $12.00 per share (including the exercise in full by the underwriters of their 30-day option to purchase up to 1,875,000 additional shares of common stock). The net proceeds from the offering were approximately $161.8 million, after deducting the underwriting discounts and commissions and offering expenses.

On February 13, 2024, we entered into a Securities Purchase Agreement (the "Purchase Agreement") for a private placement (the "Private Placement") with certain institutional and accredited investors (each, a "Purchaser" and collectively, the "Purchasers"). The closing of the Private Placement occurred on February 16, 2024. Pursuant to the Purchase Agreement, the Purchasers purchased (i) an aggregate of 17,717,997 shares of our common stock at a price per share of $7.50, and (ii) 12,280 shares of our Series B Non-Voting Convertible Preferred Stock ("Series B Preferred Stock"), at a price per share of $7,500.00. Net proceeds were approximately $213.3 million after deducting placement fees and offering costs.

As of December 31, 2024, we have 135,552,039 shares outstanding on an as-converted basis, which consists of (i) 110,461,729 shares of common stock outstanding, (ii) pre-funded warrants that are exercisable for 606,060 shares of common stock, (iii) 70,465 shares of Series A Preferred Stock that are convertible into 17,616,250 shares of common stock and (iv) 6,868 shares of Series B Preferred Stock that are convertible into 6,868,000 shares of common stock.

As of December 31, 2024, we had cash, cash equivalents and marketable securities of $287.1 million, which we believe will be sufficient to fund our operating expenses and capital expenditure requirements through clinical readouts from ongoing SUMMIT, PEAK, and APEX registration-directed trials and into late 2026.

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Net cash used in operating activities	$ (207,791)	$ (153,624)
Net cash provided by (used in) investing activities	38,276	(97,824)
Net cash provided by financing activities	214,451	163,536
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 44,936	$ (87,912)

Operating Activities

During the year ended December 31, 2024, operating activities used $207.8 million of cash, primarily resulting from our net loss of $255.9 million, partially offset by changes in our operating assets and liabilities of $11.6 million and net non-cash charges of $36.5 million. Net cash used by changes in our operating assets and liabilities for the year ended December 31, 2024 consisted primarily of a $17.3 million increase in accounts payable and accrued expenses and other current liabilities, partially offset by a $1.4 million decrease in operating lease liabilities and a $4.3 million increase in prepaid expenses and other current assets.

During the year ended December 31, 2023, operating activities used $153.6 million of cash, primarily resulting from our net loss of $192.4 million, partially offset by changes in our operating assets and liabilities of $11.4 million and net non-cash charges of $27.3 million. Net cash used by changes in our operating assets and liabilities for the year ended December 31, 2023 consisted primarily of a $13.0 million increase in accounts payable and accrued expenses and other current liabilities, partially offset by a $0.8 million decrease in operating lease liabilities, a $0.6 million increase in prepaid expenses and other current assets and a $0.1 million increase in other assets.

Investing Activities

During the year ended December 31, 2024, net cash provided by investing activities was $38.3 million, consisting of maturities and sales of marketable securities, partially offset by purchases of marketable securities and property and equipment.

During the year ended December 31, 2023, net cash used in investing activities was $97.8 million, consisting of purchases of marketable securities and property and equipment, partially offset by maturities and sales of marketable securities.

Financing Activities

During the year ended December 31, 2024, net cash provided by financing activities was $214.5 million, which consisted of $213.3 million in proceeds from the issuance of common stock and Series B Preferred Stock in the Private Placement, net of paid offering costs, proceeds from the issuance of common stock under the Employee Stock Purchase Plan and proceeds from the issuance of common stock upon stock option exercises.

During the year ended December 31, 2023, net cash provided by financing activities was $163.5 million, which consisted of $161.8 million in proceeds from the issuance of common stock in an underwritten public offering, net of paid offering costs, proceeds from the issuance of common stock under the Employee Stock Purchase Plan and proceeds from the issuance of common stock upon stock option exercises.

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we advance the clinical development of our current and any future product candidates and conduct additional research, development and preclinical activities. The timing and amount of our operating expenditures will depend largely on:

- the initiation, progress, timing, and completion of preclinical studies and clinical trials for our current and future potential product candidates;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- adverse results or delays in clinical trials;
- our decision to initiate a clinical trial, not to initiate a clinical trial, or to terminate an existing clinical trial;
- adverse regulatory decisions, including failure to receive regulatory approval of our product candidates;
- changes in laws or regulations applicable to our products, including but not limited to clinical trial requirements for approvals;
- adverse developments concerning our manufacturers;
- our inability to obtain adequate product supply for any approved product or our inability to do so at acceptable prices;
- our inability to establish collaborations, if desired or needed;
- our failure to commercialize our product candidates;
- additions or departures of key scientific or management personnel; and
- unanticipated serious safety concerns related to the use of our product candidates.

Based on our current plans, we believe that our existing cash, cash equivalents and marketable securities of $287.1 million as of December 31, 2024 will enable us to fund our operating expenses and capital expenditure requirements through clinical readouts from ongoing SUMMIT, PEAK, and APEX registration-directed trials and into late 2026. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. We will require additional funding to complete the critical activities planned to support ongoing research and development programs.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances, and marketing, distribution, or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, existing ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures, or declaring dividends. If we raise additional funds through collaborations, strategic alliances, or marketing, distribution, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or drug candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce, or terminate our research, product development, or future commercialization efforts, or grant rights to develop and market drug candidates that we would otherwise prefer to develop and market ourselves.

Critical Accounting Estimates

Our discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of our consolidated financial statements and related disclosures requires us to make estimates, assumptions and judgments that affect the reported amount of assets, liabilities, revenue, costs and expenses, and related disclosures. Actual results may differ from these estimates under different assumptions or conditions and could have a material impact on our reported results. While our significant accounting policies are more fully described in the Notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K, we believe the following accounting policies to be the most critical in understanding the judgments and estimates we use in preparing our consolidated financial statements.

Accrued Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with our applicable personnel to identify services that have been performed on our behalf, and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of the estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include fees paid to:

- vendors in connection with the preclinical development activities;
- CMOs in connection with the production of preclinical and clinical trial materials;
- CROs in connection with preclinical studies and clinical trials; and
- investigative sites in connection with clinical trials.

We base our expenses related to preclinical studies and clinical trials on our estimates of the services received and efforts expended pursuant to quotes and contracts with multiple CMOs and CROs that supply, conduct, and manage preclinical studies and clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract, and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or prepaid expense accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period.

Stock-Based Compensation

We measure stock options and other stock-based awards granted to employees, non-employees and directors based on their fair value on the date of the grant and recognize compensation expense of those awards over the requisite service period, which is generally the vesting period of the respective award. We apply the straight-line method of expense recognition to all awards with only service-based vesting conditions and apply the graded-vesting method to all awards with performance-based vesting conditions or to awards with both service-based and performance-based vesting conditions.

We estimate the fair value of our stock options granted to employees and non-employees using the Black-Scholes option-pricing model, which requires the input of highly subjective assumptions, including (a) the expected volatility of our stock, (b) the expected term of the award, (c) the risk-free interest rate, and (d) expected dividends. Due to the lack of a sufficient history of public trading of our common stock and a lack of sufficient company-specific historical and implied volatility data, we have based our estimate of expected volatility on the historical volatility of a group of companies in the pharmaceutical and biotechnology industries in a similar stage of development as us and that are publicly traded. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available. We have estimated the expected term of our employee stock options using the "simplified" method, whereby, the expected term equals the average of the vesting term and the original contractual term of the option. The risk-free interest rates for periods within the expected life of the option are based on the U.S. Treasury yield curve in effect during the period the options were granted. The expected dividend yield of zero is based on the fact that we have never paid cash dividends and do not expect to pay any cash dividends in the foreseeable future. We account for forfeitures as they occur.

We measure the fair value of stock-based awards with market-based vesting conditions on the date of grant using a Monte Carlo simulation model.

For performance-based stock awards, we begin to recognize expense when we determine that the achievement of such performance conditions is deemed probable. This determination requires significant judgment by management. At the date achievement becomes probable, we record a cumulative expense catch-up, with remaining expense amortized over the remaining service period. For awards with market conditions, the stock-based compensation expense will be recognized over the derived service period regardless of whether the award achieves the market condition and will only be adjusted to the extent the service condition is not met.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Contractual Obligations and Commitments

A description of our material cash requirements, including commitments for capital expenditures, is described above and disclosed in Note 9 to our consolidated financial statements appearing elsewhere in this Annual Report.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As of December 31, 2024 and 2023, we had cash, cash equivalents and marketable securities of $287.1 million and $273.2 million, respectively, consisting primarily of money market funds and investments in U.S. government agency securities and treasury obligations.

Interest Rate Risk

We are subject to interest rate risk on our investment portfolio. We invest in marketable securities in accordance with our investment policy. The primary objectives of our investment policy are to preserve capital, maintain proper liquidity to meet operating needs and maximize yields. Our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer or type of investment. We place our excess cash with high credit quality financial institutions, commercial companies, and government agencies in order to limit the amount of credit exposure. Some of the securities we invest in may have market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate.

Our investment exposure to market risk for changes in interest rates relates to the increase or decrease in the amount of interest income we can earn on our portfolio, changes in the market value due to changes in interest rates and other market factors, as well as the increase or decrease in any realized gains and losses. Our investment portfolio includes only marketable securities and instruments with active secondary or resale markets to help ensure portfolio liquidity. A hypothetical 100 basis point increase or decrease in interest rates along the entire interest rate yield curve would not significantly affect the fair value of our interest sensitive financial instruments, but may affect our future earnings and cash flows. We generally have the ability to hold our fixed-income investments to maturity and, therefore, do not expect that our operating results, financial position or cash flows will be materially impacted due to a sudden change in interest rates. However, our future investment income may fall short of expectations due to changes in interest rates, or we may suffer losses in principal if forced to sell securities which have declined in market value due to changes in interest rates or other factors, such as changes in credit risk related to the securities' issuers. To minimize this risk, we schedule our investments to have maturities that coincide with our expected cash flow needs, thus avoiding the need to redeem an investment prior to its maturity date. Accordingly, we do not believe that we have material exposure to interest rate risk arising from our investments. Generally, our investments are not collateralized. We have not realized any significant losses from our investments.

We do not use interest rate derivative instruments to manage exposure to interest rate changes. We ensure the safety and preservation of invested principal funds by limiting default risk, market risk and reinvestment risk. We reduce default risk by investing in investment grade securities.

Inflation Risk

Inflation generally impacts us by potentially increasing our operating expenses, including clinical trial costs. We do not believe that inflation has had a material impact on our business or results of operations during the periods for which the consolidated financial statements are presented in this report. Significant adverse changes in inflation could negatively impact our future results of operations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

COGENT BIOSCIENCES, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Cogent Biosciences, Inc.

Opinion on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Cogent Biosciences, Inc. and its subsidiaries (the "Company") as of December 31, 2024 and 2023, and the related consolidated statements of operations and comprehensive loss, of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2024, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of 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 accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated 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 accounts or disclosures to which it relates.

Accrued External Research and Development Expenses

As described in Notes 2 and 5 to the consolidated financial statements, the Company has entered into various research and development contracts with companies both inside and outside of the United States. Management records accruals for estimated ongoing external research and development costs. When billing terms under these contracts do not coincide with the timing of when the work is performed, management is required to make estimates of outstanding liabilities to the third parties as of the end of the reporting period. When evaluating the adequacy of the accrued liabilities, management analyzes progress of the studies or trials, including the phase or completion of events, communication from the contract research organizations or other companies of any actual costs incurred during the period that have not yet been invoiced, invoices received and contracted costs. Significant judgments and estimates are made in determining the accrued balances at the end of any reporting period. Within accrued expenses and other current liabilities, total accrued external research and development expense is $20.0 million as of December 31, 2024.

The principal considerations for our determination that performing procedures relating to accrued external research and development expenses is a critical audit matter are (i) the significant judgment by management in developing the estimate of accrued external research and development expenses and (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures related to management's development of the estimate of accrued external research and development expenses.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of accrued external research and development expenses. These procedures also included, among others, (i) testing management's process for developing the estimate of accrued external research and development expenses; (ii) evaluating the appropriateness of the method used by management to develop the estimate; (iii) testing the completeness and accuracy of the underlying data used in the estimate; and (iv) evaluating the reasonableness of management's estimate of accrued external research and development expenses by (a) testing the completeness and accuracy of costs incurred, on a sample basis, by tracing information to the underlying contracts, purchase orders, invoices and information received from contract research organizations or other companies, as applicable, and (b) evaluating the reasonableness of the estimated costs incurred for the services that have not been invoiced, on a sample basis, by tracing to underlying supporting documentation, such as underlying contracts, purchase orders and information received from contract research organizations or other companies, as applicable.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
February 25, 2025

We have served as the Company's auditor since 2015.

COGENT BIOSCIENCES, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share amounts)

	December 31,	
	2024	2023
Assets		
Current assets:		
Cash and cash equivalents	$ 98,165	$ 53,229
Short-term marketable securities	188,912	212,481
Prepaid expenses and other current assets	9,395	5,061
Total current assets	296,472	270,771
Long-term marketable securities	—	7,460
Operating lease, right-of-use assets	20,097	21,998
Property and equipment, net	6,467	8,344
Other assets	4,862	4,864
Total assets	$ 327,898	$ 313,437
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 12,013	$ 10,655
Accrued expenses and other current liabilities	42,132	26,127
Operating lease liabilities	1,565	1,386
Total current liabilities	55,710	38,168
Operating lease liabilities, net of current portion	15,902	17,467
Total liabilities	71,612	55,635
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 8,979,420 shares authorized; no shares issued or outstanding	—	—
Series A non-voting convertible preferred stock, $0.001 par value; 1,000,000 shares authorized; 70,465 and 74,465 shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	56,515	60,035
Series B non-voting convertible preferred stock, $0.001 par value; 20,580 shares authorized; 6,868 and no shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	54,085	—
Common stock, $0.001 par value; 300,000,000 shares authorized; 110,461,729 shares and 86,124,249 shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	110	86
Additional paid-in capital	1,004,612	801,059
Accumulated other comprehensive income	447	246
Accumulated deficit	(859,483)	(603,624)
Total stockholders' equity	256,286	257,802
Total liabilities and stockholders' equity	$ 327,898	$ 313,437

The accompanying notes are an integral part of these consolidated financial statements.

COGENT BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except share and per share amounts)

	Year Ended December 31,		
	2024	2023	2022
Operating expenses:			
Research and development	$ 232,658	$ 173,755	$ 121,627
General and administrative	43,281	34,375	26,212
Total operating expenses	275,939	208,130	147,839
Loss from operations	(275,939)	(208,130)	(147,839)
Other income:			
Interest income	18,088	13,077	3,989
Other income, net	1,992	943	2,249
Change in fair value of CVR liability	—	1,700	1,360
Total other income, net	20,080	15,720	7,598
Net loss	$ (255,859)	$ (192,410)	$ (140,241)
Net loss per share, basic and diluted, Series A non-voting convertible preferred stock	$ (484.85)	$ (486.23)	$ (431.83)
Weighted average Series A non-voting convertible preferred stock outstanding, basic and diluted	73,350	77,085	89,807
Net loss per share, basic and diluted, Series B non-voting convertible preferred stock	$ (1,939.47)	$ —	$ —
Weighted average Series B non-voting convertible preferred stock outstanding, basic and diluted	9,731	—	—
Net loss per share, basic and diluted, common stock	$ (1.94)	$ (1.94)	$ (1.73)
Weighted average common stock outstanding, basic and diluted	103,856,611	79,657,942	58,739,713
Comprehensive loss:			
Net loss	$ (255,859)	$ (192,410)	$ (140,241)
Other comprehensive income (loss):			
Net unrealized gains (losses) on marketable securities	201	350	(104)
Total other comprehensive income (loss)	201	350	(104)
Comprehensive loss	$ (255,658)	$ (192,060)	$ (140,345)

The accompanying notes are an integral part of these consolidated financial statements.

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COGENT BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except share amounts)

	Series A Non-Voting Convertible Preferred Stock		Series B Non-Voting Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive (Income) Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount				
Balances at December 31, 2021	103,289	$ 85,400	—	$ —	43,805,922	$ 44	$ 399,713	$ —	$ (270,973)	$ 214,184
Issuance of common stock in underwritten public offering, net of offering costs of $10.8 million	—	—	—	—	17,899,698	18	161,897	—	—	161,915
Pre-funded warrant exercise	—	—	—	—	2,424,242	2	22	—	—	24
Conversion of Series A non-voting convertible preferred stock into common stock	(22,239)	(19,570)	—	—	5,559,750	6	19,564	—	—	—
Issuance of common stock under Employee Stock Purchase Plan	—	—	—	—	49,000	—	351	—	—	351
Issuance of common stock from exercises	—	—	—	—	154,822	—	1,238	—	—	1,238
Unrealized losses on marketable securities	—	—	—	—	—	—	—	(104)	—	(104)
Stock-based compensation expense	—	—	—	—	—	—	18,368	—	—	18,368
Net loss	—	—	—	—	—	—	—	—	(140,241)	(140,241)
Balances at December 31, 2022	81,050	$ 65,830	—	$ —	69,893,434	$ 70	$ 601,153	$ (104)	$ (411,214)	$ 255,735
Issuance of common stock in underwritten public offering, net of offering costs of $10.7 million	—	—	—	—	14,375,000	14	161,775	—	—	161,789
Conversion of Series A non-voting convertible preferred stock into common stock	(6,585)	(5,795)	—	—	1,646,250	2	5,793	—	—	—
Issuance of common stock under Employee Stock Purchase Plan	—	—	—	—	85,878	—	752	—	—	752
Issuance of common stock from exercises	—	—	—	—	123,687	—	965	—	—	965
Unrealized gains on marketable securities	—	—	—	—	—	—	—	350	—	350
Stock-based compensation expense	—	—	—	—	—	—	30,621	—	—	30,621
Net loss	—	—	—	—	—	—	—	—	(192,410)	(192,410)
Balances at December 31, 2023	74,465	$ 60,035	—	$ —	86,124,249	$ 86	$ 801,059	$ 246	$ (603,624)	$ 257,802
Issuance of Series B non-voting convertible preferred stock and common stock, net of issuance costs of $11.7 million, in connection with the Private Placement	—	—	12,280	87,311	17,717,997	18	125,958	—	—	213,287
Exchange of common stock for Series B non-voting convertible preferred stock	—	—	8,300	74,754	(8,300,000)	(8)	(74,746)	—	—	—
Conversion of Series B non-voting convertible preferred stock into common stock	—	—	(13,712)	(107,980)	13,712,000	13	107,967	—	—	—
Conversion of Series A non-voting convertible preferred stock into common stock	(4,000)	(3,520)	—	—	1,000,000	1	3,519	—	—	—

Issuance of common stock under Employee Stock Purchase Plan	—	—	—	—	176,893	—	916	—	—	916
Issuance of common stock from exercises	—	—	—	—	30,590	—	199	—	—	199
Unrealized gains on marketable securities	—	—	—	—	—	—	—	201	—	201
Stock-based compensation expense	—	—	—	—	—	—	39,740	—	—	39,740
Net loss	—	—	—	—	—	—	—	—	(255,859)	(255,859)
Balances at December 31, 2024	70,465	$ 56,515	6,868	$ 54,085	110,461,729	$ 110	$ 1,004,612	$ 447	$ (859,483)	$ 256,286

The accompanying notes are an integral part of these consolidated financial statements.

COGENT BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2024	2023	2022
Cash flows from operating activities:			
Net loss	$ (255,859)	$ (192,410)	$ (140,241)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation expense	2,450	2,270	842
Stock-based compensation expense	39,740	30,621	18,368
Amortization of right-of-use operating lease assets	1,901	1,318	5,036
Change in fair value of CVR liability	—	(1,700)	(1,360)
Net amortization (accretion) of premiums (discounts) on marketable securities	(7,619)	(5,173)	(1,638)
Loss on disposal of property and equipment	—	8	—
Right-of-use asset impairment	—	—	(396)
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(4,334)	(626)	(1,486)
Other assets	2	(119)	(1,018)
Accounts payable	1,358	4,813	2,359
Accrued expenses and other current liabilities	15,956	8,170	9,586
Operating lease liability	(1,386)	(796)	(8,690)
Net cash used in operating activities	(207,791)	(153,624)	(118,638)
Cash flows from investing activities:			
Purchases of property and equipment	(573)	(2,796)	(6,863)
Purchases of marketable securities	(255,603)	(348,803)	(177,855)
Maturities and sales of marketable securities	294,452	253,775	60,000
Net cash provided by (used in) investing activities	38,276	(97,824)	(124,718)
Cash flows from financing activities:			
Proceeds from issuance of common stock and Series B non-voting convertible preferred stock in connection with the Private Placement, net of offering costs $11.7 million	213,336	—	—
Proceeds from issuance of shares of common stock, net of offering costs of $10.7 million	—	161,819	—
Proceeds from issuance of shares of common stock and pre-funded warrants, net of offering costs of $10.8 million	—	—	161,945
Proceeds from issuance of common stock upon stock option exercises	199	965	1,238
Proceeds from pre-funded warrant exercises	—	—	24
Proceeds from issuance of stock from employee stock purchase plan	916	752	351
Net cash provided by financing activities	214,451	163,536	163,558
Net increase (decrease) in cash, cash equivalents and restricted cash	44,936	(87,912)	(79,798)
Cash, cash equivalents and restricted cash at beginning of period	53,229	141,141	220,939
Cash, cash equivalents and restricted cash at end of period	$ 98,165	$ 53,229	$ 141,141
Supplemental disclosure of cash flow information:			
Right-of-use assets obtained in exchange for new operating lease liabilities	—	—	25,184
Supplemental disclosure of noncash investing and financing information:			
Offering costs included in accounts payable and accrued expenses	49	30	30
Property & equipment included in accounts payable and accrued expenses	—	43	58
Conversion of Series A non-voting convertible preferred stock into common stock	3,520	5,795	19,570
Conversion of Series B non-voting convertible preferred stock into common stock	107,980	—	—

The accompanying notes are an integral part of these consolidated financial statements.

1. Nature of the Business and Basis of Presentation

Cogent Biosciences, Inc. ("Cogent" or the "Company") is a clinical-stage biotechnology company focused on developing precision therapies for genetically defined diseases. Cogent's approach is to design rational precision therapies that treat the underlying cause of disease and improve the lives of patients. Cogent's most advanced program is bezuclastinib, also known as CGT9486, a highly selective tyrosine kinase inhibitor that is designed to potently inhibit the KIT D816V mutation as well as other mutations in KIT exon 17. In the vast majority of cases, KIT D816V is responsible for driving Systemic Mastocytosis ("SM"), a serious and rare disease caused by unchecked proliferation of mast cells. Exon 17 mutations are also found in patients with advanced gastrointestinal stromal tumors ("GIST"), a type of cancer with strong dependence on oncogenic KIT signaling. Bezuclastinib is a highly selective and potent KIT inhibitor with the potential to provide a new treatment option for these patient populations. The Company is developing bezuclastinib in patients living with Non-Advanced Systemic Mastocytosis ("Non-AdvSM"), Advanced Systemic Mastocytosis ("AdvSM"), and GIST. The Company also has an ongoing Phase 1 study of its novel internally developed FGFR2 inhibitor. In addition to bezuclastinib, the Company's research team is developing a portfolio of novel targeted therapies to help patients fighting serious, genetically driven diseases initially targeting mutations in ErbB2, PI3Kα and KRAS.

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, development by competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations and the ability to secure additional capital to fund operations. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel and infrastructure and extensive compliance-reporting capabilities. Even if the Company's drug development efforts are successful, it is uncertain when, if ever, the Company will realize revenue from product sales.

The accompanying consolidated financial statements have been prepared on the basis of continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the ordinary course of business. The Company has incurred recurring losses since inception, including a net loss of $255.9 million for the year ended December 31, 2024. As of December 31, 2024, the Company had an accumulated deficit of $859.5 million. The Company expects to continue to generate operating losses in the foreseeable future. As of the issuance date of the consolidated financial statements, the Company expects that its cash, cash equivalents and marketable securities will be sufficient to fund its operating expenses and capital expenditure requirements for at least the next 12 months from issuance of the consolidated financial statements.

The Company expects that it will continue to incur significant expenses in connection with its ongoing business activities. The Company will need to seek additional funding through equity offerings, debt financings, collaborations, licensing arrangements or other marketing and distribution arrangements, partnerships, joint ventures, combinations or divestitures of one or more of its assets or businesses. The Company may not be able to obtain financing on acceptable terms, or at all, and the Company may not be able to enter into collaborative arrangements or divest its assets. The terms of any financing may adversely affect the holdings or the rights of the Company's stockholders. Arrangements with collaborators or others may require the Company to relinquish rights to certain of its technologies or product candidates. If the Company is unable to obtain funding, the Company could be forced to delay, reduce or eliminate its research and development programs or commercialization efforts, which could adversely affect its business prospects, or the Company may be unable to continue operations.

The Company's consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP").

2. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Mono, Inc. and Kiq Bio LLC. All intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, the accrual of research and development expenses, the valuation of the CVR liability and the valuation of stock-based awards. The Company bases its estimates on historical experience, known trends and other market-specific or other relevant factors that it believes to be reasonable under the circumstances. On an ongoing basis, management evaluates its estimates, as there are changes in circumstances, facts and experience. Actual results may differ from those estimates or assumptions.

Concentrations of Credit Risk and of Significant Suppliers

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash, cash equivalents and marketable securities. Periodically, the Company maintains deposits in accredited financial institutions in excess of federally insured limits. The Company maintains most of its cash and cash equivalents at two accredited financial institutions. The Company has not experienced any losses on such accounts and does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships. Such deposits have and will continue to exceed federally insured limits.

The Company is dependent on third-party vendors for its product candidates. In particular, the Company relies, and expects to continue to rely, on a small number of vendors to manufacture supplies and process its product candidates for its development programs. These programs could be adversely affected by a significant interruption in the manufacturing process.

Cash Equivalents

The Company considers all highly liquid investments with original maturities of generally three months or less at the date of purchase to be cash equivalents.

Marketable Securities

The Company's marketable securities, consisting of debt securities, are classified as available-for-sale. Available-for-sale marketable debt securities are carried at fair value with the unrealized gains and losses included in other comprehensive income (loss) as a component of stockholders' equity until realized. Any premium or discount arising at purchase is amortized and/or accreted to interest income and/or expense over the life of the instrument. Realized gains and losses are determined using the specific identification method and are included in other income (expense). The Company reviews its portfolio of available-for-sale debt securities, using both quantitative and qualitative factors, to determine if declines in fair value below cost have resulted from a credit-related loss or other factors. If the decline in fair value is due to credit-related factors, a loss is recognized in net income, and if the decline in fair value is not due to credit-related factors, the loss is recorded in other comprehensive income (loss).

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization expense is recognized using the straight-line method over the estimated useful life of each asset as follows:

	Estimated Useful Life
Laboratory equipment	5 years
Computer equipment and software	3 years
Furniture and fixtures	5 years
Leasehold improvements	Shorter of life of lease or 10 years

Costs for capital assets not yet placed into service are capitalized as construction-in-progress and depreciated in accordance with the above guidelines once placed into service. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation and amortization are removed from the accounts and any resulting gain or loss is included in loss from operations. Expenditures for repairs and maintenance are charged to expense as incurred.

Impairment of Long-Lived Assets

Long-lived assets consist of property and equipment and operating lease right-of-use assets. Long-lived assets to be held and used are tested for recoverability whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a long-lived asset group for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset group to its carrying value. An impairment loss would be recognized in loss from operations when estimated undiscounted future cash flows expected to result from the use of an asset group are less than its carrying amount. The impairment loss would be based on the excess of the carrying value of the impaired asset group over its fair value.

Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The Company's cash equivalents and marketable securities are carried at fair value, determined according to the fair value hierarchy described above (see Note 3). The carrying values of the Company's accounts payable and accrued expenses approximate their fair values due to the short-term nature of these liabilities.

Leases

The Company accounts for a contract as a lease when it has the right to control the asset for a period of time while obtaining substantially all of the assets' economic benefits. The Company determines the initial classification and measurement of its operating right-of-use assets and operating lease liabilities at the lease commencement date, and thereafter if modified. The lease term includes any renewal options that the Company is reasonably assured to exercise. The Company's policy is to not record leases with an original term of twelve months or less on its consolidated balance sheets. The Company's only existing leases are for office and laboratory space.

The right-of-use asset represents the right to use the leased asset for the lease term. The lease liability represents the present value of the lease payments under the lease. The present value of lease payments is determined by using the interest rate implicit in the lease, if that rate is readily determinable; otherwise, the Company uses its estimated secured incremental borrowing rate for that lease term.

Lease payments included in the measurement of the lease liability consist of the following: the fixed noncancelable lease payments, payments for optional renewal periods where it is reasonably certain the renewal period will be exercised, and payments for early termination options unless it is reasonably certain the lease will not be terminated early.

Leases may contain rent escalation clauses and variable lease payments that require additional rental payments in later years of the term, including payments based on an index or inflation rate. Payments based on the change in an index or inflation rate, or payments based on a change in the Company's portion of the operating expenses, including real estate taxes and insurance, are not included in the initial lease liability and are recorded as a period expense when incurred. The operating leases may include an option to renew the lease term for various renewal periods and/or to terminate the leases early. These options to exercise the renewal or early termination clauses in the Company's operating leases were not reasonably certain of exercise as of the date of adoption and these have not been included in the determination of the initial lease liability or operating lease expense.

Rent expense for operating leases is recognized on a straight-line basis over the reasonably assured lease term based on the total lease payments and is included in operating expense in the consolidated statements of operations and comprehensive loss. For finance leases, any interest expense is recognized using the effective interest method and is included within interest expense. The Company has no financing leases.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development expenses are comprised of costs incurred in performing research and development activities, including salaries, stock-based compensation and benefits, facilities costs and laboratory supplies, depreciation, manufacturing expenses and external costs of outside vendors engaged to conduct preclinical development activities and clinical trials as well as the cost of licensing technology.

The Company has entered into various research and development contracts with companies both inside and outside of the United States. These agreements are generally cancelable, and related payments are recorded as research and development expenses as incurred. The Company records accruals for estimated ongoing external research and development costs. When billing terms under these contracts do not coincide with the timing of when the work is performed, the Company is required to make estimates of outstanding liabilities to those third parties as of the end of the reporting period. When evaluating the adequacy of the accrued liabilities, the Company analyzes progress of the studies or trials, including the phase or completion of events, communication from the contract research organizations or other companies of any actual costs incurred during the period that have not yet been invoiced, invoices received and contracted costs. Significant judgments and estimates are made in determining the accrued balances at the end of any reporting period. Actual results could differ from the Company's estimates.

Upfront payments and milestone payments made for the licensing of technology are expensed as research and development in the period in which they are incurred. Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. The prepaid amounts are expensed as the related goods are delivered or the services are performed.

Patent Costs

All patent-related costs incurred in connection with filing and prosecuting patent applications are expensed as incurred due to the uncertainty about the recovery of the expenditure. Amounts incurred are classified as general and administrative expenses.

Stock-Based Compensation

The Company measures stock options and other stock-based awards granted to employees, non-employees and directors based on their fair value on the date of the grant and recognizes compensation expense of those awards over the requisite service period, which is generally the vesting period of the respective award. The Company applies the straight-line method of expense recognition to all awards with only service-based vesting conditions and applies the graded-vesting method to all awards with performance-based vesting conditions or to awards with both service-based and performance-based vesting conditions.

The Company estimates the fair value of stock-based options to employees and non-employees using the Black-Scholes option-pricing model, which requires the input of highly subjective assumptions, including (a) the expected volatility of its stock, (b) the expected term of the award, (c) the risk-free interest rate, and (d) expected dividends. Due to the lack of a sufficient history of public trading of the Company's common stock and a lack of sufficient company-specific historical and implied volatility data, the Company has based the estimate of expected volatility on the historical volatility of a group of companies in the pharmaceutical and biotechnology industries in a similar stage of development and that are publicly traded. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available. The Company estimates the expected life of employee stock options using the "simplified" method, whereby, the expected life equals the average of the vesting term and the original contractual term of the option. The risk-free interest rates for periods within the expected life of the option are based on the U.S. Treasury yield curve in effect during the period the options were granted. The expected dividend yield of zero is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future. The Company accounts for forfeitures as they occur.

The Company measures the fair value of stock-based awards with market-based vesting conditions on the date of grant using a Monte Carlo simulation model.

For performance-based stock awards, the Company begins to recognize expense when it determines that the achievement of such performance conditions is deemed probable. This determination requires significant judgment by management. At the date achievement becomes probable, the Company records a cumulative expense catch-up, with remaining expense amortized over the remaining service period. For awards with market conditions, the stock-based compensation expense will be recognized over the derived service period regardless of whether the award achieves the market condition and will only be adjusted to the extent the service condition is not met.

Comprehensive Loss

Comprehensive loss includes net loss as well as other changes in stockholders' equity that result from transactions and economic events other than those with stockholders. For the years ended December 31, 2024, 2023 and 2022, the Company's only element of other comprehensive loss was unrealized gains (losses) on marketable securities.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements or in the Company's tax returns. Deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of the deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the consolidated financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the consolidated financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Recently Adopted Accounting Pronouncements

In November 2023, the FASB issued ASU 2023-07 Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures related to reportable segment disclosure requirements. The pronouncement improves reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses, and requires disclosure of incremental segment information on an annual and interim basis. The pronouncement is effective for annual periods beginning after December 15, 2023. The adoption of this ASU as of the year ended December 31, 2024, did not change the identification of the Company's operating or reportable segments and did not have a material impact on the consolidated financial statements. Refer to Note 12, Segment Information, for disclosures related to the adoption of ASU 2023-07.

Recently Issued Accounting Pronouncements

In December 2023, the FASB issued ASU 2023-09 Income Taxes (Topic 740): Improvements to Income Tax Disclosures related to income tax disclosure requirements. The pronouncement enhances the transparency and decision usefulness of income tax disclosures. The pronouncement is effective for annual periods beginning after December 15, 2024. The Company is currently evaluating the impact of the ASU on its consolidated financial statements.

In November 2024, the FASB issued ASU 2024-03, Income Statement - Reporting Comprehensive Income - Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses. The new standard requires additional disclosure of the nature of expenses included in the income statement as well as disclosures about specific types of expenses included in the expense captions presented in the income statement. ASU 2024-03 is effective for annual periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027. The Company is currently evaluating the impact of the ASU on its consolidated financial statements.

3. Marketable Securities and Fair Value of Financial Assets and Liabilities

The following table summarizes the Company's marketable securities *(in thousands)*:

	December 31, 2024			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury bills and notes (due within one year)	$ 188,465	$ 451	$ (4)	$ 188,912
U.S. Treasury bills and notes (due after one through five year)	$ —	$ —	$ —	$ —
	$ 188,465	$ 451	$ (4)	$ 188,912

	December 31, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury bills and notes (due within one year)	$ 212,274	$ 213	$ (6)	$ 212,481
U.S. Treasury bills and notes (due after one through five year)	$ 7,421	$ 39	$ —	$ 7,460
	$ 219,695	$ 252	$ (6)	$ 219,941

As of December 31, 2024, the Company held three securities that were in an unrealized loss position. The aggregate fair value of securities held by the Company in an unrealized loss position for less than twelve months as of December 31, 2024 was $8.9 million and there were no securities held by the Company in an unrealized loss position for more than twelve months. As of December 31, 2023, the Company held nine securities that were in an unrealized loss position. The aggregate fair value of securities held by the Company in an unrealized loss position for less than twelve months as of December 31, 2023 was $34.7 million and there were no securities held by the Company in an unrealized loss position for more than twelve months. The Company has the intent and ability to hold such securities until recovery. As a result, the Company did not record any charges for impairments for its marketable debt securities for the years ended December 31, 2024, 2023 or 2022.

The following tables present the Company's fair value hierarchy for its financial assets and liabilities, which are measured at fair value on a recurring basis *(in thousands)*:

	Fair Value Measurements at December 31, 2024 Using:			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 85,946	$ —	$ —	$ 85,946
Marketable securities:				
U.S. Treasury bills and notes	$ —	$ 188,912	$ —	$ 188,912
Total Assets	$ 85,946	$ 188,912	$ —	$ 274,858

	Fair Value Measurements at December 31, 2023 Using:			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 46,184	$ —	$ —	$ 46,184
Marketable securities:				
U.S. Treasury bills and notes	$ —	$ 219,941	$ —	$ 219,941
Total Assets	$ 46,184	$ 219,941	$ —	$ 266,125

Money market funds were valued using quoted prices in active markets, which represent a Level 1 measurement in the fair value hierarchy. U.S. Treasury bills and notes were valued by the Company using quoted prices in active markets for similar securities, which represent a Level 2 measurement within the fair value hierarchy.

On July 6, 2020, the Company issued a non-transferrable contingent value right ("CVR"), which was distributed to stockholders of record as of the close of business on July 6, 2020, and prior to the issuance of any shares to acquire Kiq Bio LLC ("Kiq") (the "Kiq Acquisition") or sold to the Private Investment in Public Equity ("PIPE") investors. In November 2020, the Company issued 707,938 shares of common stock in partial settlement of the CVR liability. In February 2021, the Company issued an additional 212,429 shares of common stock and paid $0.1 million in partial settlement of the CVR liability. In the fourth quarter of 2022, the Company updated the probability weighted discounted cash flow assumptions to reflect the then current probability of receiving the milestone payments from Sotio prior to the expiration of the CVR and the Company recorded a decrease in the CVR liability of $1.4 million as a component of other income (expense). The Company recorded an additional decrease in fair value of the liability of $1.7 million in the first quarter of 2023, reducing the liability to zero as the probability of additional CVR payments occurring prior to the expiration of CVR term was remote. The CVRs expired on August 6, 2023 and no further payments will be made to CVR holders.

The following table sets forth a summary of the changes in the fair value of the Company's CVR liability *(in thousands)*:

Balance at December 31, 2021	$ 3,060
Change in fair value	(1,360)
Balance at December 31, 2022	1,700
Change in fair value	(1,700)
Balance at December 31, 2023	—
Change in fair value	—
Balance at December 31, 2024	$ —

During the years ended December 31, 2024, 2023, and 2022, there were no transfers between Level 1, Level 2 and Level 3.

4. Property and Equipment, Net

Property and equipment, net consisted of the following *(in thousands)*:

	December 31,	
	2024	2023
Laboratory equipment	$ 8,083	$ 7,635
Computer equipment and software	819	745
Furniture and fixtures	1,176	1,164
Leasehold improvements	2,463	2,438
Construction-in-progress	41	27
Total property and equipment	12,582	12,009
Accumulated depreciation	(6,115)	(3,665)
Property and equipment, net	$ 6,467	$ 8,344

Depreciation and amortization expense was $2.5 million, $2.3 million and $0.8 million for the years ended December 31, 2024, 2023 and 2022, respectively.

5. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following *(in thousands)*:

	December 31,	
	2024	2023
Accrued employee compensation and benefits	$ 12,259	$ 9,874
Accrued external research and development expense	19,957	10,252
Accrued external manufacturing costs	6,548	3,302
Accrued professional and consulting services	2,995	2,258
Other	373	441
	$ 42,132	$ 26,127

6. Preferred Stock, Series A and Series B Non-Voting Convertible Preferred Stock and Common Stock

The Company's authorized capital stock consists of 300,000,000 shares of common stock, par value $0.001 per share, and 10,000,000 shares of preferred stock, par value $0.001 per share, 1,000,000 of which are designated as Series A non-voting convertible preferred stock, 20,580 of which are designated as Series B non-voting convertible preferred stock and 8,979,420 of which shares of preferred stock are undesignated.

Series A Non-Voting Convertible Preferred Stock

On July 6, 2020, the Company filed a Certificate of Designation of Preferences, Rights and Limitations of the Series A non-voting convertible preferred stock ("Series A Preferred Stock") with the Secretary of State of the State of Delaware (the "Series A Certificate of Designation") in connection with the Company's acquisition of Kiq Bio LLC and concurrent private placement of Series A Preferred Stock. The Series A Certificate of Designation provides for the issuance of shares of Series A Preferred Stock, par value $0.001 per share.

Holders of Series A Preferred Stock are entitled to receive dividends on shares of Series A Preferred Stock equal, on an as-if-converted-to-common-stock basis, and in the same form as dividends actually paid on shares of the common stock. Except as otherwise required by law, the Series A Preferred Stock does not have voting rights. However, as long as any shares of Series A Preferred Stock are outstanding, the Company will not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series A Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series A Preferred Stock, (b) alter or amend the Series A Certificate of Designation, (c) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series A Preferred Stock, (d) increase the number of authorized shares of Series A Preferred Stock, (e) at any time while at least 40% of the originally issued Series A Preferred Stock remains issued and outstanding, consummate a Fundamental Transaction (as defined in the Series A Certificate of Designation) or (f) enter into any agreement with respect to any of the foregoing. The Series A Preferred Stock does not have a preference upon any liquidation, dissolution or winding-up of the Company.

Each share of Series A Preferred Stock is convertible at any time at the option of the holder thereof, into 250 shares of common stock, subject to certain limitations, including that a holder of Series A Preferred Stock is prohibited from converting shares of Series A Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be established by the holder between 4.9% and 19.9%) of the total number of shares of common stock issued and outstanding immediately after giving effect to such conversion.

Series B Non-Voting Convertible Preferred Stock

On February 13, 2024, the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") for a private placement (the "Private Placement") with certain institutional and accredited investors (each, a "Purchaser" and collectively, the "Purchasers"), pursuant to which the Purchasers purchased (i) an aggregate of 17,717,997 shares of the Company's common stock at a price per share of $7.50, and (ii) 12,280 shares of the Company's Series B non-voting convertible preferred stock ("Series B Preferred Stock"), at a price per share of $7,500.00. Net proceeds were approximately $213.3 million after deducting placement fees and offering costs. On February 14, 2024, the Company filed a Certificate of Designation of Preferences, Rights and Limitations of the Series B Preferred Stock with the Secretary of State of the State of Delaware (the "Series B Certificate of Designation") in connection with the Private Placement. The Series B Certificate of Designation provided for the issuance of up to 12,280 shares of Series B Preferred Stock, par value $0.001 per share. Subsequently, on March 21, 2024, the Company entered into exchange agreements (the "Exchange Agreements") with certain of the Purchasers (the "Exchange Stockholders"), pursuant to which the Exchange Stockholders agreed to exchange an aggregate of 8,300,000 shares of the Company's common stock, for an aggregate of 8,300 shares of the Company's Series B Preferred Stock (the "Exchange"). On March 21, 2024, in connection with the Exchange, the Company filed a Certificate of Amendment to the Series B Certificate of Designation (the "Certificate of Amendment") to increase the number of authorized shares of Series B Preferred Stock from 12,280 to 20,580.

Holders of shares of Series B Preferred Stock are entitled to receive dividends on shares of Series B Preferred Stock equal to, on an as-if-converted-to-common stock basis, and in the same form as dividends actually paid on shares of the common stock. Except as otherwise required by law, the Series B Preferred Stock does not have voting rights. However, as long as any shares of Series B Preferred Stock are outstanding, the Company will not, without the affirmative vote of each of the holders of the then outstanding shares of the Series B Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series B Preferred Stock, (b) alter or amend the Series B Certificate of Designation, or (c) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series B Preferred Stock. The Series B Preferred Stock does not have a preference upon any liquidation, dissolution or winding-up of the Company.

On June 10, 2024, following approval by the stockholders of the Company of an increase in the number of authorized shares of common stock at the Company's 2024 annual meeting of stockholders, each share of Series B Preferred Stock automatically converted into 1,000 shares of common stock, subject to certain limitations, including that a holder of Series B Preferred Stock was prohibited from converting shares of Series B Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would have beneficially owned more than a specified percentage (established by the holder between 0% and 19.9%) of the total number of shares of common stock issued and outstanding immediately after giving effect to such conversion. Pursuant to the terms of the Series B Certificate of Designation, on June 10, 2024, 13,712 shares of Series B Preferred Stock automatically converted to 13,712,000 shares of common stock.

Cumulatively, through December 31, 2024, 92,860 shares of Series A Preferred Stock, or 56.9% of the previously issued Series A Preferred Stock, have been converted into 23,215,000 shares of common stock. The 70,465 shares of Series A Preferred Stock outstanding as of December 31, 2024 are convertible into 17,616,250 shares of common stock. Cumulatively, through December 31, 2024, 13,712 shares of the Series B Preferred Stock, or 66.6% of the previously issued Series B Preferred Stock, have been converted into 13,712,000 shares of common stock. The 6,868 shares of Series B Preferred Stock outstanding as of December 31, 2024 are convertible into 6,868,000 shares of common stock.

No other classes of preferred stock have been designated and no other preferred shares have been issued or are outstanding as of December 31, 2024.

Common Stock

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are not entitled to receive dividends, unless declared by the board of directors. In the event of the Company's liquidation, dissolution or winding up, holders of the Company's common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. The shares to be issued by the Company in this offering will be, when issued and paid for, validly issued, fully paid and non-assessable.

On May 6, 2022, pursuant to a shelf registration statement on Form S-3, the Company entered into a Sales Agreement (the "Sales Agreement") with Guggenheim Securities, LLC ("Guggenheim Securities"), pursuant to which the Company may issue and sell, from time to time, shares of its common stock having an aggregate offering price of up to $75.0 million through Guggenheim Securities, as the sales agent. As of December 31, 2024, no shares have been sold under the Sales Agreement. In February 2025, the Company sold 2,587,992 shares under the Sales Agreement for gross proceeds of $25.0 million.

The Company issued certain pre-funded warrants in 2022. Each pre-funded warrant entitles the holder to purchase shares of common stock at an exercise price of $0.01 per share and is exercisable at any time beginning on the date of issuance. These warrants were recorded as a component of stockholders' equity within additional paid-in capital. Per the terms of the warrant agreement, a holder of the outstanding warrant is not entitled to exercise any portion of the pre-funded warrant if, upon giving effect to such exercise, would cause the aggregate number of shares of common stock beneficially owned by such holder (together with its affiliates and any other person whose beneficial ownership of common stock would be aggregated with the holder) to exceed 9.99% of the total number of then issued and outstanding shares of common stock, as such percentage ownership is determined in accordance with the terms of the pre-funded warrant and subject to such holder's rights under the pre-funded warrant to increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from such holder. As of December 31, 2024, 2,424,242 pre-funded warrants have been exercised and 606,060 pre-funded warrants remain outstanding.

On February 10, 2023, the Company filed a Form S-3ASR with the SEC ("2023 Shelf Registration") for the issuance of common stock, preferred stock, warrants, rights, debt securities and units, which became effective immediately upon filing. At the time any of the securities covered by the 2023 Shelf Registration are offered for sale, a prospectus supplement will be prepared and filed with the SEC containing specific information about the terms of any such offering.

In June 2023, the Company completed an underwritten public offering of 14,375,000 shares of its common stock at a public offering price of $12.00 per share (including the exercise in full by the underwriters of their 30-day option to purchase up to 1,875,000 additional shares of common stock). The net proceeds from the offering were approximately $161.8 million, after deducting the underwriting discounts and commissions of $10.3 million and offering expenses of $0.4 million.

In February 2024, in connection with the Private Placement, the Company issued (i) an aggregate of 17,717,997 shares of the Company's common stock at a price per share of $7.50, and (ii) 12,280 shares of the Company's Series B Preferred Stock, at a price per share of $7,500.00. Net proceeds were approximately $213.3 million after deducting placement fees and offering costs. In March 2024, in connection with the Exchange, the Exchange Stockholders exchanged an aggregate of 8,300,000 shares of the Company's common stock, for an aggregate of 8,300 shares of the Company's Series B Preferred Stock.

At the Company's 2024 annual meeting of stockholders on June 5, 2024, the Company's stockholders approved an amendment to the Company's Third Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") (the "Amendment"), to increase the number of authorized shares of common stock from 150,000,000 to 300,000,000 and the Company filed a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware to effect the Amendment, which became effective immediately upon such filing. Pursuant to the terms of the Series B Certificate of Designation, on June 10, 2024, 13,712 shares of Series B Preferred Stock automatically converted to 13,712,000 shares of common stock, and 6,868 shares of Series B Preferred Stock remain outstanding as of December 31, 2024.

7. Stock-Based Compensation

2018 Stock Option and Incentive Plan

The Company's 2018 Stock Option and Incentive Plan, (the "2018 Plan"), which became effective on March 27, 2018, provides for the grant of incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock units, restricted stock awards, unrestricted stock awards, cash-based awards and dividend equivalent rights. The number of shares initially reserved for issuance under the 2018 Plan was 700,180. Additionally, the shares of common stock that remained available for issuance under the previously outstanding 2015 Stock Incentive Plan (the "2015 Plan") became available under the 2018 Plan. The number of shares reserved for the 2018 Plan automatically increases on each January 1 by 4% of the number of shares of the Company's common stock outstanding on the immediately preceding December 31 or a lesser number of shares determined by the Company's board of directors. At the Company's 2021 annual stockholder meeting, the Company's stockholders approved the amendment and restatement of the 2018 Stock Plan to increase the number of shares of common stock issuable under the 2018 Plan by 6,000,000 shares. At the Company's 2023 annual stockholder meeting, the Company's stockholders approved the amendment and restatement of the 2018 Plan to increase the number of shares of common stock issuable under the 2018 Plan by an additional 6,000,000 shares.

The shares of common stock underlying any awards that are forfeited, canceled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, repurchased or are otherwise terminated by the Company under the 2018 Plan or the 2015 Plan will be added back to the shares of common stock available for issuance under the 2018 Plan. As of December 31, 2024, 2,284,978 shares of common stock remain available for issuance under the 2018 Plan. The number of authorized shares reserved for issuance under the 2018 Plan was increased by 4,418,469 shares effective as of January 1, 2025.

Inducement Plan

On October 22, 2020, the board of directors adopted the Cogent Biosciences, Inc. 2020 Inducement Plan (the "Inducement Plan"). The board of directors also adopted a form of non-qualified stock option agreement for use with the Inducement Plan. A total of 3,750,000 shares of common stock have been reserved for issuance under the Inducement Plan, subject to adjustment for stock dividends, stock splits, or other changes in Cogent's common stock or capital structure. On November 5, 2020, the Company filed a Registration Statement on Form S-8 related to the 3,750,000 shares of its common stock reserved for issuance under the Inducement Plan. As of December 31, 2024, 945,645 shares of common stock remain available for issuance under the Inducement Plan.

In connection with the appointment of the Chief Commercial Officer on May 25, 2024, the Company granted additional "inducement" equity awards in accordance with Listing Rule 5635(c)(4) of the corporate governance rules of the Nasdaq Stock Market, separate from the awards available for grant under the Inducement Plan. The awards consist of (i) nonqualified options to purchase 525,000 shares of Cogent common stock with a 10-year term, an exercise price equal to the closing price of Cogent's common stock on the first day of his employment, and a 4-year vesting schedule with 25% vesting on the 1-year anniversary of the grant date and the remainder vesting in equal monthly installments over the subsequent 36 months, and (ii) up to 214,000 performance-based restricted stock units ("PSUs") with terms consistent with the PSUs granted in June 2023 and outlined below. In August 2024, the Company filed a registration statement on Form S-8 related to the up to 739,000 shares of its common stock reserved for issuance under these inducement awards to the Chief Commercial Officer.

2018 Employee Stock Purchase Plan

The Company's 2018 Employee Stock Purchase Plan (the "ESPP") became effective on March 28, 2018, at which time a total of 78,500 shares of common stock were reserved for issuance. In addition, the number of shares of common stock that may be issued under the ESPP automatically increases on each January 1 through January 1, 2027, by the least of (i) 125,000 shares of common stock, (ii) 1% of the number of shares of the Company's common stock outstanding on the immediately preceding December 31 or (iii) such lesser number of shares as determined by the ESPP administrator. As of December 31, 2024, 391,497 shares remain available for issuance under the ESPP. In January 2025, 88,141 shares were issued to employees under the ESPP. The number of authorized shares reserved for issuance under the ESPP was increased by 125,000 shares effective as of January 1, 2025.

Performance-based restricted stock units

In February 2023, the board of directors approved grants in aggregate of up to 2,500,000 PSUs under the 2018 Plan, which grants were subject to forfeiture in the event that the Company's stockholders did not approve an in increase to the number of shares reserved for issuance under the 2018 Plan (the "2023 Pool Increase"). On June 7, 2023, stockholders approved the 2023 Pool Increase and a grant date was established for accounting purposes for these PSUs in accordance with ASC 718 Compensation- Stock Compensation. An award holder can generally receive between 0% and 200% of the target award based on achievement of specified stock price hurdles and/or research and development milestones over a three-year performance period ending in February 2026. Any PSUs earned will vest, if at all, in a single tranche in February 2026 subject to a condition of continuing employment through the end of the performance period. During 2024, the Company granted an additional 214,000 PSUs to the Chief Commercial Officer upon his start date with the same terms and conditions as the awards granted in 2023. The fair value of the market-based awards was estimated on the date of grant for accounting purposes using a Monte Carlo simulation model. The fair value of the performance-based awards was based on the closing share price of the Company's common stock on the accounting grant date. As of December 31, 2024, one of the research performance milestones, two of the development performance milestones were achieved and another one of the development performance milestones was determined to be probable of achievement.

Stock Options

The following table presents, on a weighted average basis, the assumptions used in the Black-Scholes option-pricing model to determine the fair value of stock options granted to employees and directors:

	Year Ended December 31,		
	2024	2023	2022
Risk-free interest rate	4.1%	3.9%	2.2%
Expected volatility	84.7%	76.7%	72.4%
Expected dividend yield	—	—	—
Expected life (in years)	6.06	6.01	6.22

The following table summarizes activity under the 2018 Stock Option and Incentive Plan and the Inducement Plan, excluding performance-based and time-based restricted stock units:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2023	15,502,746	$ 9.99		
Granted	6,188,408	5.95		
Exercised	(30,590)	6.53		
Forfeited	(163,406)	9.73		
Outstanding as of December 31, 2024	21,497,158	$ 8.83	7.50	$ 16,999
Vested and expected to vest as of December 31, 2024	21,497,158	$ 8.83	7.50	$ 16,999
Options exercisable as of December 31, 2024	13,109,410	$ 9.35	6.79	$ 6,034

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had strike prices lower than the fair value of the Company's common stock.

The aggregate intrinsic value of options exercised during the years ended December 31, 2024, 2023 and 2022 was $0.1 million, $0.6 million and $1.0 million, respectively. The weighted average grant-date fair value of awards granted during the years ended December 31, 2024, 2023 and 2022 was $4.40 per share, $9.12 per share and $5.52 per share, respectively.

Performance-based restricted stock units

The following table summarizes the activity of performance-based restricted stock units:

	Number of Shares	Weighted Average Grant Date Fair Value per Share
Unvested as of December 31, 2023	2,500,000	$ 7.93
Granted	214,000	4.17
Vested	—	—
Forfeited	—	—
Unvested as of December 31, 2024	2,714,000	$ 7.63

Time-based restricted stock units

During the year ended December 31, 2024, the Company granted time-based restricted stock units to employees with service-based vesting conditions. The time-based restricted stock units vest over the 2 year service period. The following table summarizes the activity of time-based restricted stock units:

	Number of Shares	Weighted Average Grant Date Fair Value per Share
Unvested as of December 31, 2023	—	$ —
Granted	80,000	4.54
Vested	—	—
Forfeited	—	—
Unvested as of December 31, 2024	80,000	$ 4.54

Employee Stock Purchase Plan

The Company estimates the fair value of shares to be issued under the 2018 Employee Stock Purchase Plan using the Black-Scholes option-pricing model on the date of grant, or first day of the offering period. The following table summarizes information pertaining to stock purchase rights granted under the employee stock purchase plan, during the years indicated:

	Year Ended December 31,		
	2024	2023	2022
Risk-free interest rate	5.2%	4.0%	1.3%
Expected volatility	112.1%	75.7%	64.1%
Expected dividend yield	—	—	—
Expected life (in years)	0.50	0.50	0.50

Stock-Based Compensation

The following table summarizes stock-based compensation expense during the years ended December 31, 2024, 2023, 2022 *(in thousands)*:

	Year Ended December 31,		
	2024	2023	2022
Stock-based compensation expense by type of award:			
Time-based stock options	$ 30,222	$ 26,012	$ 18,144
Performance-based restricted stock units	8,665	4,196	—
Employee stock purchase plan	642	413	224
Time-based restricted stock units	211	—	—
Non-employee stock options	—	—	—
Total	$ 39,740	$ 30,621	$ 18,368

The Company recorded stock-based compensation expense in the following expense categories of its consolidated statements of operations and comprehensive loss *(in thousands)*:

	Year Ended December 31,		
	2024	2023	2022
Research and development expenses	$ 18,965	$ 14,595	$ 8,510
General and administrative expenses	20,775	16,026	9,858
Total	$ 39,740	$ 30,621	$ 18,368

As of December 31, 2024, total unrecognized compensation cost related to the unvested time-based stock options and time-based restricted stock units was $44.4 million and $0.2 million, respectively, which is expected to be recognized over a weighted average period of 2.43 years and 0.67 years, respectively.

As of December 31, 2024, the total minimum amount of unrecognized compensation cost related to the stock price hurdles for the unvested PSUs was $10.5 million based on the maximum achievement of 200% of the target award, which is expected to be recognized ratably over a weighted average period of 1.12 years.

If any additional research or development milestones become probable of achievement, the Company will recognize incremental stock compensation expense of up to $0.9 million through a cumulative catch up adjustment in the period of change in probability. The Company recorded incremental expense of $1.0 million as a result of the change in probability for four of the milestones during the year ended December 31, 2024.

8. Income Taxes

During the years ended December 31, 2024, 2023 and 2022, the Company recorded no current or deferred income tax benefits due to its full valuation allowance. The Company had no foreign operations.

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended December 31,		
	2024	2023	2022
Federal statutory income tax rate	(21.0)%	(21.0)%	(21.0)%
State taxes, net of federal benefit	(1.9)	(4.8)	(4.4)
Federal and state tax credits	(7.9)	(7.9)	(6.1)
Rate change	4.4	(2.3)	—
Nondeductible stock compensation	2.4	1.8	1.1
Other items	—	(0.9)	(0.2)
Change in valuation allowance	24.0	35.1	30.6
Effective income tax rate	0.0%	0.0%	0.0%

The Company's net deferred tax assets as of December 31, 2024 and 2023 consisted of the following *(in thousands)*:

	December 31,	
	2024	2023
Deferred tax assets (liabilities):		
Net operating loss carryforwards	$ 64,299	$ 47,953
Tax credits	48,961	28,759
Accrued expenses	2,901	2,371
Capitalized research and development expense	90,525	66,318
Operating lease right-of-use assets	(4,688)	(6,011)
Operating lease liabilities	5,271	6,687
Contingent consideration	338	929
Stock compensation	9,992	8,880
Other	953	1,184
Total deferred tax assets	218,552	157,070
Valuation allowance	(218,552)	(157,070)
Net deferred tax assets	$ —	$ —

As of December 31, 2024, the Company had U.S. federal and state net operating loss carryforwards of $268.1 million and $128.7 million, respectively, which may be available to offset future taxable income and begin to expire in 2035. Of the federal net operating loss carryforwards at December 31, 2024, $264.8 million is available to be carried forward indefinitely but can only offset 80% of taxable income per year. As of December 31, 2024, the Company had U.S. federal and state research and development tax credit carryforwards of $19.7 million and $4.4 million, respectively, which may be available to offset future income tax liabilities and begin to expire in 2040 and 2035, respectively. The Company also had federal orphan drug tax credits of $25.7 million which may be available to offset future income tax liabilities and begin to expire in 2041.

Utilization of the U.S. federal and state net operating loss carryforwards and tax credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, and corresponding provisions of state law, due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of carryforwards that can be utilized annually to offset future taxable income. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain stockholders or public groups in the stock of a corporation by more than 50% over a three-year period.

As a result of the shares issued in July 2020 related to the acquisition of Kiq and the sale of Series A convertible preferred stock, the Company experienced a change in ownership, as defined by Section 382. As a result of the ownership change, utilization of the federal and state net operating loss carryforwards and research and development tax credit carryforwards is subject to annual limitation under Section 382. Under Section 382, the annual limitation is determined by first multiplying the value of the Company's stock at the time of the ownership change by the applicable long-term tax-exempt rate, and then could be subject to additional adjustments, as required. As of December 31, 2024, approximately $73.0 million and $1.5 million of federal and state net operating losses, respectively, were subject to the July 2020 limitation of $0.3 million per year. A second ownership change occurred in December 2020 as a result of the underwritten public offering of common stock which resulted in a limitation of tax attributes generated from July 2020 to December 2020. The December 2020 ownership change is not expected to have a material impact to the Company's net operating loss carryforwards or research and development tax credit carryforwards as these net operating losses and tax credit carryforwards may be utilized, subject to annual limitation, assuming sufficient taxable income is generated before expiration. The Company has not performed a Section 382 analysis since December 2020.

The Company has not performed a research and development tax credit study. Any change to the Company's credits as a result of a study would be offset by a change in the valuation allowance.

The Company has evaluated the positive and negative evidence bearing upon its ability to realize its net deferred tax assets. Management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of its net deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets as of December 31, 2024, 2023, and 2022. Management reevaluates the positive and negative evidence at each reporting period.

The changes in the valuation allowance during the years ended December 31, 2024, 2023 and 2022 primarily related to net operating loss carryforwards, tax credits generated and capitalized research and development expenses. Changes were as follows (in thousands):

	Year Ended December 31,		
	2024	2023	2022
Valuation allowance as of beginning of year	$ 157,070	$ 89,544	$ 46,687
Decreases recorded to income tax provision	—	—	—
Increases recorded to income tax provision	61,482	67,526	42,857
Valuation allowance as of end of year	$ 218,552	$ 157,070	$ 89,544

As of December 31, 2024, 2023, and 2022, the Company had not recorded any amounts for unrecognized tax benefits. The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. The statute of limitations for assessment by the Internal Revenue Service remains open for all years from 2021 to the present, with certain states open from 2020 to the present. The Company's tax attributes related to years prior to 2021 can still be adjusted under audit. The Company is currently under audit in Massachusetts for the 2022 and 2023 tax years. The Company does not expect the audit to have a material impact on the consolidated financial statements.

9. Commitments and Contingencies

Operating Leases

Corporate Headquarters- Waltham, MA

On March 19, 2022, the Company and Cimpress USA Incorporated (the "Cimpress") entered into a sublease agreement (the "Waltham Sublease") pursuant to which the Company subleases approximately 17,749 square feet of office space in Waltham, Massachusetts, which serves as the Company's corporate headquarters. The Waltham Sublease became effective on May 5, 2022.

The Waltham Sublease has a term of four years and four months, commencing June 1, 2022 and expiring September 30, 2026. The Company will pay Cimpress base rent at an initial rate of $42.50 per square foot per year. Rent is payable in equal monthly installments and subject to $1.00 per square foot annual increases over the term. Additionally, the Company is responsible for reimbursing Cimpress for the Company's share of the building's property taxes and operating expenses. In connection with the Waltham Sublease, the Company provided a cash security deposit to the landlord in an amount of $0.4 million which is recorded in Other Assets in the consolidated balance sheet as of December 31, 2024 and 2023.

The lease commencement date occurred in May 2022, following landlord consent, as the Company gained access to the space under the terms of the lease. The Company recorded a right-of-use asset and lease liability for this lease of $2.9 million at the lease commencement date.

Research Facility- Boulder, CO

On July 6, 2021, the Company entered into a lease agreement (the "Original Lease") pursuant to which the Company leases approximately 38,075 square feet (the "Initial Premises") in Boulder, Colorado, which includes office and laboratory space. Subsequently, on March 29, 2022, the Company entered into the First Amendment to the lease agreement (the "First Amendment" and together with the Original Lease, the "Boulder Lease") pursuant to which the Company leases approximately 6,582 square feet of additional office space on the second floor (the "Expansion Premises").

The Boulder Lease has an initial term of 12 years with the option to extend for three successive five-year terms. Boulder Lease payments began in June 2023 after an initial free rent period. Rent is payable in equal monthly installments and subject to annual increases over the term. Additionally, the Company is responsible for reimbursing the landlord for its share of the building's property taxes and operating expenses. The Boulder Lease is an operating lease. In connection with the Boulder Lease, the Company provided a cash security deposit to the landlord in an amount of $0.7 million which is recorded in Other Assets in the consolidated balance sheet as of December 31, 2024 and 2023.

The Company recorded the initial right-of-use assets and lease liabilities for the lease of $22.3 million as of the lease commencement dates.

Former Corporate Headquarters- Cambridge, MA

The Company leased office and laboratory space in Cambridge, Massachusetts under a non-cancelable operating lease (the "Cambridge Lease") that expired in April 2023.

The elements of the lease expense, net of sublease income, were as follows *(in thousands)*:

	2024	2023	2022
Lease cost			
Operating lease cost	$ 3,295	$ 3,796	$ 4,052
Variable lease cost (1)	807	687	991
Sublease income	—	(950)	(2,621)
Total lease cost	$ 4,102	$ 3,533	$ 2,422
Other information			
Cash paid for amounts included in the measurement of lease liabilities	$ 3,663	$ 3,537	$ 8,413
Weighted average remaining lease term	9.84	10.58	10.84
Weighted average discount rate	8.00%	8.00%	8.04%

(1) The variable lease costs for the year ended December 31, 2024 include common area maintenance and other operating charges.

Future minimum lease payments under the Company's operating leases as of December 31, 2024 are as follows *(in thousands)*:

Year Ending December 31,	
2025	2,841
2026	2,697
2027	2,132
2028	2,179
2029	2,227
Thereafter	13,158
Total future minimum lease payments	25,234
Less: imputed interest	7,767
Total operating lease liability	$ 17,467
Included in the consolidated balance sheet:	
Current operating lease liability	$ 1,565
Operating lease liability, net of current portion	15,902
Total operating lease liability	$ 17,467

Under the terms of the Cambridge Lease, the Company issued a $1.3 million letter of credit to the landlord as collateral for the leased facility. The underlying cash collateralizing this letter of credit was classified as current restricted cash in the accompanying consolidated balance sheets as of December 31, 2022. The deposit was refunded at the expiration of the lease in 2023.

License Agreements

Plexxikon License Agreement

In July 2020, the Company obtained an exclusive, sublicensable, worldwide license (the "License Agreement") to certain patents and other intellectual property rights to research, develop and commercialize bezuclastinib. Under the terms of the License Agreement, the Company is required to pay Plexxikon Inc., a member of the Daiichi Sankyo Group ("Plexxikon"), aggregate payments of up to $7.5 million upon the satisfaction of certain clinical milestones and up to $25.0 million upon the satisfaction of certain regulatory milestones. During the second quarter of 2022, as a result of the progression of the PEAK study, the first clinical milestone was achieved, resulting in payment of $2.5 million to Plexxikon in June 2022. As of December 31, 2024, no other milestone payments have been made or are considered probable of occurring, however, $5.0 million may become payable in the next twelve months as a result of future regulatory filings.

The Company is also required to pay Plexxikon tiered royalties ranging from a low-single digit percentage to a high-single digit percentage on annual net sales of products. These royalty obligations last on a product-by-product basis and country-by-country basis until the latest of (i) the date on which there is no valid claim of a licensed Plexxikon patent covering a subject product in such country or (ii) the 10th anniversary of the date of the first commercial sale of the product in such country. In addition, if the Company sublicenses the rights under the License Agreement, the Company is required to pay a certain percentage of the sublicense revenue to Plexxikon ranging from mid-double digit percentages to mid-single digit percentages, depending on whether the sublicense is entered into prior to or after certain clinical trial events.

The license agreement will expire on a country-by-country and licensed product-by-licensed product basis until the later of the last to expire of the patents covering such licensed products or services or the 10-year anniversary of the date of first commercial sale of the licensed product in such country. The Company may terminate the license agreement within 30 days after written notice in the event of a material breach. The Company may also terminate the agreement upon written notice in the event of the Company's bankruptcy, liquidation or insolvency. In addition, the Company has the right to terminate this agreement in its entirety at will upon 90 days' advance written notice to Plexxikon.

Indemnification Agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its board of directors and its executive officers that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company is not aware of any claims under indemnification arrangements that will have a material effect on its financial position, results of operations or cash flows, and it has not accrued any liabilities related to such obligations in its consolidated financial statements as of December 31, 2024 or 2023.

Legal Proceedings

The Company is not currently party to any material legal proceedings. At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses as incurred the costs related to such legal proceedings.

10. Net Loss per Share

The Company computes net loss per share of common stock, Series A Preferred Stock and Series B Preferred Stock using the two-class method required for multiple classes of common stock and other participating securities. The two-class method is an earnings (loss) allocation method that requires income (loss) available to common stockholders be allocated to all such classes of common stock and other participating securities in accordance with the contractual terms of each class of stock. The Company has determined that the Series A Preferred Stock and Series B Preferred Stock represent other classes of common stock for purposes of calculating net loss per share.

Basic and diluted net loss per common share is computed by dividing the net loss by the weighted-average number of shares and pre-funded warrants outstanding during the period, without consideration of potential dilutive securities. The pre-funded warrants are included in the computation of basic net loss per common share as the exercise price is negligible and they are fully vested and exercisable. For periods in which the Company generated a net loss, the Company does not include potential shares of common stock in diluted net loss per share when the impact of these items is anti-dilutive. The Company has generated a net loss for all periods presented, therefore diluted net loss per share is the same as basic net loss per share since the inclusion of potential shares of common stock would be anti-dilutive.

In accordance with ASC Topic 260, Earnings Per Share, the outstanding pre-funded warrants are included in the computation of basic and diluted net loss per share because the exercise price is negligible ($0.01 per share) and they are fully vested and exercisable at any time after the original issuance date.

Revision to previously issued financial statements

The Company previously concluded that Series A Preferred Stock and Series B Preferred Stock had preferences over the Company's common stock and were therefore excluded from the calculation of basic and dilutive net loss per share pursuant to the two-class method. In preparing the Company's financial statements for the year ended December 31, 2024, the Company has now determined that the Series A Preferred Stock and Series B Preferred Stock do not have preferential rights over the Company's common stock and, accordingly, the Series A Preferred Stock and Series B Preferred stock should be considered additional classes of common stock for purposes of calculating net loss per share, utilizing the two-class method in accordance with ASC 260 Earnings Per Share. As a result of the correction, the Company has now allocated net loss to all classes of common stock and calculated basic and diluted net loss per share for common stock, Series A Preferred Stock and Series B Preferred Stock. Basic and diluted net loss per share attributable to common stockholders for the years ended December 31, 2023 and 2022 as previously presented was $2.42 and $2.39, respectively, and as revised is $1.94 and $1.73, respectively. Net loss per share attributable to holders of Series A Preferred Stock and Series B Preferred Stock was not previously presented.

The Company assessed the materiality of the change in the calculation of loss per share resulting from its conclusion that Series A Preferred Stock and Series B Preferred Stock are additional classes of common stock, considering both quantitative and qualitative factors, and concluded that the effects of the change to the calculation and presentation of net loss per share was not material, individually or in the aggregate, to any previously reported quarterly or annual period. However, the Company has revised its previously issued consolidated financial statements to reflect the change in presentation of net loss per share for all classes of stock, including common stock, Series A Preferred Stock and Series B Preferred Stock. All related amounts have been updated to reflect the effects of the revision throughout the financial statements and related footnotes, as applicable.

The following tables set forth the revised computation of basic and diluted net loss per share of Common Stock, Series A Preferred Stock, Series B Preferred Stock *(in thousands, except share and per share amounts)*:

	Year Ended December 31, 2024		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:			
Allocated net loss	$ (35,564)	$ (18,873)	$ (201,422)
Denominator:			
Weighted average shares outstanding, basic and diluted	73,350	9,731	103,856,611
Net loss per share, basic and diluted	$ (484.85)	$ (1,939.47)	$ (1.94)

	Year Ended December 31, 2023 (Revised)		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:			
Allocated net loss	$ (37,481)	$ —	$ (154,929)
Denominator:			
Weighted average shares outstanding, basic and diluted	77,085	—	79,657,942
Net loss per share, basic and diluted	$ (486.23)	$ —	$ (1.94)

	Year Ended December 31, 2022 (Revised)		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:			
Allocated net loss	$ (38,781)	$ —	$ (101,460)
Denominator:			
Weighted average shares outstanding, basic and diluted	89,807	—	58,739,713
Net loss per share, basic and diluted	$ (431.83)	$ —	$ (1.73)

The Company's potential dilutive securities have been excluded from the computation of diluted net loss per share as the effect would be anti-dilutive and would result in a reduction to net loss per share. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated above because including them would have had an anti-dilutive effect:

	December 31,		
	2024	2023	2022
Stock options to purchase common stock	21,497,158	15,502,746	12,831,771
Performance-based restricted stock units subject to vesting	2,714,000	2,500,000	—
Time-based restricted stock units	80,000	—	—
	24,291,158	18,002,746	12,831,771

11. Retirement Plan

The Company has a defined-contribution plan under Section 401(k) of the Internal Revenue Code (the "401(k) Plan"). The 401(k) Plan covers all employees who meet defined minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. The 401(k) Plan allows for discretionary matching contributions of 100% of the first 4% of elective contributions, which vest immediately. Contributions under the plan were approximately $1.5 million, $1.2 million and $0.8 million for the years ended December 31, 2024, 2023 and 2022, respectively.

12. Segment Information

The Company manages its operations as a single operating segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is the development and commercialization of precision therapies for genetically defined diseases. Cogent's chief operating decision maker ("CODM") is the Chief Executive Officer. The CODM manages and allocates resources to the operations of the Company on a total company basis and segment performance is evaluated based on consolidated net loss. The Company's CEO uses consolidated financial information for purposes of evaluating performance, understanding future forecasted results and allocating resources. The measure of segment assets is reported on the balance sheet as total consolidated assets. All of the Company's tangible assets are held in the United States.

The accounting policies for each operating segment are consistent with the Company's policies for the consolidated financial statements.

The following table is a summary of segment information for the years ended December 31, 2024, 2023, 2022 *(in thousands)*:

	Year Ended December 31,		
	2024	2023	2022
Operating Expenses			
Late-stage development	$ 120,862	$ 85,484	$ 61,270
Early-stage, preclinical and discovery programs	28,141	19,171	12,957
R&D personnel related	47,048	38,206	26,421
Research and development software, facilities and other strategic support	10,812	9,374	6,377
Other operational infrastructure and advisory support	26,886	23,010	21,605
Stock-based compensation expense	39,740	30,621	18,367
Depreciation expense	2,450	2,264	842
Interest income	(18,088)	(13,077)	(3,989)
Other income, net	(1,992)	(943)	(2,249)
Change in fair value of CVR liability	-	(1,700)	(1,360)
Segment net loss and consolidated net loss	$ 255,859	$ 192,410	$ 140,241

13. Unaudited Interim EPS

As disclosed in Note 10 above, the Company determined Series A Preferred Stock and Series B Preferred Stock should be considered additional classes of common stock for purposes of calculating net loss per share. Net loss per share for the interim periods within the annual periods ended December 31, 2024 and 2023, as revised in accordance with the changes disclosed in Note 10, is presented below. The Company will revise the presentation of net loss per share in the subsequent quarterly filings on Form 10-Q in 2025.

The following table sets forth the revised computation of basic and diluted net loss per share of Common Stock, Series A Preferred Stock, Series B Preferred Stock *(in thousands, except share and per share amounts) (unaudited)*:

	Three months ended March 31, (Revised)					
	2024			2023		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:						
Allocated net loss	$ (9,048)	$ (3,222)	$ (46,078)	$ (8,530)	$ —	$ (30,057)
Denominator:						
Weighted average shares outstanding, basic and diluted	74,465	6,630	94,804,659	80,294	—	70,734,950
Net loss per share, basic and diluted	$ (121.51)	$ (485.97)	$ (0.49)	$ (106.23)	$ —	$ (0.42)

	Three months ended June 30, (Revised)					
	2024			2023		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:						
Allocated net loss	$ (8,041)	$ (8,043)	$ (42,866)	$ (9,031)	$ —	$ (35,045)
Denominator:						
Weighted average shares outstanding, basic and diluted	74,465	18,621	99,240,030	77,050	—	74,753,269
Net loss per share, basic and diluted	$ (107.98)	$ (431.93)	$ (0.43)	$ (117.21)	$ —	$ (0.47)

	Six months ended June 30, (Revised)					
	2024			2023		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:						
Allocated net loss	$ (17,025)	$ (11,546)	$ (88,727)	$ (17,589)	$ —	$ (65,074)
Denominator:						
Weighted average shares outstanding, basic and diluted	74,465	12,626	97,022,345	78,663	—	72,755,210
Net loss per share, basic and diluted	$ (228.63)	$ (914.46)	$ (0.91)	$ (223.60)	$ —	$ (0.89)

	Three months ended September 30, (Revised)					
	2024			2023		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:						
Allocated net loss	$ (9,645)	$ (3,579)	$ (57,410)	$ (10,070)	$ —	$ (45,312)
Denominator:						
Weighted average shares outstanding, basic and diluted	74,030	6,868	110,165,580	76,600	—	86,165,951
Net loss per share, basic and diluted	$ (130.29)	$ (521.11)	$ (0.52)	$ (131.46)	$ —	$ (0.53)

	Nine months ended September 30, (Revised)					
	2024			2023		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:						
Allocated net loss	$ (26,714)	$ (15,373)	$ (145,845)	$ (27,807)	$ —	$ (110,238)
Denominator:						
Weighted average shares outstanding, basic and diluted	74,319	10,692	101,435,402	77,968	—	77,274,580
Net loss per share, basic and diluted	$ (359.45)	$ (1,437.80)	$ (1.44)	$ (356.65)	$ —	$ (1.43)

	Three months ended December 31,					
	2024			2023 (Revised)		
	Series A Preferred Stock	Series B Preferred Stock	Common Stock	Series A Preferred Stock	Series B Preferred Stock	Common Stock
Numerator:						
Allocated net loss	$ (8,828)	$ (3,442)	$ (55,657)	$ (9,607)	$ —	$ (44,758)
Denominator:						
Weighted average shares outstanding, basic and diluted	70,465	6,868	111,067,605	74,465	—	86,730,309
Net loss per share, basic and diluted	$ (125.28)	$ (501.16)	$ (0.50)	$ (129.01)	$ —	$ (0.52)

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and President and our Chief Financial Officer (our principal executive officer and principal financial officer, respectively), evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2024. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2024, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Internal Control Over Financial Reporting

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Our 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.

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.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2024. In making this assessment, it used the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on such assessment, our management has 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 PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which appears in this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended December 31, 2024 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None of our directors or executive officers adopted or terminated a Rule 10b5-1 trading arrangement or a non-Rule 10b5-1 trading arrangement during the quarter ended December 31, 2024, as such terms are defined under Item 408(a) of Regulation S-K.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 is incorporated herein by reference to information in our definitive proxy statement to be filed with the SEC with respect to our 2025 Annual Meeting of Stockholders, including under the headings "Corporate Governance" and "Executive Officers."

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 is incorporated herein by reference to information in our definitive proxy statement to be filed with the SEC with respect to our 2025 Annual Meeting of Stockholders, including under headings "Corporate Governance" and "Executive Compensation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 is incorporated herein by reference to information in our definitive proxy statement to be filed with the SEC with respect to our 2025 Annual Meeting of Stockholders, including under the heading "Certain Information about our Common Stock."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is incorporated herein by reference to information in our definitive proxy statement to be filed with the SEC with respect to our 2025 Annual Meeting of Stockholders, including under the headings "Corporate Governance" and "Certain Relationships and Related Party Transactions."

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item 14 will be included in our definitive proxy statement to be filed with the SEC with respect to our 2025 Annual Meeting of Stockholders, including under the "Ratification of Independent Registered Public Accounting Firm."

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) 1. *Financial Statements*

For a list of the financial statements included herein, see Index to the Financial Statements on page 77 of this Annual Report on Form 10-K, incorporated into this Item by reference.

2. *Financial Statement Schedules*

Financial statement schedules have been omitted because they are either not required or not applicable or the information is included in the financial statements or the notes thereto.

3. *Exhibits*

See the Exhibit Index in Item 15(b) below.

(b) Exhibit Index.

Exhibit Number	Description
3.1	Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-223414) filed on March 19, 2018)
3.2	Second Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Form 8-K (File No. 001-38443) filed on October 5, 2020)
3.3	Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's on Form 8-K (File No. 001-38443) filed on October 5, 2020)
3.4	Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's on Form 8-K (File No. 001-38443) filed on November 9, 2020)
3.5	Certificate of Designations of Preferences, Rights and Limitations of Series A Non-Voting Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Registrant's on Form 8-K (File No. 001-38443) filed on July 6, 2020)
3.6	Certificate of Designations of Preferences, Rights and Limitations of Series B Non-Voting Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K (File No. 001-38443) filed on February 14, 2024)
3.7	Certificate of Amendment to the Certificate of Designations of Preferences, Rights and Limitations of Series B Non-Voting Convertible Preferred Stock (incorporated by reference to Exhibit 3.2 to the Registrant's Form 8-K (File No. 001-38443) filed on March 22, 2024)
3.8	Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation of Cogent Biosciences, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K (File No. 001-38443) filed on June 5, 2024)
4.1*	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934
4.2	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K (File No. 001-38443) filed on June 16, 2022)
10.1	Form of Director and Officer Indemnification Agreement (incorporated by reference to Exhibit 10.1 to the Registrant's Form 10-K (File No. 001-38443) filed on March 15, 2022)

10.2#	Cogent Biosciences, Inc. Amended and Restated 2018 Stock Option and Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (File No. 001-38443) filed on June 7, 2023)
10.3#	Cogent Biosciences, Inc. 2018 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Form 10-K (File No. 001-38443) filed on March 16, 2021)
10.4#	Amended and Restated Cogent Biosciences, Inc. Non-Employee Director Compensation Policy (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-K (File No. 001-38443) filed on March 15, 2022)
10.5(1)	Securities Purchase Agreement among the Registrant and the purchasers party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's on Form 8-K (File No. 001-38443) filed on July 6, 2020)
10.6	Registration Rights Agreement between the Registrant and the purchasers party thereto (incorporated by reference to Exhibit 10.2 to the Registrant's on Form 8-K (File No. 001-38443) filed on July 6, 2020)
10.7	Contingent Value Rights Agreement dated as of August 6, 2020 among the Registrant, Computershare Inc. and Computershare Trust Company, N.A., (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (File No. 001-38443) filed on August 10, 2020)
10.8	License Agreement between KIQ LLC and Plexxikon Inc. dated as of May 27, 2020 (incorporated by reference to Exhibit 10.6 to the Registrant's Form 10-Q/A (File No. 001-38443) filed on October 6, 2020)
10.9	Asset Purchase Agreement dated as of August 28, 2020 among the Registrant, Sotio, LLC and Sotio N.V. (incorporated by reference to Exhibit 10.5 to the Registrant's Form 10-Q (File No. 001-38443) filed on November 9, 2020)
10.10	Sales Agreement, by and between the Company and Guggenheim Securities LLC, dated May 6, 2022 (incorporated by reference to Exhibit 1.2 to the Registrant's Registration Statement on Form S-3 (File No. 333-264773) filed on May 6, 2022)
10.11#	Employment Agreement dated as of October 23, 2020, between Cogent Biosciences, Inc. and Andrew Robbins (incorporated by reference to Exhibit 10.7 to the Registrant's Form 10-Q (File No. 001-38443) filed on November 9, 2020)
10.12*#	Cogent Biosciences, Inc. 2020 Inducement Plan and form of option award agreement thereunder
10.13#	Amended and Restated Employment Agreement entered into on December 24, 2021 by and between Cogent Biosciences, Inc. and John Green (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (File No. 001-38443) filed on December 27, 2021)
10.14#	Amended and Restated Employment Agreement entered into on December 24, 2021 by and between Cogent Biosciences, Inc. and Jessica Sachs, MD (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (File No. 001-38443) filed on December 27, 2021)
10.15#	Amended and Restated Employment Agreement entered into on December 20, 2021 by and between Cogent Biosciences, Inc. and John Robinson (incorporated by reference to Exhibit 10.15 to the Registrant's Form 10-K (File No. 001-38443) filed on February 26, 2024)
10.16#	Amended and Restated Employment Agreement entered into on December 20, 2021 by and between Cogent Biosciences, Inc. and Evan Kearns (incorporated by reference to Exhibit 10.16 to the Registrant's Form 10-K (File No. 001-38443) filed on February 26, 2024)
10.17	Lease by and between Cogent Biosciences, Inc. and BCSP Pearl East Property LLC dated July 6, 2021 (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (File No. 001-38443) filed on July 9, 2021)
10.18	Sublease by and between Cogent Biosciences, Inc. and Cimpress USA Incorporated dated March 19, 2022 (incorporated by reference to Exhibit 10.1 to the Registrant's Form 10-Q (File No. 001-38443) filed on November 2022)
10.19(1)	Securities Purchase Agreement, dated as of February 13, 2024, by and among Cogent Biosciences, Inc. and each purchaser identified on Annex A thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (File No. 001-38443) filed on February 14, 2024)
10.20(1)	Registration Rights Agreement, dated as of February 13, 2024, by and among Cogent Biosciences, Inc. and the purchasers party thereto (incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K (File No. 001-38443) filed on February 14, 2024)

10.21	Form of Exchange Agreement, dated March 21, 2024 (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (File No. 001-38443) filed on March 22, 2024)
10.22*#	Employment Agreement dated as of May 25, 2024, between Cogent Biosciences, Inc. and Cole Pinnow
19.1*	Insider Trading Policies and Procedures
21.1*	Subsidiaries of the Registrant
23.1*	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.
31.1*	Certification of Chief Executive Officer of the Registrant Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer of the Registrant Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*†	Certification of Chief Executive Officer of the Registrant Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*†	Certification of Chief Financial Officer of the Registrant Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
97.1	Incentive Compensation Clawback Policy
101INS*	Inline XBRL Instance Document.
101SCH*	Inline XBRL Taxonomy Extension Schema with Embedded Linkbase Document.
104*	Coverage Page Interative Data File (formatted as inline XRBL with applicable taxonomy extensive information contained in Exhibits 101.)

* Filed herewith.

# Indicates management contract or compensation plan.

(1) Schedules and exhibits have been omitted from this filing pursuant to Item 601(b)(2) of Regulation S-K. The registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the Securities and Exchange Commission upon its request; provided, however, that the registrant may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any schedule or exhibit so furnished.

† The certifications attached as Exhibits 32.1 and 32.2 that accompany this Annual Report on Form 10-K, are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Cogent Biosciences, 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 this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2025

COGENT BIOSCIENCES, INC.

By: /s/ Andrew Robbins
Andrew Robbins
Chief Executive Officer and President

Pursuant to the requirements of the Securities Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities indicated on February 25, 2025:

Signature	Title(s)
/s/ Andrew Robbins Andrew Robbins	Chief Executive Officer, President and Director (Principal Executive Officer)
/s/ John Green John Green	Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ Chris Cain Chris Cain	Director
/s/ Karen Ferrante Karen Ferrante, M.D.	Director
/s/ Peter Harwin Peter Harwin	Director
/s/ Arlene Morris Arlene Morris	Director
/s/ Matthew Ros Matthew Ros	Director
/s/ Todd Shegog Todd Shegog	Director

275 Wyman Street, 3rd Floor, Waltham, Massachusetts 02451

NOTICE OF THE 2025 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JUNE 4, 2025

To the Stockholders of Cogent Biosciences, Inc.:

Cogent Biosciences, Inc. (the "Company") will hold its 2025 Annual Meeting of Stockholders (the "Annual Meeting") on Wednesday, June 4, 2025, at 9:00 a.m. Eastern Time. The Annual Meeting will be a virtual meeting conducted exclusively online via live audio webcast at *www.virtualshareholdermeeting.com/COGT2025*. The Annual Meeting will be held for the following purposes, as more fully described in the accompanying proxy statement (the "Proxy Statement"):

(1) To elect the two Class I director nominees named in the Proxy Statement to serve until the 2028 Annual Meeting of Stockholders and until their successors are duly elected and qualified;

(2) To ratify the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the year ending December 31, 2025;

(3) To approve, on a non-binding, advisory basis, the compensation of the Company's named executive officers;

(4) To approve an amendment of the Company's Certificate of Incorporation to provide for officer exculpation; and

(5) To transact any other matters that may properly come before the Annual Meeting or any adjournments or postponements thereof.

The Board of Directors has fixed April 14, 2025 as the record date. Only stockholders of record at the close of business on that date will be entitled to notice of, and to vote at, the Annual Meeting or any adjournment or postponement thereof.

Instructions for accessing the virtual Annual Meeting are provided in the Proxy Statement. Unless otherwise announced differently at the meeting or on the meeting website, in the event of a technical malfunction or other situation that the meeting chair determines may affect the ability of the Annual Meeting to satisfy the requirements for a meeting of stockholders to be held by means of remote communication under the Delaware General Corporation Law, or that otherwise makes it advisable to adjourn the Annual Meeting, the meeting chair or secretary will convene the meeting at 10:00 a.m. Eastern Time on the date specified above and at the Company's address specified above solely for the purpose of adjourning the meeting to reconvene at a date, time and physical or virtual location announced by the meeting chair or secretary. Under either of the foregoing circumstances, we will post information regarding the announcement on the Investors page of the Company's website at *https://investors.cogentbio.com/*.

By Order of the Board of Directors,

/s/ Andrew Robbins
Andrew Robbins
Chief Executive Officer, President and Director

Waltham, Massachusetts
April 22, 2025

Whether or not you expect to participate in the virtual Annual Meeting, please vote as promptly as possible in order to ensure your representation at the Annual Meeting. You may vote online or, if you requested printed copies of the proxy materials, by telephone or by using the proxy card or voting instruction form provided with the printed proxy materials.

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LEGAL MATTERS

Important Notice Regarding the Availability of Proxy Materials for the 2025 Annual Meeting of Stockholders to Be Held on June 4, 2025. The Proxy Statement and Annual Report for the year ended December 31, 2024 are available at *www.proxyvote.com*.

Forward-Looking Statements. The Proxy Statement may contain "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, which statements are subject to substantial risks and uncertainties and are based on estimates and assumptions. All statements other than statements of historical fact included in the Proxy Statement are forward-looking statements, including statements about the Company's Board of Directors, corporate governance practices, executive compensation program, equity compensation utilization and corporate responsibility initiatives. In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "design," "estimate," "predict," "potential," "plan" or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that could cause our actual results or outcomes to differ materially from the forward-looking statements expressed or implied in the Proxy Statement. Such risks, uncertainties and other factors include those identified in the Company's Annual Report on Form 10-K for the year ended December 31, 2024 filed with the U.S. Securities and Exchange Commission ("SEC") and other subsequent documents we file with the SEC. The Company expressly disclaims any obligation to update or alter any statements whether as a result of new information, future events or otherwise, except as required by law.

Website References. Website references throughout this document are inactive textual references and provided for convenience only, and the content on the referenced websites is not incorporated herein by reference and does not constitute a part of the Proxy Statement.

275 Wyman Street, 3rd Floor, Waltham, Massachusetts 02451

PROXY STATEMENT
FOR THE 2025 ANNUAL MEETING OF STOCKHOLDERS

QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS AND VOTING

What Is the Purpose of These Proxy Materials?

We are making these proxy materials available to you in connection with the solicitation of proxies by the Board of Directors (the "Board") of Cogent Biosciences, Inc. ("we," "us," "our" or the "Company") for use at the 2025 Annual Meeting of Stockholders (the "Annual Meeting") to be held virtually on Wednesday, June 4, 2025 at 9:00 a.m. Eastern Time, or at any other time following adjournment or postponement thereof. You are invited to participate in the Annual Meeting and to vote on the proposals described in this Proxy Statement. The proxy materials are first being made available to our stockholders on or about April 22, 2025.

Why Did I Receive a Notice of Internet Availability?

Pursuant to U.S. Securities and Exchange Commission ("SEC") rules, we are furnishing the proxy materials to our stockholders primarily via the Internet instead of mailing printed copies. This process allows us to expedite our stockholders' receipt of proxy materials, lower the costs of printing and mailing the proxy materials and reduce the environmental impact of our Annual Meeting. If you received a Notice of Internet Availability of Proxy Materials (the "Notice"), you will not receive a printed copy of the proxy materials unless you request one. The Notice provides instructions on how to access the proxy materials for the Annual Meeting via the Internet, how to request a printed set of proxy materials and how to vote your shares.

Why Are We Holding a Virtual Annual Meeting?

We have adopted a virtual meeting format for the Annual Meeting to provide a consistent experience to all stockholders regardless of geographic location. We believe this expands stockholder access, improves communications and lowers our costs while reducing the environmental impact of the meeting. In structuring our virtual Annual Meeting, our goal is to enhance rather than constrain stockholder participation in the meeting, and we have designed the meeting to provide stockholders with the same rights and opportunities to participate as they would have at an in-person meeting.

Who Can Vote?

Only stockholders of record at the close of business on April 14, 2025 (the "Record Date") are entitled to notice of the Annual Meeting and to vote on the proposals described in this Proxy Statement. At the close of business on the Record Date, 113,856,454 shares of our common stock were issued and outstanding.

What Is the Difference between Holding Shares as a Registered Stockholder and as a Beneficial Owner?

Registered Stockholder: Shares Registered in Your Name

If your shares of common stock are registered directly in your name with our transfer agent, Computershare Trust Company, N.A., you are considered to be, with respect to those shares of common stock, the registered stockholder, and these proxy materials are being sent directly to you by us.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If your shares of common stock are held by a broker, fiduciary or custodian, you are considered the beneficial owner of shares of common stock held in "street name," and these proxy materials are being forwarded to you from that broker, fiduciary or custodian.

How Can I Participate in the Virtual Annual Meeting?

Stockholders of record as of the close of business on the Record Date are entitled to participate in and vote at the Annual Meeting. To participate in the Annual Meeting, including to vote and ask questions, stockholders of record should go to the meeting website at *www.virtualshareholdermeeting.com/COGT2025*, enter the 16-digit control number found on your proxy card or Notice, and follow the instructions on the website. If your shares are held in street name and your voting instruction form or Notice indicates that you may vote those shares through *www.proxyvote.com*, then you may access, participate in and vote at the Annual Meeting with the 16-digit access code indicated on that voting instruction form or Notice. Otherwise, stockholders who hold their shares in street name should contact their bank, broker or other nominee (preferably at least five days before the Annual Meeting) and obtain a "legal proxy" in order to be able to attend, participate in or vote at the Annual Meeting.

We will endeavor to answer as many stockholder-submitted questions as time permits that comply with the Annual Meeting rules of conduct. We reserve the right to edit profanity or other inappropriate language and to exclude questions regarding topics that are not pertinent to meeting matters or Company business. If we receive substantially similar questions, we may group such questions together and provide a single response to avoid repetition.

The meeting webcast will begin promptly at 9:00 a.m. Eastern Time. Online check-in will begin approximately 15 minutes before then, and we encourage you to allow ample time for check-in procedures. If you experience technical difficulties during the check-in process or during the meeting, please call the number listed on the meeting website for technical support. Additional information regarding the rules and procedures for participating in the Annual Meeting will be set forth in our meeting rules of conduct, which stockholders can view during the meeting at the meeting website.

What Am I Voting on?

The proposals to be voted on at the Annual Meeting are as follows:

(1) Election of two Class I director nominees to serve until the 2028 Annual Meeting of Stockholders ("Proposal 1");

(2) Ratification of the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the year ending December 31, 2025 ("Proposal 2");

(3) Approval, on a non-binding, advisory basis, of the compensation of our named executive officers ("Proposal 3"); and

(4) Approval of an amendment of the Company's Certificate of Incorporation to provide for officer exculpation.

How Does the Board Recommend That I Vote?

The Board recommends that you vote your shares "FOR ALL" director nominees in Proposal 1 and "FOR" Proposals 2, 3 and 4.

What If Another Matter Is Properly Brought Before the Annual Meeting?

As of the date of filing this Proxy Statement, the Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the Annual Meeting, it is

the intention of the persons named as proxies in the proxy card to vote on such matters in accordance with their best judgment.

How Many Votes Do I Have?

Each share of common stock is entitled to one vote on each proposal to be voted on at the Annual Meeting.

What Does It Mean If I Receive More Than One Set of Proxy Materials?

If you receive more than one set of proxy materials, your shares may be registered in more than one name or held in different accounts. Please cast your vote with respect to each set of proxy materials that you receive to ensure that all of your shares are voted.

How Do I Vote?

Even if you plan to attend the Annual Meeting, we recommend that you also submit your vote as early as possible in advance so that your vote will be counted if you later decide not to, or are unable to, virtually attend the Annual Meeting.

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder, you may vote your shares online during the virtual Annual Meeting (see "How Can I Participate in the Virtual Annual Meeting?" above) or by proxy in advance of the Annual Meeting by Internet (at *www.proxyvote.com*) or, if you requested paper copies of the proxy materials, by completing and mailing a proxy card or by telephone (at (800) 690-6903).

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner, you may vote your shares online during the virtual Annual Meeting (see "How Can I Participate in the Virtual Annual Meeting?" above) or you may direct your broker, fiduciary or custodian how to vote in advance of the Annual Meeting by following the instructions they provide.

What Happens If I Do Not Vote?

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder and do not vote in one of the ways described above, your shares will not be voted at the Annual Meeting and will not be counted toward the quorum requirement.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner and do not direct your broker, fiduciary or custodian how to vote your shares, your broker, fiduciary or custodian will only be able to vote your shares with respect to proposals considered to be "routine." Your broker, fiduciary or custodian is not entitled to vote your shares with respect to "non-routine" proposals, which we refer to as a "broker non-vote." Whether a proposal is considered routine or non-routine is subject to stock exchange rules and final determination by the stock exchange. Even with respect to routine matters, some brokers are choosing not to exercise discretionary voting authority. As a result, we urge you to direct your broker, fiduciary or custodian how to vote your shares on all proposals to ensure that your vote is counted.

What If I Sign and Return a Proxy Card or Otherwise Vote but Do Not Indicate Specific Choices?

Registered Stockholder: Shares Registered in Your Name

The shares represented by each signed and returned proxy will be voted at the Annual Meeting by the persons named as proxies in the proxy card in accordance with the instructions indicated on the proxy card. However, if you are the registered stockholder and sign and return your proxy card without giving specific

instructions, the persons named as proxies in the proxy card will vote your shares in accordance with the recommendations of the Board. Your shares will be counted toward the quorum requirement.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner and do not direct your broker, fiduciary or custodian how to vote your shares, your broker, fiduciary or custodian will only be able to vote your shares with respect to proposals considered to be "routine." Your broker, fiduciary or custodian is not entitled to vote your shares with respect to "non-routine" proposals, resulting in a broker non-vote with respect to such proposals.

Can I Change My Vote after I Submit My Proxy?

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder, you may revoke your proxy at any time before the final vote at the Annual Meeting in any one of the following ways:

(1) you may complete and submit a new proxy card, but it must bear a later date than the original proxy card;

(2) you may submit new proxy instructions via telephone or the Internet;

(3) you may send a timely written notice that you are revoking your proxy to our Corporate Secretary at the address set forth on the first page of this Proxy Statement; or

(4) you may vote by attending the Annual Meeting virtually. However, your virtual attendance at the Annual Meeting will not, by itself, revoke your proxy.

Your last submitted vote is the one that will be counted.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner, you must follow the instructions you receive from your broker, fiduciary or custodian with respect to changing your vote.

What Is the Quorum Requirement?

The holders of a majority of the shares of common stock outstanding and entitled to vote at the Annual Meeting must be present at the Annual Meeting, either virtually or represented by proxy, to constitute a quorum. A quorum is required to transact business at the Annual Meeting.

Your shares will be counted toward the quorum only if you submit a valid proxy (or a valid proxy is submitted on your behalf by your broker, fiduciary or custodian) or if you attend the Annual Meeting virtually and vote. Abstentions and broker non-votes, if any, will be counted toward the quorum requirement. If there is no quorum, the chairman of the Annual Meeting or the holders of a majority of shares of common stock virtually present at the Annual Meeting, either personally or by proxy, may adjourn the Annual Meeting to another time or date.

How Many Votes Are Required to Approve Each Proposal and How Are Votes Counted?

Our Board has appointed our Chief Financial Officer to serve as the Inspector of Elections to count the votes cast at the Annual Meeting.

Proposal 1: Election of Directors

A nominee will be elected as a director at the Annual Meeting if the nominee receives a plurality of the votes cast "FOR" his or her election. "Plurality" means that the individuals who receive the highest number of votes cast "FOR" are elected as directors. Broker non-votes, if any, and votes that are withheld will not be

counted as votes cast on the matter and will have no effect on the outcome of the election. Stockholders do not have cumulative voting rights for the election of directors.

Proposal 2: Ratification of Independent Registered Public Accounting Firm

The majority of votes cast on the proposal is required for approval of Proposal 2. Abstentions and broker non-votes, if any, will not be counted as votes cast on the matter and will have no effect on the outcome of the matter.

Proposal 3: Advisory Vote on Executive Compensation

The majority of votes cast on the proposal is required for approval of Proposal 3. Abstentions and broker non-votes, if any, will not be counted as votes cast on the matter and will have no effect on the outcome of the matter.

Proposal 4: Approval of an Amendment of the Company's Certificate of Incorporation to Provide for Officer Exculpation

The majority of the outstanding shares of common stock entitled to vote on the proposal is required for approval of Proposal 4. Abstentions and broker non-votes, if any, will have the same effect as a vote "AGAINST" the proposal.

Who Is Paying for This Proxy Solicitation?

We will pay the costs associated with the solicitation of proxies, including the preparation, assembly, printing and mailing of the proxy materials, any solicitation by telephone or other electronic means, and any in-person solicitation. We may also reimburse brokers, fiduciaries or custodians for the cost of forwarding proxy materials to beneficial owners of shares of common stock held in "street name."

How Can I Find out the Voting Results?

We expect to announce preliminary voting results at the Annual Meeting. Final voting results will be published in a Current Report on Form 8-K to be filed with the SEC within four business days after the Annual Meeting.

PROPOSAL 1: ELECTION OF DIRECTORS

In accordance with our Bylaws, the Board has fixed the number of directors constituting the Board at seven. At the Annual Meeting, the stockholders will vote to elect the two Class I director nominees named in this Proxy Statement to serve until the 2028 Annual Meeting of Stockholders and until their successors are duly elected and qualified or until their earlier resignation or removal. Our Board has nominated for re-election to our Board Dr. Karen Ferrante and Matthew E. Ros, each of whom is a current Class I director who was most recently elected by stockholders at the 2022 Annual Meeting of Stockholders.

Our director nominees have indicated that they are willing and able to serve as directors. However, if any of them becomes unable or, for good cause, unwilling to serve, proxies may be voted for the election of such other person as shall be designated by our Board, or the Board may decrease the size of the Board.

Information Regarding Director Nominees and Continuing Directors

Our Board is divided into three classes, with members of each class holding office for staggered three-year terms. There are currently two Class I directors, who are up for election at this meeting and for a term expiring at the 2028 Annual Meeting of Stockholders; three Class II directors, whose terms expire at the 2026 Annual Meeting of Stockholders; and two Class III directors, whose terms expire at the 2027 Annual Meeting of Stockholders.

Biographical and other information regarding our director nominees and directors continuing in office, including the primary skills and experiences considered by our Nominating and Corporate Governance Committee (the "Nominating Committee") in determining to recommend them as nominees, is set forth below.

Name	Class	Age (as of April 22)	Position
Andrew Robbins	Class III	49	Chief Executive Officer, President and Director
Chris Cain, Ph.D.[2][4]	Class II	41	Independent Director
Karen Ferrante, M.D.[3][4]	Class I	67	Independent Director
Peter Harwin[3][4]	Class III	39	Independent Director and Chairman
Arlene M. Morris[1][2]	Class II	73	Independent Director
Matthew E. Ros[1][3]	Class I	58	Independent Director
Todd Shegog[1][2]	Class II	60	Independent Director

(1) Member of the Audit Committee
(2) Member of the Compensation Committee
(3) Member of the Nominating Committee
(4) Member of the Science & Technology Committee (the "Science Committee")

Class I Director Nominees

Karen Ferrante, M.D. Dr. Ferrante has served as a member of our Board since February 2018. Dr. Ferrante is a medical oncologist who served as the Chief Medical Officer and Head of Research and Development of Tokai Pharmaceuticals, Inc. (now known as Eledon Pharmaceuticals, Inc.), a biopharmaceutical company focused on developing treatments for prostate cancer and other hormonally driven diseases, from April 2014 until August 2016. From 2007 to July 2013, Dr. Ferrante held senior positions at Millennium Pharmaceuticals, Inc. and its parent company, Takeda Pharmaceutical Company Limited (NYSE: TAK), including Chief Medical Officer and, subsequently, Oncology Therapeutic Area Head and Cambridge USA Site Head from May 2013 to July 2013. Dr. Ferrante previously held positions of increasing responsibility at Pfizer Global Research and Development and Bristol-Myers Squibb Company (NYSE: BMY). Dr. Ferrante serves on the board of directors of MacroGenics, Inc. (Nasdaq: MGNX). Dr. Ferrante also served as a director of HUTCHMED (China) Limited (Nasdaq: HCM) from 2017 until 2023, Progenics Pharmaceuticals, Inc. from 2014 until its acquisition by

Lantheus Holdings, Inc. (Nasdaq: LNTH) in 2020 and Baxalta Inc., a previously publicly-traded global biopharmaceutical company, from 2015 until its acquisition by Shire plc in 2016. She also served as an advisory board member for Kazia Therapeutics Limited (Nasdaq: KZIA) from 2016 until 2022 and Trillium Therapeutics Inc. (formerly, Nasdaq/TSX: TRIL) from 2020 until its acquisition by Pfizer Inc. in November 2021. Dr. Ferrante holds an M.D. from Georgetown University and a B.S. in Chemistry and Biology from Providence College.

We believe Dr. Ferrante is qualified to serve on our Board because of her extensive leadership, scientific, business and managerial experience in the biotechnology industry and her experience and expertise serving as a member of the board of directors of several biotechnology companies.

Matthew E. Ros. Mr. Ros has served as a member of our Board since July 2019. Mr. Ros has more than 35 years of experience in global pharmaceutical and early-stage biotechnology companies, building and leading teams across sales, marketing, franchise strategy and business operations. Since January 2025, Mr. Ros has served as the Chief Operating Officer of Verastem, Inc. (Nasdaq: VSTM), a late-stage development biopharmaceutical company. Prior to Verastem, Mr. Ros served as Chief Executive Officer and Director of Fore Biotherapeutics Inc., a clinical-stage precision oncology company from April 2022 to August 2023. Mr. Ros previously served as Chief Strategy and Business Officer of Epizyme, Inc., a biopharmaceutical company, from September 2018 to October 2021. He served as Chief Operating Officer of Epizyme from May 2016 to September 2018. Prior to joining Epizyme, from September 2010 to May 2016, Mr. Ros served in increasing levels of responsibility at Sanofi S.A. (Nasdaq: SNY), a multinational pharmaceutical company, most recently as Chief Operating Officer/Global Head of the Oncology business unit from December 2014 to May 2016. Prior to that role, Mr. Ros served in the rare disease business of Genzyme Corporation, a Sanofi company, where he served as Vice President and Franchise Head of its Pompe disease unit from September 2012 to December 2014, and also served as the Associate Vice President and Iniparib Global Brand Leader in Sanofi's Oncology business unit from September 2010 to September 2012. From October 2007 to June 2010, Mr. Ros served at ARIAD Pharmaceuticals, Inc., a global oncology company, most recently as Senior Vice President, Commercial Operations. He started his pharmaceutical career in Bristol-Myers Squibb's Oncology Division, serving in roles with increasing responsibility from 1990 to 2007. He received a B.S. from the State University of New York, College at Plattsburgh and completed the Executive Education Program in Finance and Accounting for the Non-Financial Manager at Wharton School of the University of Pennsylvania.

We believe Mr. Ros is qualified to serve on our Board because of his extensive leadership, executive, managerial and business experience with life sciences companies.

Class II Directors Continuing in Office

Chris Cain, Ph.D. Dr. Cain has served as a member of our Board since July 2020. Dr. Cain has served as Director of Research at Fairmount Funds Management LLC ("Fairmount"), a healthcare investment firm and one of the Company's largest stockholders, since April 2020. From February 2019 to February 2020, Dr. Cain served as Vice President at Samsara BioCapital, a biotherapeutics-focused venture capital fund. Prior to that role, Dr. Cain worked at Apple Tree Partners, a life sciences-focused venture capital fund, from 2016 to January 2019, and at RA Capital Management, an investment management company, before that. Previously, Dr. Cain was a writer and editor at BioCentury Publications. Dr. Cain currently serves on the board of directors of Viridian Therapeutics, Inc. (Nasdaq: VRDN). Dr. Cain received his B.A. from the University of California, Santa Barbara and his Ph.D. in Biochemistry and Molecular Biology from the University of California, San Francisco.

We believe Dr. Cain is qualified to serve on our Board because of his extensive leadership, scientific, business and managerial experience in the biotechnology industry.

Arlene M. Morris. Ms. Morris has served as a member of our Board since July 2019. Ms. Morris has served as Chief Executive Officer of Willow Advisors, a consultancy advising biotech companies on financing, strategy and business development, since 2015. Previously, she spent over a decade leading public biotechnology

companies. From 2012 to 2015, Ms. Morris served as Chief Executive Officer of Syndax Pharmaceuticals Inc. (Nasdaq: SNDX), a biopharmaceutical company focused on the development and commercialization of an epigenetic therapy for treatment-resistant cancers. Prior to this, she served as President and Chief Executive Officer of Affymax Inc. (OTCMKTS: AFFY), a biotechnology company, where she led the company through the development of peginesatide (Omontys®). She spent 15 years at Johnson & Johnson (NYSE: JNJ), a pharmaceutical company, in marketing, sales and senior level business development positions. Ms. Morris served on the board of directors of Viveve Medical, Inc. (OTCMKTS: VIVE) from 2016 to 2022, Dimension Therapeutics, Inc. (formerly, Nasdaq: DMTX) from 2015 to 2018 and Neovacs, SA (Euronext: ALNEV) from 2011 to 2020. She was also a director of Biodel Inc., a specialty pharmaceutical company, from 2015 until its merger with Albireo Limited in 2016. Ms. Morris is currently a member of the board of directors of Palatin Technologies, Inc. (NYSE: PTN), Viridian Therapeutics, Inc. (Nasdaq: VRDN), TC BioPharm (Holdings) PLC (Nasdaq: TCBP), Edgewise Therapeutics, Inc. (Nasdaq: EWTX), and the Charleston Animal Society. Ms. Morris received her B.A. in Biology and Chemistry from Carlow College.

We believe Ms. Morris is qualified to serve on our Board because of her extensive leadership, executive, managerial and board experience within pharmaceutical and biotechnology industries.

Todd Shegog. Mr. Shegog has served as a member of our Board since February 2021. Mr. Shegog has more than 25 years of financial, operations, corporate strategy and compliance expertise in the biotechnology and pharmaceutical industries. He served as Senior Vice President and Chief Financial Officer of Forma Therapeutics, Inc. (formerly, Nasdaq: FMTX), a clinical-stage biopharmaceutical company, from September 2019 through its acquisition by Novo Nordisk in October 2022. Prior to Forma Therapeutics, Mr. Shegog served as Chief Financial Officer of Synlogic, Inc. (Nasdaq: SYBX), a clinical-stage biopharmaceutical company, where he directed the company's financial strategy and management as well as facilities and information systems from September 2016 to September 2019. From April 2014 to August 2016, Mr. Shegog served as Senior Vice President and Chief Financial Officer at Forum Pharmaceuticals, Inc., an early-stage biopharmaceutical company, where he was responsible for finance, operations and information systems during their pursuit of innovative therapies for schizophrenia and Alzheimer's disease. He also served as the Chief Financial Officer of Millennium Pharmaceuticals, Inc., now Takeda Oncology, where he was responsible for management of the company's financial resources, corporate planning, financial reporting and compliance from 1998 to 2014. Mr. Shegog earned a B.S. in Electrical Engineering from Lafayette College and an M.B.A. from the Tepper School of Management at Carnegie Mellon University.

We believe Mr. Shegog is qualified to serve on our Board because of his financial expertise and extensive leadership, executive, managerial and business experience with life sciences companies.

Class III Directors Continuing in Office

Andrew Robbins. Mr. Robbins has served as our Chief Executive Officer, President, principal executive officer and a member of our Board since October 2020. Prior to joining the Company, Mr. Robbins served as Chief Operating Officer at Array BioPharma Inc., a pharmaceutical company, from March 2015 through its acquisition by Pfizer Inc. (NYSE: PFE), a pharmaceutical company, in July 2019, where he was responsible for sales and marketing, corporate strategy, business development, manufacturing and supply chains, after serving as its Senior Vice President, Commercial Operations from July 2012 to March 2015. From January 2007 to July 2012, Mr. Robbins held management positions at Hospira, Inc., a pharmaceutical and medical device company, including General Manager and Vice President of the U.S. Alternate Site business unit and Vice President of Corporate Development. Prior to Hospira, Mr. Robbins held commercial and leadership positions within Pfizer's oncology unit. Mr. Robbins previously served on the boards of directors of Turmeric Acquisition Corporation from 2020 to 2022 and Harpoon Therapeutics, Inc. from 2020 through its acquisition by Merck in March 2024. Mr. Robbins holds an M.B.A. from the Kellogg School of Management, Northwestern University and a bachelor's degree from Swarthmore College.

We believe Mr. Robbins is qualified to serve on our Board because of his extensive commercial, development and strategic leadership experience in the pharmaceutical industry.

Peter Harwin. Mr. Harwin has served as a member of our Board since July 2020. Mr. Harwin is a managing member at Fairmount, a healthcare investment firm he co-founded in April 2016. Prior to Fairmount, Mr. Harwin served as a member of the investment team at Boxer Capital, LLC, part of the Tavistock Group, based in San Diego. Mr. Harwin also serves on the board of directors of Apogee Therapeutics, Inc. (Nasdaq: APGE), Spyre Therapeutics, Inc. (Nasdaq: SYRE), Oruka Therapeutics, Inc. (Nasdaq: ORKA), Paragon Therapeutics, Inc. and Crescent Biopharma. He previously served on the board of directors of Viridian Therapeutics, Inc. (Nasdaq: VRDN) from October 2020 to March 2025. Mr. Harwin received his Bachelor of Business Administration from Emory University.

We believe Mr. Harwin is qualified to serve on our Board because of his extensive leadership, executive, managerial and board experience within pharmaceutical and biotechnology industries.

Board Recommendation

The Board recommends a vote "**FOR ALL**" of the Class I director nominees set forth above.

PROPOSAL 2: RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our Audit Committee has selected PricewaterhouseCoopers LLP ("PwC") as the Company's independent registered public accounting firm for the year ending December 31, 2025. In this Proposal 2, we are asking stockholders to vote to ratify this selection. Representatives of PwC are expected to be present at the Annual Meeting. They will have the opportunity to make a statement, if they desire to do so, and are expected to be available to respond to appropriate questions from stockholders.

Stockholder ratification of the selection of PwC as the Company's independent auditor is not required by law or our Bylaws. However, we are seeking stockholder ratification as a matter of good corporate governance. If our stockholders fail to ratify the selection, the committee will reconsider its selection. Even if the selection is ratified, the committee, in its discretion, may direct the selection of a different independent auditor at any time during the year if it determines that such a change would be in the best interests of the Company and our stockholders.

PwC has served as our independent auditor since 2015. The following table summarizes the audit fees billed and expected to be billed by PwC for the indicated fiscal years and the fees billed by PwC for all other services rendered during the indicated fiscal years. All services associated with such fees were pre-approved by our Audit Committee in accordance with the "Pre-Approval Policies and Procedures" described below.

	Year Ended December 31,	
Fee Category	**2024**	**2023**
Audit Fees[1]	$1,135,000	$1,295,000
Audit-Related Fees[2]	—	—
Tax Fees[3]	281,440	281,350
All Other Fees[4]	2,000	956
Total Fees	$1,418,440	$1,577,306

(1) Consists of aggregate fees for professional services provided in connection with the annual audit of our consolidated financial statements, the review of our quarterly condensed consolidated financial statements and comfort letters, consents and review of documents filed with the SEC.
(2) Consists of fees for assurance and related services associated with consultations on matters directly related to the audit.
(3) Consists of fees for tax compliance, advice and tax services.
(4) Consists of fees for all other services.

Pre-Approval Policies and Procedures

Our Audit Committee has adopted policies and procedures relating to the approval of all audit and non-audit services performed by our independent auditor in order to ensure that these services do not impair the auditor's independence. In accordance with these policies and procedures, we will not engage our independent auditor to render audit or non-audit services unless the service is specifically approved in advance by our Audit Committee or the engagement is entered into pursuant to the pre-approval procedure described below. The Audit Committee does not delegate its responsibility to approve services performed by the independent registered public accounting firm to any member of management.

From time to time, our Audit Committee may pre-approve specified types of services that are expected to be provided to us by our independent auditor during the next 12 months. Any such pre-approval details the particular service or type of services to be provided and is also generally subject to a maximum dollar amount.

Report of the Audit Committee

The Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2024 with the Company's management and with PwC, the Company's independent registered

public accounting firm. The Audit Committee has discussed with PwC the matters required to be discussed by the applicable standards of the Public Company Accounting Oversight Board ("PCAOB") and the SEC. The Audit Committee has also received the written disclosures and the letter from PwC pursuant to applicable PCAOB requirements regarding its communications with the Audit Committee concerning independence, and the Audit Committee has discussed with PwC its independence. Based on the foregoing, the Audit Committee recommended to the Board that the audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2024 for filing with the SEC.

This report is provided by the following directors, who serve on the Audit Committee:

Todd Shegog (Chair)
Arlene M. Morris
Matthew E. Ros

Board Recommendation

The Board recommends a vote "**FOR**" the ratification of the selection of PwC to serve as our independent registered public accounting firm.

PROPOSAL 3: ADVISORY VOTE ON EXECUTIVE COMPENSATION

In accordance with the rules of the SEC and pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), we are providing stockholders with an opportunity to make a non-binding, advisory vote on the compensation of our named executive officers. This non-binding, advisory vote is commonly referred to as a "say-on-pay" vote.

The say-on-pay vote is a non-binding vote on the compensation of our "named executive officers," as described in this Proxy Statement. The say-on-pay vote is not a vote on our general compensation policies or compensation of our Board. Stockholders are urged to read the "Executive Compensation" section of the Proxy Statement, including the Compensation Discussion and Analysis, the tabular disclosure regarding such compensation and the accompanying narrative disclosure, which discusses how our executive compensation policies and procedures implement our compensation philosophy. Our Compensation Committee and Board believe that these policies and procedures are effective in implementing our compensation philosophy and in achieving our goals.

As an advisory vote, this proposal is not binding. However, our Board and Compensation Committee, which is responsible for designing and administering our executive compensation program, value the opinions expressed by stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for our named executive officers. Unless the Board modifies its policy on the frequency of holding say-on-pay advisory votes, the next say-on-pay vote is expected to occur at our 2026 Annual Meeting of Stockholders.

Board Recommendation

The Board recommends a vote "**FOR**" the approval, on a non-binding, advisory basis, of the compensation of our named executive officers.

PROPOSAL 4: APPROVAL OF AN AMENDMENT OF THE COMPANY'S CERTIFICATE OF INCORPORATION TO PROVIDE FOR OFFICER EXCULPATION

We are submitting to our stockholders a vote to approve an amendment of our Third Amended and Restated Certificate of Incorporation, as amended, to extend the exculpation protections to our officers (the "Proposed Certificate Amendment"), in line with amendments to the Delaware General Corporation Law ("DGCL").

Overview

The Company is incorporated in the State of Delaware and is therefore subject to the DGCL. The DGCL permits Delaware corporations to limit or eliminate the directors' personal liability for monetary damages resulting from a breach of fiduciary duty, subject to certain limitations as described below. These provisions are referred to as "exculpatory provisions" or "exculpatory protections." Exculpatory provisions for directors are already included in the current Certificate of Incorporation. Effective August 1, 2022, the Delaware legislature amended the DGCL to permit Delaware corporations to provide similar exculpatory protections for officers. These protections do not apply automatically and must be included in the Company's Certificate of Incorporation to be effective.

For the reasons set forth below, the Board has approved and declared advisable the Proposed Certificate Amendment, subject to its approval by our stockholders at the Annual Meeting.

Purpose and Effect of Amendment

The Board believes that it is important to extend exculpation protection to officers, to the fullest extent permitted by Delaware law, in order to better position the Company to attract and retain qualified and experienced officers and minimize unnecessary litigation costs. In the absence of such protection, such individuals might be deterred from serving as officers due to exposure to personal liability and the risk of incurring substantial expense in defending lawsuits, regardless of merit. The nature of their role often requires officers to make decisions on crucial matters and frequently in response to time-sensitive opportunities and challenges, which can create substantial risk of lawsuits seeking to impose liability with the benefit of hindsight and regardless of merit. Aligning the protections available to our officers with those available to our directors would empower officers to exercise their business judgment in furtherance of stockholder interests without the potential distraction posed by the risk of personal liability. In addition, the Proposed Certificate Amendment also potentially could reduce future litigation costs and indemnification expenses for the Company associated with frivolous lawsuits.

The Board also believes that the Proposed Certificate Amendment would strike the appropriate balance between furthering the Company's goals of attracting and retaining quality officers with promoting stockholder accountability because, consistent with the update to Delaware law, it would exculpate officers only in connection with direct claims brought by stockholders, including class actions, but would not eliminate or limit liability with respect to any of the following:

- breach of fiduciary duty claims brought by the Company itself;
- derivative claims brought by stockholders in the name of the Company;
- any claims involving breach of the duty of loyalty to the Company or its stockholders;
- any claims involving acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of the law; or
- any claims involving transactions from which the officer derived an improper personal benefit.

Taking into account the narrow class and type of claims for which officers would be exculpated, and the benefits the Board believes would accrue to the Company and its stockholders—enhancing our ability to attract

and retain talented officers and potentially reducing future litigation costs and indemnification expenses associated with frivolous lawsuits—the Board determined that the Proposed Certificate Amendment is in the best interests of the Company and its stockholders.

Additional Information

This summary is qualified in its entirety by reference to the full text of the Proposed Certificate Amendment, as set forth in Appendix A.

The Proposed Certificate Amendment is binding. If Proposal 4 is approved by stockholders, we plan to file a Certificate of Amendment to the Company's Third Amended and Restated Certificate of Incorporation, as amended, with the Delaware Secretary of State, which will become effective at the time of the filing.

Board Recommendation

The Board recommends a vote "**FOR**" the approval of the Proposed Certificate Amendment.

CORPORATE GOVERNANCE

Our business affairs are managed under the direction of our Board. Our Board has adopted a set of Corporate Governance Guidelines as a framework for the governance of the Company, which is posted on our website located at *https://investors.cogentbio.com/*, under "Corporate Governance."

Board Composition

Director Nomination Process

The Nominating Committee is responsible for, among other things, overseeing succession planning for directors and building a qualified board to oversee management's execution of the Company's strategy and safeguard the long-term interests of stockholders. In this regard, the committee is charged with developing and recommending Board membership criteria to the Board for approval, evaluating the composition of the Board annually to assess the skills and experience that are currently represented on the Board and the skills and experience that the Board may find valuable in the future, and identifying, evaluating and recommending potential director candidates.

In identifying potential candidates for Board membership, the Nominating Committee considers recommendations from directors, stockholders, management and others, including, from time to time, third-party search firms to assist it in locating qualified candidates. Once potential director candidates are identified, the committee, with the assistance of management, undertakes a vetting process that considers each candidate's background, independence and fit with the Board's priorities. As part of this vetting process, the committee, as well as other members of the Board and the CEO, may conduct interviews with the candidates. If the committee determines that a potential candidate meets the needs of the Board and has the desired qualifications, it recommends the candidate to the full Board for appointment or nomination and to the stockholders for election at the annual meeting.

Criteria for Board Membership

In assessing potential candidates for Board membership and in assessing Board composition, the Nominating Committee considers a wide range of factors, including directors' experience, knowledge, integrity, understanding of our business environment and specific skills they may possess that are helpful to the Company (including leadership experience, financial expertise and industry knowledge). The committee generally believes that it is important for all Board members to possess the following qualifications:

- The candidate shall have experience at a strategic or policymaking level in a business, government, non-profit or academic organization of high standing.
- The candidate shall be highly accomplished in his or her respective field, with superior credentials and recognition.
- The candidate shall be well regarded in the community and shall have a long-term reputation for high ethical and moral standards.
- The candidate shall have sufficient time and availability to devote to the affairs of the Company, particularly in light of the number of boards of directors on which such candidate may serve.
- To the extent such candidate serves or has previously served on other boards, the candidate shall have a demonstrated history of actively contributing at board meetings.

The Nominating Committee seeks to balance the experiences, skills and characteristics represented on the Board and does not assign specific weight to any of these factors.

The Nominating Committee considers a potential director candidate's ability to contribute to the diversity of occupations, perspectives and backgrounds on the Board, including with respect to skills, experiences, gender,

race, ethnic and national background, geography, age and sexual orientation. The Nominating Committee assesses its effectiveness in balancing these considerations in connection with its annual evaluation of the composition of the Board. For example, our current Board of seven directors includes two directors (28%) who self-identify as female and one director (14%) who self-identifies as a member of the LGBTQ+ community.

Stockholder Recommendations for Directors

It is the Nominating Committee's policy to consider written recommendations from stockholders for director candidates. The committee considers candidates recommended by our stockholders in the same manner as a candidate recommended by other sources. Any such recommendations should be submitted to the committee as described under "Stockholder Communications" not less than 120 days prior to the date on which the Company's proxy statement was released to the stockholders in connection with the previous year's annual meeting and should include the following information: (i) the name and address of record of the stockholder; (ii) a representation that the stockholder is a record holder of the Company's securities, or if the stockholder is not a record holder, evidence of ownership in accordance with Rule 14a-8(b)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); (iii) the name, age, business and residential address, educational background, current principal occupation or employment, and principal occupation or employment for the preceding five full fiscal years of the proposed director candidate; (iv) a description of the qualifications and background of the proposed director candidate which addresses the minimum qualifications and other criteria for Board membership approved by the Board from time to time and set forth in the Corporate Governance Guidelines; (v) a description of all arrangements or understandings between the stockholder and the proposed director candidate; (vi) the consent of the proposed director candidate (1) to be named in the proxy statement relating to the Company's annual meeting of stockholders and (2) to serve as a director if elected at such annual meeting; and (vii) any other information regarding the proposed director candidate that is required to be included in a proxy statement filed pursuant to the rules of the SEC.

Director Time Commitments

While Board members benefit from service on the boards of other companies and such service is encouraged, under the Board's Corporate Governance Guidelines, directors are expected to limit the number of other boards on which they serve so as not to interfere with their service as a director of the Company. In this regard, the Company has adopted specific limits on the number of other public company boards upon which a director may sit. Ordinarily, directors may not serve on the boards of more than five public companies and directors who are executive officers of public companies, including the Company's President and CEO, may not serve on the board of more than three public companies, including the Company's Board. As part of the annual director nomination process, the Nominating Committee considers directors' adherence to these expectations, and directors are expected to notify the Chair of the Nominating Committee before accepting a seat on the board of another corporation.

Board Leadership Structure

Mr. Harwin serves as our independent Chairman while Mr. Robbins serves as our President and CEO. Our Corporate Governance Guidelines provide our Board with the flexibility to combine or separate the positions of Chairman and CEO. Currently, the Board believes that the roles of Chairman and CEO should be separate and that the Chairman should be an independent director as this structure enables our independent Chairman to oversee corporate governance matters and our CEO to focus on leading the Company's business.

The independent directors have the opportunity to meet in executive sessions without management present at every regular Board meeting and at such other times as may be determined by the Chairman. The purpose of these executive sessions is to encourage and enhance communication among the independent directors.

The Board believes that its programs for overseeing risk, as described under "Board Risk Oversight," would be effective under a variety of leadership frameworks. Accordingly, the Board's risk oversight function did not significantly impact its selection of the current leadership structure.

Director Independence

Nasdaq listing rules require a majority of a listed company's board of directors to be comprised of independent directors who, in the opinion of the board of directors, do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Subject to specified exceptions, each member of a listed company's audit, compensation and nominating committees must be independent, and audit and compensation committee members must satisfy additional independence criteria under the Exchange Act.

Our Board undertook a review of its composition and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, our Board has determined that each of our current directors listed under "Information Regarding Director Nominees and Continuing Directors," with the exception of Andrew Robbins, is an "independent director" as defined under the Nasdaq listing rules. Mr. Robbins is not an independent director because he is our CEO. In making such determinations, our Board considered the relationships that each such non-employee director has with our Company and all other facts and circumstances our Board deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director. Our Board also determined that each of the directors currently serving on the Audit Committee and the Compensation Committee satisfy the additional independence criteria applicable to directors on such committees under Nasdaq listing rules and the rules and regulations established by the SEC.

Board Committees

Our Board has a separately designated Audit Committee, Compensation Committee, Nominating Committee and Science Committee, each of which is comprised solely of independent directors with the membership and responsibilities described below. Members serve on these committees until their resignation or until otherwise determined by our Board. Other than the Science Committee, each of these committees is empowered to retain outside advisors as it deems appropriate, regularly reports its activities to the full Board, and has a written charter which is posted on our website located at *https://investors.cogentbio.com/*, under "Corporate Governance."

Name	Audit Committee	Compensation Committee	Nominating Committee	Science Committee
Andrew Robbins				
Chris Cain, Ph.D.		X		Chair
Karen Ferrante, M.D.			Chair	X
Peter Harwin			X	X
Arlene M. Morris	X	Chair		
Matthew E. Ros	X		X	
Todd Shegog	Chair	X		
# of Meetings in 2024	4	6	4	4

Audit Committee. The primary responsibilities of our Audit Committee are to oversee the accounting and financial reporting processes of the Company and its subsidiaries, including the audits of the Company's financial statements, the integrity of the financial statements and the annual review of the performance, effectiveness and independence of the outside auditor. This includes reviewing the financial information provided to stockholders and others and the adequacy and effectiveness of the Company's internal controls. The committee also makes recommendations to the Board as to whether financial statements should be included in the Company's Annual Report on Form 10-K.

Mr. Shegog qualifies as an "audit committee financial expert," as that term is defined in the rules and regulations established by the SEC, and all members of the Audit Committee are "financially literate" under Nasdaq listing rules.

Compensation Committee. The primary responsibilities of our Compensation Committee are to periodically review and approve, or recommend to the Board for review and approval, where appropriate, the compensation and other benefits for our senior officers and directors. This includes reviewing and approving corporate goals and objectives relevant to the compensation of our senior officers, evaluating the performance of these officers in light of the goals and objectives, and setting the officers' compensation based on those evaluations. The committee also administers and makes recommendations to the Board regarding equity incentive plans that are subject to the Board's approval and approves the grant of equity awards under the plans. For compensation matters and equity grants to our CEO and Board members, the committee makes recommendations to the Board, and the Board is responsible for reviewing and approving all such matters.

The Compensation Committee may delegate its authority to one or more subcommittees. The committee may also delegate authority to review and approve the compensation of our employees to certain of our executive officers. Even where the committee does not delegate authority, our executive officers will typically make recommendations to the committee regarding compensation to be paid to our employees and the size of equity awards under our equity incentive plans, but will not be present during voting or deliberations on their own compensation. The committee has the authority to engage outside advisors, such as compensation consultants, to assist it in carrying out its responsibilities. The committee engaged Compensia, Inc. ("Compensia") in 2024 to provide advice regarding the amount and form of executive and director compensation. The committee has determined that (1) the compensation consultant satisfies applicable independence criteria and (2) the compensation consultant's work with the Company does not raise any conflicts of interest, in each case under applicable Nasdaq listing rules and the rules and regulations established by the SEC.

Compensation Committee Interlocks and Insider Participation. None of the members of our Compensation Committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board or compensation committee of any entity that has one or more executive officers serving on our Board or Compensation Committee.

Nominating Committee. The primary responsibilities of our Nominating Committee are to engage in succession planning for the Board, develop and recommend to the Board criteria for identifying and evaluating qualified director candidates, and make recommendations to the Board regarding candidates for election or reelection to the Board at each annual stockholders' meeting. In addition, the committee is responsible for overseeing our corporate governance practices and making recommendations to the Board concerning corporate governance matters. The committee is also responsible for making recommendations to the Board concerning the structure, composition and functioning of the Board and its committees.

Science Committee. The Science Committee assists our Board in overseeing that our research and development function is optimized to support our strategic goals, including to review and monitor the science, technology, process, procedures and infrastructure underlying our major discovery and development programs. The Science Committee makes recommendations to the Board regarding research and development strategies and opportunities.

Board Risk Oversight

We believe that risk management is an important part of establishing and executing on the Company's business strategy. Our Board, as a whole and at the committee level, focuses its oversight on the most significant risks facing the Company and on the Company's processes to identify, prioritize, assess, manage and mitigate those risks. The committees oversee specific risks within their purview, as follows:

- **The Audit Committee** has overall responsibility for overseeing the Company's practices with respect to risk assessment and management. Additionally, the committee is responsible for overseeing management of risks related to our accounting and financial reporting processes, and, as detailed in our Annual Report on Form 10-K, information technology and cybersecurity.

- **The Compensation Committee** is responsible for overseeing management of risks related to our compensation policies and programs.
- **The Nominating Committee** is responsible for overseeing management of risks related to director succession planning and corporate governance practices.

Our Board and its committees receive regular reports from members of the Company's senior management on areas of material risk to the Company, including strategic, operational, financial, information technology and cybersecurity, and legal and regulatory risks. While our Board has an oversight role, management is principally tasked with direct responsibility for assessing and managing risks, including implementing processes and controls to mitigate their effects on the Company.

Other Corporate Governance Practices and Policies

Director Attendance

During the year ended December 31, 2024, the Board met seven times and acted by unanimous written consent three times. During 2024, each current member of the Board attended at least 75% of the aggregate number of meetings of the Board and the committees on which he or she served during the period in which he or she was on the Board or committee. Directors are encouraged to attend the annual meeting of stockholders. All of our directors then serving on the Board attended the 2024 Annual Meeting of Stockholders.

Stockholder Communications

Stockholders and other interested parties may communicate with our Board or a particular director by sending a letter addressed to the Board or a particular director to our Corporate Secretary at the address set forth on the first page of this Proxy Statement. These communications will be compiled and reviewed by our Corporate Secretary, who will determine whether the communication is appropriate for presentation to the Board or the particular director. The purpose of this screening is to allow the Board to avoid having to consider irrelevant or inappropriate communications (such as advertisements, solicitations and hostile communications).

To enable the Company to speak with a single voice, as a general matter, senior management serves as the primary spokesperson for the Company and is responsible for communicating with various constituencies, including stockholders, on behalf of the Company. Directors may participate in discussions with stockholders and other constituencies on issues where Board-level involvement is appropriate. In addition, the Board is kept informed by senior management of the Company's stockholder engagement efforts.

Code of Business Conduct and Ethics

Our Board has adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A current copy of the code is available on our website located at *https://investors.cogentbio.com/*, under "Corporate Governance." We intend to disclose amendments to the code, or waivers of its requirements, on our website to the extent required by applicable rules.

Director Compensation

Non-Employee Director Compensation Policy

We adopted a policy for compensating our non-employee directors with a cash retainer for service on the Board and for service on each committee on which the director is a member. The chairman of each committee receives a higher retainer for such service. These fees are payable in arrears in four equal quarterly installments on the last day of each quarter, provided that the amount of such payment is prorated for any portion of such quarter that the director is not serving on our Board. The Compensation Committee periodically reviews compensation paid to our non-employee directors, considering input from the Compensation Committee's independent compensation consultant, and makes recommendations for adjustments, as appropriate, to the full Board. In January 2025, the Board reviewed the outside director compensation program and determined that no changes were needed in order to maintain compensation levels for our non-employee directors at the 50th percentile of our peer companies. The fees payable to non-employee directors for service on the Board and for service on each committee of the Board on which the director was a member in 2024 are as follows:

	Annual Retainer
Board of Directors:	
All non-employee directors	$45,000
Additional retainer for Non-Executive Chairman of the Board	$35,000
Audit Committee:	
Chairman	$20,000
Non-Chairman members	$10,000
Compensation Committee:	
Chairman	$15,000
Non-Chairman members	$ 7,500
Nominating Committee:	
Chairman	$10,000
Non-Chairman members	$ 5,000
Science Committee:	
Chairman	$15,000
Non-Chairman members	$ 7,500

We also reimburse our non-employee directors for reasonable travel and out-of-pocket expenses incurred in connection with attending any in-person Board and committee meetings.

Pursuant to our director compensation policy, directors are given the opportunity to elect to receive all or a portion of their retainer and committee fees in the form of an equity award of: (a) unrestricted shares having a grant date fair value equal to the amount (or portion thereof) of such retainer and committee fees or (b) fully vested stock options to purchase common stock based on the Black-Scholes option-pricing model as of the date of grant. Any such election must be made: (i) for any continuing non-employee director, before the start of the calendar year with respect to any cash compensation for such calendar year and (ii) for any new non-employee director, within 30 days of her or his election to the Board. Any such stock options are fully vested upon grant and expire ten years from the date of grant.

In addition, our director compensation policy provides that each new non-employee director elected to our Board receives an initial, one-time stock option grant to purchase 89,400 shares of our common stock (the "Initial Award"), which vests in equal monthly installments over three years, subject to continued service as a member of the Board. In addition, each continuing non-employee director, other than a director receiving an Initial Award, receives, at the time of the Company's annual meeting, an annual equity grant of options to purchase 44,700 shares of our common stock, which vests in full upon the earlier of the first anniversary of the date of grant or the date of the Company's next annual meeting of stockholders, subject to continued service as a

member of the Board through such date. This program is intended to provide a total compensation package that enables us to attract and retain qualified and experienced individuals to serve as directors and to align our directors' interests with those of our stockholders.

Fiscal Year 2024 Director Compensation Table

The table below shows all compensation paid to or earned in 2024 by our non-employee directors. Executives who serve as directors do not receive any compensation for service as a director. The compensation received by Mr. Robbins for his service to us during 2024 as our Chief Executive Officer is presented in the 2024 Summary Compensation Table in "Executive Compensation" below.

Name	Fees Earned or Paid in Cash ($)[1]	Option Awards ($)[2][3]	Total ($)
Chris Cain, Ph.D.[4]	$67,500	$289,562	$357,062
Karen Ferrante, M.D.	$62,500	$289,562	$352,062
Peter Harwin[4]	$92,500	$289,562	$382,062
Arlene M. Morris	$70,000	$289,562	$359,562
Matthew E. Ros	$60,000	$289,562	$349,562
Todd Shegog	$72,500	$289,562	$362,062

(1) Amounts represent fees earned in cash for services rendered by each member of the Board. Dr. Ferrante elected to receive her cash compensation in the form of fully vested options to purchase our common stock.

(2) Amounts shown reflect the grant date fair value of option awards granted during 2024. The grant date fair value was computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Compensation – Stock Compensation ("ASC Topic 718"), disregarding the effect of estimated forfeitures related to service-based vesting. See Note 7 to the financial statements in the Company's Annual Report on Form 10-K regarding assumptions we made in determining the fair value of option awards.

(3) As of December 31, 2024, our non-employee directors held outstanding options to purchase the following number of shares of common stock: Dr. Cain – 179,265, Dr. Ferrante – 262,770, Mr. Harwin – 179,265, Ms. Morris – 182,848, Mr. Ros – 243,160 and Mr. Shegog – 172,100.

(4) All or a portion of such director's fees is remitted directly to Fairmount and such director is obligated to turn over to Fairmount any net cash or stock received from the options pursuant to their arrangement with Fairmount. The director disclaims beneficial ownership of the options and underlying shares.

CORPORATE RESPONSIBILITY

Corporate responsibility matters are a priority to us. Our Nominating Committee oversees this commitment, our corporate responsibility initiatives and progress towards related goals and targets. Our current corporate responsibility focus areas are as follows:

Our Patients

Our mission is to deliver the next best-in-class therapy for patients with genetically defined diseases – to move beyond incremental improvements and solely treating symptoms, to address the real causes of disease. We are methodical, rational and intentional in our approach to identify pragmatic solutions to complex health challenges with the goal of restoring health and allowing patients to live better, longer lives. In pursuing our mission, patient safety is of the utmost importance. We follow the International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use ("ICH") guidelines on Good Clinical Practice ("GCP") and the ethical principles that have their origin in the Declaration of Helsinki in designing and conducting our clinical trials. Our protocols are approved by national and local bodies and all of our participants undergo thorough and informed consent processes. Furthermore, we provide travel reimbursement to help reduce barriers so that patients with all backgrounds are able to participate in our clinical trials.

Our Workforce

We believe that our future success largely depends upon our continued ability to attract and retain a group of highly skilled employees. We provide our employees with competitive salaries and bonuses, opportunities for equity ownership, development programs that enable continued learning and growth and a robust employment package that promotes well-being across all aspects of their lives, including health care, retirement planning and paid time off.

Our Environment

We currently lease our office facilities and lab spaces. Nonetheless, we periodically review our environmental impact and consider opportunities to optimize our operations. We are committed to the responsible management of hazardous materials and lab waste and have various initiatives in place to foster a more sustainable and safer environment. Our corporate headquarters are located at 275 Wyman St. in Waltham, Massachusetts, which has a LEED Platinum certification. Our research team and laboratory facilities are located at 4840 Pearl East Circle in Boulder, Colorado, which is Boulder's first LEED-EB (Existing Building) certified building. Our Boulder research facility uses a system that recovers energy from the lab exhaust to precondition the air supplied to the labs thereby reducing the energy needed to heat and cool them. At both of our facilities, we have implemented robust composting and recycling programs, including recycling of lab-specific plastic waste streams in Boulder that are not accepted by the municipal program, and we aim to reduce our water use and consumption of single-use plastics. We also provide certain commuter benefits, including bike-to-work and public transportation subsidies, and have a flexible work-from-home program for certain roles to help reduce carbon emissions.

Our Community

We are committed to the communities in which we operate. The Company and our employees participate in multiple charitable endeavors each year. We also believe it is important to invest in the next generation of scientists, and we have engaged with local schools and students in the Boston and Boulder areas to facilitate interest in the science and technology fields.

EXECUTIVE OFFICERS

Biographical and other information regarding our executive officers is set forth below. There are no family relationships among any of our directors or executive officers.

Name	Age (as of April 22)	Position
Andrew Robbins[1]	49	Chief Executive Officer, President and Director
John Green	44	Chief Financial Officer
Evan Kearns	44	Chief Legal Officer and Corporate Secretary
Cole Pinnow	50	Chief Commercial Officer
John Robinson, Ph.D.	51	Chief Scientific Officer
Jessica Sachs, M.D.	50	Chief Medical Officer

(1) For Mr. Robbins's biographical information, see "Information Regarding Director Nominees and Continuing Directors" above.

John Green. Mr. Green has served as our Chief Financial Officer, principal accounting officer and principal financial officer since July 2020. Prior to his promotion, Mr. Green was our Vice President of Finance and Controller from April 2018 to June 2020. Mr. Green brings nearly 20 years of strategic finance and accounting experience to his position, nearly half of which has been in the biotechnology industry for both public and private companies. Prior to joining the Company, Mr. Green served as Principal Accounting Officer at Merrimack Pharmaceuticals, Inc. (formerly, Nasdaq: MACK), a biopharmaceutical company, from March 2017 to June 2018. From November 2015 to March 2017, he served as the Controller at Fractyl Laboratories, Inc., a medical technology company. From June 2014 to November 2015, Mr. Green served as Director of Accounting at Dicerna Pharmaceuticals, Inc. (formerly, Nasdaq: DRNA), a biopharmaceutical company. Mr. Green is a Chartered Professional Accountant and holds a B.S. in Chemistry and Biology from Acadia University.

Evan Kearns. Mr. Kearns has served as our Chief Legal Officer and Corporate Secretary since May 2021 and is responsible for the Company's legal and compliance functions. Mr. Kearns has nearly 20 years of experience in and serving the biotechnology industry. Prior to joining the Company, Mr. Kearns served as Vice President, General Counsel, Corporate Secretary and Chief Compliance Officer at Agenus Inc. (Nasdaq: AGEN), a biotechnology company, from July 2018 to April 2021, where he was responsible for corporate and securities law matters, as well as M&A, financing and licensing transactions and corporate governance matters. From December 2017 to July 2018, he served as Vice President, Associate General Counsel at Agenus in a similar capacity. Before joining Agenus, he served as a life sciences corporate associate in the Boston office of Goodwin Proctor LLP, an international law firm. Mr. Kearns received his J.D. from the University of Toledo College of Law and his B.A. in Economics from Colby College.

Cole Pinnow. Mr. Pinnow has served as our Chief Commercial Officer since May 2024. Prior to joining the Company, he served at Pfizer Inc. (NYSE: PFE), a biopharmaceutical company, as the Global Franchise Lead for its Genitourinary, Lung and/or Breast Oncology Businesses from May 2022 to May 2024. In this role, he oversaw the global launch and lifecycle strategy for various products. Before that, he served as President of Pfizer Canada from January 2020 to May 2022, where he was accountable for the company's operations within Canada, including sales, marketing, access and government relations. He led Pfizer Canada's Essential Health and Hospital Businesses from May 2018 to December 2019. From September 2015 to April 2018, he also served as Vice President of a U.S. commercial business unit at Pfizer. From May 2004 to September 2015, Mr. Pinnow held management positions at Hospira, Inc., a global pharmaceutical and medical device company. He holds an M.B.A. from the University of Chicago Booth School of Business, an M.S. in Microbiology from Iowa State University, and a Bachelor's Degree in Biology from St. Olaf College.

John Robinson, Ph.D. Dr. Robinson has served as our Chief Scientific Officer since April 2021. He has over 20 years of small molecule drug discovery experience. Prior to joining the Company, Dr. Robinson served

as Vice President of Medicinal Chemistry at Pfizer Boulder Research and Development, a drug discovery and development center, from July 2019 to March 2021, where he was responsible for leading the medical chemistry small molecule research team. From December 2002 to July 2019, he served in a variety of scientific and leadership positions at Array BioPharma Inc., a biopharmaceutical company, including most recently as Executive Director and Head of Chemistry. Dr. Robinson received his B.S. in Biochemistry from Indiana University of Pennsylvania and his Ph.D. in Synthetic Organic Chemistry from the University of Delaware.

Jessica Sachs, M.D. Dr. Sachs has served as our Chief Medical Officer since June 2019. Prior to assuming this role, she served as our Vice President of Clinical Sciences from April 2017 to June 2019, and she was responsible for the clinical development strategy and medical and translational oversight of the Cogent portfolio. Dr. Sachs has over 20 years of experience in oncology and pediatrics. From 2012 to April 2017, Dr. Sachs served as Senior Medical Director of Clinical Research at Takeda Pharmaceutical Company Limited (NYSE: TAK), a global biopharmaceutical company, where she led multiple clinical programs in oncology and transplantation. From 2010 to 2012, Dr. Sachs was Associate Director at Genzyme Corporation, a biotechnology company, where she was responsible for post-marketing safety surveillance and risk management activities for a variety of oncology products. Dr. Sachs has been a faculty member of the Harvard Medical School since 2007 and is an Assistant in Pediatrics in the Division of Pediatric Hematology/Oncology at the Massachusetts General Hospital. She completed her fellowship in pediatric hematology and oncology at the Dana Farber Cancer Institute and Children's Hospital Boston. Dr. Sachs received her M.D. from Washington University in St. Louis and her B.S. from Duke University.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

In this Compensation Discussion and Analysis ("CD&A"), we provide an overview of our compensation philosophy and each element of our executive compensation program with regard to the compensation awarded to, earned by, or paid to our named executive officers ("NEOs") during our fiscal year ended December 31, 2024.

For the fiscal year ended December 31, 2024, our NEOs were:

Name	Position
Andrew Robbins	Chief Executive Officer
John Green	Chief Financial Officer
Jessica Sachs, M.D.	Chief Medical Officer
John Robinson, Ph.D.	Chief Scientific Officer
Cole Pinnow	Chief Commercial Officer

Business Highlights

We are a clinical-stage biotechnology company focused on developing precision therapies for genetically defined diseases. Our approach is to design rational precision therapies that treat the underlying cause of disease and improve the lives of patients. Our most advanced program is bezuclastinib, also known as CGT9486, a highly selective tyrosine kinase inhibitor that is being studied in patients with Systemic Mastocytosis ("SM") and advanced gastrointestinal stromal tumors ("GIST"). Fiscal year 2024 business highlights include:

The advancement of three registrational clinical trials with bezuclastinib: We are on track to report top-line results ("TLR") from all three clinical trials with bezuclastinib in the second half of 2025 and expect to file our first New Drug Application by year-end 2025 for patients with SM.

- *Phase 3 PEAK Trial:* PEAK is a randomized, open-label, global Phase 3 clinical trial evaluating bezuclastinib in combination with sunitinib vs. sunitinib alone in GIST patients previously treated with imatinib. In 2024, we completed enrollment ahead of schedule, with 413 patients enrolled, and we expect to report TLR by the end of 2025.
- *Phase 2 SUMMIT Trial:* SUMMIT is a randomized, blinded, global, registration-directed clinical trial evaluating bezuclastinib vs. placebo in patients with non-advanced SM. In 2024, we completed enrollment ahead of schedule, with 179 patients enrolled, and we expect to report TLR in July 2025. We presented updated positive clinical data at the American Academy of Allergy, Asthma & Immunology conference in February 2024 and at the 2024 American Society of Hematology ("ASH") annual meeting in December 2024. We also announced our alignment with the U.S. Food and Drug Administration on our novel PROM (MS2D2) for use in Part 2 of the SUMMIT trial.
- *Phase 2 APEX Trial:* APEX is our registration-directed global, open-label, multi-center, Phase 2 clinical trial in patients with advanced SM evaluating the safety, efficacy, pharmacokinetic, and pharmacodynamic profiles of bezuclastinib. We completed enrollment in APEX Part 2 in the first quarter of 2025, and we expect to report TLR in the second half of 2025. In addition, we presented updated positive clinical data at the 2024 ASH annual meeting in December 2024.

The advancement of our research pipeline: In 2024, we initiated a Phase 1 clinical study of our FGFR2 program, a novel asset internally-developed by our Cogent Research Team. In addition, we initiated Investigational New Drug Application ("IND")-enabling studies for our novel, ErbB2 mutant program, which is focused on actionable and underserved mutations in a variety of solid tumor indications. We also selected a clinical candidate for our PI3Ka program and initiated IND-enabling studies. In addition, we announced the addition of a new named program for a potent and selective KRAS inhibitor.

Strengthened balance sheet: In February 2024, we completed a successful, over-subscribed private placement, with net proceeds of approximately $213.3 million after deducting placement fees and offering costs. We also extended our cash runway, which we believe will be sufficient to fund our operating expenses and capital expenditure requirements through clinical readouts from our ongoing SUMMIT, PEAK and APEX registration-directed trials and into late 2026.

Strengthened management team: We rounded out our executive leadership team with the appointment of Cole Pinnow as our Chief Commercial Officer, as we begin our efforts to prepare for commercial readiness.

Stockholder Outreach

Stockholder Advisory Vote on Executive Compensation

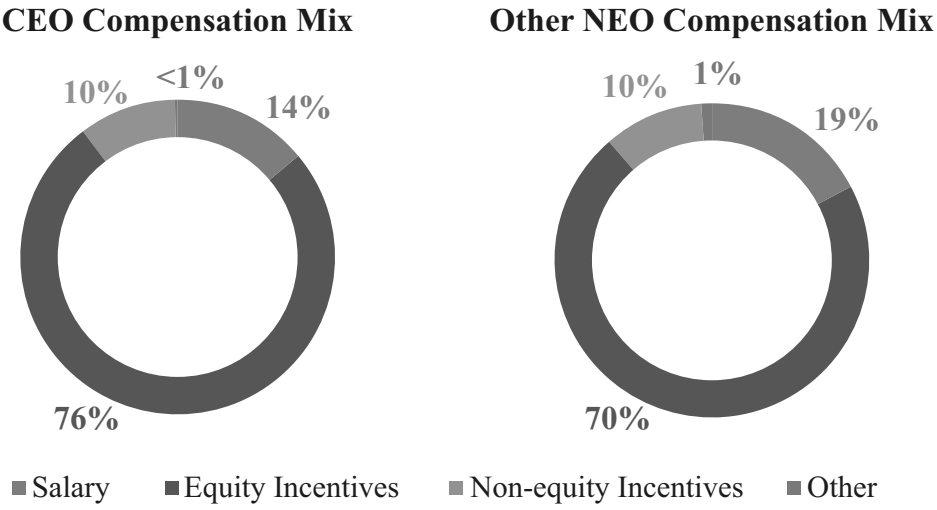
Each year, our stockholders are provided the opportunity to cast an advisory vote on the compensation of our named executive officers (the "say-on-pay" vote) and the Compensation Committee considers the outcome of the prior year's say-on-pay vote when making decisions relating to the compensation of our named executive officers and our executive compensation programs. We received 91% support for our say-on-pay proposal at our 2024 Annual Meeting of Stockholders, representing strong support of our executive compensation programs. We did not make any changes to our executive compensation programs as a result of the say-on-pay vote.

Compensation Highlights

Our Compensation Committee believes that executive compensation should be directly linked to short-term and long-term performance. A few of the key decisions made by the Compensation Committee aligned with such philosophy are as follows:

- ***Modest base salary adjustments:*** Base salary increases for our named executive officers (excluding Mr. Pinnow who joined the Company in May 2024) ranged from 4% to 5%. Salary increases were generally based on competitive market positioning and take into account individual responsibilities, performance and experiences.
- ***Annual bonuses linked to pre-determined milestone performance goals:*** Annual bonuses for our named executive officers paid out at 115% of target based on the achievement of the corporate performance goals.
- ***Annual stock option grants at the 50th percentile of peer group:*** After making one-time grants of performance-based restricted stock units (PSUs) in 2023 intended to align our long-term equity incentive program more closely with that of our peer companies and to provide a retention incentive, in 2024 our named executive officers received only stock option grants generally at the 50th percentile of our peer group (with the exception of Mr. Pinnow, who received both PSUs and stock options in connection with his commencement of employment).

- ***Pay mix is highly "at risk":*** The percentage of pay that is "at risk" for our CEO and other named executive officers is 86% and 81%, respectively, helping us align pay with performance.



Compensation Philosophy and Objectives

Our executive officer compensation program focuses on attracting, retaining and rewarding executive officers in order to promote our long-term success. In setting compensation levels and designing the elements of our program, we seek to establish overall compensation levels that are internally equitable and competitive with the talent market. We review our executive officer compensation program on an annual basis with the goal of motivating our executive team to achieve our strategic goals and aligning them with the interests of our stockholders. In particular, we seek to:

- align the base salary and target annual incentive compensation of our executive officers with market practices by targeting the 50th percentile of our peer group;
- focus a significant portion of our executive officers' compensation on short-term and long-term incentive; and
- provide balanced incentives that motivate our executives to achieve our short-term and long-term goals without incentivizing executives to take excessive risks.

The Compensation Committee has historically compensated executive officers with three primary compensation components: a base salary, an annual bonus opportunity, and equity-based compensation. The Compensation Committee believes that cash compensation in the form of base salary and an annual bonus opportunity provides our executive officers with short-term rewards for success in achieving annual goals and objectives, and that long-term compensation through the award of stock options and PSUs aligns the objectives of management with those of our stockholders with respect to long-term performance and success of the Company.

In setting compensation levels for our executive officers, the Compensation Committee considers a variety of factors, including peer group survey data, tenure, role, responsibilities, performance, and competitive market practices. Compensation paid to our named executive officers is delivered primarily through at-risk pay, based on both short-term and long-term incentives.

In addition to our compensation elements, the following compensation program features are designed to align our executive team's interests with stockholder interests and market best practices.

Best Practice Highlights

✓ ***Use of Independent Compensation Consultant:*** The Compensation Committee receives objective advice from its independent compensation consultant.

✓ ***No Perquisites in 2024:*** We generally do not provide perquisites and, consistent with such approach, our NEOs did not receive any perquisites in 2024.

✓ ***Clawback Policy:*** The Board has adopted a clawback policy applicable to all incentive payments and performance-based equity awards granted to executive officers.

✓ ***Peer Group Analysis:*** The Company reviews total direct compensation (base salary, annual cash incentive and long-term incentive payments) and the mix of the compensation components for the named executive officers relative to the peer group as one of the factors in determining if compensation is adequate to attract and retain executive officers.

✓ ***No Hedging:*** The Company has adopted a policy prohibiting hedging of Company stock.

✓ ***No Excise Tax Gross-Ups:*** Our named executive officers are not entitled to any such gross-up.

Process for Setting Compensation

Our Board and Compensation Committee review compensation practices and philosophy annually for all employees, including our executives. In setting executive base salaries and bonuses and granting equity incentive awards, they consider compensation for comparable positions in the market, the historical compensation levels of our executives, individual performance as compared to our expectations and objectives, our desire to motivate our employees to achieve short- and long-term results that are in the best interests of our stockholders and our desire to incentivize a long-term commitment to our Company. While we do not establish compensation levels based solely on benchmarking, pay practices at other companies are an important factor that the Compensation Committee considers in assessing the reasonableness of compensation and ensuring that our compensation practices are competitive in the marketplace, and we generally target the 50th percentile of our peer group, based on independent third-party benchmark analytics to inform the mix of compensation of base salary, bonus and long-term incentives.

Our Compensation Committee is responsible for approving all executive compensation matters, and in the case of our CEO, recommends to the Board for approval, as appropriate. Our Compensation Committee reviews and discusses management's proposed compensation with the CEO for all executives other than the CEO. Based on those discussions and its discretion, taking into account the factors noted above, the Compensation Committee then determines the compensation for each executive officer, and in the case of the CEO, recommends to the Board for approval, as appropriate. In 2024, the Compensation Committee retained the services of Compensia as its external compensation consultant, and the Board and the Compensation Committee considered Compensia's input on certain compensation matters as they deemed appropriate. Pursuant to the factors set forth in Item 407 of Regulation S-K of the Exchange Act, the Compensation Committee has reviewed the independence of Compensia and conducted a conflicts of interest assessment (taking into consideration factors specified in the Nasdaq listing standards) and has concluded that Compensia is independent and its work for the Compensation Committee has not raised any conflicts of interest. No other fees were paid to Compensia except fees related to its services to the Compensation Committee.

Use of a Peer Group

While we do not establish compensation levels based solely on benchmarking, pay practices at other companies are an important factor that the Compensation Committee considers in assessing the reasonableness of compensation and ensuring that our compensation practices are competitive in the marketplace. Market data is one element considered by the Compensation Committee when making executive compensation decisions, but

the Compensation Committee does not set compensation levels based solely on market data. Rather, the Compensation Committee reviews the 25th, 50th and 75th percentiles of relevant market data as one frame of reference in making its executive compensation decisions. Final executive compensation decisions reflect a variety of factors, including each executive's experience, performance rating, and the relative importance of the executive's role within the organization, as well as where each executive's pay level falls relative to the market data.

In order to evaluate the level of compensation for our named executive officers for 2024, our Compensation Committee, using information provided by Compensia, established a peer group of publicly traded companies in the biotechnology and pharmaceutical industries generally based on a balance of the following criteria, with certain limited exceptions such as for foreign companies and companies we consider to be close competitors who may fall outside the criteria below:

- companies that are headquartered in the United States;
- companies with comparable market capitalizations (i.e., in the range of $424M to $3.9B);
- companies that are generally in clinical development-stage and in Phase 2 or Phase 3 trials; and
- companies with headcounts generally between 100 to 650 employees.

Our 2024 peer group is comprised of the following companies in the biotechnology and pharmaceutical industries:

Arcus Biosciences, Inc.
Allogene Therapeutics, Inc.
Arvinas, Inc.
Bicycle Therapeutics plc
Blueprint Medicines Corporation
Celldex Therapeutics, Inc.
Day One Biopharmaceuticals, Inc.
Deciphera Pharmaceuticals, Inc.
Erasca, Inc.
IGM Biosciences, Inc.
Iovance Biotherapeutics, Inc.
Kiniksa Pharmaceuticals, Ltd.
Kura Oncology, Inc.
Nuvalent, Inc.
Relay Therapeutics, Inc.
Repare Therapeutics, Inc.
Revolution Medicines, Inc.
SpringWorks Therapeutics, Inc.
Syndax Pharmaceuticals, Inc.
Xencor, Inc.
Zentalis Pharmaceuticals, Inc.

Key Elements of Compensation

Base Salary

Each named executive officer's base salary is a fixed component of annual compensation for performing specific duties and functions, and has been established by our Board taking into account each individual's role, responsibilities, skills and experience. Base salaries for our named executive officers are reviewed annually by our Compensation Committee, typically in connection with our annual performance review process, and adjusted from time to time, based on the recommendation of the Compensation Committee, to realign salaries with market levels after taking into account individual responsibilities, performance and experiences. For 2024, base salary increases for the NEOs (excluding Mr. Pinnow, who first joined the Company in May 2024) ranged from 4% to 5% after consideration of the foregoing factors. The 2024 base salaries of our NEOs are set forth in the table below:

Name	2024 Base Salary	2023 Base Salary	Percentage Change
Andrew Robbins	$692,000	$656,098	5%
John Green	$490,025	$471,178	4%
Jessica Sachs	$527,436	$507,150	4%
John Robinson	$510,775	$491,130	4%
Cole Pinnow	$460,000	N/A	N/A

Annual Bonus

Our Board or Compensation Committee may approve annual bonuses for our named executive officers based on Company performance as compared to the goals and objectives established by the Board at the beginning of each year or as otherwise determined appropriate.

All executive officers are assigned annual bonus targets, expressed as a percent of base salary, based on each executive officer's accountability, scope of responsibilities, and potential impact on performance, as well as peer group competitive data for similarly situated positions. For 2024, target bonuses were slightly adjusted for Drs. Sachs and Robinson after consideration of the foregoing factors. The table below sets forth the target bonus for each NEO for 2024 and 2023:

Name	2024 Target Bonus (% of Base Salary)	2023 Target Bonus (% of Base Salary)
Andrew Robbins	60%	60%
John Green	40%	40%
Jessica Sachs	45%	40%
John Robinson	45%	40%
Cole Pinnow	40%	N/A

Payments under the annual bonus plan in 2024 were based on achievement of the performance goals and weightings listed below, with each goal allowing for a threshold achievement (70% payout), target achievement (100% payout) and upside achievement (130% payout). The table below sets forth the performance goal categories and relative weightings:

Performance Goals	Relative Weighting
Continue to advance our research and discovery programs	30%
Complete enrollment of our bezuclastinib registrational trials	60%
Strengthen balance sheet and maintain cash runway through clinical readouts	10%
Total:	100%

In establishing these goals, the Board selected performance goals that it considered aggressive, meaning that they are goals that were considered achievable, but only with a high degree of diligence and success in execution.

In assessing performance against goals, the Compensation Committee reviewed each goal and determined whether or not it was achieved. For all goals combined, the Compensation Committee determined an overall 115% achievement for fiscal year 2024, resulting in the Compensation Committee approving the following bonuses for performance in 2024:

Name	2024 Bonus Earned	Bonus Achieved (as % of Target)
Andrew Robbins	$477,480	115%
John Green	$225,412	115%
Jessica Sachs	$272,948	115%
John Robinson	$264,326	115%
Cole Pinnow	$127,769[(1)]	115%

(1) Payout was pro-rated based on Mr. Pinnow's start date in May 2024.

Mr. Pinnow also received a one-time sign-on bonus in connection with his commencement of employment in 2024 in order to attract Mr. Pinnow to join the Company.

Long-Term Incentive Compensation

Our equity grant program is intended to recognize the contributions of our named executive officers to the achievement of corporate objectives, to align their interests with those of our stockholders by creating value tied to the performance of our stock price, and for retention purposes. In determining the form and value of an annual grant, the Compensation Committee considers the contributions and responsibilities of each executive officer, appropriate incentives for the achievement of our long-term growth, the size and value of grants made to other executives at peer companies holding comparable positions, individual achievement of designated performance goals, and our overall performance relative to corporate objectives. The Compensation Committee also may grant equity awards to new executive officer hires or special awards upon promotion or for retention. We generally grant annual equity awards in the first quarter of each year. Annual stock option grants were awarded to our named executive officers (other than Mr. Pinnow) and such awards vest monthly over a four-year period, subject to continued service through each such vesting date. As a material inducement to Mr. Pinnow's commencement of employment, in May 2024, Mr. Pinnow received a grant of stock options and PSUs. The PSUs granted to Mr. Pinnow are subject to the same terms and conditions as the one-time PSU grants made to our other named executive officers in 2023. As described in last year's proxy statement, our named executive officers can earn between 0% and 200% of the target amount of their PSU award based on achievement of specified stock price hurdles and/or research and development milestones over a performance period ending in February 2026. The PSUs were considered a one-time award as part of an incentive and retention program for the Company's senior leadership team through an important three-year period, and the Board believes that the PSU program is closely aligned with stockholder interests given that the vast majority of the program is directly tied to significant stock price appreciation. The table below indicates the target and maximum number of shares that each named executive officer could earn subject to achievement of the performance goals:

Name	Target PSUs	Max PSUs
Andrew Robbins	420,000	840,000
John Green	150,000	300,000
Jessica Sachs	160,000	320,000
John Robinson	160,000	320,000
Cole Pinnow	108,000	214,000

Any PSUs earned during the performance period based on the achievement of the stock price hurdles and/or research and development milestones will vest, if at all, in a single tranche in February 2026 subject to continued employment through such date, provided that, in the event of a termination without "cause" or for "good reason" (each as defined in the NEOs' employment agreements) during the performance period, any PSUs that have been earned prior to such termination will accelerate and vest and the remainder will be forfeited.

In the event of a "change in control" (as defined in the NEOs' employment agreements) transaction during the performance period, subject to continued employment through the date of such change in control, there will be acceleration of vesting of the PSUs based on the price per share paid in such transaction, up to the maximum number of PSUs set forth above.

Other Elements of Compensation

Benefits and Perquisites

We typically do not provide perquisites to our named executive officers that are not available generally to all of our full-time employees, and in 2024 none of our named executive officers received any special perquisites. All of our full-time employees, including our named executive officers, are eligible to participate in certain medical, disability and life insurance benefit programs offered by us. We pay the premiums for term life insurance and long-term disability for all of our employees, including our named executive officers. We also provide all employees, including named executive officers, with a flexible spending account plan, an employee stock purchase plan and paid time off benefits, including vacation, sick time and holidays. We also maintain the

Cogent Biosciences, Inc. 401(k) Plan, a tax-qualified retirement plan for our employees. The 401(k) Plan is intended to qualify under Section 401(k) of the Internal Revenue Service Code of 1986, as amended (the "Code"), so that contributions to the 401(k) Plan by employees or by us, and the investment earnings thereon, are not taxable to the employees until withdrawn from the 401(k) Plan, and so that contributions by us, if any, will be deductible by us when made. Under the 401(k) Plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit and to have the amount of such reduction contributed to the 401(k) Plan. We currently match 100% of an employee's contributions to the 401(k) Plan up to 4% of an employee's compensation. We do not sponsor any qualified or non-qualified defined benefit plans for any of our employees or executives. In 2021, we adopted a nonqualified deferred compensation plan pursuant to which eligible participants, including our named executive officers, may elect to defer a portion of their eligible compensation. None of the NEOs have participated in the plan.

Employment Agreements

Each of the Company's NEOs is covered by an employment agreement providing for a minimum annual level of salary, target incentives, eligibility for long-term incentives, and benefit eligibility. The agreements also provide for a severance benefit in the event of a termination of employment without "cause" or for "good reason," as such terms are defined in the agreements. It is the Compensation Committee's belief that the employment agreements are necessary from a competitive perspective and contribute to the stability of the management team.

Insider Trading Policies and Prohibitions on Derivatives, Hedging Monetization and Other Transactions

We have adopted insider trading policies and procedures governing the purchase, sale and other transactions in Company securities or securities of related companies by the Company's directors, officers, employees and designated consultants and contractors, and by the Company itself, that we believe are reasonably designed to promote compliance with insider trading laws, rules and regulations and Nasdaq listing standards.

Our insider trading policy prohibits certain transactions in our securities (such as purchases and sales of publicly traded put and call options, and short sales) that create a heightened compliance risk or could create the appearance of misalignment between management and stockholders. In addition, securities held in a margin account or pledged as collateral may be sold without consent if the owner fails to meet a margin call or defaults on the loan, thus creating the risk that a sale may occur at a time when an officer or director is aware of material, non-public information or otherwise is not permitted to trade in Company securities. Our insider trading policy expressly prohibits short sales of our stock by our executive officers, directors and certain designated employees. Our insider trading policy also expressly prohibits purchases or sales of puts, calls or other derivative securities of the Company or any derivative securities or any hedging transactions that provide the economic equivalent of ownership.

Other Policies

Clawback Policy

In October of 2023, we adopted a clawback policy intended to comply with the requirements of Nasdaq Listing Standard 5608 implementing Rule 10D-1 under the Exchange Act. In the event the Company is required to prepare an accounting restatement of the Company's financial statements due to material non-compliance with any financial reporting requirement under the federal securities laws, the Company will seek to recover, on a reasonably prompt basis, the excess incentive-based compensation received by any covered executive, including our named executive officers, during the prior three fiscal years that exceeds the amount that the executive otherwise would have received had the incentive-based compensation been determined based on the restated financial statements.

Practices on Timing of Equity Awards

We do not have any program, plan or obligation that requires us to grant equity awards on specified dates. We also do not have any program, plan or practice to time award dates of stock option grants to our executive officers in coordination with the release of material nonpublic information and do not take material nonpublic information into account when determining the timing and terms of equity awards. Equity awards may occasionally be granted following a significant change in job responsibilities or to meet special retention or performance objectives. During 2024, the Compensation Committee did not time the disclosure of material nonpublic information for the purpose of affecting the value of executive compensation.

Tax Deductibility of Compensation

As one of the factors in the review of compensation matters, the Compensation Committee considers the anticipated tax treatment to the Company. Under Section 162(m) of the Code, a limitation exists on the deductibility of compensation paid to certain "covered employees," including all of our NEOs, in excess of $1 million per year and, thus, we are unable to deduct compensation payable to our NEOs in excess of such limit. While the Compensation Committee considers the impact of this tax treatment, the primary factors influencing program design are the support of our business objectives and the Compensation Committee's commitment to structuring the Company's executive compensation programs in a manner designed to align pay with performance. Accordingly, the Compensation Committee retains flexibility to structure our compensation programs in a manner that is not tax-deductible in order to achieve a strategic result that the Compensation Committee determines to be more appropriate.

Risk Management

During fiscal year 2024, the Company conducted its annual review of executive and non-executive compensation programs, with particular emphasis on incentive compensation plans and programs. Based on this review, the Company evaluated the primary components of its compensation plans and practices to identify whether those components, either alone or in combination, properly balanced compensation opportunities and risk. As part of this inventory, several factors were noted that reduce the likelihood of excessive risk taking. These factors include: (1) balancing performance focus between near-term objectives and longer-term strategic initiatives; (2) issuing annual equity awards that vest over multiyear time horizons; and (3) maintaining a clawback policy applicable to our executive officers. Furthermore, the Compensation Committee retains its own independent compensation consultant to provide input on executive pay matters, meets regularly, and approves all performance goals, award vehicles, and pay opportunity levels for named executive officers (other than the CEO, in which case the Compensation Committee makes recommendations for approval by the full Board). As a result of this evaluation, the Company concluded that risks arising from the Company's compensation policies and practices are not reasonably likely to have a material adverse impact on the Company.

Report of the Compensation Committee

The Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K. Based on this review and discussion, the Compensation Committee recommended to the Board of Directors that the foregoing Compensation Discussion and Analysis be included in this Proxy Statement and incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended December 31, 2024.

Submitted by the Compensation Committee of the Board of Directors:

Arlene M. Morris (Chair)
Chris Cain, Ph.D.
Todd Shegog

2024 Summary Compensation Table

The following table summarizes the compensation awarded to, earned by or paid to our NEOs for 2024, 2023 and 2022.

Name and Principal Position	Year	Salary ($)	Non-Equity Incentive Plan Compensation ($)	Bonus ($)	Option Awards ($)[1]	Stock Awards ($)[2]	All Other Compensation ($)[3]	Total ($)
Andrew Robbins	2024	692,000	477,480	—	3,734,610	—	13,800	4,917,890
Chief Executive Officer	2023	656,098	—	393,659	4,962,615	1,873,200	13,200	7,898,772
	2022	624,283	—	344,920	3,409,773	—	12,200	4,391,176
John Green	2024	490,025	225,412	—	1,018,530	—	13,800	1,747,767
Chief Financial Officer								
Jessica Sachs	2024	527,436	272,948	—	1,018,530	—	13,800	1,832,714
Chief Medical Officer	2023	507,150	—	253,575	1,512,416	713,600	13,200	2,999,941
	2022	482,558	—	177,744	1,235,425	—	12,200	1,907,927
Cole Pinnow	2024	265,385	127,769	50,000	3,263,610	262,980	—	3,969,744
Chief Commercial Officer								
John Robinson	2024	510,775	264,326	—	1,018,530	—	13,800	1,807,431
Chief Scientific Officer	2023	491,130	—	245,565	1,512,416	713,600	13,200	2,975,911
	2022	454,178	—	167,348	1,235,425	—	12,200	1,869,151

(1) Amounts reflect the grant-date fair value of option awards granted in 2024, 2023 and 2022 in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Compensation – Stock Compensation ("ASC Topic 718") disregarding the effect of any estimated forfeitures related to service-vesting conditions. For information regarding assumptions underlying the valuation of equity awards, see Note 7 to the financial statements in the Company's Annual Report on Form 10-K. These amounts do not correspond to the actual value that may be recognized by the executives upon exercise of the options.

(2) Amounts reflect the grant-date fair value of performance-based restricted stock units ("PSUs") granted in 2024 and 2023 in accordance with ASC Topic 718. For information regarding assumptions underlying the valuation of equity awards, see Note 7 to the financial statements in the Company's Annual Report on Form 10-K. These amounts do not correspond to the actual value that may be recognized by the executives upon vesting of the awards. The value of the PSU awards granted in 2024, assuming achievement of the maximum performance level, would have been: Mr. Pinnow: $1,112,780.

(3) Represents the value of 401(k) contributions made by the Company.

2024 Grants of Plan-Based Awards Table

The following table sets forth the grants of plan-based awards made to our NEOs during 2024.

		Estimated Future Payments Under Non-Equity Incentive Plan Awards			Estimated Future Payments Under Equity Incentive Plan Awards					
Name	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Threshold (#)	Target (#)	Maximum (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards ($)
Andrew Robbins	N/A	—	415,200	—	—	—	—	—	—	—
	1/23/2024	—	—	—	—	—	—	1,100,000	4.63	3,734,610
John Green	N/A	—	196,010	—	—	—	—	—	—	—
	1/23/2024	—	—	—	—	—	—	300,000	4.63	1,018,530
Jessica Sachs, M.D.	N/A	—	237,346	—	—	—	—	—	—	—
	1/23/2024	—	—	—	—	—	—	300,000	4.63	1,018,530
John Robinson, Ph.D.	N/A	—	229,849	—	—	—	—	—	—	—
	1/23/2024	—	—	—	—	—	—	300,000	4.63	1,018,530
Cole Pinnow	N/A	—	111,104	—	—	—	—	—	—	—
	5/25/2024	—	—	—	54,000	108,000	214,000	—	—	262,980
	5/25/2024	—	—	—	—	—	—	525,000	8.22	3,263,610

Outstanding Equity Awards at 2024 Fiscal Year End Table

The following table sets forth information regarding outstanding equity awards at the end of 2024 for each of our NEOs.

		Option Awards				Stock Awards	
Name	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that Have Not Vested ($)[4]
Andrew Robbins	10/23/2020	1,860,605	—	$ 11.16	10/22/2030	—	—
	12/7/2020	456,693	—	$ 12.76	12/6/2030	—	—
	2/10/2021	302,067	13,133[1]	$ 10.17	2/9/2031	—	—
	1/25/2022	503,125	186,875[1]	$ 7.60	1/24/2032		—
	2/13/2023	240,625	284,375[1]	$ 13.63	2/12/2033	—	—
	6/7/2023	—	—	—	—	420,000[2]	3,276,000
	1/23/2024	252,083	847,917[1]	$ 4.63	1/22/2034	—	—
John Green	5/7/2020	27,867	—	$ 1.67	5/6/2030	—	—
	10/13/2020	173,925	—	$ 11.56	10/12/2030	—	—
	2/10/2021	366,128	15,918[1]	$ 10.17	2/9/2031	—	—
	1/25/2022	164,063	60,937[1]	$ 7.60	1/24/2032	—	—
	2/13/2023	68,750	81,250[1]	$ 13.63	2/12/2033	—	—
	6/7/2023	—	—	— —	—	150,000[2]	1,170,000
	1/23/2024	68,750	231,250[1]	$ 4.63	1/22/2034	—	—
Jessica Sachs, M.D.	5/7/2020	99,472	—	$ 1.67	5/6/2030	—	—

		Option Awards				Stock Awards	
Name	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that Have Not Vested ($)[4]
	2/1/2021	383,333	16,667[3]	$ 9.10	1/31/2031	—	—
	2/10/2021	121,229	5,271[1]	$10.17	2/9/2031	—	—
	1/25/2022	182,292	67,708[1]	$ 7.60	1/24/2032	—	—
	2/13/2023	73,333	86,667[1]	$13.63	2/12/2033	—	—
	6/7/2023	—	—	—	—	160,000[2]	1,248,000
	1/23/2024	68,750	231,250[1]	$ 4.63	1/22/2034	—	—
John Robinson, Ph.D.	3/31/2021	468,750	31,250[3]	$ 8.78	3/30/2031	—	—
	1/25/2022	182,292	67,708[1]	$ 7.60	1/24/2032	—	—
	2/13/2023	73,333	86,667[1]	$13.63	2/12/2033	—	—
	6/7/2023	—	—	—	—	160,000[2]	1,248,000
	1/23/2024	68,750	231,250[1]	$ 4.63	1/22/2034	—	—
Cole Pinnow	05/25/2024	—	525,000[3]	$ 8.22	05/24/2034	108,000[2]	842,400

(1) Stock options vest in equal monthly installments over a four-year period, subject to continuous service with us.

(2) Represent the achievement of the target amount of each PSU award based on achievement of the specified stock price hurdles and/or research and development milestones over a three-year performance period ending February 2026. Any PSUs earned during the performance period will vest, if at all, in a single tranche in February 2026, subject to continuous service with us.

(3) Stock options vest over four years, with 25% of the shares vesting on the first anniversary of the grant date, and the remaining shares vesting in 36 equal monthly installments thereafter, subject to continuous service with us.

(4) The market value of unvested shares is calculated by multiplying the number of unvested shares by the closing market price of our common stock on Nasdaq on December 31, 2024, the last trading day of the year, which was $7.80 per share.

Option Exercises and Stock Vested Table

There were no option awards exercised or stock awards vested for our named executive officers during fiscal 2024.

Potential Payments on Termination or Change in Control

The table below reflects the amount of compensation that would become payable to each of the named executive officers under existing plans and arrangements if that named executive officer's employment had terminated on December 31, 2024 (pursuant to the executive's employment agreement then in effect) and/or a change in control had occurred on such date, given the named executive officer's compensation levels as of such date and, if applicable, based on the Company's closing stock price on that date of $7.80. These benefits are in addition to benefits available prior to the occurrence of any termination of employment, including benefits generally available to salaried employees, such as distributions under the Company's 401(k) plan. The actual amounts that would be paid upon a named executive officer's termination of employment can be determined only at the time of such named executive officer's separation from the Company. Due to the number of factors that affect the nature and amount of any benefits provided upon the events discussed below, any actual amounts paid or distributed may be higher or lower than reported below.

Andrew Robbins. Pursuant to the terms of his employment agreement, if Mr. Robbins's employment is terminated by the Company without cause (as defined in his employment agreement) or by Mr. Robbins for good reason (as defined in his employment agreement), Mr. Robbins will receive any base salary through the date of termination, unpaid expense reimbursements, unused vacation accrued through the date of termination, if such termination occurs on or between January 1 and March 14 and annual incentive compensation for the prior year has not yet been paid, an amount equal to 100% of Mr. Robbins's target bonus for the prior year, a pro-rated target bonus for the year of termination, and any vested benefits under any employee benefit plan through the date of termination. Additionally, subject to Mr. Robbins's execution of a release of potential claims against the Company, Mr. Robbins will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a monthly cash payment for 12 months for medical and dental benefits or Mr. Robbins's COBRA health continuation period, whichever ends earlier, (iii) a lump sum in cash in an amount equal to 100% of Mr. Robbins's target bonus for the then-current year, and (iv) acceleration of vesting on any time-based options in which Mr. Robbins would have vested if he had remained employed for an additional 12 months and acceleration of any PSUs earned prior to such termination. However, in the event that Mr. Robbins's employment is terminated by the Company without cause, or Mr. Robbins terminates his employment with the Company for good reason, in either case for a period of 90 days prior to or 12 months following the occurrence of a change in control (as defined in his employment agreement), in lieu of the severance payments and benefits described in the preceding sentence and subject to Mr. Robbins's execution of a release of potential claims against the Company, Mr. Robbins will be entitled to receive: (i) a lump sum in cash in an amount equal to 18 months of base salary, (ii) a lump sum in cash in an amount equal to 150% of Mr. Robbins's target bonus for the then-current year, (iii) a monthly cash payment for 18 months for medical and dental benefits or Mr. Robbins's COBRA health continuation period, whichever ends earlier and (iv) acceleration of vesting on all equity awards (provided that any outstanding performance-based awards will be deemed achieved at target levels, other than the PSUs, for which all of the research and development milestones will be deemed achieved and the achievement of the stock price hurdles will be dependent upon the per share value in the change in control transaction).

John Green. Pursuant to the terms of his employment agreement, if Mr. Green's employment is terminated by the Company without cause (as defined in his employment agreement) or by Mr. Green for good reason (as defined in his employment agreement), Mr. Green will receive any base salary through the date of termination, unpaid expense reimbursements, unused vacation accrued through the date of termination, if such termination occurs on or between January 1 and March 14 and annual incentive compensation for the prior year has not yet been paid, an amount equal to 100% of Mr. Green's target bonus for the prior year, and any vested benefits under any employee benefit plan through the date of termination. Additionally, subject to Mr. Green's execution of a release of potential claims against the Company, Mr. Green will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a monthly cash payment for nine months for medical and dental benefits or Mr. Green's COBRA health continuation period, whichever ends earlier, (iii) a lump sum in cash in an amount equal to Mr. Green's target bonus for the then-current year pro-rated based on the portion of the year that Mr. Green was employed, and (iv) acceleration of vesting on any time-based options in which Mr. Green would have vested if he had remained employed for an additional nine months and acceleration of any PSUs earned prior to such termination . However, in the event that Mr. Green's employment is terminated by us without cause, or Mr. Green terminates his employment with us for good reason, in either case within 12 months following the occurrence of a change in control (as defined in his employment agreement), in lieu of the severance payments and benefits described in the preceding sentence and subject to Mr. Green's execution of a release of potential claims against us, Mr. Green will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a lump sum in cash in an amount equal to 100% of Mr. Green's target bonus for the then-current year, (iii) a monthly cash payment for 12 months for medical and dental benefits or Mr. Green's COBRA health continuation period, whichever ends earlier and (iv) acceleration of vesting on all equity awards (provided that any outstanding performance-based awards will only accelerate to the extent the applicable performance goals have been achieved, other than the PSUs, for which all of the research and development milestones will be deemed achieved and the achievement of the stock price hurdles will be dependent upon the per share value in the change in control transaction).

Jessica Sachs, M.D. Pursuant to the terms of her employment agreement, if Dr. Sachs's employment is terminated by us without cause (as defined in her employment agreement) or by Dr. Sachs for good reason (as defined in her employment agreement), Dr. Sachs will receive any base salary through the date of termination, unpaid expense reimbursements, unused vacation accrued through the date of termination, if such termination occurs on or between January 1 and March 14 and annual incentive compensation for the prior year has not yet been paid, an amount equal to 100% of Dr. Sachs's target bonus for the prior year, and any vested benefits under any employee benefit plan through the date of termination. Additionally, subject to Dr. Sachs's execution of a release of potential claims against us, Dr. Sachs will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a monthly cash payment for nine months for medical and dental benefits or Dr. Sachs's COBRA health continuation period, whichever ends earlier, (iii) a lump sum in cash in an amount equal to Dr. Sachs' target bonus for the then-current year pro-rated based on the portion of the year that Dr. Sachs was employed, and (iv) acceleration of vesting on any time-based equity awards in which Dr. Sachs would have vested if she had remained employed for an additional nine months and acceleration of any PSUs earned prior to such termination. However, in the event that Dr. Sachs's employment is terminated by us without cause, or Dr. Sachs terminates her employment with us for good reason, in either case within 12 months following the occurrence of a change in control (as defined in her employment agreement), in lieu of the severance payments and benefits described in the preceding sentence and subject to Dr. Sachs's execution of a release of potential claims against us, Dr. Sachs will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a lump sum in cash in an amount equal to 100% of Dr. Sachs's target bonus for the then-current year, (iii) a monthly cash payment for 12 months for medical and dental benefits or Dr. Sachs's COBRA health continuation period, whichever ends earlier and (iv) acceleration of vesting on all equity awards (provided that any outstanding performance-based awards will only accelerate to the extent the applicable performance goals have been achieved, other than the PSUs, for which all of the research and development milestones will be deemed achieved and the achievement of the stock price hurdles will be dependent upon the per share value in the change in control transaction).

John Robinson, Ph.D. Pursuant to the terms of his employment agreement, if Dr. Robinson's employment is terminated by us without cause (as defined in his employment agreement) or by Dr. Robinson for good reason (as defined in his employment agreement), Dr. Robinson will receive any base salary through the date of termination, unpaid expense reimbursements, unused vacation accrued through the date of termination, if such termination occurs on or between January 1 and March 14 and annual incentive compensation for the prior year has not yet been paid, an amount equal to 100% of Dr. Robinson's target bonus for the prior year, and any vested benefits under any employee benefit plan through the date of termination. Additionally, subject to Dr. Robinson's execution of a release of potential claims against us, Dr. Robinson will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a monthly cash payment for nine months for medical and dental benefits or Dr. Robinson's COBRA health continuation period, whichever ends earlier, (iii) a lump sum in cash in an amount equal to Dr. Robinson's target bonus for the then-current year pro-rated based on the portion of the year that Dr. Robinson was employed, and (iv) acceleration of vesting on any time-based equity awards in which Dr. Robinson would have vested if he had remained employed for an additional nine months and acceleration of any PSUs earned prior to such termination. However, in the event that Dr. Robinson's employment is terminated by us without cause, or Dr. Robinson terminates his employment with us for good reason, in either case within 12 months following the occurrence of a change in control (as defined in his employment agreement), in lieu of the severance payments and benefits described in the preceding sentence and subject to Dr. Robinson's execution of a release of potential claims against us, Dr. Robinson will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a lump sum in cash in an amount equal to 100% of Dr. Robinson's target bonus for the then-current year, (iii) a monthly cash payment for 12 months for medical and dental benefits or Dr. Robinson's COBRA health continuation period, whichever ends earlier and (iv) acceleration of vesting on all equity awards (provided that any outstanding performance-based awards will only accelerate to the extent the applicable performance goals have been achieved, other than the PSUs, for which all of the research and development milestones will be deemed achieved and the achievement of the stock price hurdles will be dependent upon the per share value in the change in control transaction).

Cole Pinnow. Pursuant to the terms of his employment agreement, if Mr. Pinnow's employment is terminated by us without cause (as defined in his employment agreement) or by Mr. Pinnow for good reason (as defined in his employment agreement), Mr. Pinnow will receive any base salary through the date of termination, unpaid expense reimbursements, unused vacation accrued through the date of termination, if such termination occurs on or between January 1 and March 14 and annual incentive compensation for the prior year has not yet been paid, an amount equal to 100% of Mr. Pinnow's target bonus for the prior year, and any vested benefits under any employee benefit plan through the date of termination. Additionally, subject to Mr. Pinnow's execution of a release of potential claims against us, Mr. Pinnow will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a monthly cash payment for nine months for medical and dental benefits or Mr. Pinnow's COBRA health continuation period, whichever ends earlier, (iii) a lump sum in cash in an amount equal to Mr. Pinnow's target bonus for the then-current year pro-rated based on the portion of the year that Mr. Pinnow was employed, and (iv) acceleration of vesting on any time-based equity awards in which Mr. Pinnow would have vested if he had remained employed for an additional nine months and acceleration of any PSUs earned prior to such termination. However, in the event that Mr. Pinnow's employment is terminated by us without cause, or Mr. Pinnow terminates his employment with us for good reason, in either case within 12 months following the occurrence of a change in control (as defined in his employment agreement), in lieu of the severance payments and benefits described in the preceding sentence and subject to Mr. Pinnow's execution of a release of potential claims against us, Mr. Pinnow will be entitled to receive: (i) a lump sum in cash in an amount equal to 12 months of base salary, (ii) a lump sum in cash in an amount equal to 100% of Mr. Pinnow's target bonus for the then-current year, (iii) a monthly cash payment for 12 months for medical and dental benefits or Mr. Pinnow's COBRA health continuation period, whichever ends earlier and (iv) acceleration of vesting on all equity awards (provided that any outstanding performance-based awards will only accelerate to the extent the applicable performance goals have been achieved, other than the PSUs, for which all of the research and development milestones will be deemed achieved and the achievement of the stock price hurdles will be dependent upon the per share value in the change in control transaction).

Upon the occurrence of a change in control transaction, the PSUs will be subject to acceleration as described above in the Compensation Discussion and Analysis under the heading "Long-Term Incentive Compensation."

Potential Payments Upon Termination or Change in Control Table

Name	Involuntary Termination (Without Cause or for Good Reason) Not in Connection with a Change in Control ($)	Involuntary Termination in Connection with a Change in Control ($)	Change in Control ($)
Andrew Robbins			
Base Salary	692,000	1,038,000	—
Healthcare	15,685	23,528	—
Bonus	415,200	622,800	—
Option Awards	3,104,884	6,568,461	—
PSUs	1,092,000	1,638,000	1,638,000
Total	5,319,769	9,890,789	1,638,000
John Green			
Base Salary	490,025	490,025	—
Healthcare	11,764	15,685	—
Bonus	196,010	196,010	—
Option Awards	732,421	1,948,977	—
PSUs	390,000	585,000	585,000
Total	1,820,220	3,235,697	585,000
Jessica Sachs, M.D.			
Base Salary	527,436	527,436	—
Healthcare	11,764	15,685	—

Name	Involuntary Termination (Without Cause or for Good Reason) Not in Connection with a Change in Control ($)	Involuntary Termination in Connection with a Change in Control ($)	Change in Control ($)
Bonus	237,346	237,346	—
Option Awards	808,313	2,072,417	—
PSUs	416,000	624,000	624,000
Total	2,000,859	3,476,884	624,000
John Robinson, Ph.D.			
Base Salary	510,775	510,775	—
Healthcare	11,764	15,685	—
Bonus	229,849	229,849	—
Option Awards	894,816	2,127,560	—
PSUs	416,000	624,000	624,000
Total	2,063,204	3,507,869	624,000
Cole Pinnow			
Base Salary	460,000	460,000	—
Healthcare	11,764	15,685	—
Bonus	184,000	184,000	—
Option Awards	1,087,870	3,263,610	—
PSUs	280,800	421,200	421,200
Total	2,024,434	4,344,495	421,200

CEO PAY RATIO

Pursuant to Item 402(u) of Regulation S-K, we are required to calculate and disclose the median of the annual total compensation of all of our employees (excluding our CEO, Mr. Robbins), the annual total compensation of Mr. Robbins, and the ratio of these two amounts.

Our median employee was identified using the entire population of our employees as of December 31, 2024 (201 employees), excluding our sole employee who resides outside of the United States in the United Kingdom, based on a consistently applied compensation measure, or CACM, that reasonably reflects the annual compensation of our employees. The CACM selected by us for our disclosure included annual base salary and the target cash bonus amount for fiscal 2024, annualized for any permanent employees who were employed for less than the full year.

Based on the CACM methodology described above, we identified the median employee and calculated the fiscal 2024 compensation for this selected employee in the same manner we determine the annual total compensation of our NEOs for purposes of the Summary Compensation Table. The median of the annual total compensation of all our employees was $258,662. Mr. Robbins's fiscal 2024 annual total compensation as disclosed in the 2024 Summary Compensation Table was $4,917,890. As a result, our CEO to median employee pay ratio for fiscal 2024 is 19:1.

This pay ratio is a reasonable estimate calculated by a method consistent with the SEC requirements, described above, based on our payroll and employment records. As a result of a variety of factors, including employee populations, potential differences in the components used for the CACM, compensation philosophies and certain assumptions, pay ratios reported by other companies may not be comparable to our pay ratio. The pay ratio is not utilized by our management or our Compensation Committee for compensation-related decisions.

PAY VERSUS PERFORMANCE

As required by Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(v) of Regulation S-K, we are providing the following information about the relationship between executive compensation actually paid and certain financial performance of the Company.

Year	Summary Compensation Table Total for PEO[1]	Compensation Actually Paid to PEO[2]	Average Summary Compensation Table Total for Non-PEO NEOs[3]	Average Compensation Actually Paid to Non-PEO NEOs[4]	Value of Initial Fixed $100 Investment Based On:		Net Loss (in thousands)[7]	Company Stock Price
					Total Shareholder Return ("TSR")[5]	Peer Group TSR[6]		
2024	$ 4,917,890	$ 11,879,571	$2,339,414	$3,889,688	$ 90.91	$91.15	$(255,859)	$ 7.80
2023	$ 7,898,772	($ 201,504)	$2,987,926	$ 473,046	$ 68.53	$92.42	$(192,410)	$ 5.88
2022	$ 4,391,176	$ 9,821,916	$1,888,539	$3,210,146	$134.73	$89.09	$(140,241)	$11.56

1 The dollar amounts reported are the amounts of total compensation reported in our Summary Compensation Table.

2 The dollar amounts reported represent the amount of "compensation actually paid," as computed in accordance with SEC rules. The dollar amounts do not reflect the actual amount of compensation earned by or paid during the applicable year. In accordance with SEC rules, these amounts reflect "Total Compensation" as set forth in the Summary Compensation Table for each year, adjusted as shown below for the most recent fiscal year. Equity values are calculated in accordance with ASC Topic 718, and the valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of grant.

Compensation Actually Paid to PEO	2024($)
Summary Compensation Table Total	$ 4,917,890
Less, value of "Stock Awards" and "Option Awards" reported in Summary Compensation Table	(3,734,610)
Plus, year-end fair value of outstanding and unvested equity awards granted in the year	4,942,668
Plus, fair value as of vesting date of equity awards granted and vested in the year	1,652,148
Plus (less), year over year change in fair value of outstanding and unvested equity awards granted in prior years	2,084,417
Plus (less), change in fair value from prior fiscal year end to vesting date of equity awards granted in prior years that vested in the year	2,017,058
Less, prior year-end fair value for any equity awards forfeited in the year	—
Compensation Actually Paid to PEO	11,879,571

3 The dollar amounts reported represent the average of the amounts reported for the Company's named executive officers (NEOs) as a group (excluding our CEO) in the "Total" column of the Summary Compensation Table in each applicable year. The names of each of the NEOs (excluding our CEO) included for purposes of calculating the average amounts in each applicable year are Mr. Green, Dr. Sachs, Dr. Robinson and Mr. Pinnow for 2024 and Drs. Sachs and Robinson for both 2023 and 2022.

4 The dollar amounts reported represent the average amount of "compensation actually paid" to the NEOs as a group (excluding our CEO), as computed in accordance with SEC rules. The dollar amounts do not reflect the actual average amount of compensation earned by or paid to the NEOs as a group (excluding our CEO) during the applicable year. In accordance with the SEC rules, these amounts reflect "Total" as set forth in the Summary Compensation Table for each year, adjusted as shown below for the most recent fiscal year. Equity values are calculated in accordance with ASC Topic 718, and the valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of the grant.

Average Compensation Actually Paid to Non-PEO NEOs	2024($)
Average Summary Compensation Table Total	$ 2,339,414
Less, average value of "Stock Awards" and "Option Awards" reported in Summary Compensation Table	(1,645,545)
Plus, average year-end fair value of outstanding and unvested equity awards granted in the year	1,891,641
Plus, average fair value as of vesting date of equity awards granted and vested in the year	337,940
Plus (less), average year over year change in fair value of outstanding and unvested equity awards granted in prior years	573,134
Plus (less), average change in fair value from prior fiscal year end to vesting date of equity awards granted in prior years that vested in the year	393,104
Less, prior year-end fair value for any equity awards forfeited in the year	—
Average Compensation Actually Paid to Non-PEO NEOs	3,889,688

[5] Cumulative TSR is calculated by dividing the sum of the cumulative amount of dividends for the measurement period, assuming dividend reinvestment, and the difference between the Company's stock price at the end and the beginning of the measurement period by the Company's stock price at the beginning of the measurement period. The beginning of the measurement period for each year in the table is December 31, 2021.

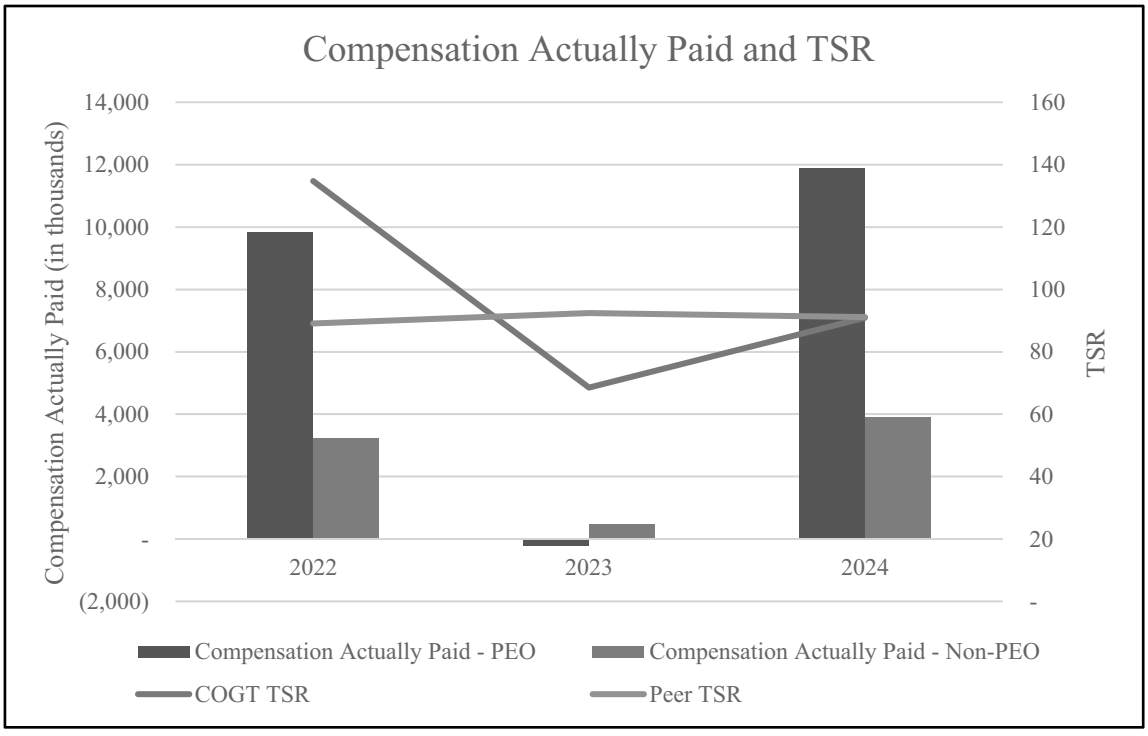
[6] The peer group used for this purpose is the Nasdaq Biotechnology Index.

[7] The dollar amounts reported represent the amount of net income reflected in the Company's audited financial statements for the applicable year.

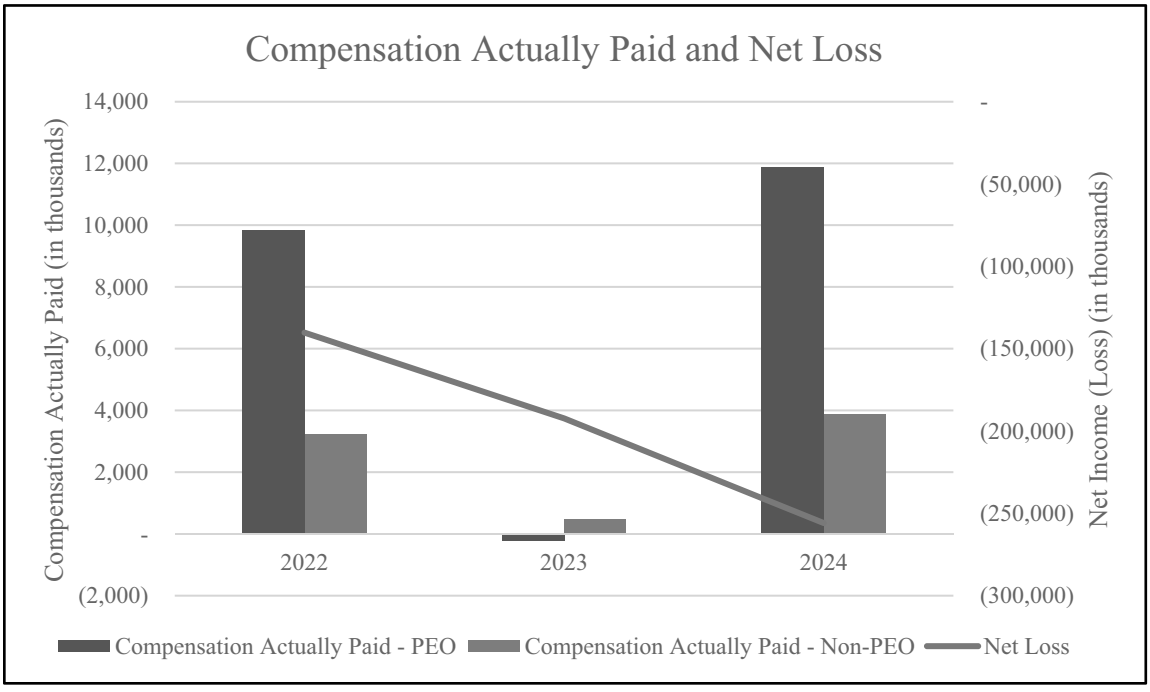
Analysis of the Information Presented in the Pay versus Performance Table

Our executive compensation program reflects a variable pay-for-performance philosophy. While we utilize several performance measures to align executive compensation with Company performance, all of those Company measures are not presented in the Pay versus Performance table. Moreover, we generally seek to incentivize long-term performance, and therefore do not specifically align the Company's performance measures with compensation that is actually paid (as computed in accordance with SEC rules) for a particular year. In accordance with SEC rules, we are providing the following descriptions of the relationships between information presented in the Pay versus Performance table.

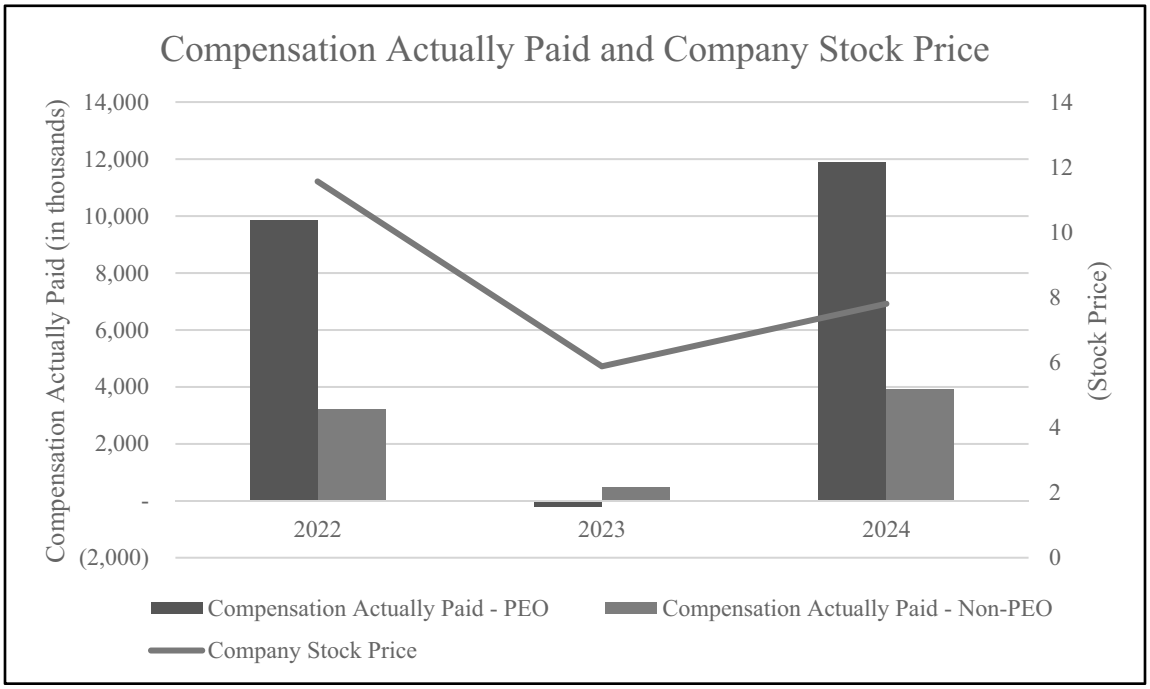
Compensation Actually Paid, Cumulative TSR, and Peer Group TSR



Compensation Actually Paid and Net Loss



Compensation Actually Paid and Company Stock Price



Financial Performance Measures

As described in greater detail in the Compensation Discussion and Analysis section, the Company's executive compensation program reflects a variable pay-for-performance philosophy. The metrics that the Company uses for both our long-term and short-term incentive awards are selected based on an objective of incentivizing our NEOs to increase the value of our enterprise for our stockholders. Other than stock price performance, the Company does not currently use any financial performance measures to link executive compensation actually paid to our performance. However, in addition to stock price performance, the other most important performance measures used by the Company to link executive compensation actually paid to the Company's NEOs, for the most recently completed fiscal year, to the Company's performance are as set forth above under the heading, "Compensation Discussion and Analysis." The most important financial performance measure used to link executive compensation actually paid to performance is:

- stock price performance.

CERTAIN INFORMATION ABOUT OUR COMMON STOCK

Security Ownership of Certain Beneficial Owners and Management

The following table presents information regarding beneficial ownership of our common stock as of April 14, 2025 by:

- each stockholder or group of stockholders known by us to be the beneficial owner of more than 5% of our outstanding common stock;
- each of our directors and nominees;
- each of our NEOs; and
- all of our current directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. Under such rules, beneficial ownership includes any shares of common stock over which the individual or entity has sole or shared voting power or investment power, as well as any shares of common stock that the individual or entity has the right to acquire within 60 days after April 14, 2025. To our knowledge and subject to applicable community property rules, and except as otherwise indicated below, the persons and entities named in the table have sole voting and sole investment power with respect to all shares beneficially owned.

The percentage ownership information shown in the column titled "Percentage of Shares Beneficially Owned" in the table below is based on 113,856,454 shares of our common stock outstanding, which is the number of shares of common stock outstanding as of April 14, 2025 (plus, as to any particular beneficial owner, any shares as to which such person has the right to acquire beneficial ownership within 60 days thereafter). Unless otherwise indicated, the address of each beneficial owner listed in this table is the Company's address set forth on the first page of this Proxy Statement.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% Stockholders:		
Entities affiliated with FMR LLC [1]	16,569,256	14.55%
Entities affiliated with Fairmount Funds Management LLC [2]	11,825,641	9.90%
Entities affiliated with Commodore Capital LP [3]	10,497,990	8.99%
Entities affiliated with Point72 Asset Management, L.P. [4]	9,986,132	8.44%
Entities affiliated with Kynam Capital Management, LP [5]	9,239,731	8.12%
Entities affiliated with TCG Crossover Fund I, L.P. [6]	6,964,375	6.12%
Entities affiliated with BlackRock, Inc. [7]	6,755,584	5.93%
Entities affiliated with Venrock Healthcare Capital Partners II, L.P. [8]	6,446,917	5.66%
Named Executive Officers, Directors and Nominees:		
Andrew Robbins [9]	3,956,665	3.36%
John Green [10]	985,179	*
Cole Pinnow [11]	197,098	*
John Robinson, Ph.D. [9]	924,166	*
Jessica Sachs, M.D. [12]	1,051,434	*
Chris Cain, Ph.D. [13]	179,265	*
Karen Ferrante, M.D. [9]	265,555	*
Peter Harwin [13]	179,265	*
Arlene M. Morris [9]	182,848	*
Matthew E. Ros [9]	243,160	*
Todd Shegog [9]	172,100	*
All current executive officers and directors as a group (12 persons) [14]	8,951,111	7.29%

* Represents beneficial ownership of less than one percent.

(1) Based on the Schedule 13G/A filed with the SEC on February 12, 2025, and consists of shares held by funds and accounts that are managed by direct or indirect subsidiaries of FMR LLC ("FMR"). FMR has sole voting power with respect to 16,567,133 shares and sole dispositive power with respect to 16,569,256 shares. Abigail P. Johnson has sole dispositive power with respect to 16,569,256 shares. Ms. Johnson is a director, the Chairman and Chief Executive Officer of FMR. Members of the Johnson family, including Ms. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR, representing 49% of the voting power of FMR. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR. The business address of each person and entity listed above is 245 Summer Street, Boston, MA 02210.

(2) Based on the Schedule 13D/A with the SEC on June 13, 2024. Includes (i) 6,225,641 shares held by Fairmount Healthcare Fund II LP ("Fund II") and (ii) approximately 5,600,000 shares issuable upon the conversion of approximately 22,400 shares of Series A Preferred Stock held by Fund II. Excludes approximately 11,253,500 shares issuable upon conversion of approximately 45,014 shares of Series A Preferred Stock, the conversion of which is subject to a beneficial ownership limitation of 9.9% of the outstanding shares. Fairmount Healthcare Fund II GP LLC is the general partner of Fund II. Fairmount Funds Management LLC ("Fairmount") provides discretionary investment management services to qualified investors through its private pooled investment vehicles, including Fund II. Fairmount, as the investment manager, along with Fairmount Healthcare Fund II GP LLC, as the general partner, exercise shared voting and dispositive power over the shares held by Fund II. The address for the entities listed above is 200 Barr Harbor Drive, Suite 400, West Conshohocken, PA 19428.

(3) Based on the Schedule 13G/A filed with the SEC on November 14, 2024. Consists of (i) 7,539,930 shares, (ii) 2,352,000 shares issuable upon the conversion of 2,352 shares of Series B Preferred Stock, the conversion of which is subject to a beneficial ownership limitation of 9.99%, and (iii) 606,060 shares underlying a warrant, the conversion of which is subject to a beneficial ownership limitation of 9.99%, held by Commodore Capital Master LP ("Commodore Master"). Commodore Capital LP is the investment manager to Commodore Master and may be deemed to beneficially own the shares held by Commodore Master. Michael Kramarz and Robert Egen Atkinson are the managing partners of Commodore Capital LP and exercise investment discretion with respect to these shares. The principal business address of Commodore Capital LP and Commodore Master is 444 Madison Avenue, Floor 35, New York, NY 10022.

(4) Based on the Schedule 13G/A filed on February 14, 2025. Consists of 5,470,132 shares and 4,516,000 shares issuable upon the conversion of 4,516 shares of Series B Preferred Stock held by Point72 Associates, LLC ("Point72 Associates"). Pursuant to an investment management agreement, Point72 Asset Management, L.P. ("Point72 Asset Management") holds shared investment and voting power with respect to the shares held by Point72 Associates. Point72 Capital Advisors, Inc. ("Point72 Capital Advisors") is the general partner of Point72 Asset Management and holds shared investment and voting power with respect to the shares held by Point72 Associates. Steven A. Cohen controls each of Point72 Asset Management and Point72 Capital Advisors and holds shared investment and voting power with respect to the shares held by Point72 Associates. Cubist Systematic Strategies, LLC, an advisor under common control with Point72 Asset Management, acts as a sub-advisor with respect to a portion of such shares. The principal business address of the person and entities above is 72 Cummings Point Road, Stamford, CT 06902.

(5) Based on the Schedule 13G/A filed with the SEC on November 14, 2024. Kynam Capital Management, LP, Kynam Capital Management GP, LLC and Yue Tang hold shared voting and dispositive power over such shares. The principal business address of each person and entity listed is 221 Elm Road, Princeton, NJ 08540.

(6) Based on Company records and does not reflect any subsequent sales of shares that may have occured. Consists of shares held by TCG Crossover Fund I, L.P. ("TCG Fund"). TCG Crossover GP I, LLC is the general partner of TCG Fund and Chen Yu is the sole managing member of TCG Crossover GP I, LLC.

Each of the persons and entities above share voting and dispositive power with respect to the Company's securities. The principal business address of these persons and entities is 705 High Street, Palo Alto, CA 94301.

(7) Based on the Schedule 13G/A filed with the SEC on January 26, 2024. BlackRock, Inc. ("BlackRock") holds sole voting power with respect to 6,638,210 shares and sole dispositive power with respect to 6,755,584 shares. The address of BlackRock is 50 Hudson Yards, New York, NY 10001.

(8) Based on Company records and the Schedule 13G/A filed with the SEC on April 11, 2025. Consists of (i) 971,162 shares and 18,750 shares issuable upon the conversion of approximately 75 shares of Series A Preferred Stock held by Venrock Healthcare Capital Partners II, L.P. ("VHCP-II"), (ii) 393,465 shares and 7,500 shares issuable upon the conversion of approximately 30 shares of Series A Preferred Stock held by VHCP Co-Investment Holdings II, LLC ("VHCP-II Co-Invest"), (iii) 2,768,631 shares and 40,750 shares issuable upon the conversion of approximately 163 shares of Series A Preferred Stock held by Venrock Healthcare Capital Partners III, L.P. ("VHCP-III"), (iv) 277,182 shares and 4,000 shares issuable upon the conversion of approximately 16 shares of Series A Preferred Stock held by VHCP Co-Investment Holdings III, LLC ("VHCP-III Co-Invest"), and (v) 1,965,477 shares held by Venrock Healthcare Capital Partners EG, L.P. ("VHCP-EG"). VHCP Management II, LLC, VHCP Management III, LLC, VHCP Management EG, LLC, VHCP II, VHCP-II Co-Invest, VHCP-III, VHCP-III Co-Invest, VHCP-EG, Nimish Shah and Bong Y. Koh share voting and dispositive power with respect to the Company's securities. The principal business address of these persons and entities is 7 Bryant Park, 23rd Floor, New York, NY 10018.

(9) Consists entirely of shares underlying options exercisable within 60 days of the date of this table.

(10) Consists of 3,841 shares and 981,338 shares underlying options exercisable within 60 days of the date of this table.

(11) Consists of 45,848 shares and 151,250 shares underlying options exercisable within 60 days of the date of this table.

(12) Consists of 1,296 shares and 1,050,138 shares underlying options exercisable within 60 days of the date of this table.

(13) Consists entirely of shares underlying options exercisable within 60 days of the date of this table that Dr. Cain and Mr. Harwin hold for one or more investment vehicles managed by Fairmount (each, a "Fairmount Fund"). The options were granted to Dr. Cain and Mr. Harwin in connection with their service as members of our Board. Pursuant to their arrangement with Fairmount, each of Dr. Cain and Mr. Harwin is obligated to turn over to Fairmount any net cash or stock received from the options for the benefit of such Fairmount Fund. Each of Dr. Cain and Mr. Harwin disclaims beneficial ownership of the options and underlying shares.

(14) Consists of 50,985 shares and 8,900,126 shares underlying options exercisable within 60 days of the date of this table.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires the Company's directors, officers and persons who beneficially own more than 10% of a registered class of our equity securities to file initial reports of ownership and reports of changes in ownership of our equity securities with the SEC. To our knowledge, based solely on our review of Forms 3, 4 and 5 filed with the SEC or written representations that no Form 5 was required, during the year ended December 31, 2024, we believe that our directors, officers and persons who beneficially own more than 10% of a registered class of our equity securities filed the required reports on a timely basis, except that, due to administrative error, one Form 4 reporting one transaction was filed late with respect to each of Ms. Morris, Messrs. Shegog, Harwin and Ros and Drs. Ferrante and Cain.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2024 with respect to the shares of our common stock that may be issued under our existing equity compensation plans.

Plan Category	Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (1)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in the First Column)
Equity compensation plans approved by stockholders(2)	17,755,944	$ 8.57	2,676,475
Equity compensation plans not approved by stockholders(3)	3,829,355	$10.01	945,645
Total	21,585,299	$ 8.82	3,622,120

(1) The weighted-average exercise price does not take into account shares issuable upon vesting of outstanding PSUs, which have no exercise price.

(2) Includes the following plans: our Amended and Restated 2018 Stock Option and Incentive Plan (the "2018 Plan") and our 2018 Employee Stock Purchase Plan (the "ESPP"), including 88,141 shares subject to purchase thereunder during the purchase periods in effect as of December 31, 2024. Excludes 4,418,469 and 125,000 shares that were added to our 2018 Plan and our ESPP, respectively, on January 1, 2025 pursuant to the evergreen provisions thereunder that provide for automatic annual increases on January 1 of each year during the term of the respective plan equal to 4% of our outstanding shares as of the preceding December 31 (or such lesser amount as approved by the Board), in the case of the 2018 Plan, or the lesser of 125,000 shares, 1% of our outstanding shares as of the preceding December 31, or such lesser amount as approved by the Board, in the case of the ESPP.

(3) Includes our 2020 Inducement Plan (the "Inducement Plan"). The Inducement Plan was adopted by the Board in October 2020 and amended by the Compensation Committee in November 2024 and February 2025. A total of 5,050,000 shares of common stock have been reserved for issuance under the Inducement Plan, subject to adjustment for stock dividends, stock splits or other changes in our common stock or capital structure. The purpose of the Inducement Plan is to secure and retain the services of eligible employees, to provide incentives for such eligible employees to exert maximum efforts for the success of the Company and to provide such eligible employees an opportunity to benefit from increases in value of the Company's common stock through the granting of certain stock awards. The Inducement Plan was approved by our Board without stockholder approval pursuant to Nasdaq Listing Rule 5635(c)(4), and is utilized exclusively for the grant of stock awards to individuals who were not previously an employee or non-employee director of the Company (or following a bona fide period of non-employment with the Company) as an inducement material to such individual's entry into employment with the Company, within the meaning of Nasdaq Listing Rule 5635(c)(4). The Inducement Plan is administered by our Compensation Committee. Stock awards under the Inducement Plan may only be granted by: (i) the Compensation Committee, (ii) another committee of the Board composed solely of at least two members of the Board who meet the requirements for independence under the Nasdaq listing rules (the "Independent Directors") or (iii) at the Board level by at least a majority of the Independent Directors (the foregoing subsections (i), (ii) and (iii) are collectively referred to as the "Committee"). The Committee may choose to grant (i) nonstatutory stock options, (ii) stock appreciation rights, (iii) restricted stock awards, (iv) restricted stock unit awards and (v) other stock awards to eligible recipients, with each grant to be evidenced by an award agreement setting forth the terms and conditions of the grant as determined by the Committee in accordance with the terms of the Inducement Plan.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of each transaction or series of similar transactions since January 1, 2024, or any currently proposed transaction, to which we were or are a party in which:

- the amount involved exceeds $120,000; and
- any related person (including our directors, executive officers, beneficial owners of more than 5% of our common stock and any affiliates or members of their immediate family) had or will have a direct or indirect material interest, other than compensation and other arrangements that are described under the section titled "Executive Compensation" or that were approved by our Compensation Committee.

Beneficial ownership of securities is determined in accordance with the rules of the SEC.

Related Party Transactions

2024 Private Placement

On February 13, 2024, we entered into a Securities Purchase Agreement for a private placement with certain institutional and accredited investors (collectively, the "Purchasers") pursuant to which the Purchasers purchased (i) an aggregate of 17,717,997 shares of our common stock at a price per share of $7.50 and (ii) 12,280 shares of the Company's Series B Preferred Stock at a price per share of $7,500.00, for an aggregate purchase price of approximately $225 million (the "Private Placement"). Seven Purchasers or their affiliates were, or became upon completion of the Private Placement, beneficial holders of more than 5% of our common stock, including Fairmount. Dr. Cain serves as Director of Research at Fairmount and Mr. Harwin is a Managing Member at Fairmount. The table below sets forth the number of shares of common stock and/or Series B Preferred Stock purchased by such holders at the closing of the Private Placement.

Purchaser	Shares of Common Stock Purchased	Shares of Series B Preferred Stock Purchased	Total Cash Purchase Price ($)
Entities affiliated with FMR LLC	5,333,333	—	$39,999,997.50
Entities affiliated with Fairmount Funds Management LLC	1,166,666	1,500	$19,999,995.00
Entities affiliated with Commodore Capital LP	2,125,000	1,875	$30,000,000.00
Entities affiliated with Point72 Asset Management, L.P.	—	1,000	$ 7,500,000.00
Entities affiliated with Kynam Capital Management, LP	316,000	350	$ 4,995,000.00
Entities affiliated with Venrock Healthcare Capital Partners II, L.P.	445,000	555	$ 7,500,000.00
Entities affiliated with TCG Crossover Fund I, L.P.	583,333	750	$ 9,999,997.50

In connection with the foregoing, on February 13, 2024, we also entered into a Registration Rights Agreement with the Purchasers (the "Registration Rights Agreement"), pursuant to which we granted the Purchasers certain registration rights with respect to the resale of shares of common stock and shares of common stock issuable upon the conversion of the Series B Preferred Stock. We filed such Registration Statement on Form S-3 with the SEC on March 29, 2024. In addition, we agreed to, among other things, indemnify the Purchasers and each of their respective officers, directors, agents, partners, members, managers, stockholders, affiliates, investment advisors and employees under the registration statement from certain liabilities and pay all fees and expenses (excluding any legal fees of the selling holder(s), and any underwriting discounts and selling commissions) incident to our obligations under the Registration Rights Agreement.

Share Exchange

On March 21, 2024, we entered into exchange agreements (the "Exchange Agreements") with certain of the Purchasers (the "Exchanging Stockholders") pursuant to which the Exchanging Stockholders exchanged an

aggregate of 8,300,000 shares of our common stock for an aggregate of 8,300 shares of our Series B Preferred Stock (the "Exchange"). Of the shares of common stock exchanged for Series B Preferred Stock in the Exchange, 2,125,000 shares of common stock were issued in the Private Placement.

Series B Preferred Stock

Holders of shares of Series B Preferred Stock are entitled to receive dividends on shares of Series B Preferred Stock equal to, on an as-if-converted-to-common stock basis, and in the same form as dividends actually paid on shares of common stock. Except as otherwise required by law, the Series B Preferred Stock does not have voting rights. However, as long as any shares of Series B Preferred Stock are outstanding, we will not, without the affirmative vote of each of the holders of the then-outstanding shares of the Series B Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series B Preferred Stock, or (b) amend the Certificate of Designations of Preferences, Rights and Limitations of Series B Non-Voting Convertible Preferred Stock, as amended, our Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series B Preferred Stock. The Series B Preferred Stock does not have a preference upon any liquidation, dissolution or winding-up of the Company.

Following our 2024 Annual Meeting of Stockholders, each share of Series B Preferred Stock was automatically converted into 1,000 shares of common stock, subject to certain limitations, including that a holder of Series B Preferred Stock is prohibited from converting shares of Series B Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be established by the holder between 0% and 19.9%) of the total number of shares of common stock issued and outstanding immediately after giving effect to such conversion.

Indemnification

Our Bylaws provide that we will indemnify, to the fullest extent permitted by law, any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of our directors or officers or is or was serving at our request as a director or officer of another corporation, partnership, joint venture, trust or other enterprise. Our Bylaws provide that we may indemnify to the fullest extent permitted by law any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of our employees or agents or is or was serving at our request as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise. Our Bylaws also provide that we must advance expenses incurred by or on behalf of a director or officer in advance of the final disposition of any action or proceeding, subject to very limited exceptions. In addition, we have entered into and in the future plan to enter into agreements to indemnify our directors and executive officers. These agreements, among other things, require us to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in our right, on account of any services undertaken by such person on behalf of our company or that person's status as a member of our Board or officer, as applicable, to the maximum extent allowed under Delaware law.

Related Person Transaction Policy

Our Board has adopted a written related person transactions policy providing that transactions with us and any related person (as defined above) must be approved by our Audit Committee. Pursuant to this policy, the Audit Committee has the primary responsibility for reviewing and approving or disapproving "related person transactions," which are transactions between us and related persons in which the aggregate amount involved exceeds or is expected to exceed $120,000 and in which a related person has or will have a direct or indirect material interest. In determining whether to approve any such transaction, the Audit Committee will review and consider:

- the related person's interest in the related person transaction;

- the approximate dollar amount involved in the related person transaction;
- the approximate dollar amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose, and the potential benefits to us, of the related-party transaction; and
- any other information regarding the related-party transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

OTHER MATTERS

Stockholder Proposals and Director Nominations for Next Year's Annual Meeting

Pursuant to Rule 14a-8 of the Exchange Act, stockholders who wish to submit proposals for inclusion in the proxy statement for the 2026 Annual Meeting of Stockholders must send such proposals to our Corporate Secretary at the address set forth on the first page of this Proxy Statement. Such proposals must be received by us as of the close of business (6:00 p.m. Eastern Time) on December 23, 2025 and must comply with Rule 14a-8 of the Exchange Act. The submission of a stockholder proposal does not guarantee that it will be included in the proxy statement.

As set forth in our Bylaws, if a stockholder intends to make a nomination for director election or present a proposal for other business (other than pursuant to Rule 14a-8 of the Exchange Act) at the 2026 Annual Meeting of Stockholders, the stockholder's notice must be received by our Corporate Secretary at the address set forth on the first page of this Proxy Statement no earlier than the 120th day and no later than the close of business (6:00 p.m. Eastern Time) on the 90th day before the anniversary of the last annual meeting; provided, however, that if the date of the annual meeting is more than 30 days before or more than 60 days after such anniversary date, the stockholder's notice must be delivered not later than the close of business on the later of the 90th day prior to such annual meeting or the tenth day following the date on which the first public announcement of the date of such annual meeting is made by the Company. Therefore, unless the 2026 Annual Meeting of Stockholders is more than 30 days before or more than 60 days after the anniversary of the Annual Meeting, notice of proposed nominations or proposals (other than pursuant to Rule 14a-8 of the Exchange Act) must be received by our Corporate Secretary no earlier than February 4, 2026 and no later than the close of business (6:00 p.m. Eastern Time) on March 6, 2026. Any such director nomination or stockholder proposal must be a proper matter for stockholder action and must comply with the terms and conditions set forth in our Bylaws. If a stockholder fails to meet these deadlines and fails to satisfy the requirements of Rule 14a-4 of the Exchange Act, we may exercise discretionary voting authority under proxies we solicit to vote on any such proposal as we determine appropriate. In addition to satisfying the deadlines in the advance notice provisions of our Bylaws, a stockholder who intends to solicit proxies in support of nominees submitted under these advance notice provisions for the 2026 Annual Meeting of Stockholders must provide the notice required under Rule 14a-19 of the Exchange Act to our Corporate Secretary in writing not later than the close of business (6:00 p.m. Eastern Time) on April 6, 2026. We reserve the right to reject, rule out of order or take other appropriate action with respect to any nomination or proposal that does not comply with these and other applicable requirements.

Delivery of Documents to Stockholders Sharing an Address

A number of brokerage firms have adopted a procedure approved by the SEC called "householding." Under this procedure, certain stockholders who have the same address and do not participate in electronic delivery of proxy materials will receive only one copy of the proxy materials, including this Proxy Statement, the Notice and our Annual Report on Form 10-K for the year ended December 31, 2024, until such time as one or more of these stockholders notifies us that they wish to receive individual copies. This procedure helps to reduce duplicate mailings and save printing costs and postage fees, as well as natural resources. If you received a "householding" mailing this year and would like to have additional copies of the proxy materials mailed to you, please send a written request to our Corporate Secretary at the address set forth on the first page of this Proxy Statement, or call (617) 945-5576, and we will promptly deliver the proxy materials to you. Please contact your broker if you received multiple copies of the proxy materials and would prefer to receive a single copy in the future, or if you would like to opt out of "householding" for future mailings.

Availability of Additional Information

We will provide, free of charge, a copy of our Annual Report on Form 10-K for the year ended December 31, 2024, including exhibits, upon the written or oral request of any stockholder of the Company. Please send a written request to our Corporate Secretary at the address set forth on the first page of this Proxy Statement or call the number above.

APPENDIX A: PROPOSED AMENDMENT TO AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

ARTICLE X

LIMITATION OF LIABILITY OF OFFICERS

An officer of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as an officer except to the extent such exemption from liability, or limitation thereof, is not permitted under the DGCL.

If the DGCL is hereafter amended to authorize the further elimination or limitation of the liability of an officer, then the liability of an officer of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Any amendment, repeal or modification of this Article X by either of (i) the stockholders of the Corporation or (ii) an amendment to the DGCL, shall not adversely affect any right or protection existing at the time of such amendment, repeal or modification with respect to any acts or omissions occurring before such amendment, repeal or modification of a person serving as an officer at the time of such amendment, repeal or modification.