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 001-40522

Monte Rosa Therapeutics, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization)

321 Harrison Avenue, Suite 900

Boston, Massachusetts (Address of principal executive offices)

of principal executive offices) (Zip Code) Registrant's telephone number, including area code: (617) 949-2643

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

	Trading	
Title of each class	Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.0001 per share	GLUE	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 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 \Box

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, 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 □ Smaller reporting company ⊠

84-3766197

(I.R.S. Employer

Identification No.)

02118

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 the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on NASDAQ on June 30, 2024, was \$199 million.

The number of shares of Registrant's Common Stock outstanding as of March 17, 2025, was 61,509,821.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of registrant's definitive proxy statement for its annual meeting of shareholders to be filed within 120 days after the close of the registrant's fiscal year are incorporated by reference to into Part III of this annual report on Form 10-K.

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Table of Contents

		Page
PARTI		
Item 1.	Business	1
Item 1A.	KISK Factors	/4
Item 1B.		129
Item 1C.		129
Item 2.		129
Item 4	Legal Proceedings	130
item 4.	Mine Salety Disclosures	130
PART II		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases	
	of Equity Securities	131
Item 6.	[Reserved]	132
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	133
Item /A.	Quantitative and Qualitative Disclosures About Market Risk	143
Item 8.	Financial Statements and Supplementary Data	143
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	144
Item 9A.	Controls and Procedures	144
Item 9B.	Other Information	144
item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	144
PART III		
Item 10.	Directors, Executive Officers and Corporate Governance	145
Item 11.	Executive Compensation	151
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	157
Item 13.	Certain Relationships and Related Transactions, and Director Independence	162
Item 14.	Principal Accountant Fees and Services	163
PART IV		
Item 15.	Exhibits and Financial Statement Schedules	165
Item 16.	Form 10-K Summary	166

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K, or Annual Report, contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, or the or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical facts contained in this Annual Report are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may", "will", "should", "expects", "intends", "plans", "anticipates", "believes", "estimates", "predicts", "potential", "continue" or the negative of these terms or other comparable terminology. These statements are not guarantees of future results or performance and involve substantial risks and uncertainties. Forward-looking statements in this Annual Report include, but are not limited to, statements about:

- the initiation, timing, progress, results, costs, and any expectations and/or predictions of success of our current and future research and development programs and preclinical studies, including our expectations for our molecular glue degraders, or MGDs, molecules, including our GSPT1-directed MGD MRT-2359, VAV1-directed MGD MRT-6160 our NEK7-directed MGDs, including MRT-8102, and our CDK2 and CCNE1 MGDs;
- the initiation, timing, progress, results, costs, and any expectations and/or predictions of success of our current and any future clinical trials, including our clinical trials for our GSPT1-directed MGD MRT-2359, VAV1-directed MGD MRT-6160, including statements regarding the nature of or the timing for when any results of any clinical trials will become available;
- our ability to continue to develop our proprietary discovery engines, called QuEEN[™], and to expand our proteomics and translational medicine capabilities;
- the potential advantages of our discovery engine technology and product candidates;
- the extent to which our scientific approach and discovery engine technology may target proteins that have been considered undruggable or inadequately drugged;
- our plans to submit Investigational New Drug, or IND applications to the U.S. Food and Drug Administration, or the FDA for future product candidates;
- the potential benefits of strategic collaborations and our ability to enter into strategic collaborations with third
 parties who have the expertise to enable us to further develop our biological targets, product candidates and
 discovery engine technologies, including our agreement with Novartis AG, or Novartis, for MRT-6160 and
 our agreement with F. Hoffmann-La Roche Ltd., or Roche Basel, and Hoffmann-La Roche Inc., or Roche
 US, and together with Roche Basel referred herein as Roche;
- our ability to obtain and maintain regulatory approval of our product candidates;
- our ability to maintain and expand, including through third-party vendors, our library of MGDs;
- our ability to manufacture, including through third-party manufacturers, our product candidates for preclinical use, future clinical trials and commercial use, if approved;
- our ability to commercialize our product candidates, including our ability to establish sales, marketing and distribution capabilities for our product candidates;
- the rate and degree of market acceptance of our product candidates;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our ability to establish and maintain intellectual property rights covering our current and future product candidates and technologies;
- the implementation of our business model and strategic plans for our business, product candidates, and technology;
- estimates of our future expenses, revenues, capital requirements, and our needs for additional financing;
- our expected use of proceeds from sales of our common stock in "at-the-market" offerings and other offerings, and the period over which such proceeds, together with existing cash, will be sufficient to meet our operating needs;

- our ability to obtain funding for our operations necessary to complete further development and commercialization of our product candidates;
- our financial performance;
- developments in laws and regulations in the United States, or the U.S., and foreign countries;
- the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- the effect of global economic uncertainty and financial market volatility caused by economic effects of rising inflation and interest rates, global health crises, geopolitical events, changes in international trade relationships and military conflicts on any of the foregoing or other aspects of our business or operations; and
- other risks and uncertainties, including those listed under Item 1A, "Risk Factors."

Any forward-looking statements in this Annual Report reflect our current views with respect to future events and with respect to our future financial performance, and involve known and unknown risks, uncertainties and other 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 these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those described under Item 1A, "Risk Factors" and elsewhere in this Annual Report. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

All of our forward-looking statements are as of the date of this Annual Report only. In each case, actual results may differ materially from such forward-looking information. We can give no assurance that such expectations or forward-looking statements will prove to be correct. An occurrence of or any material adverse change in one or more of the risk factors or risks and uncertainties referred to in this Annual Report or included in our other public disclosures or our other periodic reports or other documents or filings filed with or furnished to the Securities and Exchange Commission, or the SEC, could materially and adversely affect our business, prospects, financial condition and results of operations. Except as required by law, we do not undertake or plan to update or revise any such forward-looking statements to reflect actual results, changes in plans, assumptions, estimates or projections or other circumstances affecting such forward-looking statements occurring after the date of this Annual Report, even if such results, changes or circumstances make it clear that any forward-looking information will not be realized. Any public statements or disclosures by us following this Annual Report that modify or impact any of the forward-looking statements contained in this Annual Report will be deemed to modify or supersede such statements in this Annual Report.

We may from time to time provide estimates, projections and other information concerning our industry, the general business environment, and the markets for certain diseases, including estimates regarding the potential size of those markets and the estimated incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, and actual events, circumstances or numbers, including actual disease prevalence rates and market size, may differ materially from the information reflected in this Annual Report. Unless otherwise expressly stated, we obtained this industry, business information, market data, prevalence information and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data, and similar sources, in some cases applying our own assumptions and analysis that may, in the future, prove not to have been accurate.

TRADEMARKS

Solely for convenience, our trademarks and trade names in this report are sometimes referred to without the ® and ™ symbols, but such references should not be construed as any indicator that we will not assert, to the fullest extent under applicable law, our rights thereto.

SUMMARY OF RISK FACTORS ASSOCIATED WITH OUR BUSINESS

Our business is subject to numerous material and other risks and uncertainties that you should be aware of in evaluating our business. These risks are described more fully in Part II, "Item 1A—Risk Factors," and include, but are not limited to, the following:

- We are a biotechnology company with a limited operating history and have not generated any revenue to date from drug sales and may never become profitable.
- We have incurred significant operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.
- We are very early in our development efforts. All but two of our programs are still in the preclinical stages of drug development. If we are unable to commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.
- Our approach to the discovery and development of product candidates, which may also be referred to herein as development candidates, based on our QuEEN[™] discovery engine is novel, which makes it difficult to predict the time, cost of development and likelihood of successfully developing any product candidates.
- We will need to raise substantial additional funding before we can expect to complete development of any of our product candidates or generate any revenues from product sales.
- We may not be successful in our efforts to identify or discover additional product candidates or we may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.
- If we are unable to successfully develop our current programs into a portfolio of product candidates, or experience significant delays in doing so, we may not realize the full commercial potential of our current and future product candidates.
- If we encounter difficulties enrolling patients in our clinical trials, these clinical development activities could be delayed or otherwise adversely affected.
- If we are unable to advance our product candidates through clinical development, obtain regulatory approval and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.
- Even if we receive marketing authorization for our product candidates, we will be subject to extensive ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.
- If we are unable to obtain and maintain patent and other intellectual property protection for our technology and product candidates or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be impaired, and we may not be able to compete effectively in our market.
- Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.
- Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.
- Our executive officers, directors, principal stockholders and their affiliates exercise significant influence over our company, which will limit our stockholders' ability to influence corporate matters and could delay or prevent a change in corporate control.

PART I

Item 1. Business

Overview

We are a clinical-stage biotechnology company developing a portfolio of novel and proprietary molecular glue degraders, or "MGDs". MGDs are small molecule drugs that employ the body's natural protein destruction mechanisms to selectively degrade therapeutically relevant proteins, in effect editing the human proteome. MGDs function by inducing the engagement of an E3 ligase, such as cereblon, with defined structural features on surfaces of target proteins. These target proteins are also referred to as neosubstrates. The E3 ligase then tags the target protein for degradation by adding a molecular mark known as ubiquitin. We believe our MGDs provide significant advantages over existing therapeutic modalities, including other protein degradation approaches.

We have developed a proprietary and industry leading discovery engine, called QuEEN[™] (an abbreviation for "Quantitative and Engineered Elimination of Neosubstrates") to enable our unique target-centric MGD discovery and development approach and our rational design of MGD product candidates.

We believe our MGDs provide significant advantages over existing therapeutic modalities, including other protein degradation approaches. To date, our QuEEN[™] discovery engine has identified numerous proteins for potential targeting by our MGDs, including those targeted by product candidates in our pipeline. We combine our artificial intelligence or "AI" / machine learning or "ML" engines with multiple proprietary experimental tools to identify therapeutically relevant target proteins amenable to degradation by our MGDs. We are continuously increasing our understanding of how MGDs function and we are using this understanding to develop design principles for the engineering of new MGDs. This growing expertise manifests in our expanding MGD library as well as our discovery and development pipeline. Using our insights, knowhow, and technology platform we have generated a library of MGDs that forms the basis for our MGD programs. At present, our library comprises a diverse set of rationally designed small molecules representing more than 1000 unique low molecular weight scaffolds and over 50,000 different MGD molecules. We also use our insights and learnings to continuously update and improve QuEEN[™] and our MGD library, consistently increasing the power of the discovery engine.

We prioritize our product development to address therapeutic targets backed by strong biological and genetic rationales. We are focused on developing solutions to clinically important indications, including indications in immunology, inflammation, oncology, and others. To date, our discovery engine has resulted in two programs in clinical development: MRT-2359, a GSPT1-directed MGD for MYC-driven solid tumors, and MRT-6160, a VAV1-directed MGD for immune-mediated diseases. We expect a third program, NEK7, to enter clinical development in the first half of 2025.

MRT-2359 is an orally bioavailable MGD targeting the translation termination factor protein GSPT1 and is currently in clinical development for potential use in MYC-driven tumors. GSPT1 (also known as eRF3a) is a translation termination factor that helps catalyze the termination of protein synthesis, facilitating the release of mRNA and newly synthesized protein from the ribosomal protein synthesis machinery. We have identified GSPT1 as a potential therapeutic vulnerability for MYC-driven cancers. MRT-2359, our GSPT1-directed MGD, is designed to preferentially affect growth and survival of cancer cells addicted to protein translation, such as those driven by high expression and activity of MYC family transcription factors. Our preclinical studies showed that through a functional association between GSPT1 and the MYC family of transcription factors, GSPT1 serves as a key regulator of MYC-induced protein translation, and that the degradation of GSPT1 using our MGDs, including MRT-2359, creates a potential vulnerability in multiple MYC-driven tumors. We initiated a Phase 1/2 clinical trial for the treatment of MYC-driven SCLC and NSCLC as well as high-grade neuroendocrine tumors and L- and N-MYC amplified tumors in October 2022. In the second half of 2024, we expanded this trial to include heavily pretreated castration-resistant prostate cancer (CRPC; in combination with enzalutamide) and heavily pretreated estrogen-receptor (ER+) positive breast cancer (in combination with fulvestrant), both tumor types characterized by high expression of c-MYC. Moving forward, we will deprioritize further development of MRT-2359 in SCLC, NSCLC, high-grade neuroendocrine tumors and L- and N-MYC amplified tumors, while prioritizing development in CRPC. This is based on a favorable safety profile and encouraging early signals of clinical activity in CRPC patients in combination with enzalutamide, including a confirmed RECIST response, and the lack of need for biomarker-based patient selection for this cohort of patients due to the widespread expression of c-MYC in this tumor type. This is in contrast to SCLC, NSCLC, high-grade neuroendocrine tumors and L-and N-MYC amplified tumors where further development would require continued investments into companion diagnostics, as well as more restrictive selection protocols for clinical trials. The Company believes that the lack of need for biomarkerbased patient selection in CRPC due to the widespread expression of c-MYC in this tumor type will facilitate our future clinical development of MRT-2359.

We are continuing to enroll and evaluate patients with CRPC and we have the option to expand our enrollment in this current study to include up to 20-30 patients, including if we continue to observe positive signs of activity. CRPC remains an area of high unmet need and constitutes a potentially significant commercial opportunity for a product approved in this indication. We are also still awaiting initial results from the breast cancer cohort. We expect to present additional results in H2 2025, including results on ongoing initial safety evaluation of our combination of MRT-2359 with fulvestrant in ER+ breast cancer.

MRT-6160 is a VAV1-directed MGD being developed for immune-mediated diseases. VAV1, a Rho-family guanine nucleotide exchange factor, is a key signaling protein downstream of both the T- and B-cell receptors. Preclinical studies have shown that targeted degradation of VAV1 protein via an MGD modulates both T- and B-cell receptor activity. MRT-6160 has shown promising activity in preclinical models of neurologic and systemic autoimmune and inflammatory diseases and thus we believe has the potential to provide therapeutic benefits in multiple immune-mediated diseases, such as inflammatory bowel disease, rheumatoid arthritis, multiple sclerosis, and dermatological disorders. In October 2024, we announced a global exclusive development and commercialization license agreement with Novartis for VAV1 MGDs, including MRT-6160, for which we received \$150 million upfront payment. Under the terms of the agreement, Novartis will obtain exclusive worldwide rights to develop, manufacture and commercialize MRT-6160 and other VAV1 MGDs and will be responsible for all clinical development and commercialization, starting with Phase 2 clinical studies. We have announced initial clinical results from our Phase 1 study of MRT-6160, demonstrating deep VAV1 degradation of greater than 90%, significant T and B cell functional inhibition, profound inhibition of cytokine release from T and B cells ex-vivo, and a generally favorable safety and tolerability profile. We believe the data support a clear path to Phase 2 studies and broad potential applications in immune-mediated diseases.

Our first product candidate for our NEK7 program, MRT-8102, is now in IND-enabling studies, with an IND filing with the FDA planned for H1 2025. MRT-8102 is a NEK7-directed MGD targeting diseases driven by IL-1β and the NLRP3 inflammasome. The NLRP3 inflammasome is a multiprotein complex that serves as a central node to integrate cellular signals generated by pathogens, cell damage and stress, and subsequently triggers the generation of pro-inflammatory cytokines, such as IL-1β. Aberrant NLRP3 inflammasome activation has been implicated in several inflammatory disorders including pericarditis, gout, osteoarthritis, Parkinson's disease, obesity, and atherosclerosis. NEK7 facilitates assembly and activation of the NLRP3 inflammasome in a kinase-independent manner, suggesting that degradation of NEK7 with an MGD molecule would be a potentially attractive therapeutic approach to preventing NLRP3 activation and release of IL-1β. In light of the strategic importance of our NEK7 program and the potential role of the NLRP3 inflammasome in inflammatory responses in the CNS in multiple systemic and neurologic disorders, we expect to advance a second NEK7 MGD product candidate optimized for CNS penetration through Lead Optimization and we anticipate being able to file an IND for this program in 2026.

We are also advancing programs directed at cyclin-dependent kinase 2 (CDK2) and cyclin E1 (CCNE1), key drivers of cell cycle progression in cancer.

Our CDK2-directed MGDs have demonstrated superior selectivity for CDK2 in preclinical models as compared to several clinical-stage small molecule CDK2 inhibitors, which we believe will be important to mitigate toxicity limitations reported for CDK2 inhibitors in development. In preclinical models of ER+ breast cancer our CDK2 MGDs reduced tumor burden when added to standard of care therapy. We believe our preclinical data supports further clinical evaluation of our CDK2 MGDs as a potential improvement over current standard of care therapies in ER+ breast cancer, including, potentially without the toxicity limitations reported for CDK2 inhibitors currently in development.

Cyclin E1 is a protein that plays a crucial role in the cell cycle and is a frequently amplified non-enzymatic driver oncogene relevant in multiple solid tumors, and that has not been druggable by conventional modalities. Our proprietary Cyclin E1 MGDs may represent a potential novel therapeutic approach for treatment of such solid tumors by directly and selectively targeting Cyclin E1. We believe our cyclin E1 MGDs could provide a highly differentiated alternative and additional approach to other cell-cycle focused therapeutics.

We are currently evaluating our CDK2 and Cyclin E1 MGD programs in multiple preclinical models to determine an optimal path to IND submission, the first of which is expected in 2026.

Our proprietary QuEEN[™] discovery engine uniquely enables us to rationally design and develop our diverse library of MGDs and to deploy them against target proteins identified through our QuEEN[™] discovery engine. Uniquely, many of these target proteins are considered inadequately drugged or completely undruggable by other

therapeutic modalities. We actually consider a target protein's lack of druggability as one of our key criteria for our discovery and development selection and prioritization process. Our resulting MGDs are designed to reprogram the E3 ligase to bind to and induce the degradation of a therapeutically relevant target protein. Central to our QuEEN[™] discovery engine is a detailed understanding of the molecular interactions promoted by our MGDs between E3 ligases and structural features on the surface of therapeutically relevant proteins, which we refer to as degrons.

Key components of our QuEEN™ discovery engine are:

- AI/ML engines: Our focus on protein surface characterization enables us to identify reprogrammable E3
 ligases and E3 ligases-accessible targets. We have developed sophisticated and proprietary AI-powered
 algorithms to mine databases of protein sequences and structures, including structures determined from xray crystallography and cryoEM, and structures from predicted protein folding. Our AI/ML engine
 continuously learns from experimental results with our expanding MGD library, identifying new degrons and
 targetable proteins across the proteome.
- High throughput screening, structural biology and proteomics capabilities: We have developed a suite of high-throughput assays that rapidly assess our proprietary MGD library and MGDs generated during specific programs. Coupled with customized automation and robotic systems, our assays can measure ternary complex formation in both a biochemical and cellular format, as well as measure degradation of target proteins in cells, which we use to screen, identify and rapidly optimize our MGDs.
- *Proprietary MGD library*: Our wholly-owned, proprietary, diverse, and continuously growing chemical library of currently over 50,000 MGDs that we have rationally designed based on our growing expertise in molecular glue anatomy and design, our large proteomics and screening databases, and AI/ML algorithms. Library compounds currently represent more than 1000 unique low molecular weight scaffolds with favorable binding affinities for an E3 ubiquitin ligase.

By capturing our insights and experience with the identification of target proteins amenable to our approach as well as the discovery and development of MGDs through QuEEN[™], we are constantly increasing the power of our discovery engine.

Our QuEEN[™] discovery engine continues to generate discovery stage programs targeting therapeutically relevant proteins otherwise considered undruggable or inadequately drugged. We are progressing our discovery stage programs for multiple other undisclosed target proteins. Our focus is on target proteins that have been considered undruggable or insufficiently drugged, that are highly credentialed preclinically or clinically, and that can potentially move into the clinic in indications with high unmet need and substantial commercial potential.

In October 2023, our wholly-owned subsidiary, Monte Rosa Therapeutics AG, or Monte Rosa AG, entered into a strategic collaboration and licensing agreement with F. Hoffmann-La Roche Ltd., or Roche Basel, and Hoffmann-La Roche Inc., or Roche US, and together with Roche Basel referred herein as Roche. Pursuant to the License Agreement, the parties will seek to identify and develop MGDs against cancer or neurological disease targets using our proprietary drug discovery platform for an initial set of targets in oncology and neuroscience selected by Roche, with Roche having an option to expand the collaboration with an additional set of targets under certain conditions, each target being subject to certain substitution rights owned by Roche. We will lead preclinical discovery and research activities until a defined point. Upon such point, Roche gains the right to exclusively pursue further preclinical and clinical development activities. Under the terms of the agreement, Monte Rosa received an upfront payment of \$50 million, and is eligible to receive future preclinical, clinical, commercial and sales milestone payments that could exceed \$2 billion, including up to \$172 million for achieving preclinical milestones. Roche has an option to expand the collaboration with an additional set of targets under certain conditions. For the optional additional targets, Monte Rosa is entitled to receive from Roche an upfront payment of up to \$28 million, and potential preclinical, clinical, commercial, and sales milestones exceeding \$1 billion. We are also eligible to receive tiered percent royalties ranging from high-single-digit to low- teens on any products that are commercialized by Roche as a result of the collaboration.

In October 2024, we and Novartis entered into a License Agreement under which Monte Rosa granted to Novartis an exclusive license to develop, manufacture, and commercialize VAV1-directed MGDs including MRT-6160. Monte Rosa is responsible for completing the ongoing Phase 1 clinical study and Novartis is responsible for all subsequent development and commercial activities starting at Phase 2. Monte Rosa received from Novartis an upfront payment of \$150 million and is eligible to receive up to \$2.1 billion in development, regulatory, and sales milestones, beginning upon initiation of Phase 2 studies and including potential development and regulatory milestone payments, exceeding \$1.5 billion if multiple indications achieve regulatory approval in multiple

territories. Monte Rosa and Novartis also agreed to a net profit and loss sharing arrangement, in which Monte Rosa will co-fund any global clinical development from Phase 3 onwards and will share 30% of any profits and losses associated with the manufacturing and commercialization of the licensed products in the United States. Monta Rosa is eligible to receive from Novartis potential sales milestones payments and tiered royalties in connection with sales outside of the United States. Monte Rosa will continue to be responsible for costs associated with the ongoing Phase 1 clinical study and Novartis will be responsible for costs associated with any subsequent clinical studies except for the Phase 3 cost covered by Monte Rosa under the profit and loss sharing agreement.

We are led by an experienced team of drug discovery and development experts with deep experience in targeted protein degradation, molecular glues, chemistry, structural biology, data science, disease biology, translational medicine, and clinical development.

Monte Rosa Therapeutics AG, a Swiss operating company, was incorporated under the laws of Switzerland in April 2018. Monte Rosa Therapeutics, Inc. was incorporated in the State of Delaware in November 2019. The Company is headquartered in Boston, Massachusetts with research operations in both Boston and Basel, Switzerland. Our principal executive office is located at 321 Harrison Avenue, Suite 900, Boston, MA 02118 and our telephone number is (617) 949-2643. Information about us is available on our corporate websites at www.monterosatx.com. Information available on our website is not a part of, and is not incorporated into, this Annual Report. We trade on the Nasdaq Global Select Market under the ticker symbol "GLUE".

Our product pipeline

We have leveraged our QuEEN[™] discovery engine to generate our pipeline of product candidates with the potential to treat a diverse range of diseases through targeted protein degradation. Our current programs are focused on delivering therapies to target proteins that have been considered undruggable or inadequately drugged in well-characterized biological pathways across clinical indications in immunology, inflammation, oncology, and other diseases with high unmet needs. We currently retain exclusive worldwide rights to the programs shown in Figure 1 below, except for MGDs directed against VAV1 including MRT-6160, which we licensed to Novartis in October 2024, and the discovery targets included in the Roche collaboration.



Figure 1: Monte Rosa Pipeline

* Monte Rosa has an exclusive global license agreement with Novartis for this asset.

Over the next several years, we plan to expand our early-stage product portfolio into other therapeutic areas, leveraging the ability of our QuEEN[™] discovery engine to degrade therapeutically relevant proteins in areas including cardiovascular, metabolic, and genetic diseases, as shown in Figure 2.



Figure 2: Monte Rosa Pipeline Expansion Strategy

Our strategy

Our mission is to discover and develop a portfolio of novel small molecule MGDs that selectively eliminate therapeutically relevant proteins to benefit patients in a broad range of indications with significant unmet medical need. We believe the product candidates identified through our proprietary QuEEN[™] discovery engine can provide distinct advantages over other modalities, including to address target proteins that have been considered undruggable or inadequately drugged. We intend to fully develop certain programs internally, while also utilizing collaborations to advance programs in areas where we believe that external expertise and financial resources may enable us to more fully realize the therapeutic and commercial potential of a program.

Conventional small molecule inhibitor drugs generally work by interfering with the activity of a target protein through an interaction between the drug and a defined binding pocket on the target protein, typically an enzymatically active site of a protein, with a goal to inhibit that protein or its interaction with other proteins. This limits the application of such drugs to proteins with a succinct binding pocket. Within this field, as binding pockets tend to be highly conserved within protein classes and families, achieving selectivity can be challenging. Even where a protein's active site can be targeted, potentially with selectivity, protein inhibition does not always provide the desired functional outcome.

MGDs on the other hand, provide for therapeutic opportunities not constrained by some of the key limitations of conventional small molecule inhibitor drugs. MGDs provide an opportunity to target the vast universe of target proteins without a defined binding pocket, in a highly selective way, due to the diversity of surfaces that can be targeted, resulting in reversible elimination of a target protein. More specifically, because MGDs work by inducing protein-protein interactions between target proteins and an E3 ligase, they do not require a defined binding pocket on the target protein of interest. Thus, MGDs offer a unique opportunity to unlock significant target space and enable us to address target proteins that have been considered undruggable or inadequately drugged. The interaction surfaces we utilize are often not conserved within protein classes and families, allowing us to potentially achieve significant selectivity for our MGD product candidates that we believe is superior to classical small molecule inhibitor drugs. Lastly, we focus on target proteins where experimental evidence suggests that removal of the target is superior to transiently inhibiting it, in particular proteins that have a scaffolding function.

Through our ability to produce potentially highly selective MGDs with fine-tuned speed and depth of degradation, we believe we can generate MGD product candidates with a wide therapeutic window and other therapeutic advantages that may be beneficial in a broad range of indications, including immunology, inflammation, oncology, metabolic diseases, cardiovascular diseases, genetic diseases, and diseases of the central nervous system or CNS. We believe our platform has the capability to produce MGDs suitable for distribution into any tissue, including MGDs designed to be CNS-penetrant, such as our MGDs for NEK7.

Our precision oncology programs are focused on the elimination of proteins that are highly validated driver oncogenes in cancer cells ("oncogene addiction"), that define a cancer lineage dependence ("lineage addiction"), or that create a vulnerability specific to tumor cells ("synthetic lethality"). By tuning the speed and depth of degradation and leveraging our proprietary pharmacogenomic tools, we optimize our oncology MGDs to selectively target biomarker-positive cells. Our platform enables us to potentially tune the activity (depth and speed of degradation) of our MGDs to the most relevant tumor lineages to achieve maximal phenotypic effects.

In immunology, we are uniquely able to target highly credentialed immune signaling proteins in pathologically relevant immune pathways. We prioritize target proteins that are validated through preclinical or clinical (including human genetic) evidence. We have shown that we are able to optimize our MGD product candidates to induce deep and selective degradation of immune-pathway relevant proteins.

Key elements of our strategy include:

- Continue to advance our GSPT1-directed MGD program through clinical development and towards seeking regulatory approval. We received FDA clearance of our IND for MRT-2359 in September 2022 and initiated patient dosing in our ongoing Phase 1/2 clinical trial in October 2022. In October 2023, we announced interim clinical data from the Phase 1 dose escalation part of our ongoing MRT-2359 Phase 1/2 study demonstrating favorable pharmacokinetic (PK), pharmacodynamic (PD), and tolerability profiles in heavily pretreated patients, including lung cancers and high-grade neuroendocrine tumors. In the second half of 2024, we expanded this trial to include heavily pretreated castration-resistant prostate cancer (in combination with enzalutamide) and heavily pretreated estrogen-receptor (ER+) positive breast cancer (in combination with fulvestrant), both tumor types characterized by high expression of c-MYC. We recently announced additional results from our Phase 1/2 study of MRT-2359 demonstrating encouraging signals of clinical response in castration-resistant prostate cancer (CRPC) patients resistant to AR therapy, including a confirmed RECIST response. Moving forward, we will deprioritize further development of MRT-2359 in SCLC, NSCLC, high-grade neuroendocrine tumors and L- and N-MYC amplified tumors while prioritizing development in CRPC. This is based on a favorable safety profile and encouraging early signals of clinical activity in castration-resistant prostate cancer (CRPC) patients in combination with enzalutamide, including a confirmed RECIST response, and the lack of need for biomarker-based patient selection for this cohort of patients due to the widespread expression of c-MYC in this tumor type. This is in contrast to SCLC, NSCLC, high-grade neuroendocrine tumors and L-and N-MYC amplified tumors where further development would require continued investments into companion diagnostics, as well as more restrictive selection protocols for clinical trials. We believe that the lack of need for biomarker-based patient selection in CRPC due to the widespread expression of c-MYC in this tumor type will facilitate our future clinical development of MRT-2359. We are continuing to enroll and evaluate patients with CRPC, with the potential to expand enrollment to 20-30 patients if a positive efficacy signal continues to emerge. CRPC remains an area of high unmet need and constitutes a potentially significant commercial opportunity if the initial data are confirmed in a larger sample of patients. We are also still awaiting initial results from the breast cancer cohort. We expect to present additional results in H2 2025, including results on ongoing initial safety evaluation of our combination of MRT-2359 with fulvestrant in ER+ breast cancer;
- Continue to advance our VAV1-directed MGD program through completion of activities to prepare for Phase 2 initiation, following which, pursuant to our Agreement with Novartis, Novartis will be responsible for all further clinical development and commercialization. We believe our global license agreement with Novartis will accelerate and broaden the scope of clinical development of MRT-6160 while retaining substantial value for us, including through milestone payments and our share of the US P&L for MRT-6160 provided under our Agreement;
- Continue to advance our NEK7-directed MGD program through IND filing and into clinical trials. In March 2024, we announced our development candidate MRT-8102, targeting diseases driven by IL-1β and the NRLP3 inflammasome. Aberrant NLRP3 inflammasome activation and the subsequent release of active IL-1β and interleukin-18 (IL-18) has been implicated in multiple inflammatory disorders such as pericarditis, gout, osteoarthritis, Parkinson's disease, obesity, and atherosclerosis. MRT-8102 is an orally bioavailable MGD that has shown potent, selective, and durable degradation of NEK7 and near-complete reductions of IL-1β in a non-human primate model following *ex vivo* stimulation of whole blood. We expect to submit an IND for MRT-8102 in H1 2025. In light of the strategic importance of our NEK7 program and the crucial role of the NLRP3 inflammasome in inflammatory responses in the CNS in multiple systemic and neurologic disorders, we are advancing a second NEK7 program optimized for CNS penetration through Lead Optimization and we anticipate IND submission for this program in 2026.

- Advance our cell cycle program to IND submission. We believe our programs directed at CDK2 and CCNE1, key drivers of cancers with cyclin dependent kinase pathway alterations, have the potential to achieve greater selectivity for the CCNE/CDK2 complex versus conventional CDK inhibitors, as well as more sustained pathway inhibition compared to inhibitors. We are currently evaluating MGDs for both programs in multiple preclinical models to determine the optimal first MGD to advance to IND submission, which is expected in 2026.
- Continue to advance and develop our pipeline of rationally designed MGDs to transform the treatment of diseases in multiple therapeutic areas. Through our QuEEN[™] discovery engine, we have identified a variety of additional degron-containing proteins that are amenable to our approach and are either undruggable or insufficiently drugged and we continue to build MGDs against these proteins. We continue to advance programs into lead optimization, and to identify new degron-containing target proteins as well as MGDs. We will continue to prioritize therapeutically relevant target proteins backed by strong biological and genetic rationale with the goal of producing novel precision medicines. These opportunities include indications such as immunology, inflammation, oncology as well as others;
- Continue to enhance and expand the capabilities of our QuEEN[™] discovery engine to unlock the full therapeutic potential of our MGDs in our targeted therapeutic areas. We employ a core set of drug discovery and development principles to guide our target protein selection across various protein classes and therapeutic areas. We are specifically focused on delivering therapies to target proteins that have been considered undruggable or inadequately drugged in preclinically and clinically well-characterized biological pathways;
- Expand and protect our proprietary know-how and intellectual property. We continue to innovatively expand our intellectual property around our innovations in the field of targeted protein degradation and in particular MGDs. Our intellectual property, which includes proprietary know-how, patent applications and issued and expected patents, as well as trade secrets, applies not only to our product candidates, but also to all of our various innovations, including, for example, our drug discovery processes including our QuEEN[™] discovery engine; our AI-based E3 ligase characterization algorithms, AI-based degron discovery algorithms, AI-based novel MGD design algorithms, and *in silico* screening algorithms; our drug development tools; our growing library of MGDs; the innovative methods and approaches we have developed to rationally design MGDs to expand our library, and to certain biomarkers and therapeutic applications for our potential product candidates;
- Execute our discovery collaboration with Roche in the areas of cancer and neurology. Under the terms of the agreement, Monte Rosa will lead discovery and preclinical activities against multiple select cancer and neurological disease targets to a defined point. Upon such point, Roche gains the right to exclusively pursue further preclinical and clinical development of the compounds. We believe this collaboration will enable and accelerate expansion of our platform into neuroscience and additional areas of oncology; and
- Consider additional strategic collaborations in select therapeutic areas to fully realize the potential of our QuEENTM discovery engine. Our goal is to become a fully integrated biopharmaceutical company that delivers pioneering therapies for patients. We currently retain all rights to our programs and platform, except for the discovery targets included in the Roche collaboration and MRT-6160, for which we entered an exclusive global development and commercialization agreement with Novartis in October of 2024. To support our goal, we will selectively explore additional strategic partnerships where we can leverage complementary capabilities in discovery, development, and commercialization in disease areas within and outside our core areas of therapeutic focus to bring transformative therapies to patients with high unmet medical needs.

Background on targeted protein degradation and molecular glue degraders

Proteins drive nearly all biochemical reactions in the body and many diseases stem from abnormal intracellular protein activity. Proteins, including those inside the cell and on its surface, are attractive therapeutic targets; nevertheless, despite advances in therapeutic modalities, approximately 75% of human proteins remain undruggable by traditional small molecule inhibitors.

Challenges with druggable vs. undruggable proteins

Traditional small molecule inhibitors target proteins by binding to a pocket on the protein's surface, but many proteins lack such pockets, making them undruggable. Key disease-driving proteins, including transcription factors, scaffolding proteins, and enzyme modulators, often lack druggable pockets. The absence of a binding

pocket presents a challenge to the development of traditional small molecule inhibitors. Other therapeutic modalities that can target such proteins, such as therapeutic antibodies, oligo-based nucleotides, and genetic therapies, are limited in their ability to address aberrant protein behavior. Although these therapies have improved patient outcomes, they face challenges in delivery, scalability, and therapeutic application. A summary of characteristics of various therapeutic modalities compared to MGDs is shown in Figure 3.

Figure 3: The Next Generation of Precision Medicine-Based Small Molecule Drugs; Selectively Editing the Human Proteome with Rationally Designed MGDs

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	Traditional small molecule inhibitors	Therapeutic Antibodies	MGDs	RNAi, RNA Editing	CRISPR/Gene Therapy		
Ability to access undruggable space	×	\checkmark	\checkmark	\checkmark	\checkmark		
Cellular permeability	~	×	\checkmark	~	~		
Oral bioavailability	\checkmark	×	√	×	X		
Systemic distribution	~	\checkmark	✓	X	Х		
CNS Penetration	~	×	 ✓ 	X	X		
Manufacturing scalability	\checkmark	\checkmark	~	×	×		

Molecular glues: a rapidly emerging approach to protein degradation

Protein degradation is one of the body's natural processes by which proteins are eliminated from human cells through the attachment of a molecular tag, called ubiquitin, to a protein by any of the approximately 600 human E3 ligases, marking the protein for degradation by the proteasome in the cell. Targeted protein degradation can be mediated by two small molecule classes: MGDs (molecular glue degraders) and PROTACs (proteolysis-targeting chimeras, also known as heterobifunctional degraders) (illustrated in Figure 4).

We believe the targeted protein degradation approach offers many features that make it an attractive therapeutic modality:

- *Removal of a target protein*: partial or complete removal of a target protein can lead to more complete inhibition of signaling and metabolic pathways, thus resulting in more profound and longer lasting pharmacodynamic effects than traditional reversible or irreversible inhibition can induce.
- *Targeting intracellular proteins*: small molecule-based protein degraders, in particular MGDs, readily cross cell membranes or can be optimized to do so.
- *Ease of delivery*: small molecule-based protein degraders, in particular MGDs, can be delivered through various routes of administration, including orally.
- Systemic and tissue distribution: since most small molecule-based degraders, in particular MGDs, are low molecular weight compared to other therapeutic modalities, tissue distribution, such as into the CNS or tumor tissues, poses less of an issue.
- Catalytic mode of action: after inducing degradation of a target protein molecule, the small molecule-based protein degrader-E3 ligase complex is able to induce the degradation of additional target protein molecules. Thus, the small molecule-based protein degrader acts catalytically, unlike protein inhibition, causing the removal of many target protein molecules with a single MGD molecule, thereby editing the cellular proteome.

• Event driven pharmacology: unlike with inhibitors where prolonged engagement of the drug with the protein is required for efficacy, small molecule-based protein degraders only require engagement with the E3 ligase and the target protein long enough to induce tagging for degradation.

As described above, there are multiple potential advantages of the protein degradation approach, but one of the most intriguing is the potential to achieve greater therapeutic benefits resulting from the durable but reversible removal of a target protein from the cellular proteome.



Figure 4: Molecular Glue Degraders; Expanding Target Space, Fostering a New Generation of Drugs

Our approach

MGDs are small molecule-based protein degraders designed to modify an E3 ligase's binding specificity and thus can employ the body's natural mechanisms of protein destruction to selectively eliminate therapeutically relevant proteins.

Our QuEEN[™] discovery engine was built for the rational, target-centric discovery of potent and selective MGDs with favorable drug-like properties, thus potentially systematically overcoming common challenges of MGD discovery, as illustrated in Figure 5.

Figure 5: QuEEN[™] is Redefining the Rules of MGD Discovery

Traditional thinking		Monte Rosa Therapeutics approach
'Target space is limited'	Y?	QuEEN [™] has vastly expanded the degradable target space across a broad range of undruggable protein classes
'MGDs are identifed by serendipity'	O	QuEEN™ enables target œntric and systematic discovery of MGDs
'Med Chem rules don't apply to MGDs'		AI-driven and/or structure-based design allow rational Med Chem optimization of MGDs
'MGDs are not selective'	$\rightarrow 0 \leftarrow$	High specificity achievable even within same protein class, families and isoforms

We believe our discovery engine has the potential to continue to deliver MGD product candidates, including product candidates that could address target proteins that have been considered undruggable or inadequately drugged, while possessing attractive pharmaceutical properties. As shown in Figure 6, our initial programs are utilizing cereblon as the E3 ligase system to tag target proteins. Through our generation of data-at-scale, AI/ML platform and proprietary MGD library we have expanded and continue to expand chemical and target space, and have begun to leverage other E3 ligase systems.





We have built our discovery engine on the insight that deep knowledge and understanding of features of protein surfaces drives MGD discovery. Surfaces and their unique features mediate protein-protein interactions and targeted protein degradation. As shown in Figure 7, interrogating surfaces using geometric deep learning enables us to identify reprogrammable ligases and the matching target protein space, creating broad potential opportunities to eliminate undruggable, disease-driving proteins through "only-in-class" MGDs.



Figure 7: Surface Interactions Drive "Only-in-Class" MGD Designs

QuEEN™ Discovery Engine

We design and develop molecular glue degraders or MGDs in a rational and iterative approach using our industry-leading and dynamic QuEEN[™] discovery engine, encapsulating our team's proprietary knowledge and discovery capabilities across biology, chemistry and computational sciences, from which we are generating our library and pipeline of MGD product candidates. Through our discovery engine, we have built intellectual property that allows us to induce a high degree of surface complementarity between the E3 ligase and a target protein, potentially leading to high potency and selectivity for the therapeutically relevant target proteins we select.

The QuEEN[™] discovery engine was built to support our target-centric approach to the discovery and development of MGD drugs that degrade a wide landscape of therapeutically-relevant target proteins by (i) systematically identifying degrons and other surface features on target proteins that may enable ternary complex formation and consequential degradation by E3 ligases, (ii) understanding how to reprogram the surface of endogenous E3 ligases using small molecule-based MGDs; and (iii) rationally designing MGDs that can be optimized towards high potency and selectivity, with favorable pharmaceutical properties. Our process of degron discovery and MGD design is highly iterative and interdisciplinary. Powerful AI modeling guides our high throughput screening and chemo-proteomics, which in turn feeds information back to the AI engine, and the accumulated knowledge is used to guide our MGD library expansion. For example, MGD discovery and development for a protein target can pass from degron identification, to MGD hit identification, to *in silico* improvement, to a round of chemo-proteomics validation, to chemical library alterations and back, until we reach the desired selectivity and degradation. Figure 8 provides a schematic overview of some of the unique and critical features of our QuEEN[™] discovery engine.

Figure 8: Monte Rosa's QuEEN™ Discovery Engine: An Industry Leading Target-Centric Approach to MGD Discovery and Development



Our Proprietary MGD library

We discover and develop lead MGDs for degron-containing target proteins by screening our MGD library of currently over 50,000 MGD molecules, and applying proximity screening tools, our chemo-proteomic capabilities and our knowledge of the cereblon-binding surface and variations in degron structures and other surface features. Our highly diverse library of MGDs is continuing to expand based on our growing expertise in MGD design and development captured in QuEENTM. We have developed unique and innovative synthetic chemistry approaches to access over 1,000 scaffolds, each designed to probe three-dimensional structural and chemical property space differently. These scaffolds are being utilized as building blocks to generate our proprietary library of highly diverse compounds. The modular construction of our library allows us to explore different areas of chemical space and follow-up rapidly on hits from our library. As shown in Figure 9, our highly diverse library of MGDs leverages different areas of the cereblon surface to engage diverse degrons and surface features on target proteins. Our library has given rise to multiple series of MGDs for each of the target proteins currently being studied across our disclosed and undisclosed portfolio.

Figure 9: Monte Rosa's Proprietary MGD Library: A Novel and Structurally Diverse Cerebion-Centric Library



Our AI/ML engine fAlceit identifies reprogrammable E3 ligases and E3 ligases-accessible target proteins

Our focus on protein surface characterization sets us apart, enabling us to identify reprogrammable E3 ligases as well as potential target proteins amenable to our approach. We have developed sophisticated and proprietary Alpowered algorithms to mine databases of protein sequences and structures, including structures determined from x-ray crystallography and cryoEM, and structures from predicted protein folding. fAlceit – our proprietary geometric deep learning engine for surface characterization - continuously learns from our expanding MGD library, identifying new degrons and surface features in targetable proteins across the proteome.

High throughput screening of our proprietary library identifies active MGDs

We have developed a suite of high-throughput assays that rapidly assess our proprietary MGD library and MGDs generated during specific programs. Coupled with customized automation and robotic systems, our assays can measure ternary complex formation in both a biochemical and cellular format, as well as measure degradation of target proteins in cells, which we use to screen, identify and rapidly optimize our MGDs.

Our quantitative proteomics profiling assays for neosubstrate identification and MGD optimization

Utilizing mass-spectrometry-based proteomics, we have developed a suite of high throughput quantitative profiling assays to assess cellular target degradation, selectivity of degradation, target ubiquitination, and ternary complex formation. Data are processed and available in BaseCamp, our proprietary data analysis platform. This large proprietary dataset is used to train our AI/ML algorithms, identify novel targets, and to assess our MGDs during lead optimization programs.

Our structural biology platform enables the rational design of our MGDs

Leveraging high-throughput crystallization and cryo-electron microscopy, we have established a robust pipeline for generating high resolution protein structures. We use structural insights derived from these to support the design of our MGD library, rationally optimize our MGDs during lead optimization programs, and validate novel binding modes. Our database includes ternary complex structures of novel binding modes that are highly diverse in structure and sequence.

Our QuEEN[™] discovery engine has enabled us to discover novel degrons and binding modes, some of which are shown in Figure 10, dramatically expanding our addressable target space. We have used our AI engine and a rational design approach to discover MGDs that are exquisitely selective, enabling us to potentially eliminate therapeutically relevant target proteins in pathways that are highly relevant for diseases with high unmet need in immunology, inflammation, and oncology as well as other diseases.





QuEEN[™] expansion

Our QuEEN[™] discovery engine was originally focused on identifying and developing MGDs that induce the binding of degron-containing neosubstrates to cereblon as a means of targeting them for degradation. Using our established tools, we are expanding the scope of QuEEN[™] to further grow the cereblon target space, to leverage additional E3 ligases for targeted protein degradation, and to extend the utility of our MGDs as next-generation antibody conjugates.

- Expand chemical space: As we rationally designed our MGD compound library to increase diversity, our preclinical studies identified novel degrons and surface features on potential target proteins that engage cereblon in new binding modes. Our AI-driven algorithms predict proteins containing these novel degrons and surface features, and our rational design approach expands the chemical diversity of our MGD library to engage this diverse and growing set of cereblon-accessible proteins. We have now grown our library to 1,000 unique scaffolds and more than 50,000 MGD molecules;
- Activate new E3 ligases: We believe that we will be able to reprogram other E3 ligases through the discovery of ligase specific MGDs as well as specific ligase-accessible degrons, thus enabling us to generate ternary complexes with a further subset of the approximately 600 E3 ligases;
- *Grow target space*: We believe expanding degron identification, E3 ligase activation, and MGD chemical space will unlock previously undruggable proteins for therapeutic intervention;
- ACDCs: We have shown in vitro the potential to degrade several currently undruggable, pan-lethal targets with MGDs. MGDs to these proteins are compatible with common linker technologies and may be ideal next-generation antibody cargos.

Figure 11: QuEEN[™] Discovery Engine Expansion



Our Precision Medicine Approach for MYC-driven Cancers

MRT-2359, a highly selective and orally bioavailable GSPT1-directed molecular glue degrader (MGD) in development for the treatment of MYC-driven cancers

Overview

GSPT1 (also known as eRF3a) is a translation termination factor that helps catalyze the termination of protein synthesis, facilitating the release of mRNA and newly synthesized protein from the ribosomal protein synthesis machinery. We have identified GSPT1 as a potential therapeutic vulnerability for cancers will high levels of protein translation, including MYC-driven cancers.

MRT-2359 is an orally bioavailable MGD that we have shown using extensive *in vitro* and *in vivo* studies to induce the degradation of GSPT1. MRT-2359 is designed to preferentially affect growth and survival of cancer cells addicted to protein translation, such as those driven by high expression and activity of MYC family transcription factors. *In vivo*, once daily oral dosing of MRT-2359 led to a potent anti-tumor activity in MYC-driven, cell-line-derived xenograft models as well as patient-derived xenograft models of NSCLC and SCLC. MRT-2359 is currently in a Phase 1/2 clinical trial (ClinicalTrials.gov Identifier: NCT05546268). Based on our clinical work to date, we plan to continue development of MRT-2359 in CRPC, while deprioritizing further development in SCLC, NSCLC, high-grade neuroendocrine tumors and L- and N-MYC amplified tumors.

Development of GSPT1-directed MGDs to Target Downstream Vulnerabilities of MYC Activation

In humans, the MYC family transcription factors comprise three proteins, c-MYC, L-MYC, and N-MYC. Upon activation in tumor cells, MYC family transcription factors can function as oncogenes. They have long been recognized as drivers of multiple human cancers and are among the most frequently mutated, translocated and highly expressed oncogenes. However, despite several decades of drug discovery efforts, MYC has remained largely recalcitrant to new drug development and no approved therapies directly or indirectly targeting MYC family transcription factors have been developed to date.

It is well established that abnormal activation of MYC through translocation or high levels of expression results in uncontrolled cell growth that is associated with high rates of protein synthesis and ramp up of the protein translation machinery. MYC-driven tumors are therefore widely believed to be addicted to protein translation, and this addiction to protein translation creates an inherent dependency on critical components of the translation machinery, such as GSPT1, illustrated in Figure 12.

As part of our research program, we identified GSPT1 as a potential novel vulnerability of MYC-driven cancers and, based on this observation, we believe that targeting GSPT1 with MGDs represents a viable approach for the

treatment and management of patients with MYC-driven cancers. We believe that the administration of our GSPT1-directed MGD product candidate, MRT-2359, has the potential to address a critical downstream vulnerability of oncogenic MYC activation and provide a unique opportunity for therapeutic intervention.



Figure 12: The Role of GSPT1 in MYC-driven, Translationally Addicted Cancer Cells

Targeting GSPT1 with MRT-2359 (preclinical data and studies)

MRT-2359 is a potent and selective GSPT1-directed MGD discovered and rationally designed using our QuEEN[™] discovery engine. Key features and parameters of MRT-2359 are provided in Figure 13.

Figure 13: MRT-2359 is a Selective and Orally Bioavailable GSPT1-directed MGD Rationally Designed Using our QuEEN[™] Discovery Engine



As shown in Figure 14, MRT-2359 has optimized depth of degradation to achieve preferential activity in MYC high cancer cells. Compared with a non-optimal GSPT1 degrader, MRT-2359 displays preferential activity in MYC

driven NSCLC cells, as shown in the top right panel. The optimal level of GSPT1 degradation to achieve preferential activity in MYC high cells is approximately 60-70% as determined by Western blot, as shown in the left panel. Higher levels of degradation lead to a more pan-toxic phenotype without differential activity in MYC high cells.



Figure 14: MRT-2359 Has Optimized Depth of Degradation to Achieve Preferential Activity in MYC High Cancer Cells

Collectively, we believe that our data supports that the preferential inhibition of growth and survival of MYC-driven versus MYC-independent tumor cells results from a combination of (i) preferential degradation of GSPT1 in cancer cells with high MYC expression, (ii) inhibition of translation, whereby MRT-2359-induced reduction of GSPT1 preferentially impairs protein synthesis in tumor cells with high MYC expression and (iii) downregulation of MYC-addicted but not MYC-independent tumor cells, as depicted in Figure 15.





Indications Investigated in Our Study

We believe that there are multiple tumor types in which the MYC pathway is highly activated, and several (indicated in figure 16) were explored in our Phase 1/2 clinical trial. As shown in Figure 16, in our Phase 1/2 clinical trial, in addition to L-MYC and N-MYC driven smaller indications that we believe may require a precision medicine approach for patient identification, we are testing the potential of MRT-2359 in c-MYC-driven tumors that present large potential opportunities, including c-MYC driven cancer types such as prostate cancer (including tumors with the AR-V7 splice variant) and breast cancer. We believe such indications will not require patient selection due to the widespread overexpression and activation of c-Myc in those tumor types, which will simplify patient recruitment for our ongoing study.





MRT-2359-001 Phase 1/2 Study

Our ongoing Phase 1/2, open-label, multicenter study, illustrated in Figure 17, is designed to assess the safety, tolerability, PK, PD, and preliminary clinical activity of MRT-2359 in patients with select previously treated solid tumors.

Patients have been dosed with MRT-2359 in 6 dose levels across two dosing schedules: a 5-days on and 9-days off drug (5/9) dosing schedule; and a 21-days on and 7-days off drug (21/7) dosing schedule. The study has enrolled patients with a diverse set of tumor types, including non-small cell lung cancer (NSCLC), small cell lung cancer (SCLC), high-grade neuroendocrine (NE) tumors of the prostate, bladder and other organs of origin, heavily pretreated androgen receptor-positive prostate cancer, and heavily pretreated estrogen receptor-positive breast cancer.

In December 2024, we provided a development progress update, including the selection of 0.5 mg using the 21/7 dose schedule as the recommended phase 2 dose (RP2D) for any expansion cohorts of the Phase 1/2 study. Furthermore, using the 5/9 dosing schedule, daily doses of 0.5 mg and 1 mg were identified as having a generally favorable safety profile, while doses of 1.5 mg or higher were above the maximum tolerated dose (MTD) with thrombocytopenia being a dose limiting toxicity (DLT). Using the 21/7 schedule, both 0.5 and 0.75 mg were identified as having a generally favorable safety profile.



Figure 17: MRT-2359 Phase 1/2 Clinical Study Design

Results from MRT-2359-001 Phase 1/2 Study

A total of 59 patients were dosed with MRT-2359 as a monotherapy in 6 dose levels across the two dosing schedules. 32 patients were treated on the 5/9 schedule and 27 on the 21/7 schedule. Patient demographics and clinical characteristics in the dose escalation cohorts are shown in Figure 18. The median age was 63, and approximately half the patients were female. Patients were predominantly ECOG performance status 0 or 1. There were 23 NSCLC patients, 13 SCLC patients, 16 high grade NE patients, and 7 N-MYC or L-MYC amplified cancer patients. The median number of prior lines of therapy was 3.

Patient Characteristic	Total (N=59)*	
Age, median (range), years	63 (30-80)	
Female, N (%)	30 (51)	
Race, N (%)		
White	48 (81)	
Black	4 (7)	
Asian	3 (5)	
Other	4 (7)	
ECOG performance status, N (%)		
0 or 1	58 (98)	
2	1 (2)	
Cancer type, N (%)		
Non-small cell lung cancer	23 (39)	
Small cell lung cancer	13 (22)	
High-grade neuroendocrine cancer	16 (27)	
N-MYC or L-MYC amplified cancer	7 (12)	
Number of prior lines of therapy, median (range)	3 (1-8)	

Figure 18: Patient Demographics and Clinical Characteristics in Dose Escalation

* 32 patients treated on the 5/9 schedule and 27 patients on the 21/7 schedule

Data cut off: 10 March 2025

Doses of 0.5 mg and 1 mg at the 5/9 drug schedule and 0.5 mg and 0.75 mg on the 21/7 drug schedule were well tolerated with mostly low-grade adverse events (AEs). Doses of 1.5 mg or higher were above the maximum tolerated dose (MTD). Dose limiting toxicities were thrombocytopenia (N=6), with or without neutropenia/leukopenia, and 1 patient Grade 3 ALT/AST elevation. Figure 19 details treatment related AEs occurring in 10% of more of patients.

Importantly, dose-limiting toxicities reported with non-selective competitor GSPT1 degraders such as hypocalcemia, hypotension and cytokine release syndrome were not reported in the MRT-2359 study.

Dose Level CTC AE V5 Grade	0.5 mg 5/9 (N⊨9)			1 mg 5/9 (N=13)		1.5 mg 5/9 (№5)		2 mg 5/9 (N=5)		0.5 mg 21/7 (N=18)			0.75 mg 21/7 (N=9)					
	G1-2 (%)	G3 (%)	G4 (%)	G1-2 (%)	G3 (%)	G4 (%)	G1-2 (%)	G3 (%)	G4 (%)	G1-2 (%)	G3 (%)	G4 (%)	G1-2 (%)	G3 (%)	G4 (%)	G1-2 (%)	G3 (%)	G4 (%)
Thrombocytopenia	0	0	0	0	0	1 (8)	2 (40)	1 (20)	1 (20)	2 (40)	1 (20)	2 (40)	2 (11)	0	1 (6)	3 (33)	0	1 (11)
Neutropenia	0	0	0	0	0	1 (8)	0	1 (20)	2 (40)	0	1 (20)	1 (20)	0	1 (6)	0	0	1 (11)	2 (22)
Leukopenia#	0	0	0	0	0	0	0	2 (40)	1 (20)	0	1 (20)	1 (20)	0	0	0	0	2 (22)	0
Anemia	0	0	0	0	1 (8)	0	1 (20)	1 (20)	0	1 (20)	1 (20)	0	1 (6)	1 (6)	0	1 (11)	1 (11)	0
Nausea	3 (33)	0	0	4 (31)	0	0	4 (80)	0	0	2 (40)	0	0	4 (22)	0	0	4 (44)	0	0
Vomiting	1 (11)	0	0	3 (23)	0	0	5 (100)	0	0	2 (40)	0	0	4 (22)	0	0	4 (44)	0	0
Diarrhea	1 (11)	0	0	3 (23)	0	0	1 (20)	1 (20)	0	1 (20)	0	0	1 (6)	0	0	3 (33)	0	0
Hypokalemia	0	0	0	2 (15)	0	0	0	0	0	1 (20)	0	0	3 (17)	0	0	1 (11)	0	0
Fatigue	0	0	0	3 (23)	0	0	0	0	0	0	0	0	2 (11)	0	0	4 (44)	0	0

Figure 19: MRT-2359 Treatment-Related AEs in ≥ 10% patients (N=59)

[#] Data combined for `leukopenia' and `white blood cell count decreased'

Data cut off: 10 March 2025

L-MYC and N-MYC expression in tumor tissue obtained at baseline was assessed in 46 patients and 35 were evaluable for response assessment per RECIST 1.1. Overall, as compared to preclinical data, we observed lower than expected frequency of tumors with high L-MYC or N-MYC expression in NCSLC (0% biomarker positive),

SCLC, including cases were NSCLC had transformed to SCLC (31% biomarker positive), and high grade NE tumors (17% biomarker positive). Figure 20 graphs the biomarker status for patients where this could be assessed.

Figure 20: Biomarker Status in L-/N-MYC Amplified Tumors, NSCLC, SCLC and High-Grade NE Tumors



To assess pharmacodynamic (PD) modulation of GSPT1 in tumors following treatment, targeted mass spectrometry was performed on 17 paired tumor biopsies that met internal quality control criteria. Optimal degradation of approximately 60-70% (in line with preclinical data) was seen in tumor samples of patients with biomarker positive cancers, defined by L-/N-MYC high expression or amplification/fusion. Consistent with our hypothesis and preclinical findings, degradation of GSPT1 was lower in biomarker negative tumors.





L-MYC and N-MYC expression levels in tumor tissue obtained at baseline or known L-MYC or N-MYC amplification in the absence of tissue was available in 48 patients, of which 37 were evaluable for response per RECIST 1.1

Activity was assessed per RECIST 1.1 criteria in biomarker positive and negative patients. There were 13 patients determined to be biomarker positive with high L-MYC or N-MYC expression, including patients with L-MYC or N-MYC amplification without tumor tissue for expression analysis. Of these 13 patients, one patient had a confirmed partial response (PR), and 4 patients had stable disease (SD), for a disease control rate (DCR; PR/SD) of 38%.

24 patients were determined to be biomarker negative, based on low L-MYC and N-MYC expression. Of these patients, one patient had an unconfirmed PR and 3 patients had SD. The DCR rate was 17%.

In aggregate, we believe that the low biomarker positivity in the cancer types tested in the dose escalation cohorts and the need for companion diagnostic development moving forward does not support our prioritizing additional studies in lung cancer, high-grade neuroendocrine tumors and L- and N-MYC amplified tumors. In light of early clinical results from our CRPC cohort, where expression of c-MYC is widespread and biomarker-based patient selection will not be required, we plan to prioritize development in CRPC, and we do not plan to open expansion cohorts in in SCLC, NSCLC, high-grade neuroendocrine tumors and L- and N-MYC amplified tumors. This is in contrast to SCLC, NSCLC, high-grade neuroendocrine tumors and L- and N-MYC amplified tumors where further development would require continued investments into companion diagnostics, as well as more restrictive selection protocols for clinical trials. We believe that the lack of need for biomarker-based patient selection in CRPC due to the widespread expression of c-MYC in this tumor type will facilitate our future clinical development of MRT-2359.

Further evidence of activity of MRT-2359 is shown in Figure 22, which presents a confirmed PR in a heavily treated high grade NE bladder cancer patient. The patient had four lines of prior therapy, including multiple lines of chemotherapy and pembrolizumab. The baseline tumor biopsy demonstrated high N-MYC expression. The patient experienced Grade 4 neutropenia (which was not a dose limiting toxicity) after the first 5 days of administration of 2 mg resulting in a dose reduction to 1 mg and then developed Grade 4 thrombocytopenia (which was considered a dose limiting toxicity), resulting in treatment interruption and further dose reduction to 0.5 mg. CT scan demonstrated a confirmed PR with continuing shrinkage of target lesions from -31% on the first assessment to -89% after 11 months on therapy.



Figure 22: Confirmed PR in Heavily Pretreated HG NE Bladder Cancer Patient

Preliminary Data from MRT-2359/Enzalutamide Study in Castration-Resistant Prostate Cancer

As of the March 10, 2025, data cutoff, tumor response per RECIST 1.1 criteria was available for 3 patients treated with MRT-2359 and enzalutamide combination therapy. One patient showed a confirmed partial response (PR), with tumor reduction of -57% after 4 treatment cycles. This patient harbors an AR H875Y mutation (revealed by standard of care molecular testing by the clinical trial site), typically associated with resistance to AR antagonists, including enzalutamide. Additionally, two patients that were positive for the AR-V7 variant presented stable disease. Both of these patients had undergone multiple prior treatments including abiraterone and/or enzalutamide. PSA response was available for 2 patients showing 1 PSA response (-90%) in the patient with a confirmed PR.

The safety profile observed as of the data cutoff date has been favorable.

The safety and efficacy assessment continues following a Simon 2-stage design. As noted above, we have the option to expand enrollment of this study to include up to 20 - 30 CRPC patients.

We are also enrolling hormone receptor positive breast cancer patients to study the combination of MRT-2359 and fulvestrant. Further data from both combination cohorts is expected in H2 2025.

Figure 23 presents additional data on the refractory CRPC patient with a confirmed partial response. The patient had undergone prior therapies including androgen deprivation therapy, abiraterone, olaparib, docetaxel, Pluvicto, and a different investigational therapy. The patient had an AR H875Y mutation, typically associated with resistance to AR antagonists including enzalutamide. The patient had a prostate specific antigen (PSA) partial response of -85% after cycle 1 and -90% after cycle 4. The patient showed a reduction in tumor burden, with a confirmed partial response per RECIST 1.1 criteria of -46% after cycle 2 and -57% after cycle 4. The patient continues on study for 5+ months.





CDK2-directed MGD molecules for the treatment of cancer

Cyclin dependent kinases, or CDKs, are a family of closely related kinases that regulate progression through the cell cycle. CDK activity is modulated by specific cyclins. For example, cyclin E1 activates cyclin-dependent kinase 2, or CDK2, as shown in Figure 24. CDK2 can be activated in tumors by the amplification or overexpression of Cyclin E1 or E2. Cyclin E1 dysregulation has been found in several cancers, including ovarian and triple negative breast cancer. In addition, cyclin E1 dysregulation and CDK2 activation has also been found to be one of the mechanisms of resistance in ER⁺ breast cancer patients treated with CDK4/CDK6 inhibitors such as ribociclib. Therefore, we believe selective elimination of CDK2 using CDK2-directed MGDs may provide benefit to these patients. Previously reported small molecule inhibitors and PROTACs of CDK2 have been limited in their selectivity due to the high degree of similarity among the active sites of kinases, in particular within the CDK family itself. We have identified multiple MGD molecules that selectively promote the association of CDK2 and cereblon *in vitro*, while avoiding other CDKs. Through ongoing lead optimization chemistry, the most advanced compounds are orally bioavailable and can robustly and selectively induce CDK2 protein degradation in multiple cancer cell lines *in vitro* and in disease relevant models *in vivo*, leading to strong tumor growth inhibition.



Figure 24: CDK2 is One of the Key Regulators of the Cell Cycle

Lead optimization towards orally bioavailable CDK2-directed MGDs

Our CDK2-directed MGDs form a strong ternary complex with CDK2 and cereblon through a newly characterized non-canonical degron which was unveiled through application of our QuEEN[™] discovery engine technologies. The unique character of the CDK2 degron interaction with cereblon, and the optimized features of our MGDs provide a high degree of selectivity over closely related proteins such as CDK1, CDK4, and CDK9. Our MGDs are designed to be orally bioavailable with favorable *in vitro* ADMET properties and preclinical safety profiles.

In vitro data

Our lead CDK2-directed MGD MRT-51443 has shown the ability to selectively degrade CDK2 and reduce E2F pathway proteins in vitro, with no significant effect on other CDKs or other kinases, as shown in Figure 25. Our data also support that our CDK2 MGD MRT-51443 can block DNA replication during S phase in CDK2 dependent cells and inhibits cellular proliferation in a concentration-dependent manner.

Figure 25: CDK2-directed MGD MRT-51443 is Selective and Showed Biological Activity in a CDK2 Dependent Cell Line



MRT-51443 displayed superior selectivity compared to clinical CDK2 inhibitors, as shown in Figure 26. Clinicalstage CDK2 inhibitors show off-target activity in biochemical kinome profiling. CDK2 inhibitors, but not a CDK2 MGD, display CDK2-independent activity, as demonstrated by their suppression of cell proliferation in the absence of their primary target, CDK2.





The combination of MRT-51443 and ribociclib delayed resistance onset in an ER+ breast cancer model in vitro, as shown in Figure 27.



Figure 27: CDK2 MGD/Ribociclib Combination Delayed Resistance Onset

In vivo data

As shown in Figure 28, when dosed orally in preclinical models of HR-positive/HER2-negative breast cancer, MRT-51443 drove deep tumor regression in triple combination with a CDK4/6 inhibitor (ribociclib) and endocrine therapy (fulvestrant) and substantially reduced tumor burden versus ribociclib + fulvestrant combination therapy alone.

Figure 28: CDK2 MGD Demonstrated Activity in Combination with CDK4/6 Inhibitor and Fulvestrant in ER⁺ Breast Cancer Model



Cyclin E1-directed MGD molecules for the treatment of cancer

Cyclin-dependent kinase protein complexes (cyclin-CDK) regulate progression through the cell cycle, whereby different combinations of the two subunits control different stages of the cell cycle. They are formed by an association of a regulatory, subunit, a cyclin, with an inactive catalytic (kinase) subunit, cyclin-dependent kinase (CDK). Once the complex is formed, it transitions into an active state, whereby the kinase (CDK) subunits can phosphorylate downstream effector substrates.

Cyclin E proteins, encoded by the *CCNE1* and *CCNE2* genes, complex with CDK2 to form an active Cyclin E-CDK2 complex, regulating G1-to-S transition of the cell cycle and initiation of DNA replication, as shown in Figure 29. Under normal conditions, cyclin E expression is tightly regulated and restricted to the G1-S phase of the cell cycle. However, many cancer types, including ovarian, endometrial, gastric, and breast cancers, bear frequent amplification or overexpression of the *CCNE1* gene, resulting in increased Cyclin E1 protein expression and aberrant regulation of cell growth. As such, Cyclin E1 represents a genuine oncogenic driver and Cyclin E1 amplified cancers are greatly dependent on sustained high levels of Cyclin E1 for their continued growth and survival. Hence, pharmacologic suppression of high Cyclin E1 protein levels is expected to inhibit tumor growth, in line with the classical "oncogene addiction" paradigm.

Figure 29: CCNE1 (Cyclin E1) Drives Multiple Hallmark Cancer Mechanisms and is a Target for Solid Tumors with Deregulated Cyclin E1



As a regulatory subunit with no catalytic activity, Cyclin E1 has been considered "undruggable" to date. We have identified multiple MGD molecules that selectively promote the association of Cyclin E1 and cereblon *in vitro*, while sparing the Cyclin E2 paralog. These compounds have shown the ability to robustly and selectively induce Cyclin E1 degradation in multiple cancer cell lines *in vitro* and in disease relevant models *in vivo*. In addition, they suppress cancer cell line proliferation preferentially when *CCNE1* is amplified and/or overexpressed, suggesting robust biomarker-driven activity.

In vitro data

As shown in Figure 30, the Cyclin E1-directed MGD MRT-50969 selectively degrades Cyclin E1, leads to downstream pathway suppression and induces robust G1/S cell cycle arrest. Cyclin E1 degradation blocks cell cycle progression and proliferation in *CCNE1*-amplified and -dependent cancer cell lines by inducing G1-S cell cycle arrest in a concentration-dependent manner.

Figure 30: Cyclin E1-directed MGDs are selective and showed biological activity in *CCNE1*-amplified cell lines



MRT-50969 showed superior differential suppression of tumor growth in CCNE1 dependent cell lines compared to clinical-stage CDK2 inhibitors, as shown in Figure 31. Unlike MRT-50969, several tested clinical stage CDK2 or WEE1 inhibitors did not fully recapitulate genetic dependency, potentially indicating off-target activity.



Figure 31: MRT-50969 Showed Superior Differential Activity in CCNE1 Dependent Cell Lines

GI50 = growth inhibition 50%; the concentration of drug required to inhibit the growth of cancer cells in vitro by 50%

In vivo data

When dosed orally as a single agent in preclinical cell line-based xenograft models of CCNE1-amplified breast cancer and gastric cancer, the cyclin E1-directed MGD MRT-50969 induced robust tumor growth suppression and regression in both models, as shown in Figures 32 and 33.



Figure 32: MRT-50969 Inhibited Tumor Growth in a CCNE1 Amplified Breast Cancer Model in vivo

Figure 33: MRT-50969 Inhibited Tumor Growth in a CCNE1 Amplified Gastric Cancer Model in vivo



The CCNE1 MGD program is currently in lead optimization. We are benchmarking MGD molecules for both the CDK2 and CCNE1 programs against each other in multiple preclinical models to determine the optimal MGD to advance to IND submission, which is expected in 2026.

Our Approach for Immunologic and Inflammatory Diseases

MRT-6160, a highly selective and orally bioavailable VAV1-directed molecular glue degrader (MGD) in development for the treatment of immune-mediated diseases

Overview

VAV1 is a Rho-family guanine nucleotide exchange factor that plays a critical role in T- and B-cell receptor signaling and activity. As many immune-mediated diseases are thought to be driven by an underlying dysregulation or hyperactivation of T- and/or B-cells, a VAV1-directed MGD, which we believe will ameliorate aberrant responses from both cell types, has broad potential application for immune-mediated diseases.

There are multiple published studies providing preclinical data supporting VAV1's potential as an attractive target for attenuating T- and B-cell activity (summarized by illustration in Figure 34). For example, studies report that *VAV1* knockout mice are viable and fertile, but display various loss-of-function T- and B-cell phenotypes, and are protected from experimentally induced autoimmune disease. Other studies describe whole-genome CRISPR screens in primary human T cells that indicate a role for *VAV1* as a key player in T-cell function and showing that genetic loss of *VAV1* confers loss of IL-2 secretion.



Figure 34: VAV1 is a Highly Validated Target for Attenuating T-cell and B-cell Activity

Furthermore, we have demonstrated, *in vivo*, once daily oral dosing of MRT-6160 inhibited disease progression in well-established models of multiple sclerosis, rheumatoid arthritis, and inflammatory bowel disease, as shown in the Figures and discussion below. We believe the public literature, summarized above, coupled with our data package, summarized below, provides strong support for use of a VAV1-directed MGD in multiple systemic and central nervous system autoimmune diseases. Based on this support, we advanced our VAV1 development candidate, MRT-6160 into clinical studies. In August 2024, we announced initiation of our MRT-6160 Phase 1 single ascending dose/multiple ascending dose (SAD/MAD) study. We provide initial results from the Phase 1 study below.

In October 2024, we and Novartis entered into a License Agreement under which Monte Rosa granted to Novartis an exclusive license to develop, manufacture, and commercialize VAV1-directed MGDs including MRT-6160. Monte Rosa is responsible for completing the ongoing Phase 1 clinical study and Novartis is responsible for all subsequent development and commercial activities starting at Phase 2. Monte Rosa received from Novartis an upfront payment of \$150 million and is eligible to receive up to \$2.1 billion in development, regulatory, and sales milestones, beginning upon initiation of Phase 2 studies and including potential development and regulatory milestone payments, exceeding \$1.5 billion if multiple indications achieve regulatory approval in multiple territories. Monte Rosa and Novartis also agreed to a net profit and loss sharing arrangement, in which Monte Rosa will co-fund any global clinical development from Phase 3 onwards and will share 30% of any profits and losses associated with the manufacturing and commercialization of the licensed products in the United States.
Monta Rosa is eligible to receive from Novartis potential sales milestone payments in connection with sales outside of the United States, and tiered royalties on sales outside of the United States. Monte Rosa will continue to be responsible for costs associated with the ongoing Phase 1 clinical study and Novartis will be responsible for costs associated with any subsequent clinical studies except for the Phase 3 cost covered by Monte Rosa under the profit and loss sharing agreement.

Development of VAV1-directed MGDs

A summary of the VAV1 intracellular signaling pathway is illustrated in Figure 35. We believe our VAV1-directed MGDs have the potential to modulate both T- and B-cell function as well as the cross talk between these cell types when activated in autoimmune disease. Despite being a preclinically validated target for attenuating T- and B-cell activity, VAV1 has remained undruggable to date using small molecule inhibitor approaches. Therefore, targeting VAV1 with a VAV1-directed MGD and eliminating its activity could provide therapeutic benefits in multiple T- and/or B-cell mediated autoimmune diseases.



Figure 35: VAV1 is a Key Regulator of T- and B-cell Receptor Activity

VAVI signaling increases cycokine production, promeration, and dimerentiation

TCR = T cell receptor. BCR = B cell receptor. IL-2, IL-17 and IL-6 are cell signaling molecules (cytokines) that promote immune response. sIgG is the most common circulating antibody.

VAV1 is an upstream signaling node associated with multiple clinically validated pathways, as shown in Figure 36. These include T cell activation, B cell activation and plasma cell differentiation, Th17 response, and proinflammatory cytokine production. Therapies targeting these pathways individually have been approved for multiple autoimmune and inflammatory diseases.



Figure 36: VAV1 is an Upstream Targeting Node Associated with Clinically Validated Pathways

MRT-6160 is a first-in-class molecular glue degrader of VAV1. MRT-6160 forms a strong ternary complex with VAV1 and cereblon through a newly characterized non-canonical degron which was unveiled through application of our QuEENTM discovery engine technologies. The unique character of the VAV1 degron and its interaction with cereblon induced by MRT-6160 result in a high degree of selectivity over commonly degraded neosubstrates and other closely related VAV family proteins. Our studies show that MRT-6160 degrades human VAV1 with a DC₅₀ of 7 nM and D_{max} of 97%, is orally bioavailable across species, and displays favorable in vitro ADMET properties. The favorable drug-like profile of MRT-6160 is summarized in Figure 37.





MGD Acti	vity Profile
CRBN Binding (HTRF, IC ₅₀)	0.67 µM
VAV1 Ternary Complex (HTRF, EC ₅₀)	11 nM
VAV1 Degradation (Jurkat, DC50 /Dmax)	7 nM / 97%
Selectivity (TMT proteomics)	Large VAV1 selectivity window
Physicochem	ical Properties
LogD	1.5
MW	<400
Thermodynamic Solubility	7 μΜ
ADME	ſ Profile
Oral bioavailability (all species)	> 50 %
Metabolite Profile (in vitro)	No unique human metabolites or GSH adducts (mics)
CYP DDI (9 isoforms)	IC ₅₀ > 30 μM
Safety Ph	armacology
Mini-Ames	Negative
hERG inhibition (patch damp)	No inhibition (EC ₅₀ > 30 μ M)
Counterscreens (panel with 98 targets)	No inhibition

Degradation of VAV1 in the periphery is observed following MRT-6160 oral administration. Additionally, MRT-6160 has brain penetrance with anticipated dose dependent degradation of VAV1 in the CNS. Non-clinical safety profiling showed a clean profile with respect to mutagenicity (mini-Ames), hERG activity, CYP inhibition and induction, and broad off-target screening (CEREP panel).

Preclinical 28-day GLP toxicology studies in rats and non-human primates (cynomolgus macaque or cyno) demonstrated a highly favorable profile. The no observed adverse effect level (NOAEL) was set at the highest

doses in both species. The exposure at NOAEL for rats was approximately 1000-fold over the projected human efficacious exposure, and the exposure at NOAEL for cynos was approximately 600-fold over the projected human efficacious exposure. In healthy cynos, no adverse immunotoxicity or impact on peripheral immune compartments was observed. There was no observed impact on bone marrow and peripheral hematopoietic cell counts. No gastrointestinal toxicity was observed. Furthermore, there were no off-target effects identified in invitro safety profiling, no genotoxicity, no phototoxicity, and no hERG activity.

The potency and selectivity profile of MRT-6160 was evaluated in primary human peripheral mononuclear blood cells (hPBMCs). As shown in Figure 38, left panel, MRT-6160 elicited dose-dependent degradation of VAV1 in primary human T and B cell subsets. As shown in Figure 38, right panel, tandem mass tag (TMT)-global proteomics assessment revealed selective degradation of VAV1 over its closely related family members VAV2 and VAV3 in addition to other proteins expressed in hPBMCs and detectable in the assay.



Figure 38: MRT-6160 Selectively Degraded VAV1 in Primary Human Immune Cells

MRT-6160 was further characterized for anticipated on-target pharmacodynamic and functional activity in primary human T and B cells. As shown in Figure 39, in primary human T cells (top panel), VAV1 degradation by MRT-6160 resulted in inhibition of TCR-mediated pharmacodynamic (CD69) and functional activity (IL-2 secretion and proliferation). In primary human B cells (bottom panel), VAV1 degradation by MRT-6160 resulted in inhibition of BCR-mediated pharmacodynamic (CD69) and functional activity (IL-2 secretion and proliferation). In primary human B cells (bottom panel), VAV1 degradation by MRT-6160 resulted in inhibition of BCR-mediated pharmacodynamic (CD69) and functional activity (IL-6 and soluble IgG secretion) demonstrating expected on-target activity in disease-relevant cell types.

Figure 39: VAV1 degradation by MRT-6160 resulted in inhibition of T- and B-cell receptor activity



In vivo validation of VAV1 MGD MRT-6160

To determine the oral bioavailability and subsequent pharmacokinetics (PK) and pharmacodynamics (PD) of MRT-6160 *in vivo*, mice were orally administered a single dose of 10 mg/kg MRT-6160. PBMC, and spleen samples were collected at 2, 6, and 24 hours post-dosing. As shown in Figure 40, concentrations of MRT-6160 were comparable in both serum and spleen with a proportional decrease over 24 hours (left panel). Furthermore, VAV1 protein levels were reduced in both PBMCs and spleen tissue within 6 hours of administration of MRT-6160 (left panel) and degradation was maintained for 24 hours (left and right panel).



Figure 40: Oral dosing of MRT-6160 led to rapid degradation of VAV1 in vivo

MRT-6160 was evaluated in various well-established T- as well as T- and B-cell mediated *in vivo* models of autoimmune disease. In a T-cell-mediated experimental autoimmune encephalomyelitis (EAE) model of multiple sclerosis (Figure 41, left panel), daily oral dosing of MRT-6160 following disease onset inhibited disease

progression in a dose-dependent manner comparable to that of supratherapeutic doses of dexamethasone, a corticosteroid used broadly in autoimmune disease. After 6 days of dosing, samples from mice were assessed by western blot for murine (m) VAV1 levels in diseased tissue. Shown in the right panel of Figure 41, MRT-6160 induced dose-dependent degradation of mVAV1 commensurate with inhibition of disease progression.





MRT-6160 was also evaluated in a T- and B-cell mediated collagen-induced arthritis (CIA) model of rheumatoid arthritis. Mice were orally administered MRT-6160 daily following disease onset and scored for clinical signs of disease. As shown in Figure 42, left panel, 1 mg/kg MRT-6160 inhibited disease progression comparably to 10 mg/kg anti-TNF-Alpha. The right panel of Figure 42 shows that treatment with MRT-6160 reduced the serum levels of anti-collagen II IgG1 and total anti-collagen II IgG antibodies, demonstrating inhibition of auto-antibody production.

Figure 42: MRT-6160 inhibited disease progression and auto-antibody production in the collagen-induced arthritis disease model



MRT-6160 was also evaluated in a T-cell transfer-induced model of colitis, as shown in Figure 43. In a prophylactic model shown in the left panel, mice were orally administered vehicle or MRT-6160 daily following T-cell transfer. Anti-TNF-Alpha was administered intraperitoneally every third day as a standard of care control. Oral dosing with 1 mg/kg MRT-6160 demonstrated superior disease inhibition compared to 10 mg/kg anti-TNF-Alpha. In a therapeutic model shown in the right panel, mice were orally administered MRT-6160 starting on Day 17 following disease induction. MRT-6160 was compared to two commonly used oral therapies for rheumatoid arthritis, a JAK inhibitor and a S1PR antagonist, as well as vehicle control. MRT-6160 was superior in controlling clinical signs of disease as compared to both active comparators.



Figure 43: MRT-6160 Ameliorated T Cell Transfer-Induced Colitis Equal to or Better than Standard of Care

Figure 44, left panel, shows reduction of inflammation-mediated damage and swelling of the colon with MRT-6160 treatment in the prophylactic T-cell transfer-induced model of colitis. The right panel of Figure 44 shows mesenteric lymph node and colon CD4+ T cell assessment by flow cytometry where MRT-6160 reduced the frequency of IL-17A⁺, TNF-Alpha⁺, and IL-6⁺ CD4+ T cells, known drivers of inflammatory bowel disease in humans.

Figure 44: MRT-6160 Inhibited Inflammation-Mediated Damage and Cytokine Production in a Model of Inflammatory Bowel Disease



Collectively, we believe the preclinical data we have generated for MRT-6160 demonstrate significant on-target attenuation of TCR and BCR-mediated activity both *in vitro* and in multiple preclinical *in vivo* models of T- and T/B-cell mediated disease.

MRT-6160 Phase 1 Study

In a Phase 1 study of healthy volunteers, MRT-6160 was dosed in five single ascending dose (SAD) cohorts and three multiple ascending dose (MAD) cohorts, as shown in Figure 45. All cohorts were randomized and placebo controlled, and over 70 subjects were enrolled in total. The primary endpoint of the study was safety and tolerability of MRT-6160. The secondary endpoints were pharmacokinetic and pharmacodynamic assessments using various readouts in multiple different analytes.





Enrolled > 70 subjects

VAV1 degradation was assessed by flow cytometry of CD3+ T cells and CD19+ B cells, as shown in Figure 46. In addition, ex vivo activation of whole blood was performed to assess T and B cell functions, including CD69 upregulation on T and B cells measured by flow cytometry, and cytokine secretion measured by immunoassay.



Figure 46: In-Vitro Assay Validation of PD and Immune Cell Functional Testing

Analysis of plasma concentrations of MRT-6160 over time demonstrated a dose dependent human pharmacokinetic profile, as shown in Figure 47. MAD dosing resulted in an approximately two-fold increase in exposure at steady. No food effect was observed.





As shown in Figure 48, MRT-6160 achieved degradation exceeding 90% at all but DL1 of the single ascending dose cohorts and at all multiple ascending dose cohorts, based on analysis of peripheral blood T cells. Reduction of VAV1 protein levels was sustained, with dose-dependent recovery following cessation of treatment. Similar results were observed in peripheral blood B cells.



Figure 48: MRT-6160 Achieved Dose-Dependent Degradation >90% in Peripheral Blood T cells After Single and Multiple Dose Administration

VAV1 degradation by MRT-6160 resulted in significant functional inhibition of T and B cells following ex vivo activation of T and B cells derived from whole blood, as shown in Figure 49 for all single ascending dose cohorts. MRT-6160 treatment significantly attenuated CD69 upregulation (a marker of immune cell activation) on T and B cells following TCR stimulation, reflecting functional inhibition of both cell types. In addition, MRT-6160 treatment significantly inhibited IL-2, IFN- γ and IL-17A secretion from whole blood derived T cells following ex-vivo activation of TCR, demonstrating reductions up to 99% from pre-dose levels. MRT-6160 also attenuated IL-6 production by 60-90% across dose levels, and over 80% at all but the lowest dose level, following B cell activation. Alignment with the pharmacodynamic studies above suggests robust functional effects on cytokine production can be achieved with 80% and higher degradation of VAV1.

Figure 49: VAV1 Degradation by MRT-6160 Resulted in Significant Functional Inhibition of T and B Cells



Suppression of CD69 upregulation following single or multiple doses of MRT-6160 and ex vivo TCR stimulation of whole blood was significant as well as sustained during post treatment observation periods, as shown in Figure 50 (data for selected SAD and MAD dose shown as example). Marked and sustained suppression of CD69 upregulation (> 90%) was seen in both peripheral blood T and B cells following TCR stimulation. Similar results were observed in peripheral blood B cells following BCR-stimulation.

Figure 50: MRT-6160 Resulted in Sustained Suppression of TCR-mediated CD69 Activation following Single or Multiple Doses of MRT-6160



MRT-6160 demonstrated a sustained effect on TCR-mediated cytokine production following single and multiple dose administration and ex vivo stimulation of whole blood, as shown in Figure 51. MRT-6160 treatment resulted

in significant and sustained suppression of IL-2, IL-17A and IFN-γ secretion from whole blood derived T cells following ex-vivo activation of TCR (data for selected SAD and MAD dose shown as example).





MRT-6160 was well tolerated with no serious adverse events (SAE) observed. Observed treatment-emergent adverse events (TEAEs) were mild (82%) or moderate (18%) and self-limiting. Overall TEAE frequency was similar between MRT-6160 and placebo. TEAE observed in 2 or more subjects treated with MRT-6160 were: in the SAD cohorts, pain from vessel puncture (2); in the MAD cohorts, cough (2), diarrhea (3), feeling hot (4), headache (5), nasal congestion (2), oropharyngeal pain (3) and pyrexia (2).

In summary, the pharmacodynamic and functional ex-vivo studies suggest significant effects on cytokine production can be achieved following treatment with MRT-6160. Furthermore, we believe the levels of VAV1 degradation observed clinically are consistent with levels of degradation we observed to induce efficacy in preclinical models. The functional impact on cytokine production is also consistent with levels predicted to be required to achieve efficacy in humans, based on benchmark clinical data from other compounds.

In summary, we believe the Phase 1 data described here as well as chronic toxicology package support a clear path into Phase 2 studies and broad potential applications of MRT-6160 in multiple immune-mediated diseases.

NEK7-directed MGDs for the treatment of inflammatory disease

Overview

Activation of the NLRP3 inflammasome critically depends on NIMA related kinase 7, or NEK7, a serine/threonineprotein kinase that facilitates assembly of the active NLRP3 inflammasome complex in a kinase-independent manner. The NLRP3 inflammasome is a multi-protein complex that serves as a central node to integrate signals generated by pathogens, damage and stress, and triggers the generation of pro-inflammatory cytokines. As depicted in Figure 52, aberrant NLRP3 inflammasome activation and the subsequent release of active interleukin-1 β (IL-1 β) and interleukin-18 (IL-18) has been implicated in several inflammation-driven diseases including pericarditis, gout, osteoarthritis, Parkinson's disease, obesity, and atherosclerosis. The assembly of NEK7 and NLRP3 with ASC and pro-caspase 1 induces cleavage of pro-caspase 1, which then activates the cytokines IL-1 β and IL-18 and leads to their release via a cell death event known as pyroptosis. NEK7 has been shown to be required for NLRP3 inflammasome activation and IL-1 β release both *in vitro* and *in vivo*. Furthermore, our own *in vitro* and *in vivo* work, described below, shows that NEK7 is critical for the production of IL-1 β downstream of NLRP3 inflammasome activation. Consequently, we believe NEK7 degradation with a highly selective MGD, such as our product candidate MRT-8102, has the potential to inhibit and/or prevent NLRP3 inflammasome activation and the associated downstream production of IL-1 β , and thereby to be an important treatment modality for a variety of inflammatory diseases.



Figure 52: NEK7 is a Key Regulator of NLRP3 Inflammasomes, IL-1 and IL-18

Extensive clinical data exists to support the relevance of IL-1 and NLRP3 signaling to multiple diseases in therapeutic areas spanning cardio-immunology, rheumatology, and neurology, as illustrated in Figure 53. For example, rilonacept (IL-1 α/β blocker) has demonstrated efficacy and safety for recurrent pericarditis, and canakinumab (IL-1 β blocker) treatment in the CANTOS trial resulted in 15% reduction in a combined major adverse cardiac events (MACE) endpoint. Canakinumab treatment also benefited osteoarthritis patients in the CANTOS trial, with a 0.73 hazard ratio (HR) for osteoarthritis-related adverse events (AEs).

Figure 53: IL-1/NLRP3 Signaling is a Clinically Validated Pathway for Inflammatory Diseases



IL-1 is upstream of the acute-phase response, which leads to production of interleukin-6 (IL-6) and C-reactive protein (CRP), as shown in Figure 54. Elevated CRP concentration is a feature of many inflammatory conditions, including acute pericarditis flares and coronary artery disease and CRP is a long-term predictor of atherosclerotic-cardiovascular risk. Several NLRP3 inhibitors have shown promising reductions in CRP in early clinical trials. Our

therapeutic hypothesis is that MRT-8102 may be able to mitigate systemic inflammation by degrading the NEK7 protein, leading to decreased production of IL-1 β and lowered serum levels of CRP.

Figure 54: C-reactive Protein (CRP) is an Acute-phase Protein downstream of the NEK7/NLRP3 inflammasome



Plans for clinical development of MRT-8102 are summarized in Figure 55. Safety is expected to be assessed initially in healthy volunteers, after which proof-of-concept studies in asymptomatic subjects with elevated cardiovascular risk as indicated by high levels of CRP, and in cardio-immunological conditions are planned. We believe this study design provides potential for efficient demonstration of broad proof of concept for our therapeutic hypothesis using established endpoints and for maximal optionality for informed future clinical development of MRT-8102. Based on our preclinical data, we are also evaluating development opportunities in gout, pseudogout (calcium pyrophosphate deposition disease), osteoarthritis and other inflammatory conditions.

Anticipated Studies	Goal/Objective	
Phase 1 HV	 Safety, tolerability, and pharmacokinetics in healthy volunteers NEK7 degradation in blood after single and multiple daily doses Changes in levels of inflammatory cytokines 	
Planned Phase 1 (PoC) in High CRP, Cardio-immunology Indications	 Safety, and tolerability of 28-day dosing Changes in CRP levels in subjects with high CRP Generate data in cardio-immunology indications to support a path to registration 	
Further Development in Gout/Pseudogout, Osteoarthritis	 Changes in gout/pseudogout flare pain or osteoarthritic pain Reduction in frequency of gout/pseudogout flares Generate data to support registration studies 	

Figure 55: MRT-8102: Development Path in Peripheral Inflammatory Diseases

Identification of NEK7 degron and NEK7-directed MGDs

NEK7 contains a well-defined degron, as identified using our proprietary QuEEN[™] discovery engine and confirmed by crystal structure (shown in Figure 56, left panel). The kinase-independent role of NEK7 in activating the NLRP3 inflammasome suggests that inhibition of the catalytic activity of NEK7 would be ineffective in blocking NLRP3 inflammasome activation. Removal of NEK7 by MGD-mediated degradation is expected to inactivate

formation of the NLRP3 inflammasome and is therefore preferable over conventional catalytic inhibition strategies. We have generated MGDs from multiple chemical series that promote the association of NEK7 with cereblon and lead to its degradation. MRT-8102 is a first-in-class NEK7 MGD developed from one of our chemical series that we have advanced into IND-enabling studies. As shown in Figure 56, right panel, MRT-8102 forms a strong ternary complex with NEK7 and cereblon through a canonical G-loop degron that results in profound NEK7 degradation (DC₅₀ 10 nM and D_{max}89%). MRT-8102 is highly selective over commonly degraded cereblon neosubstrates and other NEK family members, it is orally bioavailable across species and displays favorable *in vitro* ADMET properties. Non-clinical safety profiling showed a clean profile with respect to mutagenicity (miniames), hERG activity, and broad off-target screening (CEREP panel).

Figure 56: MRT-8102 is a Potent, Selective Development Candidate NEK7 MGD with a Favorable Drug-Like Profile



MGD Acti	vity Profile
CRBN Binding (HTRF, IC ₅₀)	0.2 μM
NEK7 Degradation (CAL51, DC ₅₀ /Dmax)	10 nM / 89%
Selectivity (TMT proteomics)	Excellent selectivity profile in different cell lines
Physicochem	ical Properties
LogD	1.47
MW	<450
Thermodynamic Solubility	166 µМ
ADMET	[Profile
Oral Bioavailability	Yes
Metabolite Profile (<i>in vitro</i>)	No unique human metabolites or GSH adducts (mics)
Safety Ph	armacology
Mini-Ames	Negative
hERG (patch clamp)	No inhibition (IC50> 30 µM)
CEREP (panel with 44 proteins)	No inhibition

The amino acid sequence of the NEK7 degron is unique among the NEK family members, indicating the potential to identify MGDs that are highly selective for NEK7. As shown in Figure 57, human peripheral blood mononuclear cells (PBMC) were treated with MRT-8102 for 24 hours, followed by TMT-global proteomic profiling. Highly selective and profound degradation of NEK7 is evidenced by a selective several fold-change decrease in NEK7 protein, without significant changes in other detected proteins. Other NEK family members are highlighted on the volcano plot and were not degraded. Several other cell types, including U937, MM1S and induced pluripotent stem cells (iPSC) revealed similarly selective proteomic profiles when treated with MRT-8102.

In a PK/PD study in cynomolgus monkeys, a single oral dose of 10 mg/kg of MRT-8102 was sufficient to achieve deep and sustained NEK7 degradation beyond the PK exposure window of the compound (Figure 57, right panel).



Figure 57: MRT-8102, a Potent and Highly Selective NEK7-directed MGD, Induces Durable Pharmacodynamic Modulation *In Vivo*

Development Candidate NEK7 MGD, MRT-8102, showed high potency modulation of the NLRP3 pathway in human monocyte-derived macrophage and cynomolgus whole blood stimulation assays

To assess the functional impact of NEK7 degradation on NLRP3 inflammasome activation, human monocytederived macrophages (hMDM) were treated with increasing concentrations of MRT-8102 or selnoflast, an NRLP3 inhibitor. Caspase-1 activation and IL-1 β release from hMDM were measured following pre-treatment with MRT-8102 and subsequent exposure to the inflammasome stimulators lipopolysaccharide (LPS) and nigericin. As shown in Figure 58, MRT-8102 led to a dose-dependent decrease in caspase-1 activity (top left) and IL-1 β release (bottom left), which was more potent than the effect of selnoflast, a direct inhibitor of the ATPase activity of NLRP3 itself. As shown on the right panel, a flow cytometry-based ASC speck formation assay in human whole blood was performed to measure inflammasome activation. Within the monocyte population, ASC specks were formed upon stimulation with LPS plus nigericin, but this formation was prevented in the presence of 0.1 μ M MRT-8102.



Figure 58: MRT-8102 Led to Potent Inhibition of NLRP3 Inflammasome In Vitro

In vivo evaluation of NEK7 MGD MRT-8102 as a potent inhibitor of IL-1 β

MRT-8102 is orally bioavailable and has been progressed to *in vivo* studies in cynomolgus (cyno) monkeys. MRT-8102 was administered once-daily for 5 days at 0.2 mg/kg to a single male and female cyno monkey. PBMC samples were collected at 0 (pre-dose) and 24 hours post-dose on Days 1 and 5, and on Day 10. As shown in Figure 59, left panel, data represent the average cyno PBMC NEK7 protein levels on the y-axis. PBMC NEK7 levels showed a reduction to 40% of pre-dose levels on day 1, with a further reduction to 27% by day 5. Upon ceasing MRT-8102 administration, NEK7 protein recovered to 88% of pre-dose levels by day 10.

Commensurate with NEK7 levels, production of IL-1 β was inhibited in an *ex vivo* whole blood stimulation assay, shown in Figure 59, middle panel. Similar results were obtained when measuring caspase-1 activity following exvivo stimulation, in Figure 59 right panel. The deep and sustained inhibition of IL-1 β release and caspase-1

activity in the *ex vivo* assay after oral administration over five consecutive days suggests that MRT-8102 is capable of controlling inflammation driven by IL-1 β .

Figure 59: *In Vivo* Dosing of MRT-8102 in Cynomolgus Monkeys Led to NEK7 Degradation and Inhibition of Both IL-1β Release and Caspase-1 Activity



MRT-8102 showed activity in an in vivo model of gout

Daily oral dosing of MRT-8102 at 50 mg/kg reduced pathogenic effects associated with gout driven by intraarticular injection of monosodium urate (MSU) crystals in rabbits, including reduction in joint swelling, musculoskeletal ultrasound (MSKUS) pathologic findings, and cumulative histopathology scores as assessed by a blinded pathologist.



Figure 60: MRT-8102 reduced MSU crystal-driven effects in a rabbit gout model

MRT-8102 GLP toxicology study suggests considerable safety margin

In 28-day repeat-dose GLP toxicology studies in male and female rats and cynomolgus monkeys, no MRT-8102 related clinical signs, no changes in immunophenotyping, and no gross or clinical pathology findings were observed at any dose level. In these studies, a no-observed-adverse-effect level (NOAEL) was established at 150 mg/kg/day and 100 mg/kg/day (the highest doses tested), respectively, leading for both species to a greater than

200-fold exposure margin over the projected human efficacious dose. Additional IND-enabling GLP safety studies did not indicate significant safety concerns related to in vitro off-targets, mutagenicity, phototoxicity, hERG or in vivo respiratory or CNS safety pharmacology (assessed in rats) or cardiovascular safety pharmacology (assessed in cyno).

MRT-8102 is currently completing IND-enabling studies with IND submission expected in the first half of 2025.

NEK7 MGDs for diseases of the CNS

The NLRP3 inflammasome plays a crucial role in inflammatory responses in the CNS and represents a promising therapeutic target for the treatment of neurological diseases associated with neuroinflammation. The identification of multiple chemical series within the NEK7 program offers a significant opportunity for the development of multiple drug-like MGDs with differentiated distribution profiles. Our NEK7-directed MGDs are selective, orally bioavailable and can be tuned to penetrate the blood-brain-barrier, and hence are potentially applicable to target inflammatory diseases of the CNS, including those with CNS and peripheral organ involvement, as illustrated in Figure 61.

Figure 61: Brain-Penetrant NEK7 MGDs Have Potential to Impact Neurodegeneration, Obesity and Other Diseases



We have identified NEK7 MGDs from a structurally distinct chemical series with high potency and selectivity for NEK7 degradation, favorable *in vitro* ADMET properties and excellent blood-brain-barrier penetration.

To assess the functional impact of one such brain-penetrant MGD on NLRP3 inflammasome activation, hMDM were treated with increasing concentrations of the CNS-optimized NEK7-directed MGD MRT-51126 or the NLRP3 inhibitor selnoflast, as shown in Figure 62. Caspase-1 activation and release of IL-1 β , IL-1 α and IL-18 from hMDM was measured following pre-treatment with our MGD and subsequent exposure to inflammasome stimulators LPS and nigericin. As shown in Figure 62, MRT-51126 led to a dose-dependent decrease in caspase-1 activity and IL-1 β , IL-1 α and IL-18 release, which was more potent than the effect of selnoflast.



Figure 62: MRT-51126 Demonstrated Potent Inhibition of NLRP3 Inflammasome In Vitro

MRT-51126 demonstrated substantial reduction in inflammatory cytokines in the brain after induction of neuroinflammation using multiple doses of LPS in mice, as shown in Figure 63. Specifically, Cereblon^{I391V}mice, a mouse strain expressing a humanized version of cereblon, dosed with LPS three times daily at 1 mg/kg intraperitoneally and MRT-51126 at 30 mg/kg orally twice daily, showed significantly reduced levels of NEK7 protein in the brain (left panel), along with lower levels of IL-1β (middle panel) and IL-6 (right panel) in brain tissue, relative to animals dosed with LPS and vehicle control.



Figure 63: MRT-51126 Inhibited Brain Cytokines in an LPS-induced Neuroinflammation Model in Mice

In a study in cynomolgus (cyno) monkeys, multiple dosing of MRT-51126 at 0.5 mg/kg demonstrated profound NEK7 degradation in cyno peripheral blood mononuclear cells (PBMC) and in cyno cerebrospinal fluid (CSF), as shown in Figure 64.

As shown in the left panel, PBMC NEK7 levels showed a reduction to 39% of pre-dose levels on day 1, that was further reduced to 3% of pre-dose level by day 5. Additionally, NEK7 protein levels were measured in the cerebrospinal fluid (CSF; middle panel) and deep degradation was observed after the first and final doses. Commensurate with NEK7 levels, production of IL-1 β was inhibited in an *ex vivo* whole blood stimulation assay, shown in Figure 64, right panel. The deep and sustained inhibition of IL-1 β release in the *ex vivo* assay after oral administration over five consecutive days suggests that MRT-51126 is capable of controlling inflammation driven by IL-1 β .

Figure 64: MRT-51126 Demonstrated Profound NEK7 Degradation and Pathway Inhibition *In Vivo* Over Several Days in Cynomolgus Monkey



Other programs

We are specifically focused on developing product candidates for target proteins that have been deemed undruggable or inadequately drugged. Our QuEEN[™] discovery engine was purpose-built to support the discovery and development of drugs that degrade a wide landscape of therapeutically relevant proteins by (i) systematically identifying therapeutically relevant target proteins that may be amenable to molecular glue-based degradation; and (ii) rationally designing MGD molecules that can be optimized towards high potency and selectivity, with properties that we believe to be favorable, so to become MGD product candidates. Our pipeline includes programs in immunology and inflammation (I&I) indications as well as in oncology. We also have early-stage efforts in areas including cardiovascular, metabolic and genetic diseases.

The primary focus of our discovery efforts for 2025 is building a portfolio of additional oral MGDs for immunology and inflammation indications. We believe that the strengths of MGDs align very well with requirements for I&I drugs, as shown in Figure 65. Namely, we have shown that MGDs can achieve deep degradation of target proteins in immune and blood cells as cereblon is expressed highly in those cells and in immune relevant sites and organs; the catalytic mechanism of action of MGDs drives a sustained pharmacodynamic effect, potentially allowing for dose regimens that are convenient for patients; the exquisite selectivity of MGDs enables a high therapeutic index; and MGDs have the potential to deplete both membrane receptors and intracellular signaling nodes critical for immune cell regulation.



Figure 65: MGD Strengths Align with I&I Requirements

We are advancing novel discovery programs for I&I targets that we believe have the potential to be highly differentiated, by designing oral MGD product candidates that are degrading undruggable targets in critical I&I pathways. These may include programs with the potential to improve upon the clinical profile of cell therapies such as CAR-T or biologics such as FcRn-targeting antibodies and biologics, as illustrated in Figure 66.

Figure 66: Degrading Undruggable Targets in Critical I&I Disease Pathways



Our services, collaboration and licenses agreements

Roche agreement

On October 16, 2023, Monte Rosa AG entered into a Collaboration and License Agreement with Roche Basel and Roche US, and together with Roche Basel, Roche, or the "Roche Agreement". Pursuant to the Roche Agreement, the parties will seek to identify and MGDs against cancer or neurological disease targets using our proprietary drug discovery platform for an initial set of targets in oncology and neuroscience selected by Roche, with Roche having an option to expand the collaboration with an additional set of targets under certain conditions, each target being subject to certain substitution rights owned by Roche. We will lead preclinical discovery and research activities until a defined point. Upon such point, Roche gains the right to exclusively pursue further preclinical and clinical development activities.

Under the Roche Agreement, Roche will have a worldwide, exclusive license under patents and know-how controlled by us to develop and commercialize products directed to applicable targets. The research collaboration activities governed by the Roche Agreement will be overseen by a joint research committee.

Under the terms of the agreement, we received an upfront payment of \$50 million, and are eligible to receive future preclinical, clinical, commercial and sales milestone payments that could exceed \$2 billion, including up to \$172 million for achieving preclinical milestones. Roche has an option to expand the collaboration with an additional set of targets under certain conditions. For the optional additional targets, we are entitled to receive from Roche an upfront payment of up to \$28 million, and potential preclinical, clinical, commercial, and sales milestones exceeding \$1 billion. We are also eligible to receive tiered royalties ranging from high-single-digit percent to low-teens percent on any products that are commercialized by Roche as a result of the collaboration.

Unless earlier terminated, the Roche Agreement will remain in effect for each product licensed under the Roche Agreement until expiration of the royalty term for the applicable product. The parties have included customary termination provisions in the agreement, allowing termination of the Roche Agreement in its entirety, on a country-by-country or a target-by-target basis.

Novartis agreement

On October 25, 2024, Monte Rosa AG and Novartis entered into a global exclusive development and commercialization license agreement, or the Novartis Agreement. Pursuant to the Novartis Agreement, we granted to Novartis an exclusive, royalty-bearing, sublicensable and transferable license to develop, manufacture, and commercialize VAV1 MGDs, including MRT-6160, which is currently in Phase 1 clinical development for immune-mediated conditions. We are responsible for completing the ongoing Phase 1 clinical study and Novartis is responsible for all subsequent development and commercial activities starting at Phase 2. Development and commercial activities governed by the Novartis Agreement will be overseen by a Development Committee and a Commercialization Committee.

Pursuant to the Novartis Agreement, we received from Novartis an upfront payment of \$150 million, and are eligible to receive from Novartis (1) up to \$2.1 billion in development, regulatory, and sales milestones, beginning upon initiation of Phase 2 studies including (a) potential development and regulatory milestone payments, exceeding \$1.5 billion if multiple indications achieve regulatory approval in multiple territories. (b) potential sales milestones payments in connection with sales outside of the United States, and (2) tiered royalties on sales outside of the United States. We will continue to be responsible for costs associated with the ongoing Phase 1 clinical study and Novartis will be responsible for costs associated with any subsequent clinical studies. We and Novartis also agreed to a net profit and loss sharing arrangement, pursuant to which we will co-fund any global clinical development from Phase 3 onwards and will share 30% of any profits and losses associated with the manufacturing and commercialization of the licensed products in the United States. We have defined opportunities to opt out of the net profit and loss sharing arrangement, in such case, sales in the United States would be entitled to the potential sales milestones payments and tiered royalties on sales available outside of the United States. Any costs for any co-funded development and commercialization activities are subject to budgets reviewed by the Development Committee and Commercialization Committee, respectively. The Novartis Agreement includes customary termination provisions, including Novartis' ability to terminate the Novartis Agreement in its entirety. On December 11, 2024, we announced the closing of the Novartis Agreement.

Competition

The biotechnology industry is extremely competitive in the race to develop new products and the industry is characterized by a high level of innovation and strong emphasis on proprietary products and intellectual property

rights. While we believe we have significant competitive advantages due to our management team's years of expertise in protein degradation, molecular glues and clinical and preclinical development of precision medicines in general, coupled with our unique scientific expertise and our growing portfolio of intellectual property rights, we currently face and will continue to face competition for our development programs from other companies that develop heterobifunctional degraders, similar molecular glue degraders or have protein degradation development platforms and their own associated intellectual property. Our competition will also include companies focused on existing and novel therapeutic modalities such as small molecule inhibitors antibodies and gene therapies. The competition is likely to come from multiple sources, including large and specialty pharmaceutical companies, biotechnology companies and academic institutions that are in the business of research, development, manufacturing and commercialization. Moreover, the existence of large numbers of patents and frequent allegations of patent infringement is typical in our industry.

The main competitors in our efforts to develop targeted protein degraders or MGD therapeutics for patients, include, but are not limited to, C4 Therapeutics, Inc., Nurix Therapeutics, Inc., Kymera Therapeutics, Inc., Bristol-Myers Squibb, Novartis, all of whom have reported having TPD or MGD product candidates in preclinical or clinical development. Several large pharmaceutical companies have disclosed investments in the TPD field.

In addition to the competitors we face in developing small molecule-based protein degraders, we will also face competition in the indications we expect to pursue with our MGD programs. Many of these indications already have approved standards of care which may include existing therapeutic modalities. In order to compete effectively with these existing therapies, we will need to demonstrate that our MGDs perform favorably when compared to existing therapeutics.

Manufacturing

We do not own or operate manufacturing facilities for the production of our product candidates and we currently have no plans to build our own clinical or commercial scale manufacturing capabilities. We currently contract with third-party contract manufacturing organizations, or CMOs, for the manufacture of our product candidates and we intend to continue to do so in the future. We rely on and expect to continue to engage on third-party manufacturers for the production of both drug substance and finished drug product. We currently obtain our supplies from these manufacturers on a purchase order basis and do not have long-term supply arrangements in place. Should any of these manufacturers become unavailable to us or their services to us become delayed for any reason, we believe that there are a number of potential replacements, although we may incur some delay in identifying and qualifying such replacements.

Intellectual property

We are an innovation-driven company and we seek to aggressively protect the innovations, intellectual property, and proprietary technology that we generate that we consider important to our business, including by pursuing patent applications that cover our product candidates and methods of using the same, innovations around our industry leading QuEEN[™] discovery engine and our proprietary library of MGDs, as well as any other relevant innovations, inventions, and improvements that are considered potentially commercially relevant to the development of our business and to maintain our perceived competitive advantages. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position. For our product candidates, we generally pursue patent protection covering compositions of matter, pharmaceutical compositions, methods of use, including combination therapies, methods of administration including dosing methods, methods for monitoring potential clinical events, compositions and methods for personalizing, monitoring, and potentially refining clinical use, including biomarkers, processes of manufacture and process intermediates, where relevant. For our QuEENTM discovery engine, we generally intend to pursue patent protection covering our approaches, methods, and research and development tools. We continually assess and iteratively refine our intellectual property strategies as we develop new innovations and product candidates. We currently plan to continue to invest in filing additional patent applications based on our intellectual property strategies to build value in our business and/or to improve our business and potential partnering opportunities, where appropriate.

Our commercial success depends, in part, on our ability to obtain, maintain, enforce and protect our intellectual property and other proprietary rights for the technology, inventions and improvements we consider important to our business, and to defend any patents we may own or in-license in the future, prevent others from infringing any patents we may own or in-license in the future, prevent others, and operate

without infringing, misappropriating or otherwise violating the valid and enforceable patents and proprietary rights of third parties.

As with other biotechnology and pharmaceutical companies, our ability to maintain and solidify our proprietary and intellectual property position for our product candidates and technologies will depend on our success in obtaining effective patent claims and enforcing those claims if granted. However, our pending provisional and Patent Cooperation Treaty (PCT) patent applications, and any patent applications that we may in the future file or license from third parties, may not result in the issuance of patents and the validity and/or enforceability of any of our issued patents may be challenged by third parties. Further, as with other companies, the patents we may obtain do not guarantee us the right to practice our technology in relation to the commercialization of our products. Regarding obtaining issued patents, here in the United States as well as in other jurisdictions of interest to our business, the patent positions for biopharmaceutical companies like us are generally uncertain and can involve complex legal, scientific, and factual issues. Further, the laws governing the protection of intellectual property may change over time due to the issuance of new judicial decisions or the passage of new laws, rules or regulations. In addition, the coverage claimed in a patent application can be significantly reduced before a patent is issued and its scope can be reinterpreted and challenged even after issuance. As a result, we cannot guarantee that any of our product candidates will be protected or remain protectable by valid, enforceable patents. We also cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, circumvented, or invalidated by third parties.

The exclusivity terms of our patents depend upon the laws of the countries in which they are obtained. In the countries in which we currently intend to file, the patent term is 20 years from the earliest date of filing of a nonprovisional patent application. The term of a U.S. patent may be extended to compensate for the time required to obtain regulatory approval to sell a drug (referred to as a patent term extension) or by delays encountered during patent prosecution that are caused by the United States Patent and Trademark Office (referred to as patent term adjustment). For example, the Hatch-Waxman Act permits a patent term extension for FDA-approved new chemical entity drugs of up to five years beyond the ordinary expiration date of one patent that covers the approved drug or its use. The length of the patent term extension is related to the length of time the drug is under regulatory review and diligence during the review process. Patent term extensions in the United States cannot extend the term of a patent beyond a total of 14 years from the date of product approval and only one patent covering an approved drug or its method of use may be extended. A similar kind of patent extension, referred to as a Supplementary Protection Certificate, is available in Europe. Legal frameworks may also be available in certain other jurisdictions to extend the term of a patent. We currently intend to seek patent term extensions for our products on any of our issued patents in any jurisdiction where we have a qualifying patent and the extension is available: however, there is no guarantee that the applicable regulatory authorities, including the FDA in the United States, will agree with our assessment of whether extensions of this nature should be granted and, even if granted, the length of these extensions. Further, even if any of our patents are extended or adjusted, those patents, including the extended or adjusted portion of those patents, may be held invalid or unenforceable by a court of final jurisdiction in the United States or a foreign country.

Patents and Patent Applications

As of December 31, 2024, we solely owned a patent portfolio that included thirty-nine (39) pending patent families, including pending patent applications filed under the Patent Cooperation Treaty, national and regional phase patent applications, and multiple pending United States provisional patent applications. Our portfolio is built to cover our MGDs product candidates and various uses thereof, and our industry-leading QuEEN[™] discovery engine, as further described below. Patent prosecution related to our portfolio is currently in the early stages and, as such, only two patent applications have proceeded to allowance in the United States.

Wholly Owned Product Candidates

With respect to our GSPT1 program, as of December 31, 2024, our portfolio included one granted US patent, one pending PCT patent application, ten pending non-provisional patent applications in the United States, and patent applications in Australia, Canada, Chile, China, Europe, Israel, Japan, Mexico, Nigeria, New Zealand, Singapore and South Africa that cover various GSPT1-directed MGDs and uses thereof. These patent applications are drawn to composition of matter, pharmaceutical compositions, and methods of using our GSPT1-directed MGDs. We also own one pending European patent application that covers biomarkers related to use of our GSPT1-directed MGDs, if such patent is issued, would be 2040, excluding any additional term for available patent term adjustment or patent term extension, and assuming timely payment of all applicable maintenance or annuity fees.

With respect to our CDK2 program, as of December 31, 2024, our portfolio included two pending PCT applications, two pending non-provisional patent applications in the United States, two pending United States provisional patent applications, and a pending European patent application, that cover various CDK2-directed MGDs and uses thereof. The earliest scheduled expiration of any U.S. or foreign patents issuing from these patent applications, if such patents are issued, would be 2042, excluding any additional term for available patent term adjustment or patent term extension.

With respect to our NEK7 program, as of December 31, 2024, our portfolio included one pending PCT patent application and two U.S. provisional patent applications that cover various NEK7-directed MGDs and uses thereof. The earliest scheduled expiration of any U.S. or foreign patents issuing from these U.S. provisional patent applications, if such patents are issued, would be 2044, excluding any additional term for available patent term adjustment or patent term extension.

With respect to our CCNE1 program, as of December 31, 2024, our portfolio included one pending U.S. provisional patent application that covers CCNE1-directed MGDs.

With respect to our VAV1 program, on October 25, 2024, the patent rights protecting our VAV1 MGDs were exclusively licensed to Novartis Pharma AG.

QuEEN[™] discovery engine

With respect to our QuEEN[™] discovery engine, as of December 31, 2024, our portfolio included three pending PCT patent applications, four pending U.S. non-provisional patent applications, one U.S. provisional patent application, and a pending European patent application, that protect our QuEEN[™] discovery engine and uses thereof for the design, discovery, and development of MGD product candidates. The earliest scheduled expiration of any U.S. or foreign patent issuing from these U.S. provisional patent applications, if such patents are issued, would be 2042, excluding any available additional term for patent term adjustment or patent term extension.

Trademarks

As of December 31, 2024, we owned various registered and unregistered trademarks in the United States and Switzerland, including Monte Rosa, Monte Rosa Therapeutics and our housemark 'M' logo.

Trade Secrets and Know How

As an innovation driven biotechnology company, we rely on trade secrets, technical know-how and continuing innovation to develop and maintain the competitive advantage relevant to our business. Under the agreements we enter into with our employees and consultants, full rights in any intellectual property are assigned to us. We also rely on confidentiality or other agreements with our employees, consultants, other advisors and business partners to protect our proprietary information. Our policy is to require third parties that receive material confidential information to enter into confidentiality or other agreements with us that contain appropriate protections for our confidential and trade secret information.

Government regulation

The FDA and other regulatory authorities at federal, state and local level, as well as in foreign countries and local jurisdictions, extensively regulate among other things, the research, development, testing, manufacture, quality control, sampling, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record-keeping, approval, advertising, promotion, marketing, post-approval monitoring and post-approval reporting of drugs. We, along with our vendors, contract research organizations, or CROs, and contract manufacturers, will be required to navigate the various preclinical, clinical, manufacturing and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval of our product candidates. The process of obtaining regulatory approvals of drugs and ensuring subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources.

In the U.S., the FDA regulates drug products under the Federal Food, Drug, and Cosmetic Act, or FD&C Act, as amended, its implementing regulations and other laws. If we fail to comply with applicable FDA or other requirements at any time with respect to product development, clinical testing, approval or any other legal requirements relating to product manufacture, processing, handling, storage, quality control, safety, marketing, advertising, promotion, packaging, labeling, export, import, distribution, or sale, we may become subject to administrative or judicial sanctions or other legal consequences. These sanctions or consequences could include, among other things, the FDA's refusal to approve pending applications, issuance of clinical holds for ongoing studies, withdrawal of approvals, warning or untitled letters, product withdrawals or recalls, product seizures,

relabeling or repackaging, total or partial suspensions of manufacturing or distribution, injunctions, fines, civil penalties or criminal prosecution.

The process required by the FDA before a drug may be marketed in the U.S. generally involves the following:

- completion of extensive preclinical studies in accordance with applicable regulations, including studies conducted in accordance with good laboratory practice, or GLP, requirements;
- submission to the FDA of an IND application, which must become effective before clinical trials may begin;
- approval by an IRB or independent ethics committee at each clinical trial site before each trial may be initiated;
- performance of adequate and well-controlled clinical trials in accordance with applicable IND regulations, GCP requirements and other clinical trial-related regulations, to establish the safety and efficacy of the investigational product for each proposed indication;
- submission to the FDA of a NDA;
- a determination by the FDA within 60 days of its receipt of a New Drug Application, or an NDA, to accept the filing for review;
- satisfactory completion of one or more FDA pre-approval inspections of the manufacturing facility or facilities where the drug will be produced to assess compliance with cGMP requirements to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- potential FDA audit of the clinical trial sites that generated the data in support of the NDA;
- payment of user fees for FDA review of the NDA; and
- FDA review and approval of the NDA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the drug in the U.S.

Preclinical studies and clinical trials for drugs

Before testing any drug in humans, the product candidate must undergo rigorous preclinical testing. Preclinical studies include laboratory evaluations of drug chemistry, formulation and stability, as well as *in vitro* and animal studies to assess safety and in some cases to establish the rationale for therapeutic use. The conduct of preclinical studies is subject to federal and state regulations and requirements, including GLP requirements for safety/toxicology studies. The results of the preclinical studies, together with manufacturing information and analytical data must be submitted to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational product to humans and must become effective before clinical trials may begin. Some long-term preclinical testing may continue after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research patients will be exposed to unreasonable health risks, and imposes a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Submission of an IND may result in the FDA not allowing clinical trials to commence or not allowing clinical trials to commence on the terms originally specified in the IND.

The clinical stage of development involves the administration of the product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control, in accordance with GCP requirements, which include the requirements that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters and criteria to be used in monitoring safety and evaluating effectiveness. Each protocol, and any subsequent amendments to the protocol must be submitted to the FDA as part of the IND. Furthermore, each clinical trial must be reviewed and approved by an IRB for each institution at which the clinical trial will be conducted to ensure that the risks to individuals participating in the clinical trials are minimized and are reasonable related to the anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative, and must monitor the clinical trial until completed. The FDA, the IRB or the sponsor may suspend or discontinue a clinical trial at any time on various grounds, including a finding that the patients are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which

provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trials to public registries. Information about applicable clinical trials, including clinical trial results, must be submitted within specific timeframes for publication on the www.clinicaltrials.gov website.

A sponsor who wishes to conduct a clinical trial outside of the U.S. may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor must submit data from the clinical trial to the FDA in support of an NDA. The FDA will accept a well-designed and well-conducted foreign clinical trial not conducted under an IND if the trial was conducted in accordance with GCP requirements, and the FDA is able to validate the data through an onsite inspection if deemed necessary.

Clinical trials to evaluate therapeutic indications to support NDAs for marketing approval are typically conducted in three sequential phases, which may overlap or be combined.

- Phase 1—Phase 1 clinical trials involve initial introduction of the investigational product into healthy human volunteers or patients with the target disease or condition. These studies are typically designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, excretion the side effects associated with increasing doses, and, if possible, to gain early evidence of effectiveness. In the case of some products for severe or life-threatening diseases, such as cancer, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- Phase 2—Phase 2 clinical trials typically involve administration of the investigational product to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks.
- Phase 3—Phase 3 clinical trials typically involve administration of the investigational product to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval and physician labeling. Generally, two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of an NDA.

Post-approval trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication and are commonly intended to generate additional safety data regarding use of the product in a clinical setting. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA. Written IND safety reports must be submitted to the FDA and the investigators fifteen days after the trial sponsor determines the information qualifies for reporting for serious and unexpected suspected adverse events, findings from other studies or animal or *in vitro* testing that suggest a significant risk for human volunteers and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must also notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction as soon as possible but in no case later than seven calendar days after the sponsor's initial receipt of the information.

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

U.S. marketing approval for drugs

Assuming successful completion of the required clinical testing, the results of the preclinical studies and clinical trials, 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 product for one or more indications. An NDA must contain proof of the drug's safety and efficacy in order to be approved. The marketing application may include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of the FDA. FDA approval of an NDA must be obtained before a drug may be marketed in the U.S.

The FDA reviews all submitted NDAs before it accepts them for filing and may request additional information rather than accepting the NDA for filing. The FDA must make a decision on accepting an NDA for filing within 60 days of receipt, and such decision could include a refusal to file by the FDA. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the NDA. The FDA reviews an NDA to determine, among other things, whether the drug is safe and effective and whether the facility in which it is manufactured, processed, packaged or held meets standards designed to assure the product's continued safety, quality and purity. Under the goals and polices agreed to by the FDA under the Prescription Drug User Fee Act, or PDUFA, the FDA targets ten months, from the filing date, in which to complete its initial review of a new molecular entity NDA and respond to the applicant, and six months from the filing date of a new molecular entity NDA for priority review. The FDA does not always meet its PDUFA goal dates for standard or priority NDAs, and the review process is often extended by FDA requests for additional information or clarification.

Further, under PDUFA, as amended, each NDA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA also may require submission of a Risk Evaluation and Mitigation Strategy, or REMS, program to ensure that the benefits of the drug outweigh its risks. The REMS program could include medication guides, physician communication plans, assessment plans and/or elements to assure safe use, such as restricted distribution methods, patient registries or other risk-minimization tools.

The FDA may refer an application for a novel drug to an advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, which 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.

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 cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA may inspect one or more clinical trial sites to assure compliance with GCP and other requirements and the integrity of the clinical data submitted to the FDA.

After evaluating the NDA and all related information, including the advisory committee recommendation, if any, and inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter, or, in some cases, a complete response letter. A complete response letter generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing in order for the FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

Even if the FDA approves a product, depending on the specific risk(s) to be addressed it may limit the approved indications for use of the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization or impose other conditions, including distribution and use restrictions or other risk management mechanisms under a REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-marketing studies or

surveillance programs. After approval, 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.

Orphan drug designation and exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the U.S., or if it affects 200,000 or more individuals in the U.S., there is no reasonable expectation that the cost of developing and making the product available in the U.S. for the disease or condition will be recovered from sales of the product. Orphan designation must be requested before submitting an NDA. After the FDA grants orphan designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan designation does not convey any advantage in or shorten the duration of the regulatory review and approval process, though companies developing orphan products are eligible for certain incentives, including tax credits for qualified clinical testing and waiver of application fees.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to a seven-year period of marketing exclusivity during which the FDA may not approve any other applications to market the same therapeutic agent for the same indication, except in limited circumstances, such as a subsequent product's showing of clinical superiority over the product with orphan exclusivity or where the original applicant cannot produce sufficient quantities of product. Competitors, however, may receive approval of different therapeutic agents for the indication for which the orphan product has exclusivity or obtain approval for the same therapeutic agent but for a different indication than that for which the orphan product has exclusivity. Orphan product exclusivity could also block the approval of one of our products for seven years if a competitor obtains approval for the same therapeutic agent for the same indication before we do, unless we are able to demonstrate that our product is clinically superior. If an orphan designated product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan exclusivity. Further, orphan drug exclusive marketing rights in the U.S. may be lost if the FDA later determines that the request for designation was materially defective or the manufacturer of the approved product is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Expedited development and review programs for drugs

The FDA maintains several programs intended to facilitate and expedite development and review of new drugs to address unmet medical needs in the treatment of serious or life-threatening diseases or conditions. These programs include Fast Track Designation, Breakthrough Therapy Designation, Priority Review and Accelerated Approval, and the purpose of these programs is to either expedite the development or review of important new drugs to get them to patients earlier than under standard FDA development and review procedures.

A new drug is eligible for Fast Track Designation if it is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address unmet medical needs for such disease or condition. Fast Track Designation provides increased opportunities for sponsor interactions with the FDA during preclinical and clinical development, in addition to the potential for rolling review once a marketing application is filed, meaning that the agency may review portions of the marketing application before the sponsor submits the complete application, as well as Priority Review, discussed below.

In addition, a new drug may be eligible for Breakthrough Therapy Designation if it is intended 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. Breakthrough Therapy Designation provides all the features of Fast Track Designation in addition to intensive guidance on an efficient drug development program beginning as early as Phase 1, and FDA organizational commitment to expedited development, including involvement of senior managers and experienced review staff in a cross-disciplinary review, where appropriate.

Any product submitted to the FDA for approval, including a product with Fast Track or Breakthrough Therapy Designation, may also be eligible for additional FDA programs intended to expedite the review and approval process including Priority Review designation and Accelerated Approval. A product is eligible for Priority Review if it has the potential to provide a significant improvement in safety or effectiveness in the treatment, diagnosis or prevention of a serious disease or condition. Under priority review, the FDA targets reviewing an application in six months after filing compared to ten months after filing for a standard review.

Additionally, products are eligible for Accelerated Approval if they can be shown to have an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or an effect on a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality which 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. Accelerated Approval is usually contingent on a sponsor's agreement to conduct additional post-approval studies to verify and describe the product's clinical benefit and, under the Food and Drug Omnibus Reform Act of 2022, or FDORA, the FDA is now permitted to require, as appropriate, that such trials be underway prior to approval or within a specific time period after the date of approval for a product granted Accelerated Approval. Under FDORA, the FDA has increased authority for expedited procedures to withdraw approval of a drug or indication approved under Accelerated Approval if, for example, the confirmatory trial fails to verify the predicted clinical benefit of the product. In addition, for products being considered for accelerated approval, the FDA generally requires, unless otherwise informed by the agency, that all advertising and promotional materials that are intended for dissemination or publication within 120 days following marketing approval be submitted to the agency for review during the pre-approval review period, and that after 120 days following marketing approval, all advertising and promotional materials must be submitted at least 30 days prior to the intended time of initial dissemination or publication.

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 the time period for FDA review or approval may not be shortened. Furthermore, Fast Track Designation, Breakthrough Therapy Designation, Priority Review and Accelerated Approval do not change the scientific or medical standards for approval or the quality of evidence necessary to support approval but may expedite the development or review process.

Pediatric information and pediatric exclusivity

Under the Pediatric Research Equity Act, or PREA, as amended, certain NDAs and certain supplements to an NDA must contain data to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. The FD&C Act requires that a sponsor who is planning to submit a marketing application for a drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within 60 days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase 3 or Phase 2/3 trial. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials and/or other clinical development programs.

A drug can also obtain pediatric market exclusivity in the U.S. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial or of multiple pediatric trials in accordance with an FDA-issued "Written Request" for such trials, provided that at the time pediatric exclusivity is granted there is not less than nine months of term remaining.

U.S. post-approval requirements for drugs

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 record-keeping, periodic reporting, product sampling and distribution, reporting of adverse experiences with the product, complying with promotion and advertising requirements, which include restrictions on promoting products for unapproved uses or patient populations (known as "off-label use") and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available products for off-label uses, manufacturers and individuals working on behalf of manufacturers may not market or promote such uses. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability, including investigation by federal and state authorities. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use or first publication. Further, if there are any modifications to the drug, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA or NDA supplement, which may require the development of additional data or preclinical studies and clinical trials. The FDA may impose a number of post-approval requirements as a condition of approval of an NDA. For example, the FDA may require post-market testing, including Phase 4 clinical trials, and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

In addition, drug manufacturers and their subcontractors involved in the manufacture and distribution of approved drugs, and those supplying products, ingredients, and components of them, are required to register their establishments with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMP, which impose certain procedural and documentation requirements upon us and our contract manufacturers. Manufacturers and other parties involved in the drug supply chain for prescription drug products must also comply with product tracking and tracing requirements and for notifying the FDA of counterfeit, diverted, stolen and intentionally adulterated products or products that are otherwise unfit for distribution in the United States. Failure to comply with statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, product seizures, injunctions, civil penalties or criminal prosecution. There is also a continuing, annual prescription drug product program user fee.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information, requirements for post-market studies or clinical trials to assess new safety risks, or imposition of distribution or other restrictions under a REMS. 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;
- safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- fines, warning letters or untitled letters or holds on post-approval clinical trials;
- refusal of the FDA to approve applications or supplements to approved applications, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- injunctions or the imposition of civil or criminal penalties; and
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs or mandated modification of promotional materials and labeling and issuance of corrective information.

Marketing exclusivity

Market exclusivity provisions under the FD&C Act can delay the submission or the approval of certain marketing applications. The FD&C Act provides a five-year period of non-patent exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not approve or even accept for review an abbreviated new drug application, or ANDA, or an NDA submitted under Section 505(b)(2), or 505(b)(2) NDA, submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication. However, such an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder.

The FD&C Act alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA, if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to any preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Other regulatory matters

From time to time, legislation is drafted, introduced, passed in Congress and signed into law that could significantly change the statutory provisions governing the approval, manufacturing, and marketing of products regulated by the FDA. In addition to new legislation, FDA regulations, guidances, and policies are often revised or

reinterpreted by the agency in ways that may significantly affect the manner in which pharmaceutical products are regulated and marketed.

Manufacturing, sales, promotion and other activities of product candidates following product approval, where applicable, or commercialization are also subject to regulation by numerous regulatory authorities in the U.S. in addition to the FDA, which may include the Centers for Medicare & Medicaid Services, or CMS, other divisions of the Department of Health and Human Services, the Department of Justice, the Drug Enforcement Administration, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency and state and local governments and governmental agencies.

Current and future healthcare reform legislation

In the United States and in some foreign jurisdictions, there have been, and likely will continue to be, a number of legislative and regulatory changes and proposed changes intended to broaden access to healthcare, improve the quality of healthcare, and contain or lower the cost of healthcare. For example, in the United States, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or ACA, among other things, subjected products to potential competition by lower-cost products, expanded the types of entities eligible for the 340B drug discount program, increased rebates owed by manufacturers under the Medicaid Drug Rebate Program and extended the rebate program to individuals enrolled in Medicaid managed care organizations, established annual fees and taxes on manufacturers of certain branded prescription drugs, and created a Medicare Part D coverage gap discount program for certain Medicare Part D beneficiaries, in which manufacturers must agree to offer 50% (increased effective January 2019 to 70%) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D (later replaced altogether by a similar manufacturer-owed discount obligation under the Inflation Reduction Act of 2022).

There have been executive, judicial and congressional challenges to certain aspects of the ACA Act as well as efforts to repeal or replace certain aspects of the ACA. On June 17, 2021, for example, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. In addition, President Trump has issued multiple executive orders that have sought to reduce prescription drug costs. Although a number of these and other proposed measures may require authorization through additional legislation to become effective, and the Trump administration may reverse or otherwise change these measures, both the Trump administration and Congress have indicated that they will continue to seek new legislative measures to control drug costs.

Other federal health reform measures have been proposed and adopted in the U.S. since the ACA was enacted. The Budget Control Act of 2011, for example, included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year that will remain in effect through 2031. In addition, the American Taxpayer Relief Act of 2012 was signed into law which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Furthermore, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several congressional inquiries and proposed legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient assistance programs and reform government program reimbursement methodologies for drug products.

In addition, the Inflation Reduction Act of 2022, or the IRA, included several provisions that could impact our business to varying degrees. The IRA, which among other things, allows for Centers for Medicare & Medicaid Services to negotiate prices for certain single-source drugs and biologics reimbursed under Medicare Part B and Part D, beginning with select high-cost drugs in 2026. The legislation subjects drug manufacturers to civil monetary penalties and a potential excise tax for offering a price that is not equal to or less than the price negotiated under the law or for taking price increases that exceed inflation. The legislation also requires manufacturers to pay rebates for drugs in Medicare Part D whose price increases exceed inflation. Further, the legislation caps Medicare beneficiaries' annual out-of-pocket drug expenses at \$2,000. The effect of IRA on our business and the healthcare industry in general is not yet known.

We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our approved products;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

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

Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. It is difficult to predict the future legislative landscape in healthcare and the effect on our business, results of operations, financial condition and prospects. However, we expect that additional state and federal healthcare reform measures will be adopted in the future.

Third-party payor coverage and reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory approval. In the U.S. and markets in other countries, sales of any products for which we may receive regulatory marketing approval for commercial sale will depend, in part, on the availability of coverage and reimbursement from third-party payors. Third-party payors include government healthcare programs (e.g., Medicare, Medicaid), managed care providers, private health insurers, health maintenance organizations and other organizations. These third-party payors decide which medications they will pay for and will establish reimbursement levels. The availability of coverage and extent of reimbursement by governmental and other third-party payors is essential for most patients to be able to afford treatments such as targeted protein degradation therapies.

In the United States, no uniform policy exists for coverage and reimbursement for products among third-party payors. Therefore, decisions regarding the extent of coverage and amount of reimbursement to be provided can differ significantly from payor to payor. Third-party payors often follow 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. 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;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

One third-party payor's decision to cover a particular product or service does not ensure that other payors will also provide coverage for the medical product or service. Third-party payors may limit coverage to specific products on an approved list or formulary, which may not include all FDA-approved products for a particular indication. Also, third-party payors may refuse to include a particular branded product on their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available. 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 third-party payors.

Moreover, the process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate a payor will pay for the product. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. In order to secure coverage and

reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA or comparable regulatory approvals. Additionally, we may also need to provide discounts to purchasers, private health plans or government healthcare programs. Despite our best efforts, our product candidates may not be considered medically necessary or cost-effective. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover an approved product as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit. A decision by a third-party payor not to cover a product could reduce physician utilization once the product is approved and have a material adverse effect on sales, our operations and financial condition.

Finally, in some foreign countries, the proposed pricing for a product candidate must be approved before it may be lawfully marketed. The requirements governing product pricing vary widely from country to country. For example, in the European Union, or EU, pricing and reimbursement of pharmaceutical products are regulated at a national level under the individual EU Member States' social security systems. Some foreign countries provide options to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and can 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 country may approve a specific price for the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for products will allow favorable reimbursement and pricing arrangements for any of our product candidates. Even if approved for reimbursement, historically, product candidates launched in some foreign countries, such as some countries in the EU, do not follow price structures of the U.S. and prices generally tend to be significantly lower.

Other healthcare laws and regulations

Healthcare providers, physicians, and third-party payors will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our business operations and any current or future arrangements with third-party payors may expose us to broadly applicable federal and state fraud and abuse laws, as well as other healthcare laws and regulations. These laws may impact, among other things, our proposed sales, marketing, and distribution strategies. In the U.S., these laws include, among others:

- The federal Anti-Kickback Statute, or AKS, which prohibits, among other things, any person or entity from knowingly and willfully offering, soliciting, receiving or paying remuneration (a term interpreted broadly to include anything of value, including, for example, gifts, discounts and credits), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, or arranging for, an item, good, facility or service for which payment may be made under a federal healthcare program such as Medicare and Medicaid. The AKS has been interpreted to apply to arrangements between manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. 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. Violations can result in significant civil monetary and criminal penalties for each violation, plus up to three times the amount of remuneration, imprisonment, and exclusion from government healthcare programs.
- Additionally, the civil False Claims Act, or FCA, prohibits knowingly presenting or causing the presentation of a false, fictitious or fraudulent claim for payment to the U.S. government. Actions under the FCA may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Violations of the FCA can result in very significant monetary penalties, for each false claim and treble the amount of the government's damages. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. Further, a violation of the AKS can also form the basis for FCA liability.
- The U.S. federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes additional criminal and civil liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private); and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statement in connection with the delivery of, or payment for, healthcare benefits, items or services. Similar to the AKS, 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 of 2009, or HITECH, and its implementing regulations, including the final omnibus rule published on January 25, 2013, imposes, among other things, certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that create, receive, maintain, transmit, or obtain, protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions.
- Federal transparency laws, including the federal Physician Payment Sunshine Act created under the ACA, and its implementing regulations, which requires manufacturers of certain drugs, devices, medical supplies, and biologics, among others, to track and disclose payments under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) and other transfers of value they make to U.S. physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Effective January 1, 2022, these reporting obligations were extended to include transfers of value made to certain non-physician providers such as physician assistants and nurse practitioners. This information is subsequently made publicly available in a searchable format on a CMS website.
- Federal government price reporting laws, which require us to calculate and report complex pricing metrics in an accurate and timely manner to government programs.
- Federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.
- Analogous state law equivalents of each of the above U.S. federal laws and similar healthcare laws and regulations in the European Union and other jurisdictions, such, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers or patients: state and local marketing and/or transparency laws applicable to manufacturers that may be broader in scope than the federal requirements; state laws that require the reporting of information related to drug pricing; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures and pricing information; state and local laws that require the licensure and/or registration of pharmaceutical sales representatives; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; and state laws governing the privacy and security of health information and/or other health information in certain circumstances, many of which differ from each other in significant ways and often are not pre-empted by HIPAA, thus complicating compliance efforts. There are ambiguities as to what is required to comply with these state requirements and if we fail to comply with an applicable state law requirement we could be subject to penalties. Finally, there are state and foreign laws governing the privacy and security of health information, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.
- The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal, state and foreign enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, individual imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations, as well as additional reporting obligations and oversight if we

become subject to a corporate integrity agreement or similar settlement to resolve allegations of noncompliance with these laws, any of which could adversely affect our ability to operate our business and our financial results. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to similar actions, penalties, and sanctions. Ensuring business arrangements comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource consuming and can divert a company's attention from the business.

Privacy data protection, and security laws and regulations

We may be subject to Swiss, European, US federal, state, and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the European Union, we may be subject to additional privacy restrictions. The collection and use of personal data including health information in the European Union is governed by the provisions of the General Data Protection Regulation, or GDPR as well as national data protection laws. The GDPR imposes a broad range of strict requirements on companies subject to the GDPR, such as requirements relating to ensuring a legal basis or condition applies to the processing of personal data, transferring such information outside the European Economic Area, or EEA, including to the U.S. (see below), expanded disclosures to individuals regarding the processing of their personal data, implementing safeguards to keep personal data secure, having data processing agreements with third parties who process personal data, providing information to individuals regarding data processing activities, responding to individuals' requests to exercise their rights in respect of their personal data, if required obtaining consent of the individuals to whom the personal data relates, reporting security and privacy breaches involving personal data to the competent national data protection authority and affected individuals, appointing data protection officers, conducting data protection impact assessments, and record-keeping. The GDPR substantially increases the penalties to which we could be subject in the event of any non-compliance, including fines of up to €20,000,000 or 4% of total annual global revenue, whichever is greater. The GDPR increases the responsibility and liability of pharmaceutical companies in relation to processing personal data, and companies may be required to put in place additional mechanisms to ensure compliance with the new EU data protection rules. The GDPR introduced new data protection requirements in the EU and substantial fines for breaches of the data protection rules. The GDPR may impose additional responsibility and liability in relation to personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules. This may be onerous and adversely affect our business, financial condition, results of operations and prospects.

In addition, the United Kingdom (UK) incorporated the GDPR into UK law (referred to as the 'UK GDPR'), following its exit from the EU. The UK GDPR and the UK Data Protection Act 2018 set out the UK's data protection regime, which is independent from but aligned to the EU's data protection regime. Non-compliance with the UK GDPR may result in monetary penalties of up to £17.5 million or 4% of worldwide revenue, whichever is higher. Although the UK is regarded as a third country under the EU's GDPR, the European Commission or EC has now issued a decision recognizing the UK as providing adequate protection under the EU GDPR and. therefore, transfers of personal data originating in the EU to the UK remain unrestricted. Like the EU GDPR, the UK GDPR restricts personal data transfers outside the UK to countries not regarded by the UK as providing adequate protection. The UK government has confirmed that personal data transfers from the UK to the EEA remain free flowing. The UK introduced plans to reform the country's data protection legal framework in its Data Reform Bill which failed in the legislative process. A new Data (Use and Access) Bill, or UK Bill, has been introduced into parliament. If passed, the final version of the UK Bill may have the effect of further altering the similarities between the UK and EU data protection regime and threaten the UK adequacy decision from the EU Commission. Compliance with the EU GDPR and UK GDPR is a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European or UK activities.

The GPDR imposes strict rules on the transfer of personal information to third countries, including the United States. The European Commission has issued standard contractual clauses for data transfers from controllers or processors in the EU (or otherwise subject to the GDPR) to controllers or processors established outside the EU. The standard contractual clauses require exporters to assess the risk of a data transfer on a case-by-case basis, including an analysis of the laws in the destination country. The UK is not subject to the European Commission's new standard contractual clauses but has published a UK-specific transfer mechanism, which enables transfers from the UK. The UK-specific mechanism, the "International Data Transfer Agreement", requires a similar risk assessment of the transfer as the standard contractual clauses. Further, the EU and United States have adopted its adequacy decision for the EU-U.S. Data Privacy Framework, or the "Framework," which entered into force on
July 11, 2023. This Framework provides that the protection of personal data transferred between the EU and the United States is comparable to that offered in the EU. This provides a further avenue to ensuring transfers to the United States are carried out in line with GDPR. There has been an extension to the Framework to cover UK transfers to the United States. The Framework could be challenged like its predecessor frameworks. This complexity and the additional contractual burden increases our overall risk exposure. There may be further divergence in the future, including with regard to administrative burdens.

In Switzerland, we are also subject to comprehensive data protection requirements including the Swiss Federal Act on Data Protection, or the DPA, which imposes stringent rules on the processing of personal data including health related information.

In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. For example, the California Consumer Privacy Act (CCPA) is a comprehensive law that creates individual privacy rights and protections for California consumers, places increased privacy and security obligations on entities handling personal data of consumers or households, and provides for civil penalties for violations and a private right of action for data breaches. The CCPA requires covered companies to provide certain disclosures to consumers about its data collection, use and sharing practices, and to provide affected California residents with ways to opt-out of certain sales or transfers of personal information.

Further, as of January 1, 2023, the California Privacy Rights Act (CPRA), amended the CCPA and created additional obligations with respect to processing and storing personal information and sensitive personal information. While the CCPA contains an exception for activities that are subject to HIPAA, we cannot yet determine the impact the CCPA and other such future laws, regulations and standards may have on our business. Similar consumer privacy laws have passed or have been proposed in numerous U.S. states. Like the CCPA, these laws grant consumers rights in relation to their personal information and impose new obligations on regulated businesses, including, in some instances, broader data security requirements. Such proposed legislation, if enacted, may add additional complexity, variation in requirements, restrictions and potential legal risk, require additional investment of resources in compliance programs, impact strategies and the availability of previously useful data and could result in increased compliance costs and/or changes in business practices and policies. The existence of comprehensive privacy laws in different states in the country would make our compliance obligations more complex and costly and may increase the likelihood that we may be subject to enforcement actions or otherwise incur liability for noncompliance. State laws are changing rapidly and there are discussions in the U.S. Congress of new comprehensive federal data privacy laws to which we could become subject to, if enacted.

At the federal level, the FTC has used its authority over "unfair or deceptive acts or practices" to impose stringent requirements on the collection and disclosure of sensitive categories of personal information, including health information. Moreover, the FTC's expanded interpretation of a "breach" under its Health Breach Notification Rule could impose new disclosure obligations that would apply in the event of a qualifying breach. Regulators and legislators in the U.S. are also increasingly scrutinizing and restricting certain personal data transfers and transactions involving foreign countries. For example, the Biden Administration's executive order "Preventing Access to Americans' Bulk Sensitive Personal Data and United States Government-Related Data by Countries of Concern" as implemented by Department of Justice regulations issued in December 2024, prohibits data brokerage transactions involving certain sensitive personal data categories, including health data, genetic data, and biospecimens, to countries of concern, including China. The regulations also restrict certain investment agreements, employment agreements and vendor agreements involving such data and countries of concern, absent specified cybersecurity controls. Actual or alleged violations of these regulations may be punishable by criminal and/or civil sanctions, and may result in exclusion from participation in federal and state programs.

The uncertainty surrounding the implementation of recent and emerging state privacy and other similar laws, regulations and standards that may be adopted in other jurisdictions exemplifies the vulnerability of our business to the evolving regulatory environment related to personal data and protected health information. Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the

providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, 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.

Many jurisdictions outside of Europe where we do business directly or through master resellers today and may seek to expand our business in the future, are also considering and/or have enacted comprehensive data protection legislation. We also continue to see jurisdictions imposing data localization laws. These and similar regulations may interfere with our intended business activities, inhibit our ability to expand into those markets, require modifications to our products or services or prohibit us from continuing to offer services in those markets without significant additional costs.

Compliance with other federal and state laws or requirements; changing legal requirements

If any products that we may develop are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Products must meet applicable child-resistant packaging requirements under the U.S. Poison Prevention Packaging Act. Manufacturing, labeling, packaging, distribution, sales, promotion and other activities also are potentially subject to federal and state consumer protection and unfair competition laws, among other requirements to we may be subject.

The distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive record-keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products.

The failure to comply with any of these laws or regulatory requirements subjects firms to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in criminal prosecution, fines or other penalties, injunctions, exclusion from federal healthcare programs, requests for recall, seizure of products, total or partial suspension of production, denial or withdrawal of product approvals, relabeling or repackaging, or refusal to allow a firm to enter into supply contracts, including government contracts. Any claim or action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Prohibitions or restrictions on marketing, sales or withdrawal of future products marketed by us could materially affect our business in an adverse way.

Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling or packaging; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

Other U.S. environmental, health and safety laws and regulations

We may be subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Current or future environmental laws and regulations may impair our research, development or production efforts. In addition, failure to comply with these laws and regulations may result in substantial fines, penalties or other sanctions.

Government regulation of drugs outside of the United States

To market any product outside of the U.S., we would need to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and governing, among other things, clinical trials,

marketing authorization or identification of an alternate regulatory pathway, manufacturing, commercial sales and distribution of our products.

Whether or not we obtain FDA approval of a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Non-clinical studies and clinical trials

Similarly to the U.S., the various phases of non-clinical and clinical research in EU, are subject to significant regulatory controls.

Non-clinical studies are performed to demonstrate the safety and non-toxicity of new chemical (or biological) substances. Non-clinical studies, both *in vitro* and *in vivo*, must be planned, performed, monitored, recorded, reported and archived in accordance with the GLP principles, which define a set of rules and criteria for a quality system for the organizational process and the conditions for non-clinical studies. These GLP standards reflect the Organization for Economic Co-operation and Development requirements.

In April 2014, the EU adopted the Clinical Trials Regulation (EU) No 536/2014, or the Clinical Trials Regulation, which replaced the Clinical Trials Directive 2001/20/EC on January 31, 2022. The Clinical Trials Regulation, which is directly applicable in all EU Member States (meaning no national implementing legislation in each EU Member State is required), aims to simplify and streamline the approval of clinical trials in the EU, for example by providing for a streamlined application procedure via a single entry point and simplifying reporting procedures for clinical trial sponsors.

Marketing authorizations

In the EU, medicinal products can only be placed on the market after obtaining a marketing authorization, or MA. The process for doing this depends, among other things, on the nature of the medicinal product, but the two routes are either the centralized authorization procedure or one of the national authorization procedures.

Centralized procedure—Under the centralized procedure, following the opinion of the European Medicines Agency's, or EMA's, Committee for Medicinal Products for Human Use, or, CHMP, the European Commission issues a single MA valid across the EU as well as the additional Member States of the EEA (Iceland, Norway and Liechtenstein). The centralized procedure is compulsory for human medicines derived from biotechnology processes, such as genetic engineering, or advanced therapy medicinal products (i.e. gene therapy, somatic cell therapy and tissue engineered products), products that contain a new active substance indicated for the treatment of certain diseases, (i.e. HIV/AIDS, cancer, neurodegenerative disorders, diabetes, autoimmune diseases and other immune dysfunctions and viral diseases), and officially designated orphan medicinal products. For medicines that do not fall within these categories, an applicant has the option of submitting an application for a centralized MA to the EMA, as long as the medicine concerned contains a new active substance not yet authorized in the EU, is a significant therapeutic, scientific or technical innovation, or if its authorization would be in the interest of public health in the EU. Under the centralized procedure the maximum timeframe for the evaluation of a marketing authorization application, or MAA, by the EMA is 210 days, excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP. Clock stops may extend the timeframe of evaluation of an MAA considerably beyond 210 days. Where the CHMP gives a positive opinion, the EMA provides the opinion together with supporting documentation to the European Commission, who makes the final decision to grant an MA, which is issued within 67 days of receipt of the EMA's recommendation. In exceptional cases, the CHMP might perform an accelerated review of an MAA in no more than 150 days (not including clock stops). Innovative products that target an unmet medical need and are expected to be of major public health interest may be eligible for certain expedited development and review programs, such as the EMA's PRIME scheme, which provides incentives similar to the Breakthrough Therapy Designation in the U.S. PRIME is a voluntary scheme aimed at enhancing the EMA's support for the development of medicines that target unmet medical needs. It is based on increased interaction and early dialogue with companies developing promising medicines, to optimize their product development plans and speed up their evaluation to help them reach patients earlier. Product developers that benefit from PRIME designation can expect to be eligible for accelerated assessment, however this is not guaranteed. The benefits of a PRIME designation include the appointment of a CHMP rapporteur before submission of

an MAA, early dialogue and scientific advice at key development milestones, and the potential to qualify products for accelerated review earlier in the application process.

- National authorization procedures—There are also two other possible routes to authorize products for therapeutic indications in several EU Member States, which are available for products that fall outside the mandatory scope of the centralized procedure:
- Decentralized procedure—Under the decentralized procedure, an applicant may apply for simultaneous authorization in more than one EU Member State for medicinal products that have not yet been authorized in any EU Member State.
- Mutual recognition procedure—Under the mutual recognition procedure, a medicine is first authorized in one EU Member State, in accordance with the national procedures of that country. Following this, the applicant may seek additional MAs from other EU Member States in a procedure whereby the countries concerned agree to recognize the validity of the original, national MA.

MAs have an initial duration of five years. After these five years, the authorization may be renewed for an unlimited period on the basis of a reevaluation of the risk-benefit balance by the EMA.

Data and market exclusivity

In the EU, upon receiving an MA, innovative medicinal products, sometimes referred to as new chemical entities (i.e., reference products) generally qualify for eight years of data exclusivity and an additional two years of market exclusivity. If granted, the data exclusivity period prevents generic or biosimilar applicants from relying on the nonclinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar MA in the EU during a period of eight years from the date on which the reference product was first authorized in the EU. During the additional two-year period of market exclusivity, a generic/biosimilar MAA can be submitted, and the innovator's data may be referenced, but no generic or biosimilar product can be marketed in the EU until the expiration of the market exclusivity period. The overall ten-year period can be extended to a maximum of eleven years if, during the first eight years of those ten years, the MA holder obtains an MA for one or more new therapeutic indications which, during the scientific evaluation prior to their MA, are held to bring a significant clinical benefit in comparison with existing therapies. However, there is no guarantee that a product will be considered by the EMA or Member State regulatory authorities to be a new chemical entity, and products may not qualify for data exclusivity. Even if a product gains the prescribed period of data exclusivity, another company may market another version of the product if such company obtained a marketing authorization based on an application with a complete and independent data package of pharmaceutical tests, preclinical tests and clinical trials.

Orphan medicinal products

The criteria for designating an "orphan medicinal product" in the EU are similar in principle to those in the U.S. In the EU, a medicinal product may be designated as orphan if (i) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (ii) either (a) such condition affects no more than five in 10,000 persons in the EU when the application is made, or (b) it is unlikely that the product, without the benefits derived from orphan status, would generate sufficient return in the EU to justify the investment in its development; and (iii) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the EU, or if such a method exists, the product will be of a significant benefit to those affected by that condition. The application for orphan designation must be submitted before the MAA. Orphan medicinal products are eligible for financial incentives such as reduction of fees or fee waivers and are, upon grant of an MA, entitled to ten years of market exclusivity for the approved therapeutic indication. During this tenyear orphan market exclusivity period, no MAA shall be accepted in the EU for the same indication in respect of a similar medicinal product to the authorized orphan product. A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an 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 in the EU for pediatric studies. No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications. Orphan designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The ten-year market exclusivity may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation, for example, if the product is sufficiently profitable not to justify maintenance of market exclusivity. Additionally, an MA may be granted to a similar medicinal product for the same indication as an authorized orphan product at any time if (i) it is established that a similar medicinal product is safer, more effective or otherwise clinically superior than the authorized orphan product; (ii) the MA

holder of the authorized orphan product consents to the second medicinal product authorization; or (iii) the MA holder of the authorized orphan product cannot supply enough orphan medicinal product.

Pediatric development

In the EU, MAAs for new medicinal products must include the results of trials conducted in the pediatric population, in compliance with a pediatric investigation plan, or PIP, agreed with the EMA's Pediatric Committee, or PDCO, unless the EMA has granted a product-specific waiver, a class waiver, or a deferral for one or more of the measures included in the PIP. This requirement also applies when a company wants to add a new indication, pharmaceutical form or route of administration for a medicine that is already authorized. The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the product for which an MA is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures of the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when these data are not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. Products that are granted an MA with the results of the pediatric clinical trials conducted in accordance with the PIP are eligible for a six month extension of the protection under an SPC (provided an application for such extension is made at the same time as filing the SPC application for the product, or at any point up to 2 years before the SPC expires) even where the trial results are negative. This pediatric reward is subject to specific conditions and is not automatically available when data in compliance with the PIP are developed and submitted.

Post-approval requirements

Similar to the United States, both MA holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA, the European Commission and/or the competent regulatory authorities of the EU Member States. The holder of an MA 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 periodic safety update reports, or PSURs. All new MAAs must include a risk management plan, or 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. The regulatory authorities may also impose specific obligations as a condition of the MA. Such risk-minimization measures or post-authorization obligations may include additional safety monitoring, more frequent submission of PSURs, or the conduct of additional clinical trials or post-authorization safety studies.

The advertising and promotion of medicinal products is also subject to laws concerning promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices. All advertising and promotional activities for the product must be consistent with the approved summary of product characteristics, and therefore all off-label promotion is prohibited. Direct-to-consumer advertising of prescription medicines is also prohibited in the EU. Although general requirements for advertising and promotion of medicinal products are established under EU Directives, the details are governed by regulations in each EU Member State and can differ from one country to another.

Failure to comply with EU and Member State laws that apply to the conduct of clinical trials, manufacturing approval, authorization of medicinal products and marketing of such products, both before and after grant of the 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 an 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 aforementioned EU rules are generally applicable in the European Economic Area, or EEA, which consists of the 27 EU Member States plus Norway, Liechtenstein and Iceland. For other countries outside of the EU, such as countries in Latin America or Asia, the requirements governing the conduct of clinical studies, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical studies are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

Should we utilize third-party distributors, compliance with such foreign governmental regulations would generally be the responsibility of such distributors, who may be independent contractors over whom we have limited control.

Reform of the Regulatory Framework in the European Union

The European Commission introduced legislative proposals in April 2023 that, if implemented, will replace the current regulatory framework in the EU for all medicines (including those for rare diseases and for children). The European Commission has provided the legislative proposals to the European Parliament and the European Council for their review and approval, and, in April 2024, the European Parliament proposed amendments to the legislative proposals. Once the European Commission's legislative proposals are approved (with or without amendment), they will be adopted into EU law.

Brexit and the regulatory framework in the United Kingdom

The UK formally left the EU on January 31, 2020.

On February 27, 2023, the UK government and the European Commission announced a political agreement in principle to replace the Northern Ireland Protocol with a new set of arrangements, known as the "Windsor Framework". The Windsor Framework was approved by the EU-UK Joint Committee on March 24, 2023, and the medicines aspects of the Windsor Framework have applied since January 1, 2025. This new framework fundamentally changes the previous system under the Northern Ireland Protocol, including with respect to the regulation of medicinal products in the UK. In particular, the MHRA is now responsible for approving all medicinal products destined for the UK market (i.e., Great Britain and Northern Ireland), and the EMA no longer has any role in approving medicinal products destined for Northern Ireland. A single UK-wide MA will be granted by the MHRA for all novel medicinal products to be sold in the UK, enabling products to be sold in a single pack and under a single authorization throughout the UK. In addition, the new arrangements require all medicines placed on the UK market to be labelled "UK only", indicating they are not for sale in the EU. However, although separate authorization is now required to market medicinal products in the UK, under an international recognition procedure which was put in place by the MHRA on January 1, 2024, the MHRA may take into account decisions on the approval of a marketing authorization from the EMA (and certain other regulators) when considering an application for a UK marketing authorization. There is now no pre-marketing authorization orphan designation in the UK. Instead, the MHRA reviews applications for orphan designation in parallel to the corresponding MAA. The criteria are essentially the same, but have been tailored for the UK market, i.e., the prevalence of the condition in UK (rather than the EU) must not be more than five in 10,000. Should an orphan designation be granted, the period of market exclusivity will be set from the date of first approval of the product in the UK.

Employees and human capital resources

As of December 31, 2024, we had 134 full-time employees, of which 63 have M.D. or Ph.D. degrees. Within our workforce, 105 employees are engaged in research and development and 29 are engaged in business development, finance, legal, and general management and administration. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity incentive plans are to attract, retain and reward personnel through the granting of equity-based compensation awards in order to increase shareholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Available Information

Investors and others should note that we announce material information to our investors using our investor relations website (https://ir.monterosatx.com/), SEC filings, press releases, public conference calls and webcasts. We use these channels as well as social media, including LinkedIn and our Twitter (@MonteRosaRx), to communicate with the public about our company, our business, our product candidates and other matters. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in our company to review the information we post on the social media channels listed on our investor relations website. Information that is contained in and can be accessed through our website or our social media posts are not incorporated into, and does not form a part of, this Annual Report on Form 10-K.

We file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements and other information with the SEC. Our filings with the SEC are available on the SEC's website at www.sec.gov.

We make available, free of charge, in the Investor Relations section of our website, documents we file with or furnish to the SEC, including 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. We make this information available as soon as reasonably practicable after we electronically file such materials with, or furnish such information to, the SEC. The other information found on our website is not part of this or any other report we file with, or furnish to, the SEC. Copies of such documents are available in print at no charge to any shareholder who makes a request. Such requests should be made to our corporate secretary at our corporate headquarters, 321 Harrison Avenue, Suite 900, Boston, MA 02118.

Item 1A. Risk Factors

Careful consideration should be given to the following risk factors, in addition to the other information set forth in this Annual Report and in other documents that we file with the SEC, in evaluating our business. Investing in our common stock involves a high degree of risk. If any of the following risks and uncertainties actually occurs, our business, prospects, financial condition and results of operations could be materially and adversely affected. The risks described below are not intended to be exhaustive and are not the only risks that we face. New risk factors can emerge from time to time, and it is not possible to predict the impact that any factor or combination of factors may have on our business, prospects, financial condition and results of operations. Certain statements in this Annual Report are forward-looking statements. Please also see the section entitled "Special Note Regarding Forward-Looking Statements."

Risks related to our financial position and capital needs

We are a biotechnology company with a limited operating history and have not generated any revenue to date from drug sales, and may never become profitable.

Biopharmaceutical drug development is a highly speculative undertaking and involves a substantial degree of risk. Since our formation as Monte Rosa Therapeutics AG in 2018, our operations have been limited primarily to organizing and staffing our company, business planning, raising capital, researching and developing our <u>Qu</u>antitative and Engineered Elimination of Neosubstrates drug discovery engine, or our QuEEN[™] discovery engine, building our proprietary library of MGDs, developing our pipeline of product candidates, building our intellectual property portfolio, undertaking preclinical and IND-enabling studies of our product candidates, and conducting our first clinical trials for MRT-2359 and MRT-6160. We have never generated any revenue from drug sales. We have not obtained regulatory approvals for any of our current or future product candidates.

Typically, it takes many years to develop one new pharmaceutical drug from the time it is discovered to when it is available for treating patients. Consequently, any predictions we make about our future success or viability may not be as accurate as they could be if we had a longer operating history. In addition, as a business with a limited operating history, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors, such as market volatility, public health crises or other geopolitical events. We will need to transition from a company focused on research and early-stage development to a company capable of supporting late-stage development and commercial activities. We may not be successful in such a transition.

We have incurred significant operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.

Since our inception, we have focused substantially all of our efforts and financial resources on developing our proprietary QuEENTM discovery engine, our proprietary MGD library, and our initial pipeline of product candidates. To date, we have financed our operations primarily through the issuance and sale of convertible promissory notes and our convertible preferred stock to outside investors in private equity financings, public offerings of our common stock or warrants to purchase common stock, registered direct offerings, and our collaboration agreements with Roche and Novartis. From our inception through the date hereof, we raised an aggregate of \$834.8 million of gross proceeds from such transactions. As of December 31, 2024, our cash, cash equivalents, restricted cash and marketable securities were \$377.0 million. We have incurred net losses in each year since our inception, and we had an accumulated deficit of \$438.6 million as of December 31, 2024. For the years ended December 31, 2024 and 2023, we reported net losses of \$72.7 million and \$135.4 million, respectively. Substantially all of our operating losses have resulted from costs incurred in connection with our research and initial pipeline programs and from general and administrative costs associated with our operations. We expect to continue to incur significant expenses and increasing operating losses over the next several years and for the foreseeable future. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' deficit and working capital. We expect our expenses to significantly increase in connection with our ongoing activities, as we:

- conduct our clinical trial for MRT-2359, our MGD product candidate targeting GSPT1;
- finalize our Phase 1 clinical trial for MRT-6160, our MGD candidate targeting VAV1 for immune-mediated conditions and, if applicable, co-fund any global clinical development of Phase 3 onward;
- continue preclinical activities for our NEK7, CDK2, CCNE1 and other currently undisclosed programs;

- prepare and submit IND applications with the FDA for other current and future product candidates, including for MRT-8102, our MGD product candidate targeting NEK7;
- complete preclinical studies for current or future product candidates;
- progress MGD molecules from our initial programs through lead optimization to development candidates and multiple areas of interest and indications;
- initiate and complete clinical trials for current or future product candidates;
- expand and improve the capabilities of our QuEEN[™] discovery engine;
- continue to build our proprietary library of MGDs;
- contract to manufacture our product candidates;
- advance research and development related activities to expand our product pipeline;
- seek regulatory approval for our product candidates that successfully complete clinical development;
- develop and scale up our capabilities to support our ongoing preclinical activities and future clinical trials for our product candidates and commercialization of any of our product candidates for which we may obtain marketing approval;
- maintain, expand, and protect our intellectual property portfolio;
- hire additional staff, including clinical, scientific and management personnel; and
- secure facilities to support continued growth in our research, development and commercialization efforts.

In addition, if we obtain marketing approval for our current or future product candidates, we will incur significant expenses relating to our commercialization of such product candidates via our sales, marketing, product manufacturing and distribution efforts. Because of the numerous risks and uncertainties associated with developing pharmaceutical drugs, including in light of any potential regional or global economic slowdowns, we are unable to predict the extent of any future losses or when we will become profitable, if at all.

Even if we achieve profitability, we may not be able to sustain or increase our profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our development efforts, obtain product approvals, diversify our offerings or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We are very early in our development efforts. All but two of our programs are still in the preclinical stages of drug development. If we are unable to commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

Our ability to become profitable depends upon our ability to generate revenue. To date we have not generated any revenue from our product candidates, and we do not expect to generate any revenue from the sale of drugs in the near future. We do not expect to generate revenue from product sales unless and until we complete the development of, obtain marketing approval for, and begin to sell, one or more of our product candidates. We are also unable to predict when, if ever, we will be able to generate revenue from such product candidates due to the numerous risks and uncertainties associated with drug development, including the uncertainty of:

- our plans to submit IND applications to the FDA for our future product candidates;
- our ability to timely and successfully complete preclinical studies and clinical trials for our product candidates MRT-2359, MRT-6160, MRT-8102, and our GSPT1, VAV1, NEK7, CDK2, our other currently undisclosed programs, and other current or future product candidates;
- our ability to advance additional MGD molecules through lead optimization;
- our successful initiation, enrollment in and completion of clinical trials, including our ability to generate positive data from any such clinical trials;
- our ability to demonstrate, to the satisfaction of the FDA and comparable regulatory authorities the safety, efficacy, consistent manufacturing quality and acceptable risk-benefit profile of our product candidates for their intended uses;

- our ability to timely receive necessary regulatory approvals from applicable regulatory authorities, including the FDA;
- the costs associated with the development of any additional development programs we identify in-house or via collaborations or other arrangements;
- the costs associated with collaboration or license agreements;
- our ability to establish timely manufacturing capabilities or make arrangements with third-party manufacturers for clinical supply and commercial manufacturing;
- obtaining and maintaining patent and trade secret protection or regulatory exclusivity for our current and future product candidates;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with others;
- obtaining and maintaining acceptance of our product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining healthcare coverage and adequate reimbursement;
- the terms and timing of any additional collaboration, license or other arrangement, including the terms and timing of any payments thereunder;
- our ability to enforce and defend intellectual property rights and claims; and
- our ability maintain a continued acceptable safety profile of our product candidates following approval.

We expect to incur significant sales and marketing costs as we prepare to commercialize our current or future product candidates. Even if we initiate and successfully complete pivotal or registration-enabling clinical trials of our current or future product candidates, and our current or future product candidates are approved for commercial sale, and despite expending these costs, our current or future product candidates may not be commercially successful. We may not achieve profitability soon after generating drug sales, if ever. If we are unable to generate revenue, we will not become profitable and may be unable to continue operations without continued funding.

As part of our ongoing business, we will need to raise substantial additional funding beyond our current capital. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, scale back or discontinue some of our product candidate development programs or future commercialization efforts.

We are currently progressing our Phase 1/2 trial of MRT-2359 and Phase 1 trial of MRT-6160, preparing to file an IND for MRT-8102, advancing multiple late stage preclinical programs, and multiple discovery programs through the preclinical stages of drug development across a number of potential indications, and we are continuously discovering additional targets as candidates for new discovery programs via our prolific QuEENTM MGD discovery engine. We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we continue the research and development of, advance the preclinical and clinical activities of, and seek marketing approval for, our current or future product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Furthermore, we expect to continue to incur significant additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. However, changing circumstances may cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We cannot be certain that additional funding will be available on acceptable terms, or at all. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through a combination of public or private equity offerings, including use of our "at-themarket" program with Jefferies LLC, or Jefferies, debt financings, governmental funding, collaborations, such as our collaboration with Roche, strategic partnerships and alliances or marketing, distribution or licensing arrangements with third parties, such as our license to Novartis. If we are unable to raise capital or generate revenue when needed or on attractive terms, we would be forced to delay, reduce or eliminate our discovery and preclinical development programs or any future commercialization efforts. To the extent that we raise additional

capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. 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 capital expenditures or declaring dividends.

Since our initial public offering, or IPO, we have raised additional capital through the issuance and sale of our common stock and warrants to purchase our common stock, including a registered direct offering in October 2023 which raised aggregate net proceeds of approximately \$24.9 million after deducting offering expenses, an underwritten public offering in May 2024 which raised aggregate net proceeds of approximately \$100 million after deducting offering expenses, collaboration and license agreements with Roche and Novartis and in "at-the-market" offerings, pursuant to an Open Market Sale Agreement with Jefferies which provided for the offering, issuance and sale of up to an aggregate amount of \$100.0 million of our common stock. We expect that our existing cash and cash equivalents and marketable securities, will be sufficient to fund our operations into 2028. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. This estimate also assumes that we do not obtain any additional funding through collaborations and licenses, such as our collaboration with Roche and our license to Novartis, or other strategic alliances. Our future capital requirements will depend on, and could increase significantly as a result of, many factors, including:

- the scope, prioritization and number of our research and development programs;
- the costs, timing and outcome of regulatory review of our current or future product candidates;
- the scope, progress, results and costs of drug discovery, preclinical development, laboratory testing and planned clinical trials for our current or future product candidates, including additional expenses attributable to adjusting our development plans (including any supply related matters) in response to public health crises or other geopolitical events;
- our ability to establish and maintain additional collaborations on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments, including
 potential royalty payments, under our existing Collaboration and License Agreement with Roche and our
 existing License Agreement with Novartis, or any additional collaboration agreements we obtain;
- the extent to which we are obligated to reimburse, or entitled to reimbursement of, clinical trial costs under any current or future collaboration agreements, if any;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the extent to which we acquire or in-license other current or future product candidates and technologies;
- the costs of securing timely manufacturing arrangements for commercial production; and
- the costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory clearances to market our current or future product candidates.

Identifying potential current or future product candidates and conducting preclinical studies and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve drug sales. In addition, our current or future product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional funding to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Risks related to our business and industry

Risks related to drug development and regulatory approval

Our approach to the discovery and development of product candidates based on our QuEEN[™] discovery engine is novel, which makes it difficult to predict the time, cost of development and likelihood of successfully developing any product candidates.

Our QuEEN[™] discovery engine is a relatively new technology. Our future success depends on the successful development of this novel product candidate development approach. We have not yet succeeded and may not succeed in demonstrating the efficacy and safety of any of our product candidates in clinical trials or in obtaining marketing approval thereafter. In particular, our ability to successfully target therapeutically-relevant proteins using MGDs requires the successful development of MGDs developed via our QuEEN[™] discovery engine. This is a complex process requiring a number of component parts or biological mechanisms to work in unison to achieve the desired effect. We cannot be certain that we will be able to discover MGDs by matching the right target and its degron with the ideal E3 ligase in a timely manner, or at all. We have only initiated clinical development of our lead product candidate, and there may be adverse effects from treatment with any of our current or future product candidates that we cannot predict at this time.

As a result of these factors, it is more difficult for us to predict the time and cost of product candidate development, and we cannot predict whether our approaches will result in the development and marketing approval of any product candidates. Any development problems we experience in the future related to our QuEEN[™] discovery engine or any of our discovery programs may cause significant delays or unanticipated costs or may prevent the development of a commercially viable product. Any of these factors may prevent us from completing our preclinical studies and clinical trials, or any clinical trials that we may initiate in the future or commercializing any product candidates we may develop on a timely or profitable basis, if at all.

We may not be successful in our efforts to identify or discover additional product candidates or we may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

A key element of our strategy is to apply our QuEEN[™] discovery engine and product pipeline to address a broad array of target proteins in various therapeutic areas. The discovery activities that we are conducting may not be successful in identifying product candidates that are useful in treating oncology, inflammatory, immunologic, metabolic, cardiovascular, genetic and other diseases, and neurodegenerative or other neurologic diseases. Our discovery programs may be unsuccessful in identifying potential product candidates, or our potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval.

Because we have limited financial and management resources, we focus on a limited number of discovery programs and product candidates at a time. As a result, we may forego or delay pursuit of opportunities with other current or future product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

Our business is dependent on the success of our lead programs, and any other product candidates that we advance into the clinic. We cannot be certain that we will be able to obtain regulatory approval for, or successfully commercialize, any of our current or future product candidates.

All of our pipeline programs other than MRT-2359 and MRT-6160 are currently in preclinical development. The preclinical studies and future clinical trials of our current or future product candidates are, and the manufacturing and marketing of our current or future product candidates will be, subject to extensive and rigorous review and regulation by numerous government authorities in the U.S. and in other countries where we intend to test or, if approved, market any of our current or future product candidates. Before obtaining regulatory approvals for the commercial sale of any of our current or future product candidates, we must demonstrate through preclinical studies and clinical trials that each product candidate is safe and effective for use in each target indication. Drug development is a long, expensive and uncertain process, and delay or failure can occur at any stage of any of our preclinical studies and clinical trials. This process can take many years and may include post-marketing studies and surveillance, which will require the expenditure of substantial resources beyond the proceeds we raised in our IPO. Of the large number of drugs in development in the U.S., only a small percentage will successfully complete the FDA regulatory approval process and will be commercialized, with similarly low rates of success for drugs in development in the EMA. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development and preclinical studies and clinical trials, we

cannot assure you that any of our current or future product candidates will be successfully developed or commercialized.

We are not permitted to market our current or future product candidates in the U.S. until we receive approval of an NDA from the FDA, or in the EEA, until we receive approval of a marketing authorization application, or an MAA, from the European Commission, or in any other foreign countries until we receive the requisite approval from such countries. Obtaining approval of an NDA or MAA is a complex, lengthy, expensive, and uncertain process, and the FDA or EMA may delay, limit or deny approval of any of our current or future product candidates for many reasons, including, among others:

- we may not be able to demonstrate that our current or future product candidates are safe and effective in treating their target indications to the satisfaction of the FDA or applicable foreign regulatory agency;
- the results of our preclinical studies and clinical trials may not meet the level of statistical or clinical significance required by the FDA or applicable foreign regulatory agency for marketing approval;
- the FDA or applicable foreign regulatory agency may disagree with the number, design, size, conduct or implementation of our preclinical studies and clinical trials;
- the FDA or applicable foreign regulatory agency may require that we conduct additional preclinical studies and clinical trials;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or applicable foreign regulatory agency may not approve the formulation, labeling or specifications of any of our current or future product candidates;
- the Contract Research Organizations, or CROs that we retain to conduct our preclinical studies and clinical trials may take actions outside of our control that materially adversely impact our preclinical studies and clinical trials;
- the FDA or applicable foreign regulatory agency may find the data from preclinical studies and clinical trials insufficient to demonstrate that our current or future product candidates' clinical and other benefits outweigh their safety risks;
- the FDA or applicable foreign regulatory agency may disagree with our interpretation of data from our preclinical studies and clinical trials;
- the FDA or applicable foreign regulatory agency may not accept data generated at our preclinical study and clinical trial sites;
- if our NDA, if and when submitted, is reviewed by an advisory committee, the FDA may have difficulties scheduling an advisory committee meeting in a timely manner or the advisory committee may recommend against approval of our application or may recommend that the FDA require, as a condition of approval, additional preclinical studies or clinical trials, limitations on approved labeling or distribution and use restrictions;
- the FDA may require development of a Risk Evaluation and Mitigation Strategy, or REMS, as a condition of approval or post-approval;
- the FDA or the applicable foreign regulatory agency may determine that the manufacturing processes or facilities of third-party manufacturers with which we contract do not conform to applicable requirements, including current Good Manufacturing Practices, or cGMPs;
- the FDA or applicable foreign regulatory agency may be delayed in their review processes due to staffing or other constraints arising from public health crises; or
- the FDA or applicable foreign regulatory agency may change its approval policies or adopt new regulations.

Any of these factors, many of which are beyond our control, could jeopardize our ability to obtain regulatory approval for and successfully market our current or future product candidates. In addition, the FDA and other applicable foreign regulatory agencies have substantial discretion in the approval process and determining when or whether regulatory approval will be granted for any product candidate that we develop and may decide that our data are insufficient for approval or require additional preclinical, clinical, or other data. The U.S. Supreme Court's July 2024 decision to overturn prior established case law giving deference to regulatory agencies' interpretations

of ambiguous statutory language has introduced uncertainty regarding the extent to which FDA's regulations, policies and decisions may become subject to increasing legal challenges, delays, and/or changes. Any setbacks in our pursuit of regulatory approval would have a material adverse effect on our business and prospects.

If we experience delays or difficulties in the initiation, enrollment and/or retention of patients in clinical trials, our regulatory submissions or receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate our planned clinical trials or continue our ongoing trial on a timely basis or at all if we are unable to recruit and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the U.S. Patient enrollment is a significant factor in the timing of clinical trials. Our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate.

Moreover, some of our clinical trials will compete with other clinical trials that are in the same therapeutic areas as our current or future product candidates, and this competition reduces the number and types of patients available to us, as some patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' current or future product candidates. Because the number of qualified clinical investigators and clinical trial sites is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such clinical trial sites. There may be limited patient pools from which to draw for clinical studies. In addition to the rarity of some diseases, the eligibility criteria of our clinical studies will further limit the pool of available study participants as we will require that patients have specific characteristics that we can measure or to assure their disease is either severe enough or not too advanced to include them in a study.

Patient enrollment for our ongoing clinical trial and any of our future clinical trials may be affected by other factors including:

- the size and nature of the patient population;
- competition with other companies for clinical sites or patients;
- the willingness of participants to enroll in our clinical trials in our countries of interest;
- the severity of the disease under investigation;
- availability and efficacy of approved drugs for the disease under investigation;
- the eligibility criteria for the clinical trial in question as defined in the protocol;
- the availability of an appropriate screening test for the indications we are pursuing;
- the perceived risks and benefits of the product candidate under study in relation to other available therapies, including any new products that may be approved for the indications we are investigating;
- the efforts to facilitate timely enrollment in and completion of clinical trials;
- delays in or temporary suspension of the enrollment of patients in our future clinical trials due to public health crises;
- ability to obtain and maintain patient consents;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment;
- the proximity and availability of clinical trial sites for prospective patients; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

These factors may make it difficult for us to enroll enough patients to complete our clinical trials in a timely and cost-effective manner. Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our product candidates and jeopardize our ability to obtain marketing approval for the sale of our product candidates. Furthermore, even if we are able to enroll a sufficient number of patients for our clinical trials, we may have difficulty maintaining participation in our clinical trials through the treatment and any follow-up periods.

The incidence and prevalence for target patient populations of our product candidates have not been established with precision. If the market opportunities for our product 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 and ability to achieve profitability will be adversely affected, possibly materially.

The precise incidence and prevalence for the indications being pursued by our current and future product candidates is currently 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 our product candidates, are based on estimates. Our product candidates are targeting cancers, inflammatory diseases, and autoimmune diseases. The total addressable market opportunity for product candidates from these discovery programs and future product candidates will ultimately depend upon, among other things, its proven safety and efficacy, the diagnosis criteria included in the final label for each, whether our product candidates are approved for sale for these indications, acceptance by the medical community and patient access, product pricing and reimbursement. The number of patients for our product candidates in the United States and elsewhere may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products, 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.

Preclinical and clinical drug development is a lengthy and expensive process, with an uncertain outcome. Our preclinical and clinical programs may experience delays or may never advance, which would adversely affect our ability to obtain regulatory approvals or commercialize our product candidates on a timely basis or at all, which could have an adverse effect on our business.

In order to obtain FDA approval to market a new small molecule product, we must demonstrate the safety and efficacy of our product candidates in humans to the satisfaction of the FDA. To meet these requirements, we will have to conduct adequate and well-controlled clinical trials. Clinical testing is expensive, time-consuming and subject to uncertainty. Before we can commence clinical trials for a product candidate, we must complete extensive preclinical studies that support our planned and future INDs in the United States. Other than MRT-2359, which is being evaluated in an ongoing clinical trial, MRT-6160, which is being evaluated in a Phase 1 single ascending dose / multiple ascending dose study, and MRT-8102, which we plan to submit an IND in H1 2025, we are currently selecting lead development candidates for preclinical development. We cannot be certain of the timely completion or outcome of our preclinical studies and cannot predict if the FDA will allow our proposed clinical programs to proceed or if the outcome of our preclinical studies will ultimately support further development of our programs. We cannot be sure that we will be able to submit INDs or similar applications with respect to our other product candidates on the timelines we expect, if at all, and we cannot be sure that submission of an IND or similar applications will result in the FDA or other regulatory authorities allowing clinical trials to begin.

Conducting preclinical testing and clinical trials represents a lengthy, time-consuming and expensive process. The length of time may vary substantially according to the type, complexity and novelty of the program, and often can be several years or more per program. Delays associated with programs for which we are directly conducting preclinical studies may cause us to incur additional operating expenses. The commencement and rate of completion of preclinical studies and clinical trials for a product candidate may be delayed by many factors, including, for example:

- inability to generate sufficient preclinical or other *in vivo* or *in vitro* data to support the initiation of clinical studies;
- timely completion of preclinical laboratory tests, animal studies and formulation studies in accordance with the FDA's good laboratory practice requirements and other applicable regulations;
- approval by an independent Institutional Review Board, or IRB, ethics committee at each clinical site before each trial may be initiated;
- delays in reaching a consensus with regulatory agencies on study design and obtaining regulatory authorization to commence clinical trials;
- delays in reaching agreement on acceptable terms with prospective CROs, and clinical trial sites, the terms
 of which can be subject to extensive negotiation and may vary significantly among different CROs and
 clinical trial sites;
- delays in identifying, recruiting and training suitable clinical investigators;

- delays in recruiting suitable patients to participate in our clinical trials;
- delays in manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials or the inability to do any of the foregoing;
- insufficient or inadequate supply or quality of product candidates or other materials necessary for use in clinical trials, or delays in sufficiently developing, characterizing or controlling a manufacturing process suitable for clinical trials;
- imposition of a temporary or permanent clinical hold by regulatory authorities;
- developments on trials conducted by competitors for related technology that raises FDA or foreign
 regulatory authority concerns about risk to patients of the technology broadly, or if the FDA or a foreign
 regulatory authority finds that the investigational protocol or plan is deficient to meet its stated objectives;
- delays in recruiting, screening and enrolling patients and delays caused by patients withdrawing from clinical trials or failing to return for post-treatment follow-up;
- difficulty collaborating with patient groups and investigators;
- failure by our CROs, other third parties or us to adhere to clinical trial protocols;
- failure to perform clinical trials in accordance with the FDA's good clinical practice requirements, or GCPs, or applicable regulatory guidelines in other countries;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits, or occurrence of adverse events in a trial of the same class of agents conducted by other companies;
- changes to the clinical trial protocols;
- clinical sites dropping out of a trial;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- selection of clinical endpoints that require prolonged periods of observation or analyses of resulting data;
- the cost of clinical trials of our product candidates being greater than we anticipate;
- clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon development of such product candidates;
- transfer of manufacturing processes to larger-scale facilities operated by a CMO and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process; and
- third parties being unwilling or unable to satisfy their contractual obligations to us.

Further, conducting clinical trials in foreign countries, as we may do for our product candidates, presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries. Delays in the completion of any preclinical studies or clinical trials of our product candidates will increase our costs, slow down our product candidate development and approval process and delay or potentially jeopardize our ability to commence product sales and generate product revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. Any delays to our preclinical studies or clinical trials that occur as a result could shorten any period during which we may have the exclusive right to commercialize our product candidates and our competitors may be able to bring products to market before we do, and the commercial viability of our product candidates could be significantly reduced. Any of these occurrences may harm our business, financial condition and prospects significantly.

The results of preclinical testing and early clinical trials may not be predictive of the results of later preclinical studies and clinical trials, and the results of our current and future clinical trials may not satisfy the requirements of the FDA or other comparable regulatory authorities. If we cannot replicate the positive results from our preclinical studies of our current or future product candidates in our current or future clinical trials, we may be unable to successfully develop, obtain regulatory approval for and commercialize our current or future product candidates.

We will be required to demonstrate with substantial evidence through well-controlled clinical trials that our product candidates are safe and effective before we can seek marketing approvals for their commercial sale. Positive results from our preclinical studies of our current or future product candidates, and any positive results we may obtain from our early clinical trials of our current or future product candidates, may not necessarily be predictive of the results from required subsequent preclinical studies and clinical trials. Similarly, even if we are able to complete our planned preclinical studies or any clinical trials of our current or future product candidates and clinical studies according to our current development timeline, the positive results from such preclinical studies and clinical trials of our current or future product candidates and clinical trials of our current or future product candidates and clinical trials of our current or future product candidates according to our current or future product candidates may not be replicated in subsequent preclinical studies or clinical trial results.

Additionally, several of our planned and ongoing clinical trials utilize an "open-label" trial design. An "open-label" clinical trial is one where both the patient and investigator know whether the patient is receiving the investigational product candidate or either an existing approved drug or placebo. Most typically, open-label clinical trials test only the investigational product candidate and sometimes may do so at different dose levels. Open-label clinical trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. Open-label clinical trials may be subject to a "patient bias" where patients perceive their symptoms to have improved merely due to their awareness of receiving an experimental treatment. In addition, open-label clinical trials may be subject to an "investigator bias" where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. The results from an open-label trial may not be predictive of future clinical trial results with any of our product candidates for which we include an open-label clinical trial when studied in a controlled environment with a placebo or active control.

Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in latestage clinical trials after achieving positive results in early-stage development, and we cannot be certain that we will not face similar setbacks. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway or safety or efficacy observations made in preclinical studies and clinical trials, including previously unreported adverse events. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials nonetheless failed to obtain approval from the FDA or a comparable foreign regulatory authority. If we fail to produce positive results in our planned preclinical studies or clinical trials of any of our current or future product candidates, the development timeline and regulatory approval and commercialization prospects for our current or future product candidates, and, correspondingly, our business and financial prospects, would be materially adversely affected. Thus, even if the results from our initial research and preclinical activities appear positive, we do not know whether subsequent clinical studies we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market any product candidates.

Interim, top-line and preliminary data from our preclinical studies and clinical trials that we announce or publish from time to time may change as more data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose interim, topline or preliminary data from our preclinical studies and clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the interim, topline or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. For example, in December 2024 we announced interim data from the Phase 1 dose escalation part of our ongoing Phase 1/2 open-label, multicenter study of MRT-2359 in patients with MYC-driven solid tumors. While the interim clinical data from the study demonstrated favorable tolerability, and favorable pharmacokinetic and pharmacodynamic profiles in heavily pre-treated patients with lung cancers and high-grade neuroendocrine cancer, we cannot be certain that the final data will demonstrate the same results, or that we will be able to draw the same conclusions from the final data. Interim, topline and preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we

previously published. As a result, such data should be viewed with caution until the final data are available. Adverse differences between preliminary, interim or topline data and final data could significantly harm our business prospects.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product, product candidate or our business. If the interim, topline or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals for our current or future product candidates, we will not be able to commercialize, or will be delayed in commercializing, our current or future product candidates, and our ability to generate revenue will be materially impaired.

Our current or future product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export, are subject to comprehensive regulation by the FDA and other regulatory agencies in the U.S. and by comparable authorities in other countries. Before we can commercialize any of our current or future product candidates, we must obtain marketing approval from the regulatory authorities in the relevant jurisdictions. We have not received approval to market any of our current or future product candidates from regulatory authorities in any jurisdiction, and it is possible that none of our current product candidates, nor any product candidates we may seek to develop in the future, will ever obtain regulatory approval. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory approval also requires the submission of information about the drug manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Our current or future product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our current or future product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our drugs, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our current or future product candidates.

If we experience delays in obtaining approval or if we fail to obtain approval of our current or future product candidates, the commercial prospects for our current or future product candidates may be harmed and our ability to generate revenues will be materially impaired.

Our current or future product candidates may cause adverse or other undesirable side effects that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by our current or future product candidates could cause us to interrupt, delay or halt preclinical studies or could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other regulatory authorities. As is the case with many treatments for cancer, inflammatory and autoimmune diseases, neurodegeneration or other diseases it is likely that there may be adverse side effects associated with the use of our product candidates. Additionally, a potential risk in any protein degradation product is that healthy proteins or proteins not targeted for degradation will be degraded or that the degradation of the targeted protein, in itself, could cause adverse events, undesirable side effects, or unexpected consequences. It is possible that healthy proteins or proteins not targeted for degradation could be degraded using our MGD molecules in any of our

planned or future clinical studies. There is also the potential risk of delayed adverse events following treatment using any of our current or future product candidates.

These side effects could arise due to off-target activity, allergic reactions in trial subjects or unwanted on-target effects in the body. Results of our current or planned clinical trials could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of, or deny approval of, our current or future product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Further, our current or future product candidates could cause undesirable side effects in clinical trials related to on-target toxicity. If on-target toxicity is observed, or if our current or future product candidates have characteristics that are unexpected, we may need to abandon their development or limit development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in early-stage testing for treating cancer or other diseases have later been found to cause side effects that prevented further development of the compound.

In addition, clinical trials by their nature utilize a sample of the potential patient population. With a limited number of patients and limited duration of exposure, rare and severe side effects of our current or future product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate. In any such event, our studies could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. The side effects experienced could affect patient recruitment or the ability of enrolled subjects to complete the study or result in potential product liability claims. Moreover, if we elect, or are required, not to initiate, or to delay, suspend or terminate any future clinical trial of any of our product candidates, the commercial prospects of such product candidates may be harmed and our ability to generate product revenues from any of these product candidates may be delayed or eliminated. Any of these occurrences may harm our ability to develop other product candidates, and may harm our business, financial condition and prospects significantly.

In addition, if our current or future product candidates receive marketing approval and we or others identify undesirable side effects caused by such current or future product candidates after such approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may suspend, withdraw or limit approvals of such current or future product candidates, or seek an injunction against their manufacture or distribution;
- regulatory authorities may require the addition of labeling statements or warnings, such as a "boxed" warning or a contraindication;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we may be required to change the way such current or future product candidates are distributed or administered, conduct additional clinical trials or change the labeling of the current or future product candidates;
- we may be required to conduct post-marketing studies or change the way the product is administered;
- regulatory authorities may require a REMS plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools;
- we may be subject to regulatory investigations and government enforcement actions;
- we may decide to remove such current or future product candidates from the market;
- we could be sued and held liable for injury caused to individuals exposed to or taking our current or future product candidates;
- we may be subject to fines, injunctions or imposition of criminal penalties; and

• our reputation may suffer.

We believe that any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidates and could substantially increase the costs of commercializing our current or future product candidates, if approved, and significantly impact our ability to successfully commercialize our current or future product candidates and generate revenues.

We may seek and fail to obtain Breakthrough Therapy Designation or Fast Track Designation from the FDA for our current or future product candidates. Even if granted for any of our current or future product candidates, these programs may not lead to a faster development, regulatory review or approval process, and such designations do not increase the likelihood that any of our product candidates will receive marketing approval in the United States.

We may seek a Breakthrough Therapy Designation for one or more of our current or future product candidates. A breakthrough therapy is defined as a drug that 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. For drugs that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Product candidates designated as breakthrough therapies by the FDA may also be eligible for priority review and accelerated approval. Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our current or future product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a Breakthrough Therapy Designation for a current or future product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition. even if one or more of our current or future product candidates gualify as breakthrough therapies, the FDA may later decide that such product candidates no longer meet the conditions for gualification and rescind the designation or decide that the time period for FDA review or approval will not be shortened.

We have been granted Fast Track Designations for MRT-2359 for the treatment of patients with previously treated, metastatic small cell lung cancer (SCLC) with L-MYC or N-MYC expression and MRT-2359 for the treatment of patients with previously treated, metastatic NSCLC with L-MYC or N-MYC expression. We may seek additional Fast Track Designations for one or more of our current or future product candidates, as appropriate. If a product candidate is intended for the treatment of a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address an unmet medical need for this condition, the product sponsor may apply for Fast Track Designation. The sponsor of a product candidate with Fast Track Designation has opportunities for more frequent interactions with the applicable FDA review team during product development and, once an NDA is submitted, the product candidate may be eligible for priority review. Such product candidate may also be eligible for rolling review, where the FDA may consider reviewing sections of the NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular current or future product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation for certain current or future product candidates, such as the Fast Track Designation we received for MRT-2359, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may rescind Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program. Fast Track Designation alone does not guarantee qualification for the FDA's priority review procedures.

We may seek approval from the FDA through the use of the accelerated approval pathway. If we are unable to obtain such approval, we may be required to conduct additional preclinical studies or clinical trials beyond those that we contemplate, which could increase the expense of obtaining, and delay the receipt of, necessary marketing approvals. Even if we receive accelerated approval from the FDA, if our confirmatory trials do not verify clinical benefit, or if we do not comply with rigorous post-marketing requirements, the FDA may seek to withdraw accelerated approval.

A product may be eligible for accelerated approval if it is designed to treat a serious or life-threatening disease or condition and generally provides a meaningful advantage over available therapies upon a determination that the

product candidate has an effect on a surrogate endpoint or intermediate clinical endpoint that is reasonably likely to predict clinical benefit or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, or IMM, that is reasonably likely to predict an effect on IMM or other clinical benefit. The FDA considers a clinical benefit to be a positive therapeutic effect that is clinically meaningful in the context of a given disease, such as IMM. For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. An intermediate clinical endpoint is a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit. The accelerated approval pathway may be used in cases in which the advantage of a new drug over available therapy may not be a direct therapeutic advantage. but is a clinically important improvement from a patient and public health perspective. If granted, accelerated approval is usually contingent on the sponsor's agreement to conduct, in a diligent manner, additional postapproval confirmatory studies to verity and describe the drug's clinical benefit. Under FDORA, the FDA is permitted to require, as appropriate, that a post-approval confirmatory study or studies be underway prior to approval or within a specified time period after the date of approval for a product granted accelerated approval. FDORA also requires sponsors to send updates to the FDA every 180 days on the status of such studies, including progress toward enrollment targets, and the FDA must promptly post this information publicly. FDORA also gives the FDA increased authority to withdraw approval of a product granted accelerated approval on an expedited basis if the sponsor fails to conduct such studies in a timely manner, send the necessary updates to the FDA, or if such post-approval studies fail to verify the drug's predicted clinical benefit. Under FDORA, the FDA is empowered to take action, such as issuing fines, against companies that fail to conduct with due diligence any post-approval confirmatory study or submit timely reports to the agency on their progress. In addition, for products being considered for accelerated approval, the FDA generally requires, unless otherwise informed by the Agency, that all advertising and promotional materials intended for dissemination or publication within 120 days of marketing approval be submitted to the Agency for review during the pre-approval review period. There can be no assurance that the FDA would allow any of the product candidates we may develop to proceed on an accelerated approval pathway, and even if the FDA did allow such pathway, there can be no assurance that such submission or application will be accepted or that any expedited development, review or approval will be granted on a timely basis, or at all. Moreover, even if we received accelerated approval, any post-approval studies required to confirm and verify clinical benefit may not show such benefit, which could lead to withdrawal of any approvals we have obtained. Receiving accelerated approval does not assure that the product's accelerated approval will eventually be converted to a traditional approval.

We may seek Orphan Drug Designation for certain of our current or future product candidates, and we may be unsuccessful or may be unable to maintain the benefits associated with Orphan Drug Designation, including the potential for market exclusivity.

We have been granted by FDA Orphan Drug Designation for MRT-2359 for the treatment of small cell lung cancer, and as part of our business strategy, we may seek Orphan Drug Designation for certain indications of our other current or future product candidates, and we may be unsuccessful. Regulatory authorities in some jurisdictions, including the U.S. and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the U.S., or a patient population of 200,000 or more in the U.S. In the U.S., Orphan Drug Designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers.

Similarly, in the European Union, the European Commission, upon the recommendation of the EMA's Committee for Orphan Medicinal Products, may grant orphan designation in respect of products that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than 5 in 10,000 persons in the EU. Additionally, orphan designation may be granted for products intended for the diagnosis, prevention, or treatment of life-threatening or chronically debilitating conditions, and when, without incentives, it is unlikely that sales of the product in the EU would generate sufficient return to justify the necessary investment in developing the product. In each case, there must be no satisfactory method of diagnosis, prevention, or treatment of the applicable condition which is authorized for marketing in the EU (or, if such a method exists, the applicable product would be of significant benefit to those affected by the condition). In the EU, orphan designation entitles a party to financial incentives such as reduction of fees or fee waivers.

Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the FDA or the EMA from approving another marketing authorization application for the same drug for the same indication for that time period. The applicable period is seven years in the U.S. and ten years in the European Union. The exclusivity period in the European Union can be reduced to six years if, at the end of the fifth year, a drug no longer meets the criteria for orphan designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different therapies can be approved for the same condition and the same therapies can be approved for different conditions but used off-label. Even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In addition, a designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. Orphan Drug Designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process. While we may seek Orphan Drug Designation for applicable indications for our current and any future product candidates, we may never receive such designations. Even if we do receive such designations, there is no guarantee that we will enjoy the benefits of those designations.

Even if we receive marketing authorization for our product candidates, we will be subject to extensive ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

If the FDA or a comparable foreign regulatory authority approves any of our current or future product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the drug will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration requirements, continued compliance with cGMPs and GCPs, and applicable product tracking and tracing requirements. Any regulatory approvals that we receive for our current or future product candidates may also be subject to limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the drug. Later discovery of previously unknown problems with a drug, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of our product candidates, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- manufacturing delays and supply disruptions where regulatory inspections identify observations of noncompliance during remediation;
- revisions to the labeling, including limitation on approved uses or the addition of warnings, contraindications, or other safety information, including boxed warnings;
- imposition of a REMS, which may include distribution or use restrictions;
- requirements to conduct additional post-market clinical trials to assess the safety of the product;
- fines, warning or untitled letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of approvals;
- product seizure or detention, or refusal to permit the import or export of drugs; and
- injunctions or the imposition of civil or criminal penalties.

The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates and generate revenue and could require us to expend significant time and resources in response and could generate negative publicity.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our current or future product candidates. We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

Even if we receive marketing approval for our current or future product candidates in the U.S., we may never receive regulatory approval to market our current or future product candidates outside of the U.S.

We plan to seek regulatory approval of our current or future product candidates outside of the U.S. 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.

For example, even if the FDA grants marketing approval of a product candidate, we may not obtain approvals in other jurisdictions, and comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion and reimbursement of the product candidate in those countries. However, a failure or delay in obtaining marketing approval in one jurisdiction may have a negative effect on the regulatory approval process in others. Approval procedures vary among countries and can involve additional product candidate testing and administrative review periods different from those in the United States. The time required to obtain approvals in other countries generally implicate all of the risks detailed above regarding FDA approval in the U.S. as well as other risks. In particular, in many countries outside of the U.S., products must receive pricing and reimbursement approval before the product can be commercialized. Obtaining this approval can result in substantial delays in bringing products to market in such countries.

Obtaining foreign regulatory approvals and establishing and maintaining 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 or any future collaborator fail to comply with regulatory requirements in international markets or fail to receive applicable marketing approvals, it would reduce the size of our potential market, which could have a material adverse impact on our business, results of operations and prospects.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Current or future environmental laws and regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

Our future growth may depend, in part, on our ability to penetrate foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties that could materially adversely affect our business.

We are not permitted to market or promote any of our current or future product candidates before we receive regulatory approval from the applicable regulatory authority in that foreign market, and we may never receive such regulatory approval for any of our current or future product candidates. To obtain separate regulatory

approval in many other countries we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy. Such requirements govern, among other things, clinical trials and commercial sales, and pricing and distribution of our current or future product candidates, and we cannot predict success in these jurisdictions. If we obtain approval of our current or future product candidates and ultimately commercialize our current or future product candidates in foreign markets, we would be subject to additional risks and uncertainties, including:

- differing regulatory requirements in foreign countries, such that obtaining regulatory approvals outside of the U.S. may take longer and be more costly than obtaining approval in the U.S.;
- our customers' ability to obtain reimbursement for our current or future product candidates in foreign markets;
- the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements;
- different medical practices and customs in foreign countries affecting acceptance in the marketplace;
- import or export licensing requirements;
- longer accounts receivable collection times;
- longer lead times for shipping;
- language barriers for technical training;
- reduced protection of intellectual property rights in some foreign countries;
- the existence of additional potentially relevant third-party intellectual property rights;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the U.S.;
- potential liability under the Foreign Corrupt Practices Act of 1977 or comparable foreign regulations;
- the interpretation of contractual provisions governed by foreign laws in the event of a contract dispute;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism.

Foreign sales of our current or future product candidates could also be adversely affected by the imposition of governmental controls, political and economic instability, trade restrictions and changes in tariffs.

Changes in funding or disruptions at the FDA, the SEC and other government agencies caused by funding shortages or global health concerns, or changes in policy could hinder their ability to hire and retain key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely,

including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the past decade, the U.S. government shut down several times and certain regulatory agencies, such as the FDA and the SEC, had to furlough critical employees and stop critical activities.

If a prolonged government shutdown occurs, or if global health concerns prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews or other regulatory activities, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, in our operations as a public company, future government shutdowns or delays could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

We may in the future conduct clinical trials for current or future product candidates outside the U.S., and the FDA and comparable foreign regulatory authorities may not accept data from such trials.

We may in the future choose to conduct one or more clinical trials outside the U.S., including in Europe. The acceptance of study data from clinical trials conducted outside the U.S. or another jurisdiction by the FDA or comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the sole basis for marketing approval in the U.S., the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations: and (iii) the data may be considered valid without the need for an on-site inspection by the FDA, or if the FDA considers such inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. In addition, even where the foreign study data are not intended to serve as the sole basis for approval, the FDA will not accept the data as support for an application for marketing approval unless the study is well-designed and well-conducted in accordance with GCP and the FDA is able to validate the data from the study through an onsite inspection if deemed necessary. Many foreign regulatory authorities have similar approval reguirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the U.S. or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which could be costly and time-consuming, and which may result in current or future product candidates that we may develop not receiving approval for commercialization in the applicable jurisdiction.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations. We can face serious consequences for violations.

Among other matters, U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations, which we collectively refer to as Trade Laws, prohibit companies and their employees, agents, clinical research organizations, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of Trade Laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations.

Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.

In some countries, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product candidates. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after coverage and reimbursement have been obtained. Reference pricing used by various countries and parallel distribution or arbitrage between low-priced and high-priced countries, can further reduce prices. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that

compares the cost-effectiveness of our product candidate to other available therapies, which is time-consuming and costly. If coverage and reimbursement of our product candidates are unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed, possibly materially.

Risks related to commercialization

Even if we receive marketing approval for our current or future product candidates, our current or future product candidates may not achieve broad market acceptance, which would limit the revenue that we generate from their sales.

The commercial success of our current or future product candidates, if approved by the FDA or other applicable regulatory authorities, will depend upon the awareness and acceptance of our current or future product candidates among the medical community, including physicians, patients and healthcare payors. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant revenue and we may not become profitable. Market acceptance of our current or future product candidates, if approved, will depend on a number of factors, including, among others:

- the efficacy of our current or future product candidates as demonstrated in clinical trials, and, if required by any applicable regulatory authority in connection with the approval for the applicable indications, to provide patients with incremental health benefits, as compared with other available medicines;
- the timing of market introduction of the product candidates and potential advantages to alternative treatments;
- limitations or warnings contained in the labeling approved for our current or future product candidates by the FDA or other applicable regulatory authorities;
- the clinical indications for which our current or future product candidates are approved;
- availability of alternative treatments already approved or expected to be commercially launched in the near future;
- the potential and perceived advantages of our current or future product candidates over current treatment options or alternative treatments, including future alternative treatments;
- the willingness of the target patient population to try new therapies or treatment methods and of physicians to prescribe these therapies or methods;
- the need to dose such product candidates in combination with other therapeutic agents, and related costs;
- the strength of marketing and distribution support and timing of market introduction of competitive products;
- publicity concerning our products or competing products and treatments;
- pricing and cost effectiveness;
- the effectiveness of our sales and marketing strategies;
- our ability to increase awareness of our current or future product candidates;
- our ability to obtain sufficient third-party coverage or reimbursement; or
- the willingness of patients to pay out-of-pocket in the absence of third-party coverage.

If our current or future product candidates are approved but do not achieve an adequate level of acceptance by patients, physicians and payors, we may not generate sufficient revenue from our current or future product candidates to become or remain profitable. Before granting reimbursement approval, healthcare payors may require us to demonstrate that our current or future product candidates, in addition to treating these target indications, also provide incremental health benefits to patients. Our efforts to educate the medical community, patient organizations and third-party payors about the benefits of our current or future product candidates may require significant resources and may never be successful.

If we are unable to establish sales, marketing and distribution capabilities for any product candidate that may receive regulatory approval, we may not be successful in commercializing those product candidates if and when they are approved.

We do not have sales or marketing infrastructure. To achieve commercial success for any product candidate for which we may obtain marketing approval, we will need to establish a sales and marketing organization. In the future, we expect to build a focused sales and marketing infrastructure to market some of our product candidates in the United States, if and when they are approved. There are risks involved with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to market our products on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians in order to educate physicians about our product candidates, once approved;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we are unable to establish our own sales, marketing and distribution capabilities and are forced to enter into arrangements with, and rely on, third parties to perform these services, our revenue and our profitability, if any, are likely to be lower than if we had developed such capabilities ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell, market and distribute our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

The market opportunities for any current or future product candidate we develop, if and when approved, may be limited to those patients who are ineligible for established therapies or for whom prior therapies have failed, and may be small.

Cancer therapies are sometimes characterized as first-line, second-line, or third-line, and the FDA often approves new therapies initially only for third-line use. When cancer is detected early enough, first-line therapy, usually chemotherapy, hormone therapy, surgery, radiation therapy or a combination of these, is sometimes adequate to cure the cancer or prolong life without a cure. Second- and third-line therapies are administered to patients when prior therapy is not effective. We expect to initially seek approval of our product candidates we develop as a therapy for patients who have received one or more prior treatments. Subsequently, for those products that prove to be sufficiently beneficial, if any, we would expect to seek approval potentially as a first-line therapy, but there is no guarantee that product candidates we develop, even if approved, would be approved for first-line therapy, and, prior to any such approvals, we may have to conduct additional clinical trials.

The number of patients who have the cancers we are targeting may turn out to be lower than expected. Additionally, the potentially addressable patient population for our current programs or future product candidates in both oncology and non-oncology indications may be limited, if and when approved. Even if we obtain significant market share for any product candidate, if and when approved, if the potential target populations are small, we may never achieve profitability without obtaining marketing approval for additional indications, including to be used as first- or second-line therapy.

We face substantial competition, which may result in others discovering, developing or commercializing drugs before or more successfully than we do.

The development and commercialization of new drugs is highly competitive. We face and will continue to face competition from third parties that use protein degradation, antibody therapy, inhibitory nucleic acid, gene editing or gene therapy development platforms and from companies focused on more traditional therapeutic modalities, such as small molecule inhibitors. 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 of new drugs.

We are aware of several biotechnology companies focused on developing TPD, including MGD therapeutics for patients, the most prominent of which include but are not limited to, C4 Therapeutics, Inc., Nurix Therapeutics,

Inc., Kymera Therapeutics, Inc., Bristol-Myers Squibb, Novartis, all of whom have reported having TPD or MGD product candidates in preclinical or clinical development. Several large pharmaceutical companies have disclosed investments in the TPD field.

Many of our current or future competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and reimbursement and marketing of 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, sales, marketing and management personnel and establishing clinical trial sites and patient recruitment 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 current or future product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the level of generic competition and the availability of reimbursement from government and other third-party payors.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any current or future product candidates that we may develop.

We will face an inherent risk of product liability exposure related to the testing of our current or future product candidates in human clinical trials and will face an even greater risk if we commercially sell any current or future product candidates that we may develop. If we cannot successfully defend ourselves against claims that our current or future product candidates caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

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

We do not yet maintain product liability insurance, and we anticipate that we will need to increase our insurance coverage when we begin clinical trials and if we successfully commercialize any product candidate. Insurance coverage is increasingly expensive. We may not be able to maintain product liability insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Even if we are able to commercialize any current or future product candidates, such drugs may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which would harm our business.

Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory approval. In the U.S. and in other countries, sales of any products for which we may receive regulatory marketing approval for commercial sale will depend, in part, on the availability of coverage and reimbursement from third-party payors. Third-party payors include government healthcare programs (e.g., Medicare and Medicaid), managed care providers, private health insurers, health maintenance organizations and other organizations. These third-party payors decide which medications they will pay for and establish reimbursement levels. The availability of coverage and extent of reimbursement by governmental and other third-party payors is essential for most patients to be able to afford treatments such as targeted protein degradation therapies. See the section of this report titled, "Business – Government Regulation – Third-party payor coverage and reimbursement."

Current and future healthcare legislative reform measures may have a material adverse effect on our business and results of operations.

In the United States and in some foreign jurisdictions, there have been, and likely will continue to be, a number of legislative and regulatory changes and proposed changes intended to broaden access to healthcare, improve the guality of healthcare, and contain or lower the cost of healthcare. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the ACA, was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. The ACA, among other things, subjected drug products to potential competition by lower-cost biosimilars, expanded the types of entities eligible for the 340B drug discount program, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increased rebates owed by manufacturers under the Medicaid Drug Rebate Program and extended the rebate program to individuals enrolled in Medicaid managed care organizations, established annual fees and taxes on manufacturers of certain branded prescription drugs, and created a new Medicare Part D coverage gap discount program-later replaced by a similar program under the Inflation Reduction Act of 2022 - under which manufacturers must agree to offer point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during certain coverage periods, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and provided incentives to programs that increase the federal government's comparative effectiveness research.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. See the section of this report titled, "*Business – Government Regulation - Current and future healthcare reform legislation*."

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our current or future product candidates or additional pricing pressures. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

Our relationships with customers, health care providers, physicians, and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished future profits and earnings.

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any current or future product candidates for which we obtain marketing approval. Our business operations and any current or future arrangements with third-party payors and customers may expose us to broadly applicable federal and state laws relating to fraud and abuse, as well as other healthcare laws and regulations. These laws may impact, among other things, the business or financial arrangements and relationships through which we market, sell and distribute any current or future product candidates for which we obtain marketing approval. See the section of this report titled, "*Business - Government Regulation – Other healthcare laws and regulations*."

It is possible that governmental authorities will conclude that our business practices, including our arrangements with certain physicians, some of whom are compensated in the form of stock or stock options for services provided to us, do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are to be found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations, as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or similar settlement to resolve allegations of non-compliance with these laws, any of which could adversely affect our ability to operate our business and our financial results. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to similar actions, penalties, and sanctions.

The provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is also prohibited in the EU and UK. The provision of benefits or advantages to induce improper performance generally is governed by the national antibribery laws of EU Member States, and the U.K. Bribery Act 2010 in the U.K. Infringement 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 often must be the subject of prior notification and approval by the physician's employer, his or her competent professional organization and/or the regulatory 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 EU Member States. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

Significant political, trade, regulatory developments, and other circumstances beyond our control, could have a material adverse effect on our financial condition or results of operations.

We operate beyond the United States and, if approved, we may sell our products in countries throughout the world. Significant political, trade, or regulatory developments in the jurisdictions in which we may sell our products, such as those stemming from the change in U.S. federal administration, are difficult to predict and may have a material adverse effect on us. Similarly, changes in U.S. federal policy that affect the geopolitical landscape could give rise to circumstances outside our control that could have negative impacts on our business operations. For example, in 2025, the United States imposed tariffs on imports on its trading partners, including Canada, Mexico, the EU and China. Historically, tariffs have led to increased trade and political tensions. In response to tariffs, other countries have implemented retaliatory tariffs on U.S. goods. Political tensions as a result of trade policies could reduce trade volume, investment, technological exchange and other economic activities between major international economies, resulting in a material adverse effect on global economic conditions and the stability of global financial markets. Any changes in political, trade, regulatory, and economic conditions, including U.S. trade policies, could have a material adverse effect on our financial condition or results of operations.

Risks related to our dependence on third parties

We currently rely, and plan to rely on in the future, on third parties to conduct and support our preclinical studies and to conduct our clinical trials for our current and future product candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize our current and potential future product candidates and our business could be substantially harmed.

We utilize and depend upon independent investigators and collaborators, such as medical institutions, CROs, CMOs and strategic partners to help conduct our preclinical studies and our clinical trials.

We do not have the ability to independently conduct clinical trials. We rely, and plan to continue to rely on in the future, on medical institutions, clinical investigators, contract laboratories, and other third parties, including collaboration partners, to conduct or otherwise support clinical trials for our current or future product candidates. We expect to rely heavily on these parties for execution of clinical trials for our product candidates and control only certain aspects of their activities. Nevertheless, we will be responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on CROs will not relieve us of our regulatory responsibilities.

We and any third parties that we contract with are required to comply with regulations and requirements, including GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate, and that the trial patients are adequately informed of the potential risks of participating in clinical trials and their rights are protected. These regulations are enforced by the FDA, the Competent Authorities of the Member States of the EEA and comparable foreign regulatory authorities for any drugs in clinical trial sponsors, principal investigators and trial sites. If we or the third parties we contract with fail to comply with applicable GCP requirements, 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. We cannot assure you that, upon inspection, the FDA will determine that any of our ongoing or future clinical trials will comply with GCP requirements. In addition, our clinical trials must be conducted with current or future product candidates produced under cGMP regulations and will require a large number of study subjects. Our failure or the

failure of third parties that we may contract with to comply with these regulations or to recruit a sufficient number of subjects may require us to repeat some aspects of a specific, or an entire, clinical trial, which would delay the marketing approval process and could also subject us to enforcement action. We also are required to register certain ongoing clinical trials and provide certain information, including information relating to the trial's protocol, on a government-sponsored database, ClinicalTrials.gov, within specific timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Although we intend to design the clinical trials for our current or future product candidates, or be involved in the design when other parties sponsor the trials, we anticipate that third parties will conduct all of our clinical trials. As a result, many important aspects of our clinical development, will be outside of our direct control. Our reliance on third parties to conduct our ongoing clinical trial and future clinical trials will also result in less direct control over the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff, and we cannot control whether or not they will devote sufficient time and resources to our product candidates. 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 product development activities, which could affect their performance on our behalf. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Outside parties may:

- have staffing difficulties;
- fail to comply with contractual obligations;
- experience regulatory compliance issues; and
- form relationships with other entities, some of which may be our competitors.

These factors may materially adversely affect the willingness or ability of third parties to conduct our clinical trials and may subject us to unexpected cost increases that are beyond our control. If our CROs do not perform clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, the development, marketing approval and commercialization of our current or future product candidates may be delayed, we may not be able to obtain marketing approval and commercialize our current or future product candidates, or our development programs may be materially and irreversibly harmed. If we are unable to rely on clinical data collected by our CROs, we could be required to repeat, extend the duration of, or increase the size of any clinical trials we conduct and this could significantly delay commercialization and require significantly greater expenditures.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs on commercially reasonable terms, or at all. If our CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain are compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, any clinical trials such CROs are associated with may be extended, delayed or terminated, and we may not be able to obtain marketing approval for or successfully commercialize our current or future product candidates. As a result, we believe that our financial results and the commercial prospects for our current or future product candidates in the subject indication would be harmed, our costs could increase and our ability to generate revenue could be delayed.

The third parties upon whom we rely on for the supply of drug product and starting materials used in our product candidates are limited in number, and the loss of any of these suppliers, or their noncompliance with regulatory requirements or our quality standards, could significantly harm our business.

The drug substance and drug product in our product candidates are supplied to us from a small number of suppliers, and in some cases sole source suppliers. Our ability to successfully develop our current or future product candidates, and to ultimately supply our commercial drugs in quantities sufficient to meet the market demand, depends in part on our ability to obtain the drug product and drug substance for these drugs in accordance with regulatory requirements and in sufficient quantities for commercialization and clinical testing.

The facilities used by our contract manufacturers to manufacture our product candidates will be identified in, and subject to inspections that will be conducted after we submit, any marketing application to the FDA or other comparable foreign regulatory authorities. We may not control the manufacturing process of, and may be completely dependent on, our contract manufacturing partners for compliance with cGMP requirements and any other regulatory requirements of the FDA or other regulatory authorities for the manufacture of our product candidates. Beyond periodic audits, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory

authority does not approve our marketing applications identifying these facilities for the manufacture of our product candidates or if it withdraws any approval in the future, we may need to find alternative manufacturing facilities, which would require that we incur significant additional costs and materially adversely affect our ability to develop, obtain regulatory approval for or market our product candidates, if approved. Similarly, if any third-party manufacturers on which we will rely fail to manufacture quantities of our product candidates at quality levels necessary to meet regulatory requirements and at a scale sufficient to meet anticipated demand at a cost that allows us to achieve profitability, our business, financial condition and prospects could be materially and adversely affected.

Further, we do not currently have arrangements in place for a redundant or second-source supply of all drug product or drug substance in the event any of our current suppliers of such drug product and drug substance cease their operations for any reason. Any delays in the delivery of our drug substance, drug product or starting materials could have an adverse effect and potentially harm our business.

For all of our current or future product candidates, we intend to identify and qualify additional manufacturers to provide drug product and drug substance prior to submission of an NDA to the FDA and/or an MAA to the EMA. We are not certain, however, that our single-source and dual 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. While our suppliers have generally met our demand for their products on a timely basis in the past, they may subordinate our needs in the future to their other customers.

Establishing additional or replacement suppliers for the drug product and drug substance used in our current or future product candidates, if required, may not be accomplished quickly. In some cases, the technical skills required to manufacture our products or product candidates may be unique or proprietary to the original supplier 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. If we are able to find a replacement supplier, such replacement supplier would need to be qualified and may require additional regulatory approval, which could result in further delay. 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.

While we seek to maintain adequate inventory of the drug product and drug substance used in our current or future product candidates, any interruption or delay in the supply of components or materials, or our inability to obtain drug product and drug substance 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.

In addition, some of our suppliers are located outside of the United States. We currently have a supplier based in Ukraine which supplies us with services and materials related to the ongoing expansion of our library of MGDs. Although we have reduced the work done by this supplier, continued Ukrainian geopolitical developments, including military activities related to Russia's invasion of Ukraine, could adversely affect the ability for such supplier to meet our ongoing demand. We also have a supplier based in China which supplies us with services and materials to support the ongoing expansion of our library of MGDs and materials for use in the pre-clinical and clinical development of our product candidates, including for MRT-2359, and recent changes in U.S.-China trade policies, and a number of other economic and geopolitical factors both in China and abroad could affect the ability for such supplier to meet our ongoing demand. Disruptions in our suppliers ability to meet our ongoing demand could have an adverse effect on our business and could have a material adverse effect on our business, financial condition, results of operations or prospects.

We have entered into a Collaboration and License Agreement with Roche, and pursuant to the terms of that agreement, are dependent on Roche for certain development and commercialization activities with respect to certain of our product candidates.

In October 2023, we announced that Monte Rosa Therapeutics AG, our wholly-owned subsidiary, or Monte Rosa AG, entered into a Collaboration and License Agreement with F. Hoffmann-La Roche Ltd, or Roche Basel, and Hoffmann-La Roche Inc., or Roche US, and together with Roche Basel, Roche, or the "Roche Agreement." Pursuant to the Roche Agreement, we and Roche will seek to identify and develop MGDs against cancer or neurological disease targets using our proprietary drug discovery engine for an initial set of targets in oncology and neuroscience selected by Roche, with Roche having an option to expand the collaboration with an additional

set of targets under certain conditions, each target being subject to certain substitution rights owned by Roche. Pursuant to the Roche Agreement, we will lead preclinical discovery and research activities until a defined point. Upon such point, Roche gains the right to exclusively pursue further preclinical and clinical development activities. Under the Roche Agreement, Roche will have a worldwide, exclusive license under patents and know-how controlled by us to develop and commercialize products directed to applicable targets. The research collaboration activities governed by the Roche Agreement will be overseen by a joint research committee. Pursuant to the Roche Agreement, Under the terms of the agreement, we received an upfront payment of \$50 million, and are eligible to receive future preclinical, clinical, commercial and sales milestone payments that could exceed \$2 billion, including up to \$172 million for achieving preclinical milestones. Roche has an option to expand the collaboration with an additional set of targets under certain conditions. For the optional additional targets, we are entitled to receive from Roche an upfront payment of up to \$28 million, and potential preclinical, clinical, commercial, and sales milestones exceeding \$1 billion. We are also eligible to receive tiered royalties ranging from high-single-digit percent to low-teens percent on any products that are commercialized by Roche as a result of the collaboration.

Unless earlier terminated, the Roche Agreement will remain in effect for each product licensed under the Roche Agreement until expiration of the royalty term for the applicable product. The parties have included customary termination provisions in the agreement, allowing termination of the Roche Agreement in its entirety, on a country-by-country or a target-by-target basis. If Roche elects to exercise these termination rights, it will result in a delay in or could prevent us from developing or commercializing certain product candidates. Further, disputes may arise between us and Roche, which may delay or cause the termination of this Roche Agreement, result in significant litigation, cause Roche to act in a manner that is not in our best interest or cause us to seek another collaborator or proceed with development, commercialization and funding on our own. If we seek a new collaborator but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct the development or commercialization, which could harm our business.

We have entered into a License Agreement with Novartis, and pursuant to the terms of that agreement, are dependent on Novartis for certain development and commercialization activities with respect to certain of our product candidates.

In October 2024, we announced that Monte Rosa AG entered into a License Agreement with Novartis, or the Novartis Agreement. Pursuant to the Novartis Agreement, we granted to Novartis an exclusive, royalty-bearing, sublicensable and transferable license to develop, manufacture, and commercialize VAV1 MGDs, including MRT-6160, which is currently in Phase 1 clinical development for immune-mediated conditions. We are responsible for completing the ongoing Phase 1 clinical study and Novartis is responsible for all subsequent development and commercial activities starting at Phase 2. Development and commercial activities governed by the Novartis Agreement will be overseen by a Development Committee and a Commercialization Committee. Pursuant to the Novartis Agreement, we received from Novartis an upfront payment of \$150 million and are eligible to receive (1) up to \$2.1 billion in development, regulatory, and sales milestones, beginning upon initiation of Phase 2 studies including (a) potential development and regulatory milestone payments, exceeding \$1.5 billion if multiple indications achieve regulatory approval in multiple territories, (b) potential sales milestones payments in connection with sales outside of the United States, and (2) tiered royalties on sales outside of the United States. We will continue to be responsible for costs associated with the ongoing Phase 1 clinical study and Novartis will be responsible for costs associated with any subsequent clinical studies. We and Novartis also agreed to a net profit and loss sharing arrangement, pursuant to which we will co-fund any global clinical development from Phase 3 onwards and will share 30% of any profits and losses associated with the manufacturing and commercialization of the licensed products in the United States. We have defined opportunities to opt out of the net profit and loss sharing arrangement, in such case, sales in the United States would be entitled to the potential sales milestones payments and tiered royalties on sales available outside of the United States. Any costs for any co-funded development and commercialization activities are subject to budgets reviewed by the Development Committee and Commercialization Committee, respectively.

The Novartis Agreement includes customary termination provisions, including Novartis' ability to terminate the Novartis Agreement in its entirety. If Novartis elects to exercise these termination rights, it will result in a delay in or could prevent us from developing or commercializing certain product candidates. Further, disputes may arise between us and Novartis, which may delay or cause the termination of this Novartis Agreement, result in significant litigation, cause Novartis to act in a manner that is not in our best interest or cause us to seek another collaborator or proceed with development, commercialization and funding on our own. If we seek a new collaborator but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct the

development or commercialization of such development candidates we may have to curtail or abandon that development or commercialization, which could harm our business.

Our success is dependent on our executive management team's ability to successfully pursue business development, strategic partnerships and investment opportunities as our company matures. We are engaged in a strategic collaboration and may also form or seek strategic alliances or acquisitions or enter into additional collaboration and licensing arrangements in the future, and we may not realize the benefits of such collaborations, alliances, acquisitions or licensing arrangements.

We are engaged in a strategic collaboration and may in the future form or seek strategic alliances or acquisitions, create joint ventures, or enter into additional collaboration and licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our current product candidates and any future product candidates that we may develop. 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. For example, on October 16, 2023, we entered into the Agreement with Roche for the discovery and development of MGDs against targets in cancer and neurological diseases. Pursuant to the terms of the Agreement, we granted to Roche an exclusive license to use certain of our platform technology for the exploitation of compounds and products discovered and developed under the arrangement. Further, in October 2024, we announced a global exclusive development and commercialization license agreement with Novartis to advance VAV1 MGDs, including MRT-6160, currently in Phase 1 clinical development for various immune-related conditions.

In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or acquisition or other alternative arrangements for our current or future 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 current or future product candidates as having the requisite potential to demonstrate safety, potency, purity and efficacy and obtain marketing approval.

Further, collaborations and licensing deals involving our technologies or current or future product candidates, such as our arrangements with Roche and Novartis, are subject to numerous risks, which may include the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration;
- collaborators may not pursue development and commercialization of our current or future product candidates or may elect not to continue or renew development or commercialization of our current or future product candidates based on clinical trial results, changes in their strategic focus due to the acquisition of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our current or future product candidates;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to their marketing and distribution;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual
 property or proprietary information in a way that gives rise to actual or threatened litigation that could
 jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our current or future product candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable current or future product candidates;

- collaborators may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such intellectual property; and
- collaborators may not pay milestones and royalties due to the company in a timely manner.

As a result, we may not be able to realize the benefits of our existing collaboration and licensing arrangements or any future strategic partnerships or acquisitions, collaborations or license arrangements we may enter into if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction, license, collaboration or other business development partnership, we will achieve the revenue or specific net income that justifies such transaction. Any delays in entering into new collaborations or strategic partnership agreements related to our current or future product candidates could delay the development and commercialization of our current or future product candidates in certain geographies or for certain indications, which would harm our business prospects, financial condition and results of operations.

Manufacturing our current or future product candidates is complex and we may encounter difficulties in production. If we encounter such difficulties, our ability to provide supply of our current or future product candidates for our preclinical studies and clinical trials or for commercial purposes could be delayed or stopped.

The process of manufacturing of our current or future product candidates is complex and highly regulated. We do not have our own manufacturing facilities or personnel and currently rely, and expect to continue to rely, on third parties for the manufacture of our current or future product candidates. These third-party manufacturing providers may not be able to provide adequate or timely resources or capacity to meet our needs and may incorporate their own proprietary processes into our product candidate manufacturing processes. We have limited control and oversight of a third party's proprietary process, and a third party may elect to modify its process without our consent or knowledge. These modifications could negatively impact our manufacturing, including product loss or failure that requires additional manufacturing runs or a change in manufacturer, either of which could significantly increase the cost of and significantly delay the manufacture of our current or future product candidates.

As our current or future product candidates progress through preclinical studies and clinical trials towards potential approval and commercialization, it is expected that various aspects of the manufacturing process will be altered in an effort to optimize processes and results. Such changes may require amendments to be made to regulatory applications which may further delay the timeframes under which modified manufacturing processes can be used for any of our current or future product candidates and additional bridging studies or trials may be required and may not be successful. We may be unsuccessful in demonstrating the comparability of clinical supplies which could require the conduct of additional clinical trials. Any such delay could have a material adverse impact on our business, results of operations and prospects.

Our manufacturing process needs to comply with FDA regulations relating to the quality and reliability of such processes. Any failure to comply with relevant regulations could result in delays in or termination of our preclinical and future clinical programs and suspension or withdrawal of any regulatory approvals.

In order to commercially produce our products either at our own facility or at a third party's facility, we will need to comply with the FDA's cGMP regulations and guidelines. We may encounter difficulties in achieving quality control and quality assurance and may experience shortages in qualified personnel. We and our third-party manufacturers are subject to inspections by the FDA and comparable foreign regulatory authorities to confirm compliance with applicable regulatory requirements. Any failure to follow cGMP or other regulatory requirements or delay, interruption or other issues that arise in the manufacture, fill-finish, packaging, or storage of our product candidates as a result of a failure of our facilities or the facilities or operations of third parties to comply with regulatory requirements or pass any regulatory authority inspection could significantly impair our ability to develop and commercialize our current or future product candidates, including leading to significant delays in the availability of our product candidates for our future clinical trials or the termination of or suspension of a future clinical trial, or the delay or prevention of a filing or approval of marketing applications for our current or future product candidates. Significant non-compliance could also result in the imposition of sanctions, including warning or untitled letters, fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approvals for our current or future product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could damage our reputation and our business.

If our third-party manufacturers use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical materials, by our third-party manufacturers. Our manufacturers are subject to federal, state and local laws and regulations in the U.S. governing the use, manufacture, storage, handling and disposal of medical and hazardous materials. Although we believe that our manufacturers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous material laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

Risks related to intellectual property

If we are unable to obtain and maintain patent and other intellectual property protection for our technology and product candidates or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be impaired, and we may not be able to compete effectively in our market.

We rely upon a combination of patents, trademarks, trade secret protection and confidentiality agreements to protect the intellectual property related to our products and technologies and to prevent third parties from copying and surpassing our achievements, thus eroding our competitive position in our market. Our commercial success depends in part on our ability to obtain and maintain patent or other intellectual property protection in the U.S. and other countries for our current or future product candidates and our core technologies, including our proprietary QuEEN[™] discovery engine, our GSPT1 program, including our clinical stage product candidate named MRT-2359, our VAV1 program, including our clinical stage product candidate named MRT-6160, our NEK7 program, including our proprietary and our CDK2 and CCNE1 programs, which are our three most advanced preclinical stage pipeline programs, as well as our proprietary compound library and other knowhow. We seek to protect our proprietary and intellectual property position by, among other methods, filing patent applications in the U.S. and abroad related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business.

As of December 31, 2024, we owned thirty-nine patent families related to our QuEEN[™] discovery engine, our CCNE1 program, our CDK2 program, our NEK7 program, our VAV1 program, and our GSPT1 program, including GSPT1-directed MGDs and biomarkers related to these compounds. We currently own one issued patent. Further, patent prosecution related to our pending patent applications is on-going.

As of December 31, 2024, our patent portfolio covering GSPT1-directed MGDs and uses thereof included twelve patent families, our patent portfolio related to our QuEEN[™] discovery engine included eight patent families, our patent portfolio related to our CDK2 program included six patent families, our patent portfolio related to our NEK7 program included three patent families, and our patent portfolio related to our VAV1 program included five patent families. Patent term adjustments, supplementary protection certificate filings, or patent term extensions could result in later expiration dates in various countries, while terminal disclaimers could result in earlier expiration dates in the U.S.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As such, we cannot guarantee that our pending and future patent applications will result in patents being issued or that issued patents will afford sufficient protection of our product candidates or their intended uses against competitors, nor can there be any assurance that the patents issued will not be infringed, designed around, invalidated by third parties, or effectively prevent others from commercializing competitive technologies, products or product candidates.

The degree of patent protection we require to successfully commercialize our current or future product candidates may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of our pending patent applications that mature into issued patents will include claims with a scope sufficient to protect our QuEEN[™]
discovery engine and our current or future product candidates. In addition, if the breadth or strength of protection provided by our patent applications or any patents we may own or in-license is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Other parties have developed technologies that may be related or competitive to our own, and such parties may have filed or may file patent applications, or may have acquired or may acquire patents, claiming inventions that may overlap or conflict with those claimed in our own patent applications or issued patents, with respect to either the same compounds, methods, formulations or other subject matter, in either case that we may rely upon to support our patent position in the market. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the U.S. and other jurisdictions are typically not published until at least 18 months after the earliest priority date of the patent filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in patents we may own or in-license patents or pending patent applications, or that we were the first to file for patent protection of such inventions. In addition, the USPTO might require that the term of a patent issuing from a pending patent application be disclaimed and limited to the term of another patent that is commonly owned or names a common inventor. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights cannot be predicted with any certainty. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States.

In addition, the patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Further, with respect to certain pending patent applications covering our current or future product candidates or technologies, prosecution has yet to commence and as such, no patent examiner has scrutinized the merits of such pending patent applications. Patent prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the relevant patent office(s) may be significantly narrowed by the time they issue, if they ever do. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from or to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

Even if we acquire patent protection that we expect should enable us to establish and/or maintain a competitive advantage, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the U.S. and abroad. We may become involved in opposition, derivation, reexamination, *inter partes* review, or post-grant review proceedings challenging our patent rights or the patent rights of others from whom we may in the future obtain licenses to such rights, in the U.S. Patent and Trademark Office, or USPTO, the European Patent Office, or EPO, or the relevant patent authorities in other countries. In addition, we may be subject to third-party submissions to the USPTO, the EPO, or elsewhere, that may reduce the scope or preclude the granting of claims from our pending patent applications. Competitors may challenge our issued patents or may file patent applications before we do.

Competitors may also claim that we are infringing their patents and that we therefore cannot practice our technology as claimed under our patents or patent applications. Competitors may also contest our patents by arguing before an administrative patent authority or judge that the invention was not patent-eligible, was not novel, was obvious, and/or lacked inventive steps, and/or that the patent application failed to meet relevant requirements relating to description, basis, enablement, and/or support; in litigation, a competitor could assert that our patents are not valid or are unenforceable for a number of reasons. If a court or administrative patent authority agrees, we would lose our protection of those challenged patents.

An adverse determination in any such submission or proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and drugs, without payment to us, or could limit the duration of the patent protection covering our technology and current or future product candidates. Such challenges may also result in our inability to manufacture or commercialize our current or future product candidates without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if they are unchallenged, our issued patents and our pending patent applications, if issued, may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent patents we may own or in-license by developing similar or alternative technologies or drugs in a non-infringing manner. For example, a third party may develop a competitive drug or product that provides benefits similar to one or more of our current or future product candidates but that has a different composition or otherwise falls outside the scope of our patent protection. If the patent protection provided by the patents and patent applications we hold or pursue with respect to our current or future product candidates is not sufficiently broad to impede such competition, our ability to successfully commercialize our current or future product candidates could be negatively affected, which would harm our business.

Obtaining and maintaining our patent protection, including patent term, depends on compliance with various procedural, document submission, deadlines, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated if we miss a filing deadline for patent protection on these inventions or otherwise fail to comply with these requirements.

The USPTO and foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process and after issuance of any patent. In addition, periodic maintenance fees, renewal fees, annuity fees and/or various other government fees are required to be paid periodically. While an inadvertent lapse can in some cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market with similar or identical products or discovery engines, which could have a material adverse effect on our business prospects and financial condition.

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

Patents have a limited lifespan. In the U.S., and most other jurisdictions in which we have undertaken patent filings, the natural expiration of a patent is generally twenty years after it is filed, assuming all maintenance fees are paid. Various extensions may be available, on a jurisdiction-by-jurisdiction basis; however, the life of a patent, and thus the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, patents we may own or in-license may not provide us with adequate and continuing patent protection sufficient to exclude others from commercializing drugs similar or identical to our current or future product candidates, including generic versions of such drugs.

Depending upon the timing, duration and specifics of FDA marketing approval of our current or future product candidates, one or more of the U.S. patents we own or license may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. Different laws govern the extension of patents on approved pharmaceutical products in Europe and other jurisdictions. However, we may not be granted a patent extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to satisfy applicable requirements. For example, we may not be granted an extension in the U.S. if all of our patents covering an approved product expire more than fourteen years from the date of NDA approval for a product covered by those patents. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our ability to generate revenues could be materially adversely affected.

If our trademarks and trade names for our products or company name are not adequately protected in one or more countries where we intend to market our products, we may delay the launch of product brand names, use different trademarks or tradenames in different countries, or face other potentially adverse consequences to building our product brand recognition.

We use and will continue to use registered and/or unregistered trademarks or trade names to brand and market ourselves and our products. Our trademarks or trade names may be challenged, infringed, diluted, circumvented or declared generic or determined to be infringing on other marks. We intend to rely on both registration and common law protection for our trademarks. We may not be able to protect our rights to these 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. During the trademark registration process, we may receive Office Actions from the USPTO or from comparable agencies in foreign jurisdictions objecting to the registration of our trademark. 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/or to seek the cancellation of registered trademarks. Opposition or cancellation proceedings may be filed against our trademark applications or registrations, and our trademark applications or registrations may not survive such proceedings. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long run, if we are unable to obtain a registered trademark or 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.

Additionally, we may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names.

If we are unable to adequately protect and enforce our trade secrets, our business and competitive position would be harmed.

In addition to the protection afforded by patents we may own or in-license, we seek to rely on trade secret protection, confidentiality agreements, and license agreements to protect proprietary know-how that may not be patentable, processes for which patents are difficult to enforce and any other elements of our product discovery and development processes that involve proprietary know-how, information, or technology that may not be covered by patents. Although we require all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information, or technology to enter into non-disclosure and confidentiality agreements, trade secrets can be difficult to protect and we have limited control over the protection of trade secrets used by our collaborators and suppliers. We cannot be certain that we have or will obtain these agreements in all circumstances and we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary information.

Moreover, any of these parties might breach the agreements and intentionally or inadvertently disclose our trade secret information and we may not be able to obtain adequate remedies for such breaches. In addition, competitors may otherwise gain access (such as through unauthorized access to our information technology systems) to our trade secrets or independently develop substantially equivalent information and techniques. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and timeconsuming, and the outcome is unpredictable. If we choose to go to court to stop a third party from using any of our trade secrets, we may incur substantial costs. These lawsuits may consume our time and other resources even if we are successful. Furthermore, the laws of some foreign countries do not protect proprietary rights and trade secrets to the same extent or in the same manner as the laws of the U.S. We may need to share our proprietary information, including trade secrets, with future business partners, collaborators, contractors and others located in countries at heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors, and those affiliated with or controlled by state actors. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the U.S. and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, financial condition, results of operations and future prospects.

We may initiate, become a defendant in, or otherwise become party to lawsuits to protect or enforce our intellectual property rights, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe or otherwise violate any patents or other intellectual property we may own or in-license. In addition, any patents we may own or in-license also may become involved in inventorship, priority, validity or unenforceability disputes. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Any such claims could provoke these parties to assert counterclaims against us, including claims alleging that we infringe their patents or other intellectual property rights. In patent litigation in the U.S. and in some other jurisdictions, defendant counterclaims alleging invalidity

and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld material information from the USPTO or the applicable foreign counterpart, or made a misleading statement, during prosecution. A litigant or the USPTO itself could challenge our patents on this basis even if we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith. The outcome following such a challenge is unpredictable. Moreover, with respect to challenges to the validity of our patents, there might be invalidating prior art, of which we and the patent examiner were unaware during prosecution.

We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, in an infringement proceeding, a court may decide that one or more of any patents we may own or in-license is not valid or is unenforceable or that the other party's use of our technology that may be patented falls under the safe harbor to patent infringement under 35 U.S.C. §271(e)(1). There is also the risk that, even if the validity of these patents is upheld, the court may refuse to stop the other party from using the technology at issue on the grounds that any patents we may own or in-license do not cover the technology in guestion or that such third party's activities do not infringe our patent applications or any patents we may own or in-license. An adverse result in any litigation or defense proceedings could put one or more of any patents we may own or in-license at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing. Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, patient support or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

We may be required to protect our patents through procedures created to attack the validity of a patent at the USPTO. Post-grant proceedings, including post-grant review, *inter partes* review and derivation proceedings, provoked by third parties or brought by the USPTO may be necessary to determine the validity or priority of inventions with respect to our patent applications or any patents we may own or in-license. These proceedings are expensive and an unfavorable outcome 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. In addition to potential USPTO post-grant proceedings, we may become a party to patent opposition proceedings in the EPO, or similar proceedings in other foreign patent offices or courts where our patents may be challenged. The costs of these proceedings could be substantial, and may result in a loss of scope of some claims or a loss of the entire patent. An unfavorable result in a post-grant challenge proceeding may result in the loss of our right to exclude others from practicing one or more of our inventions in the relevant country or jurisdiction, which could have a material adverse effect on our business. Litigation or post-grant proceedings within patent offices 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.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

We may not be able to detect infringement against any patents we may own or in-license. Even if we detect infringement by a third party of any patents we may own or in-license, we may choose not to pursue litigation against or settlement with the third party. If we later sue such third party for patent infringement, the third party may have certain legal defenses available to it, which otherwise would not be available except for the delay between when the infringement was first detected and when the suit was brought. Such legal defenses may make it impossible for us to enforce any patents we may own or in-license against such third party.

Intellectual property litigation and administrative patent office patent validity challenges in one or more countries could cause us to spend substantial resources and distract our personnel from their normal responsibilities. Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to

incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace, including compromising our ability to raise the funds necessary to continue our preclinical studies and future clinical trials, continue our discovery programs, license necessary technology from third parties, or enter into development collaborations or licensing arrangements that would help us commercialize our current or future product candidates, such as our arrangements with Roche and Novartis.

In addition, if our product candidates are found to infringe the intellectual property rights of third parties, these third parties may assert infringement claims against our licensees and other parties with whom we have business relationships, and we may be required to indemnify those parties for any damages they suffer as a result of these claims. The claims may require us to initiate or defend protracted and costly litigation on behalf of licensees and other parties regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of those parties or may be required to obtain licensees for the products they use.

Any of the foregoing events would harm our business, financial condition, results of operations and prospects.

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our product candidates or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. Alternatively, or additionally, we may enter into agreements to clarify the scope of our rights in such intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Our current and future licensors may have relied on third-party consultants or collaborators or on funds from third parties, such as the U.S. government, such that our licensors are not the sole and exclusive owners of the patents we in-licensed. If other third parties have ownership rights or other rights to our in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

In the case of employees, we enter into agreements providing that all inventions conceived by the individual, and which are related to our current or planned business or research and development or made during normal working hours, on our premises or using our equipment or proprietary information, are our exclusive property. Although we require all of our employees to assign their inventions to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights, the outcome of which would be uncertain. Defending against such law suits will be costly and time consuming, and an unfavorable outcome in that litigation would have a material adverse effect on our business.

The intellectual property landscape relevant to our products and programs is crowded, and third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business. Our commercial success depends upon our ability to develop, manufacture, market and sell our current and future product candidates and use our proprietary technologies without infringing, misappropriating or otherwise violating the valid and enforceable intellectual property rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the biotechnology and

pharmaceutical industries, as well as administrative proceedings for challenging patents, including derivation, interference, reexamination, *inter partes* review and post grant review proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions. We or any of our current or future licensors or strategic partners may be party to, exposed to, or threatened with, future adversarial proceedings or litigation by third parties having patent or other intellectual property rights alleging that our current or future product candidates and/or proprietary technologies infringe, misappropriate or otherwise violate their intellectual property rights. We cannot assure you that our current or future product candidates, the QuEEN[™] discovery engine, and other technologies that we have developed, are developing or may develop in the future do not or will not infringe, misappropriate or other intellectual property rights owned by third parties.

While certain activities related to development and preclinical and clinical testing of our current or future product candidates may be subject to safe harbor of patent infringement under 35 U.S.C. §271(e)(1), upon receiving FDA approval for such candidates we or any of our future licensors or strategic partners may immediately become party to, exposed to, or threatened with, future adversarial proceedings or litigation by third parties having patent or other intellectual property rights alleging that such product candidates infringe, misappropriate or otherwise violate their intellectual property rights. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing our current or future product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our current or future product candidates may give rise to claims of infringement of the patent rights of others. Moreover, it is not always clear to industry participants, including us, which patents cover various types of drugs, products or their methods of use or manufacture. Thus, because of the large number of patents issued and patent applications filed in our fields, there may be a risk that third parties may allege they have patent rights encompassing our current or future product candidates, technologies or methods.

If a third party claims that we infringe, misappropriate or otherwise violate its intellectual property rights, we may face a number of issues, including, but not limited to:

- infringement, misappropriation and other intellectual property claims which, regardless of merit, may be expensive and time-consuming to litigate and may divert our management's attention from our core business and may impact our reputation;
- substantial damages for infringement, misappropriation or other violations, which we may have to pay if a
 court decides that the product candidate or technology at issue infringes, misappropriates or violates the
 third party's rights, and, if the court finds that the infringement was willful, we could be ordered to pay treble
 damages and the patent owner's attorneys' fees;
- a court prohibiting us from developing, manufacturing, marketing or selling our current or future product candidates, or from using our proprietary technologies, including our QuEEN[™] discovery engine, unless the third-party licenses its product rights to us, which it is not required to do on commercially reasonable terms or at all;
- if a license is available from a third party, we may have to pay substantial royalties, upfront fees and other amounts, and/or grant cross-licenses to intellectual property rights for our products, or the license to us may be non-exclusive, which would permit third parties to use the same intellectual property to compete with us;
- redesigning our current or future product candidates or processes so they do not infringe, misappropriate or violate third-party intellectual property rights, which may not be possible or may require substantial monetary expenditures and time; and
- there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and, if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, results of operations, financial condition and prospects. The occurrence of any of the foregoing could have a material adverse effect on our business, financial condition, results of operations or prospects.

Third parties may assert that we are employing their proprietary technology without authorization. Patents issued in the U.S. by law enjoy a presumption of validity that can be rebutted in U.S. courts only with evidence that is

"clear and convincing," a heightened standard of proof. There may be issued third-party patents of which we are currently unaware with claims to compositions, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our current or future product candidates. Patent applications can take many years to issue. In addition, because some patent applications in the U.S. may be maintained in secrecy until the patents are issued, patent applications in the U.S. and many foreign jurisdictions are typically not published until 18 months after their earliest priority filing date, and publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications covering our current or future product candidates or technology. If any such patent applications issue as patents, and if such patents have priority over our patent applications or patents we may own or in-license, we may be required to obtain rights to such patents owned by third parties which may not be available on commercially reasonable terms or at all, or may only be available on a non-exclusive basis. There may be currently pending third-party patent applications which may later result in issued patents that our current or future product candidates may infringe. It is also possible that patents owned by third parties of which we are aware, but which we do not believe are relevant to our current or future product candidates or other technologies, could be found to be infringed by our current or future product candidates or other technologies. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Moreover, 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 current or future 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, such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a thirdparty patent on commercially reasonable terms, or at all, our ability to commercialize our current or future product candidates or the QuEEN[™] discovery engine may be impaired or delayed, which could in turn significantly harm our business. Even if we obtain a license, it may be nonexclusive, thereby giving our competitors access to the same technologies licensed to us.

In addition, 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 current or future 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. In the event of a successful claim of infringement, misappropriation or other violation 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 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 current or future product candidates, which licenses may not be available on commercially reasonable terms, or at all. In that event, we would be unable to further develop and commercialize our current or future product candidates or technologies, which could harm our business significantly.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information or alleged trade secrets of third parties or competitors or are in breach of non-competition or non-solicitation agreements with our competitors or their former employers.

As is common in the biotechnology and pharmaceutical industries, we employ individuals and engage the services of consultants who previously worked for other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending and we try to ensure that our employees, consultants and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these individuals have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's former employees, consultants and advisors, even those related to one or more of our current or future product candidates, the QuEEN[™] discovery engine, or other technologies, are rightfully owned by their former or

concurrent employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities.

We will not obtain patent or other intellectual property protection for any current or future product candidates in all jurisdictions throughout the world, and we may not be able to adequately enforce our intellectual property rights even in the jurisdictions where we seek protection.

We may not be able to pursue patent coverage of our current or future product candidates, the QuEEN[™] discovery engine, or other technologies in all countries. Filing, prosecuting and defending patents on current or future product candidates, the QuEEN[™] discovery engine, and other technologies in all countries throughout the world would be prohibitively expensive, and intellectual property rights in some countries outside the U.S. can be less extensive than those in the U.S. 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 U.S. Consequently, we may not be able to prevent third parties from infringing on our inventions in all countries outside the U.S., or from selling or importing products made using our inventions in and into the U.S. 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 territories where we have patent protection, but where enforcement is not as strong as that in the U.S. These products may compete with our current or future product candidates and in jurisdictions where we do not have any issued patents our patent applications or other intellectual property rights may not be effective or sufficient to prevent them from competing. Much of our patent portfolio is at the very early stage. We will need to decide whether and in which jurisdictions to pursue protection for the various inventions in our portfolio prior to applicable deadlines.

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 protection, particularly those relating to pharmaceutical products, which could make it difficult for us to stop the infringement of any patents we may own or in-license or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce any rights we may have in our patent applications or any patents we may own or in-license in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put any patents we may own or in-license at risk of being invalidated or interpreted narrowly and our 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 rights we develop or license.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we are forced to grant a license to third parties with respect to any patents we may own or license that are relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations, and prospects may be adversely affected.

We may not obtain or grant licenses or sublicenses to intellectual property rights in all markets on equally or sufficiently favorable terms with third parties.

It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our products, in which case we would be required to obtain a license from these third parties. The licensing of third-party intellectual property rights is a competitive area, and more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. More established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to license such technology, or if we are forced to license such technology on unfavorable terms, our business could be materially harmed. If we are unable to obtain a necessary license, we may be unable to develop or commercialize the affected current or future product candidates, which could materially harmed.

our business, and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties or other forms of compensation. 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. Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

The Collaboration and License Agreement with Roche and the License Agreement with Novartis under which we currently license intellectual property or technology are complex, and certain provisions in such agreement, or other future collaboration and license agreements, may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, increase what we believe to be our financial or other obligations under the relevant agreement, or decrease what we believe to be the financial or other obligations of our licensee under the relevant agreement, any of which could materially harm our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements or obtain additional licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected products or product candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

Further, our licensors may retain certain rights under their agreements with us, including the right to use the underlying technology for noncommercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether our licensors limit their use of the technology in the event of misuse. In addition, the United States federal government retains certain rights in inventions produced with its financial assistance under the Patent and Trademark Law Amendments Act, or the Bayh-Dole Act. The federal government retains a "nonexclusive, nontransferable, irrevocable, paid-up license" for its own benefit. The Bayh-Dole Act also provides federal agencies with "march-in rights." March-in rights allow the government, in specified circumstances, to require the contractor or successors in title to the patent to grant a "nonexclusive, partially exclusive, or exclusive license" to a "responsible applicant or applicants." If the patent owner refuses to do so, the government may grant the license itself. If, in the future, we co-own or license in technology which is critical to our business that is developed in whole or in part with federal funds subject to the Bayh-Dole Act, our ability to enforce or otherwise exploit patents covering such technology may be adversely affected.

If we fail to comply with our obligations in our current or any future agreements under which we may license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.

We are dependent on patents, know-how and proprietary technology, both our own and in-licensed from collaborators. We may in the future enter into more license agreements with third parties under which we receive rights to intellectual property that are important to our business. Our commercial success depends upon our ability to develop, manufacture, market and sell our current or future product candidates and use our and our licensors' proprietary technologies without infringing the proprietary rights of third parties. Our success will also depend in part on the ability of our licensors to obtain, maintain and enforce patent protection for our licensed intellectual property, in particular, those patents to which we have secured exclusive rights. Our licensors may not successfully prosecute the patent applications to which we are licensed. Even if patents are issued in respect of these patent applications, our licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents, or may pursue such litigation less aggressively than we would. Without protection for the intellectual property we license, other companies might be able to offer substantially identical products for sale, which could adversely affect our competitive business position and harm our business prospects. Further, we may have limited control over these activities or any other intellectual property that may be in-licensed. For example, we cannot be certain that such activities by licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights. We may have limited control over the manner in which our licensors initiate an infringement proceeding against a third-party infringer of the intellectual property rights, or defend certain of the intellectual property that is licensed to us. It is possible that the licensors' infringement proceeding or defense activities may be less vigorous than had we conducted them ourselves. In the event our licensors fail to adequately pursue and maintain patent protection for patents and applications they control, and to timely cede control of such prosecution to us, our competitors might be able to enter the market, which would have a material adverse effect on our business.

In addition, our current and future intellectual property license agreements may require us various development, regulatory and/or commercial diligence obligations, payment of milestones and/or royalties and other obligations. If we fail to comply with our obligations under these agreements, we use the licensed intellectual property in an unauthorized manner or we are subject to bankruptcy-related proceedings, the terms of the licenses may be materially modified, such as by rendering currently exclusive licenses non-exclusive, or it may give our licensors the right to terminate their respective agreement with us. Any termination of these licenses, or if the underlying patents fail to provide the intended exclusivity, could result in the loss of significant rights and could harm our ability to commercialize our current or future product candidates, the QuEENTM discovery engine, or other technologies, competitors or other third parties would have the freedom to seek regulatory approval of, and to market, products identical to ours, and we may be required to cease our development and commercialization of certain of our current or future product candidates. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Disputes may also arise between us and our current or future licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe, misappropriate or otherwise violate intellectual property rights of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our current or future product candidates, and what activities satisfy those diligence obligations;
- our right to transfer or assign the license;
- the priority of invention of any patented technology; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our current or future licensors and us and our partners.

In addition, the agreements under which we may license intellectual property or technology from third parties are likely to be complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we may license prevent or impair our ability to maintain current or future licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected current or future product candidates or technologies, which could have a material adverse effect on our business, financial conditions and prospects.

Changes in patent law in the U.S. and in foreign jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. Assuming that other requirements for patentability are met, prior to March 16, 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. On March 16, 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO on or after March 16, 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our product candidates or (ii) invent any of the inventions claimed in our or our licensor's patents or patent applications.

The America Invents Act also includes a number of significant changes that affect the way patent applications are prosecuted and also may affect patent litigation. These include allowing third party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the enforcement or defense of our owned or in-licensed issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

In addition, the patent positions of companies in the development and commercialization of biopharmaceuticals are particularly uncertain. 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. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might subject us to infringement claims or adversely affect our ability to develop and market our current or future product candidates.

We cannot guarantee that any of our or our licensors' patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending patent application in the U.S. and abroad that is relevant to or necessary for the commercialization of our current or future product candidates in any jurisdiction. For example, U.S. patent applications filed before November 29, 2000, and certain U.S. patent applications filed after that date that will not be filed outside the U.S. remain confidential until patents issue. As mentioned above, patent applications in the U.S. and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our current or future product candidates could have been filed by third parties without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our current or future product candidates or the use of our current or future product candidates. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our current or future product candidates. We may incorrectly determine that our current or future product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the U.S. or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our current or future product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our current or future product candidates.

If we fail to identify and correctly interpret relevant patents, we may be subject to infringement claims. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we fail in any such dispute, in addition to being forced to pay damages, which may be significant, we may be temporarily or permanently prohibited from commercializing any of our current or future product candidates or technologies that are held to be infringing. We might, if possible, also be forced to redesign current or future product candidates so that we no longer infringe the third-party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business and could adversely affect our business, financial condition, results of operations and prospects.

Intellectual property rights do not guarantee commercial success of current or future product candidates or other business activities. Numerous factors may limit any potential competitive advantage provided by our intellectual property rights.

The degree of future protection afforded by our intellectual property rights, whether owned or in-licensed, is uncertain because intellectual property rights have limitations, and may not adequately protect our business, provide a barrier to entry against our competitors or potential competitors, or permit us to maintain our competitive advantage. Moreover, if a third party has intellectual property rights that cover the practice of our technology, we may not be able to fully exercise or extract value from our intellectual property rights. The following examples are illustrative:

- patent applications that we own or may in-license may not lead to issued patents;
- patents, should they issue, that we may own or in-license, may not provide us with any competitive advantages, may be narrowed in scope, or may be challenged and held invalid or unenforceable;
- others may be able to develop and/or practice technology, including compounds that are similar to the chemical compositions of our current or future product candidates, that is similar to our technology or aspects of our technology but that is not covered by the claims of any patents we may own or in-license, should any patents issue;
- third parties may compete with us in jurisdictions where we do not pursue and obtain patent protection;
- we, or our future licensors or collaborators, might not have been the first to make the inventions covered by a patent application that we own or may in-license;
- we, or our future licensors or collaborators, might not have been the first to file patent applications covering a particular invention;
- others may independently develop similar or alternative technologies without infringing, misappropriating or otherwise violating our intellectual property rights;
- our competitors might conduct research and development activities in the U.S. and other countries that
 provide a safe harbor from patent infringement claims for certain research and development activities, as
 well as in countries where we do not have patent rights, and may then use the information learned from
 such activities to develop competitive products for sale in our major commercial markets;
- we may not be able to obtain and/or maintain necessary licenses on reasonable terms or at all;
- third parties may assert an ownership interest in our intellectual property and, if successful, such disputes may preclude us from exercising exclusive rights, or any rights at all, over that intellectual property;
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such trade secrets or know-how;
- we may not be able to maintain the confidentiality of our trade secrets or other proprietary information;
- we may not develop or in-license additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, financial condition, results of operations and prospects.

European patents and patent applications could be challenged in the recently created Unified Patent Court (UPC) for the European Union.

Our owned European patents and patent applications could be challenged in the recently created Unified Patent Court (UPC) for the European Union. We may decide to opt out our European patents and patent applications from the UPC. However, if certain formalities and requirements are not met, our European patents and patent applications could be challenged for non-compliance and brought under the jurisdiction of the UPC. We cannot be certain that our or our licensors' European patents and patent applications will avoid falling under the jurisdiction of the UPC, if we decide to opt out of the UPC. Under the UPC, a granted European patent would be valid and enforceable in numerous European countries. A successful invalidity challenge to a European patent under the UPC would result in loss of patent protection in those European countries. Accordingly, a single proceeding under the UPC could result in the partial or complete loss of patent protection in numerous European countries, rather than in each validated European country separately as such patents always have been adjudicated. Such a loss of patent protection could have a material adverse impact on our business and our ability to commercialize our technology and products and, resultantly, on our business, financial condition, prospects and results of operations.

The use of new and evolving technologies, such as artificial intelligence (AI), in our business may result in spending material resources and presents risks and challenges that can impact our business including by posing security and other risks to our confidential information, proprietary information and personal information, and as a result we may be exposed to reputational harm and liability.

We continue to build and integrate AI into our business, in particular as a component of our QuEEN[™] drug discovery engine, and this innovation presents risks and challenges that could affect its adoption, and therefore our business. The use of certain artificial intelligence technology can give rise to intellectual property risks, including compromises to proprietary intellectual property and intellectual property infringement. A growing number of legislators and regulators are adopting laws and regulations and have focused enforcement efforts on the adoption of artificial intelligence, and use of such technologies in compliance with ethical standards and societal expectations. These developments may increase our compliance burden and costs in connection with use of artificial intelligence and lead to legal liability if we fail to meet evolving legal standards or if use of such technologies results in harms or other causes of action we did not predict. For example, the EU's Artificial Intelligence Act, or the "AI Act," entered into force in August 2024 and, with some exceptions, become effective 24 months thereafter. This legislation imposes significant obligations on providers and deployers of high-risk artificial intelligence systems, and encourages providers and deployers of artificial intelligence systems to account for EU ethical principles in their development and use of these systems. The scope of requirements depends on legal and risk determinations that rely on novel legal provisions that have not yet been interpreted by courts or regulators, and non-compliance can lead to significant fines.

Likewise, in the U.S., several states, including Colorado and California, passed laws that will take effect in 2026 to regulate various uses of artificial intelligence, including to make consequential decisions. In addition, various federal regulators have issued guidance and focused enforcement efforts on the use of AI in regulated sectors. If we develop or use AI systems governed by these laws or regulations, we will need to meet higher standards of data quality, transparency, and human oversight, and we would need to adhere to specific and potentially burdensome and costly ethical, accountability, and administrative requirements, with the potential for significant enforcement or litigation in the event of any perceived non-compliance.

The rapid evolution of AI will require the application of significant resources to design, develop, test and maintain our products and services to help ensure that AI is implemented in accordance with applicable law and regulation and in a socially responsible manner and to minimize any real or perceived unintended harmful impacts. Our vendors may in turn incorporate AI tools into their own offerings, and the providers of these AI tools may not meet existing or rapidly evolving regulatory or industry standards, including with respect to privacy and data security. Further, bad actors around the world use increasingly sophisticated methods, including the use of AI, to engage in illegal activities involving the theft and misuse of personal information, confidential information and intellectual property. Any of these effects could damage our reputation, result in the loss of valuable property and information, cause us to breach applicable laws and regulations, and adversely impact our business.

Risks related to employee matters and managing growth

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the research and development, clinical and business development expertise of Markus Warmuth, M.D., our Chief Executive Officer, John Castle, Ph.D., our Chief Data and Information Officer, Sharon Townson, our Chief Scientific Officer, Filip Janku, our Chief Medical Officer, Philip Nickson, our Chief Business and Legal Officer, Jennifer Champoux, our Chief Operating Officer, Magnus Walter, our Senior Vice President of Drug Discovery, and Andrew Funderburk, our Senior Vice President and Head of Investor Relations and Strategic Financing, as well as the other principal members of our management and scientific teams. Although we have entered into employment letter agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to

successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize drugs. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Failure to succeed in clinical trials may make it more challenging to recruit and retain qualified scientific personnel. In addition, in order to induce employees to continue their employment with us, we have provided equity awards that vest over time and the value to our employees of such equity awards may be significantly affected by movements in our stock price that are beyond our control and may be at any time insufficient to counteract more lucrative offers from other companies. If we are unable to continue to attract and retain high quality personnel, the rate and success at which we can develop and commercialize product candidates will be limited.

We will need to develop and expand our company, and we may encounter difficulties in managing this development and expansion, which could disrupt our operations.

As of December 31, 2024, we had 134 full-time employees. We expect to increase our number of employees and the scope of our operations, including the areas of data sciences, platform biology and chemistry, drug discovery, clinical development, finance, business development, and legal. To manage our anticipated development and expansion, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Our management may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing these development activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional gualified personnel. This may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. The expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of our current or future product candidates. If our management is unable to effectively manage our expected development and expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our current or future product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage the future development and expansion of our company.

We have offices in multiple countries and we may further expand in the future, which presents challenges in managing our business operations.

We are headquartered in Boston, Massachusetts and have offices in Basel, Switzerland. Conducting our business in multiple countries subjects us to a variety of risks and complexities that may materially and adversely affect our business, results of operations, financial condition and growth prospects, including, among other things:

- the increased complexity and costs inherent in managing international operations;
- diverse regulatory, financial and legal requirements, and any future changes to such requirements, in one or more countries where we are located or do business;
- country-specific tax, labor and employment laws and regulations;
- challenges inherent in efficiently managing employees in diverse geographies, including the need to adapt systems, policies, benefits and compliance programs to differing labor and other regulations;
- liabilities for activities of, or related to, our international operations or product candidates;
- changes in currency rates; and
- regulations relating to data security and the unauthorized use of, or access to, commercial and personal information.

We continue to expand our operations, and our corporate structure and tax structure is complex. In connection with our current and future potential partnerships, we are actively engaged in developing and applying technologies and intellectual property with a view toward commercialization of products globally, often with commercialization partners. In connection with those activities, we already have and will likely continue to engage in complex cross-border and global transactions involving our technology, intellectual property and other assets, between us and other entities such as partners and licensees, and between us and our subsidiaries. Such cross-

border and global arrangements are both difficult to manage and can potentially give rise to complexities in areas such as tax treatment, particularly since we are subject to multiple tax regimes and different tax authorities can also take different views from each other, even as regards the same cross-border transaction or arrangement. There can be no assurance that we will effectively manage this increased complexity without experiencing operating inefficiencies, control deficiencies or tax liabilities. Significant management time and effort is required to effectively manage the increased complexity of our company, and our failure to successfully do so could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

We may be unable to adequately protect our information systems from cyberattacks and security incidents, which could result in the disclosure of confidential or proprietary information, including personal data, damage our reputation, and subject us to significant financial and legal exposure.

We rely on information technology systems that we or our third-party providers operate to process, transmit and store electronic information in our day-to-day operations. In connection with our product discovery efforts, we may collect and use a variety of personal data, such as name, mailing address, email addresses, phone number and clinical trial information. We, like other organizations in our industry, have experienced and continue to experience attempted and actual cyber incidents. A successful security incident or cyberattack could result in the theft or destruction of intellectual property, data or other misappropriation of assets, or otherwise compromise our confidential or proprietary information and disrupt our operations. Cyberattacks generally are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. Cyberattacks could include wrongful conduct by hostile foreign governments, or employees, industrial espionage, wire fraud and other forms of cyber fraud, the deployment of harmful malware, denial-of-service, ransomware, social engineering (including phishing attacks) fraud or other means to threaten or compromise the security, confidentiality, integrity and availability of systems and information. A successful cyberattack or security incident could cause serious negative consequences for us, including, without limitation, the disruption of operations, the misappropriation of protected information or confidential business information, including financial information, trade secrets, financial loss and the disclosure of corporate strategic plans.

Although we devote resources to protect our information systems, we realize that cyberattacks are a threat, and there can be no assurance that our efforts will prevent cybersecurity incidents or breaches that would result in business, legal, financial or reputational harm to us, or would have a material adverse effect on our results of operations and financial condition. In addition, although we carry cyber insurance, in the event of a cybersecurity incident or breach, such coverage may not be sufficient to cover all losses. Any failure to prevent or mitigate or adequately address any cybersecurity incidents, data breaches, or other improper access to, use of, or disclosure of our clinical data or patients' personal data could require us to notify impacted stakeholders (including affected individuals, regulators and investors) and result in significant liability through litigation and regulatory investigations and enforcement actions, including under Swiss national data protection laws, U.S. state (*e.g.*, state breach notification laws), and/or federal (*e.g.*, HIPAA, as amended by HITECH) laws, and laws of other foreign jurisdictions (*e.g.*, the EU General Data Protection Regulation, or GDPR) and may cause a material adverse impact to our reputation, affect our ability to use collected data, conduct new studies and potentially disrupt our business.

For example, the loss of data from preclinical studies or clinical trials for our current or future product candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or cybersecurity incident results in a loss of or damage to our data or applications, other data or applications relating to our technology or current or future product candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our current or future product candidates could be delayed.

We rely on our third-party providers to implement effective security measures and identify and correct for any such failures, deficiencies, cybersecurity incidents, or data breaches. We also rely on our employees and consultants to safeguard their security credentials and follow our policies and procedures regarding use and access of computers and other devices that may contain our sensitive information. If we or our third-party providers fail to maintain or protect our information technology systems and data integrity effectively or fail to anticipate, plan for or manage significant disruptions to our information technology systems, we or our third-party providers could have difficulty preventing, detecting and controlling such cyber-attacks and any such attacks could result in losses described above, as well as disputes with physicians, patients and our partners, litigation, regulatory sanctions or penalties, increases in operating expenses, expenses or lost revenues or other adverse consequences, any of which could have a material adverse effect on our business, results of operations, financial condition, prospects and cash flows. Any failure by such third parties to prevent or mitigate or adequately address any cybersecurity incidents, data breaches, or other improper access to or disclosure of such information could

have similarly adverse consequences for us. If we are unable to prevent or mitigate the impact of such cybersecurity incidents or data breaches, we could be exposed to litigation and governmental investigations, which could lead to a potential disruption to our business, or fines and penalties. Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our privacy and data security obligations.

We, our collaborators and our service providers may be subject to a variety of privacy and data security laws, regulations and contractual obligations, and our failure to comply with them could harm our business.

We maintain a large quantity of sensitive information, including confidential business and patient health information in connection with our preclinical studies, and are subject to laws and regulations governing the privacy and security of such information. In the United States, there are numerous federal and state privacy and data security laws and regulations governing the collection, use, disclosure and protection of personal information, including federal and state health information privacy laws, federal and state security breach notification laws, and federal and state consumer protection laws. Each of these laws is subject to varying interpretations and new laws continue to be proposed. At the state level, numerous states have or are in the process of enacting or considering comprehensive state-level data privacy and security laws, rules and regulations while other states have focused on more narrow aspects of privacy. In the state of Washington, for example, the My Health My Data Act will require regulated entities to obtain consent to collect health information, grant consumers certain rights, including to request deletion of their information, and provide for robust enforcement mechanisms, including enforcement by the Washington state attorney-general and a private right of action for consumer claims.

Outside of the United States, many jurisdictions have enacted stringent privacy and data protection laws. The collection, use, disclosure, transfer or other processing of personal data originating from the European Economic Area, or EEA, and United Kingdom, or UK, is governed by the General Data Protection Regulation, or EU GDPR, and the UK General Data Protection Regulation, or UK GDPR, which, together with the EU GDPR, is referred to as the GDPR. The GDPR imposes stringent requirements for controllers and processors of personal data of persons in the EU and U.K., including, for example, ensuring an appropriate legal basis or condition applies to the processing of personal data, more robust disclosures to individuals and a strengthened individual data rights regime, shortened timelines for data breach notifications, limitations on retention of information, increased requirements pertaining to special categories of data, such as health data, and additional obligations when we contract with third-party processors in connection with the processing of the personal data. The GDPR also imposes strict rules on the transfer of personal data out of the EU and U.K. to the United States and other third countries. In addition, the GDPR provides that EU member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric or health data. Failure to comply with the requirements of the GDPR may result in fines of up to €20,000,000 (or £17.5 million in the U.K.) or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, and other administrative penalties. GDPR regulations may impose additional responsibility and liability in relation to the personal data that we process and we may be required to put in place additional mechanisms to ensure compliance with the new data protection rules. For additional information on these regimes, see "Government Regulation—Privacy and data protection laws and regulations". Compliance with these and any other applicable privacy and data security laws and regulations is a rigorous and time-intensive process, and we may be required to put in place additional mechanisms to ensure compliance, and despite those efforts, if we fail, or are perceived to fail, to comply with any such laws or regulations, we may face significant fines and penalties that could adversely affect our reputation, business, financial condition and results of operations.

Our employees, principal investigators, CROs and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading laws.

We are exposed to the risk that our employees, principal investigators, CROs and consultants may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and other regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the U.S. and abroad; or laws that require the reporting of financial information or data accurately. In particular, sales, marketing, patient support and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or

prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Other activities subject to these laws include the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We have adopted a code of conduct applicable to all of our employees, but it is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant criminal, civil and administrative sanctions including monetary penalties, damages, fines, disgorgement, individual imprisonment, reputational harm, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance and/or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

Risks related to our common stock

The price of our common stock may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our common stock.

Our stock price is likely to be volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, purchasers of our common stock could incur substantial losses. The market price for our common stock may be influenced by many factors, including:

- the success of competitive drugs or technologies;
- results of preclinical studies and clinical trials of our current or future product candidates or those of our competitors;
- unanticipated safety concerns related to the use of any of our product candidates;
- regulatory or legal developments in the U.S. and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our current or future product candidates or clinical development programs;

- the results of our efforts to discover, develop, acquire or in-license additional current or future product candidates or drugs;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- product liability claims or other litigation;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions, including inflation and potential tariffs; and
- the other factors described in this "Risk factors" section.

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, which has resulted in decreased stock prices for many companies notwithstanding the lack of a fundamental change in their underlying business models or prospects. Broad market and industry factors, including potentially worsening economic conditions and other adverse effects or developments relating to geopolitical events or public health crises, may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any of the above risks or any of a broad range of other risks, including those described in this section, could have a significant and material adverse impact on the market price of our common stock.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or current or future product candidates.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of private and public equity offerings, debt financings, collaborations, such as our collaboration with Roche, strategic alliances and marketing, distribution or licensing arrangements, such as our license to Novartis. We do not currently have any committed external source of funds. To the extent that we raise additional capital through the sale of common stock or securities convertible or exchangeable into common stock, our stockholders' ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that materially adversely affect their rights as a common stockholder. Debt financing, if available, would increase our fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, future revenue streams, discovery programs or current or future product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, scale back or discontinue the development and commercialization of one or more of our product candidates, delay our pursuit of potential in-licenses or acquisitions or grant rights to develop and market current or future product candidates that we would otherwise prefer to develop and market ourselves.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We do not currently have and may never obtain research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock would likely decrease. In the event we do have research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. Additionally, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

We incur increased costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

As a public company, we incur significant legal, accounting and other expenses. We are subject to the reporting requirements of the Exchange Act, which require, among other things, that we file with the SEC annual, guarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act of 2002, as amended, or Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and The Nasdag Stock Market LLC to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas, such as "say on pay" and proxy access. Emerging growth companies may implement many of these requirements over a longer period and up to five years from the completion of an initial public offering. We intend to take advantage of these extended transition periods, but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

The rules and regulations applicable to public companies substantially increase our legal and financial compliance costs and make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will decrease our net income or increase our net loss and may require us to reduce costs in other areas of our business or increase the prices of our products or services. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

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 fourth amended and restated certificate of incorporation, as amended, and our second 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. Some of these provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- a prohibition on stockholder action through written consent, which requires that all stockholder actions be taken at a meeting of our stockholders;
- a requirement that special meetings of stockholders be called only by the board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors;
- a requirement that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of all outstanding shares of our voting stock then entitled to vote in the election of directors;
- a requirement of approval of not less than two-thirds of all outstanding shares of our voting stock to amend any bylaws by stockholder action or to amend specific provisions of our certificate of incorporation; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval and which preferred stock may include rights superior to the rights of the holders of common stock.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporate Law, or DGCL, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These antitakeover provisions and other provisions in our fourth 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 bylaws designate certain courts as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Pursuant to our amended and restated bylaws, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for state law claims for: (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders; (iii) any action asserting a claim arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws (including the interpretation, application or validity thereof); or (iv) any action asserting a claim governed by the internal affairs doctrine, or the Delaware Forum Provision. The Delaware Forum Provision will not apply to any causes of action arising under the Securities Act or the Exchange Act. Our amended and restated bylaws further provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America are the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, or the rules and regulations promulgated thereunder, or the Federal Forum Provision. In addition, our amended and restated bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing Delaware Forum Provision and Federal Forum Provision; provided, however, that stockholders cannot and will not be deemed to have waived our compliance with the U.S. federal securities laws and the rules and regulations thereunder.

The Delaware Forum Provision and the Federal Forum Provision may impose additional litigation costs on stockholders in pursuing any such claims. Additionally, these forum selection clauses may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage the filing of lawsuits against us and our directors, officers and employees, even though an action, if successful, might benefit our stockholders. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. While the Delaware Supreme Court and other states have upheld the validity of federal forum selection provisions purporting to require claims under the Securities Act be brought in federal, there is uncertainty as to whether other courts will enforce our Federal Forum Provision. If the Federal Forum Provision is found to be unenforceable, we may incur additional costs associated with resolving such matters. The Federal Forum Provision may also impose additional litigation costs on us and/or our stockholders who assert that the provision is invalid or unenforceable. The Court of Chancerv of the State of Delaware or the federal district courts of United States of America may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline. Based upon the number of shares of common stock, on an as-converted basis, outstanding as of March 17, 2025, we have outstanding a total of 61,509,821 shares of common stock.

We previously entered into an Open Market Sale Agreement with Jefferies to provide for the offering, issuance and sale of up to an aggregate amount of \$100.0 million of our common stock from time to time in "at-the-market" offerings under our registration statement on Form S-3 (File No. 333-266003), or the 2022 Shelf Registration Statement, and subject to the limitations thereof. We will pay to the Jefferies cash commissions of up to 3.0 percent of the aggregate gross proceeds of sales of common stock under the Open Market Sale Agreement. Sales of common stock, debt securities or other equity securities by us may represent a significant percentage of our common stock currently outstanding. If we sell, or the market perceives that we intend to sell, substantial amounts of our common stock under the 2022 Shelf Registration Statement or otherwise, the market price of our common stock could decline significantly. To date 2,612,514 shares have been sold pursuant to the Open Market Sale Agreement for net proceeds of \$21.0 million, after deducting commissions of \$0.6 million.

From time to time, we may sell shares of common stock or pre-funded warrants to purchase shares of common stock in underwritten public offerings, registered direct offerings or other types of offerings. Sales of common stock, debt securities or other equity securities by us may represent a significant percentage of our common stock currently outstanding.

We have reserved shares for issuance pursuant to our 2021 ESPP and 2021 Plan, each subject to evergreen renewal on January 1 of each year through January 1, 2031. Shares of unvested restricted stock that were issued and outstanding will become available for sale immediately upon the vesting of such shares, as applicable. Shares issued upon the exercise of stock options pursuant to awards that may be granted under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules.

We are an emerging growth company and a smaller reporting company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies and smaller reporting companies will make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years following the year in which we completed our IPO, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of (i) the last day of the fiscal year (a) following the fifth anniversary of the closing of our IPO, (b) in which we have total annual gross revenue of at least \$1.235 billion, or (c) in which we are deemed to be a large accelerated filer, which requires the market value of our common stock that is held by non-affiliates to exceed \$700 million as of the prior June 30th, and (ii) the date on which we have issued more than \$1 billion in non-convertible debt during the prior three-year period.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to not "opt out" of this exemption from complying with new or revised accounting standards and, therefore, we will adopt new or revised accounting standards at the time private companies adopt the new or revised accounting standard and will do so until such time that we either: (i) irrevocably elect to "opt out" of such extended transition period or (ii) no longer qualify as an emerging growth company.

Even after we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting company," which would allow us to continue to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be the sole source of gain for our stockholders.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for our stockholders for the foreseeable future.

We are at risk of securities class action litigation.

Historically, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology and pharmaceutical companies have experienced significant stock price volatility in recent years. If we were to be sued, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. If our assumptions change or if actual circumstances differ from our assumptions, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

General risk factors

Our executive officers, directors, principal stockholders and their affiliates exercise significant influence over our company, which will limit our stockholders' ability to influence corporate matters and could delay or prevent a change in corporate control.

The holdings of our executive officers, directors, principal stockholders and their affiliates represents beneficial ownership, in the aggregate, own a significant percentage of our outstanding common stock. In addition, our chief executive officer, who is a director, is affiliated with our principal stockholders. As a result, these stockholders, if they act together, are able to influence our management and affairs and the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets. These stockholders may have interests with respect to their common stock that are different from our other stockholders. The concentration of voting power among these stockholders may have an adverse effect on the price of our common stock. In addition, this concentration of ownership might adversely affect the market price of our common stock by:

- delaying, deferring or preventing a change of control of us;
- impeding a merger, consolidation, takeover or other business combination involving us; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

Adverse developments affecting the financial services industry, such as actual events or concerns involving liquidity, defaults or non-performance by financial institutions or transactional counterparties, could adversely affect our current and projected business operations and its financial condition and results of operations.

Adverse developments that affect financial institutions, such as events involving liquidity that are rumored or actual, have in the past and may in the future lead to market-wide liquidity problems. For example, on March 10, 2023, Silicon Valley Bank was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation as receiver. Although we assess our banking relationships as we believe necessary or appropriate, our access to funding sources and other credit arrangements in amounts adequate to finance or capitalize our current and projected future business operations could be significantly impaired by factors that us, the financial institutions with which we have credit agreements or arrangements directly, or the financial services industry or economy in general. These factors could include, among others, events such as liquidity constraints or failures, the ability to perform obligations under various types of financial, credit or liquidity agreements or arrangements, disruptions or instability in the financial services industry or financial markets, or concerns or negative expectations about the prospects for companies in the financial services industry. While it is not possible at this time to predict the extent of the impact that high market volatility and instability of the financial services industry could have on economic activity and our business in particular, the failure of other banks and financial institutions and the measures taken by governments, businesses and other organizations in response to these events could adversely impact our business, financial condition and results of operations.

Public health crises, such as a pandemic, epidemic or outbreak of other highly infectious or contagious diseases, could seriously harm our research, development and potential future commercialization efforts, increase our costs and expenses and have a material adverse effect on our business, financial condition and results of operations.

Public health crises, such as a pandemic, epidemic or outbreak of other highly infectious or contagious diseases, could adversely impact our business, the business operations of third parties on whom we rely and our ongoing or planned research and development activities. Additionally, timely enrollment in our ongoing and planned clinical trials is dependent upon clinical trial sites which may be adversely affected by global health concerns. Public health crises could result in increased adverse events and deaths in our clinical trials. Some factors from public health crises that could delay or otherwise adversely affect enrollment in the clinical trials of our product candidates, as well as our business generally, include:

- the potential diversion of healthcare resources away from the conduct of clinical trials to focus on public health crises, including the attention of physicians serving as our clinical trial investigators, hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our prospective clinical trials and the need for drugs, such as tocilizumab, and other supplies that clinical trial sites must have on hand to conduct our clinical trials to be used to address such public health crises;
- limitations on travel that could interrupt key trial and business activities, such as clinical trial site initiations
 and monitoring, domestic and international travel by employees, contractors or patients to clinical trial sites,
 including any government-imposed travel restrictions or quarantines that will impact the ability or willingness
 of patients, employees or contractors to travel to our clinical trial sites or secure visas or entry permissions,
 a loss of face-to-face meetings and other interactions with potential partners, any of which could delay or
 adversely impact the conduct or progress of our prospective clinical trials;
- interruption in global shipping affecting the transport of clinical trial materials, such as patient samples, investigational drug product and conditioning drugs and other supplies used in our prospective clinical trials;
- interruptions in operations at our third-party manufacturers, which could result in delays or disruptions in the supply of our current product candidates and any future product candidates; and
- business disruptions caused by potential workplace, laboratory and office closures and an increased reliance on employees working from home, disruptions to or delays in ongoing laboratory experiments and operations, product manufacturing and supply, staffing shortages, travel limitations or mass transit disruptions, any of which could adversely impact our business operations or delay necessary interactions with local regulators, ethics committees and other important agencies and contractors.

Any of these factors, and other factors related to any such disruptions that are unforeseen, could have a material adverse effect on our business and our results of operations and financial condition. Further, uncertainty around these and related issues could lead to adverse effects on the economy of the United States and other economies, which could impact our ability to raise the necessary capital needed to develop and commercialize our product candidates.

If we fail to establish and maintain proper and effective internal control over financial reporting, our operating results and our ability to operate our business could be harmed.

Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be reevaluated frequently. 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 in accordance with generally accepted accounting principles. Pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, we are required to furnish a report by our management on our internal control over financial reporting. However, while we remain an "emerging growth company," we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we are and will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we need to continue to dedicate internal resources, potentially engage outside consultants, and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that neither we nor our independent registered public accounting firm will be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Implementing any appropriate changes to our internal controls may distract our officers and employees, entail substantial costs to modify our existing processes, and take significant time to complete. These changes may not,

however, be effective in maintaining the adequacy of our internal controls, and any failure to maintain that adequacy, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and harm our business. In addition, investors' perceptions that our internal controls are inadequate or that we are unable to produce accurate financial statements on a timely basis may harm our stock price and make it more difficult for us to effectively market and sell any of our present or future product candidates that may receive regulatory approval.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

We or the third parties upon whom we depend may be adversely affected by natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Natural disasters could severely disrupt our operations and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities on which we rely, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business. For example, following Hurricane Maria, shortages in production and delays in a number of medical supplies produced in Puerto Rico resulted, and any similar interruption due to a natural disaster affecting us or any of our third-party manufacturers could materially delay our operations.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.

As widely reported, global credit and financial markets have experienced extreme volatility and disruptions in the past several years, declines in consumer confidence, concerns about declines in economic growth, increases in the rate of inflation and uncertainty about economic stability, including in connection with actions undertaken by the U.S. Federal Reserve Board to address inflation and geopolitical conflicts. There can be no assurance that further volatility in credit and financial markets and confidence in economic conditions will not occur.

Regional or single-source dependencies may in some cases accentuate these risks. For example, the pharmaceutical industry in general, and in some instances we or our collaborators or other third parties on which we or they rely, depend on China-based suppliers or service providers for certain raw materials, products and services, or other activities, Our ability or the ability of our collaborators or such other third parties to continue to engage these China-based suppliers or service providers for certain preclinical research programs and clinical development programs could be restricted due to geopolitical developments between the United Sates and China, including as a result of the escalation of tariffs.

Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets continue to be volatile it may make any necessary debt or equity financing more difficult, more costly, and more dilutive. Furthermore, our stock price may decline due in part to the volatility of the stock market and a general economic downturn.

Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions. In addition, there is a risk that one or more of our current

service providers, manufacturers and other partners may not survive these difficult economic times, which could directly affect our ability to attain our operating goals on schedule and on budget.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics, pandemics and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce our product candidates. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption.

Our internal computer systems, or those of our third-party CROs or other contractors or consultants, may fail or suffer from cybersecurity incidents or breaches, which could result in a material disruption of our current or future product candidates' development programs.

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident, or cybersecurity incident to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes to offset future taxable income may be subject to certain limitations.

As of December 31, 2024, we had a federal net operating loss carryforwards of \$0.6 million which will begin to expire in various amounts in 2040 (other than federal net operating loss carryforwards arising in taxable years beginning after December 31, 2019, which are not subject to expiration). As of December 31, 2024, we had foreign net operating loss carryforwards of \$332.1 million that begin to expire in 2026. These net operating loss and tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities. In addition, in general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its prechange net operating losses or tax credits, or NOLs or credits, to offset future taxable income or taxes. For these purposes, an ownership change generally occurs where the aggregate stock ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation's stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing period.

Our existing NOLs or credits may be subject to limitations arising from previous ownership changes, and our ability to utilize NOLs or credits could be further limited by Sections 382 and 383 of the Code. In addition, future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Sections 382 and 383 of the Code. Our NOLs or credits may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs or credits.

Furthermore, our ability to utilize our NOLs or credits is conditioned upon our attaining profitability and generating U. S. federal and state taxable income. As described above under "Risk factors—Risks related to our financial position and capital needs," we have incurred significant net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future; and therefore, we do not know whether or when we will generate the U.S. federal or state taxable income necessary to utilize our NOL or credit carryforwards that are subject to limitation by Sections 382 and 383 of the Code.

Changes in tax law may adversely affect us or our investors.

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, or IRS, and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect us or holders of our common stock. In recent years, many changes have been made and changes are likely to continue to occur in the future. For example, under Section 174 of the code, in taxable years beginning after December 31, 2021, expenses that are incurred for research and development in the U.S. are capitalized and amortized, which may have an adverse effect on our cash flow. In addition, it is unclear how these U.S. federal income tax changes will affect state and local taxation.

In 2017, the U.S. Congress and the Trump administration made substantial changes to U.S. policies, which included comprehensive corporate and individual tax reform. In addition, the Trump administration called for significant changes to U.S. trade, healthcare, immigration and government regulatory policy. With the transition to the Biden administration in early 2021, changes to U.S. policy occurred and since the start of the Trump Administration in 2025, U.S. policy changes have been implemented at a rapid pace and additional changes are likely. Changes to U.S. policy implemented by the U.S. Congress, the Trump administration or any new administration have impacted and may in the future impact, among other things, the U.S. and global economy, international trade relations, unemployment, immigration, healthcare, taxation, the U.S. regulatory environment, inflation and other areas. Although we cannot predict the impact, if any, of these changes to our business, they could adversely affect our business. Until we know what policy changes are made, whether those policy changes are challenged and subsequently upheld by the court system and how those changes impact our business and the business of our competitors over the long term, we will not know if, overall, we will benefit from them or be negatively affected by them.

It cannot be predicted whether, when, in what form, or with what effective dates, new tax laws may be enacted, or regulations and rulings may be enacted, promulgated or issued under existing or new tax laws, which could result in an increase in our or our shareholders' tax liability or require changes in the manner in which we operate in order to minimize or mitigate any adverse effects of changes in tax law or in the interpretation thereof.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 1C. Cybersecurity

Cybersecurity Risk Management and Strategy

We have implemented a cybersecurity risk management program, in accordance with our risk profile and business size, that is designed to detect, identify, assess, and respond to current and emerging cybersecurity threats. Our cybersecurity risk management program is supported by third-party information technologies and vendors, including a managed services provider that assists us with, among other things, information technology system monitoring, detection, and response support services. We also leverage third-party information technology service providers to monitor and evaluate our cybersecurity posture through vulnerability scans, penetration tests, and cybersecurity risk reviews and assessments. Our cybersecurity risk assessments are informed by industry standards and frameworks and incorporate elements of the same, including elements of the National Institute of Standards and Technology (NIST) cybersecurity framework.

We have adopted an incident response plan designed to coordinate the steps to identify, contain, eradicate, and recover from cybersecurity incidents. We have a process requiring newly hired employees to participate in security awareness training and we conduct periodic phishing email simulations. We also have a risk-based process to review certain third-party information technology service providers and vendors, including through contractual requirements and proactive threat intelligence monitoring, as appropriate.

To date, we have not identified any cybersecurity incidents or threats that have materially affected us or are reasonably likely to materially affect us, including our business strategy, results of operations, or financial condition. Like other companies in our industry, we and our third-party information technology service providers and vendors have from time to time experienced threats that could affect our information or systems. For more information, please refer to Item 1A, "Risk Factors," in this annual report on Form 10-K.

Governance

Our Head of Information Technology, or IT, with the support of our third-party information technology service providers and a team of IT professionals, is responsible for the strategic leadership and day-to-day management of our cybersecurity program, including the prevention, detection, mitigation, and remediation of cyber incidents. The individual serving as Head of IT has more than twenty-five years of experience in information technology and information security.

Our Board of Directors has delegated oversight of our cybersecurity risk management program to our Audit Committee, per the Audit Committee Charter. Our Head of IT provides quarterly updates to the Audit Committee regarding our cybersecurity risk management program, including information about cybersecurity risk management governance, and provides the Audit Committee with status updates on various projects intended to enhance the overall cybersecurity posture of the Company, as applicable.

Item 2. Properties

Our principal offices occupy approximately 63,327 square feet of office and laboratory space at 321 Harrison Avenue, Suite 900, Boston, Massachusetts, 02118, which has served as our new headquarters since the second quarter of 2023. Our obligation to pay rent pursuant to the lease began on December 21, 2022. The initial term of the lease is one hundred twenty-eight (128) months following April 1, 2022. The annual base rent under the lease is \$95.00 per square foot for the first year, which is subject to scheduled annual increases of 3%, plus certain costs, operating expenses and property management fees. We have the option to extend the lease once for five (5)-years upon notice to the Landlord at least one (1) year prior to the end of the then-current term. We also have the option to sublet the Premises on the terms and conditions set forth in the lease.

We have an additional location used for office and lab space that occupies approximately 21,422 square feet located in Basel-City, Switzerland. In April 2023, we amended the lease to increase the square footage of the office and lab space to 44,685 square feet and extended the lease term through June 2027.

We believe that our facilities are adequate for our current needs and for the foreseeable future. To meet the future needs of our business, we may lease additional or alternate space. We believe that suitable additional or

substitute space at commercially reasonable terms will be available as needed to accommodate any future expansion of our operations.

Item 3. Legal Proceedings

From time to time, we may become subject to various legal proceedings and claims that arise in the ordinary course of our business activities. Although the results of litigation and claims cannot be predicted with certainty, as of March 20, 2025, we do not believe we are party to any claim or litigation the outcome of which, if determined adversely to us, would individually or in the aggregate be reasonably expected to have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact 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

Market information

Our common stock began trading on The Nasdaq Global Select Market on June 24, 2021, under the symbol "GLUE". Prior to that time, there was no public market for our common stock.

Holders of record

As of March 10, 2025, we had approximately 14 holders of record for our common stock. Certain shares are held in "street" name and accordingly, the number of beneficial owners of such shares is not known or included in the foregoing number. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividends

We have never declared or paid cash dividends on our capital stock. We anticipate that we will retain all available funds and any future earnings, if any, for use in the operation of our business and do not anticipate paying cash dividends in the foreseeable future.

Stock performance graph

We are a smaller reporting company, as defined by Rule 12b-2 of the Exchange act, and are not required to provide a performance graph.

Recent sales of unregistered equity securities

None.

Issuer purchaser of equity securities

We did not purchase any of our registered equity securities during the period covered by this Annual Report.

Item 6. [Reserved]

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

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties, including those described in the section titled "Special Note Regarding Forward Looking Statements." Our actual results and the timing of selected events could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those set forth under the section titled "Risk Factors" included elsewhere in this Annual Report.

Overview

We are a biotechnology company developing a portfolio of novel and proprietary MGDs. MGDs are small molecule drugs that employ the body's natural protein destruction mechanisms to selectively degrade therapeutically relevant proteins. MGDs work by inducing the engagement of defined surfaces identified on target proteins by an E3 ligase, such as cereblon. We have developed a proprietary and industry-leading protein degradation discovery engine, called QuEEN[™], to enable our unique, target-centric, MGD discovery and development process and our rational design of MGD products. We believe our small molecule MGDs may give us significant advantages over existing therapeutic modalities, including other protein degradation approaches. We prioritize our product development on therapeutic targets backed by strong biological and genetic rationale with the goal of discovering and developing novel medicines.

Monte Rosa Therapeutics AG, a Swiss operating company, was incorporated under the laws of Switzerland in April 2018. Monte Rosa Therapeutics, Inc. was incorporated in Delaware in November 2019. In 2020, through a common control reorganization, Monte Rosa Therapeutics, Inc. acquired the net assets and shareholding of Monte Rosa Therapeutics AG. Monte Rosa Therapeutics, Inc. includes wholly owned subsidiaries Monte Rosa Therapeutics and Monte Rosa Securities Corporation. We are headquartered in Boston, Massachusetts with research operations in both Boston and Basel, Switzerland.

Liquidity

To date, we have financed our operations primarily through the issuance and sale of convertible promissory notes, convertible preferred stock, public offerings of our common stock or warrants to purchase common stock, registered direct offerings, and through our collaboration agreements. From our inception through the date hereof, we raised an aggregate of \$834.8 million of gross proceeds from such transactions. Since inception, we have had significant operating losses. Our primary use of cash is to fund operating expenses, which consist primarily of research and development expenditures and, to a lesser extent, general and administrative expenditures. Our net loss was \$72.7 million and \$135.4 million for the years ended December 31, 2024 and 2023, respectively. As of December 31, 2024, we had an accumulated deficit of \$438.6 million and \$377.0 million of cash, cash equivalents, restricted cash, and marketable securities.

Impact of global economic and political developments

The development of our product candidates could be disrupted and materially adversely affected in the future by global economic or political developments. In addition, economic uncertainty in global markets caused by political instability and conflict, and economic challenges caused by global pandemics or other public health events, may lead to market disruptions, including significant volatility in commodity prices, credit and capital market instability and supply chain interruptions. Our business, financial condition and results of operations could be materially and adversely affected by negative impacts on the global economy and capital markets resulting from these global economic conditions, particularly if such conditions are prolonged or worsen.

Components of operating results

Collaboration revenue

Collaboration revenue represents amounts earned from our collaboration and license agreements with Roche and Novartis. We expect that our revenue for the next several years will be dervied primarily through our current collaboration and license agreements and any additional collaborations that we may enter into in the future.

Roche agreement

On October 16, 2023, Monte Rosa AG entered into a Collaboration and License Agreement with Roche Basel and Roche US, and together with Roche Basel, Roche, or the "Roche Agreement". Pursuant to the Roche Agreement, the parties will seek to identify and MGDs against cancer or neurological disease targets using our proprietary drug discovery platform for an initial set of targets in oncology and neuroscience selected by Roche, with Roche having an option to expand the collaboration with an additional set of targets under certain conditions, each target being subject to certain substitution rights owned by Roche. We will lead preclinical discovery and research activities until a defined point. Upon such point, Roche gains the right to exclusively pursue further preclinical and clinical development activities.

Under the Agreement, Roche will have a worldwide, exclusive license under patents and know-how controlled by us to develop and commercialize products directed to applicable targets. The research collaboration activities governed by the Agreement will be overseen by a joint research committee.

Under the terms of the agreement, we received an upfront payment of \$50 million, and are eligible to receive future preclinical, clinical, commercial and sales milestone payments that could exceed \$2 billion, including up to \$172 million for achieving preclinical milestones. Roche has an option to expand the collaboration with an additional set of targets under certain conditions. For the optional additional targets, we are entitled to receive from Roche an upfront payment of up to \$28 million, and potential preclinical, clinical, commercial, and sales milestones exceeding \$1 billion. We are also eligible to receive tiered royalties ranging from high-single-digit percent to low-teens percent on any products that are commercialized by Roche as a result of the collaboration.

Unless earlier terminated, the Agreement will remain in effect for each product licensed under the Agreement until expiration of the royalty term for the applicable product. The parties have included customary termination provisions in the agreement, allowing termination of the Agreement in its entirety, on a country-by-country or a target-by-target basis.

Novartis agreement

On October 25, 2024, Monte Rosa AG and Novartis entered into a global exclusive development and commercialization license agreement, or the Novartis Agreement. Pursuant to the Novartis Agreement, we granted to Novartis an exclusive, royalty-bearing, sublicensable and transferable license to develop, manufacture, and commercialize VAV1 MGDs, including MRT-6160, which is currently in Phase 1 clinical development for immune-mediated conditions. We are responsible for completing the ongoing Phase 1 clinical study and Novartis is responsible for all subsequent development and commercial activities starting at Phase 2. Development and commercial activities governed by the Novartis Agreement will be overseen by a Development Committee and a Commercialization Committee.

Pursuant to the Novartis Agreement, we received from Novartis an upfront payment of \$150 million, and are eligible to receive from Novartis (1) up to \$2.1 billion in development, regulatory, and sales milestones, beginning upon initiation of Phase 2 studies including (a) potential development and regulatory milestone payments, exceeding \$1.5 billion if multiple indications achieve regulatory approval in multiple territories, (b) potential sales milestones payments in connection with sales outside of the United States, and (2) tiered royalties on sales outside of the United States. We will continue to be responsible for costs associated with the ongoing Phase 1 clinical study and Novartis will be responsible for costs associated with any subsequent clinical studies. We and Novartis also agreed to a net profit and loss sharing arrangement, pursuant to which we will co-fund any global clinical development from Phase 3 onwards and will share 30% of any profits and losses associated with the manufacturing and commercialization of the licensed products in the United States. We have defined opportunities to opt out of the net profit and loss sharing arrangement, in such case, sales in the United States would be entitled to the potential sales milestones payments and tiered royalties on sales available outside of the United States, Any costs for any co-funded development and commercialization activities are subject to budgets reviewed by the Development Committee and Commercialization Committee, respectively. The Novartis Agreement includes customary termination provisions, including Novartis' ability to terminate the Novartis Agreement in its entirety. On December 11, 2024, we announced the closing of the Novartis Agreement.

Research and development expenses

Our research and development expenses include:

- expenses incurred under agreements with consultants, third-party service providers that conduct research and development activities on our behalf;
- personnel costs, which include salaries, benefits, pension and stock-based compensation;
- laboratory and vendor expenses related to the execution of preclinical and clinical studies;
- laboratory supplies and materials used for internal research and development activities; and
- facilities and equipment costs.

Most of our research and development expenses have been related to the development of our QuEEN[™] discovery engine and advancement of our GSPT1 and VAV1 programs, and advancement of our disclosed and undisclosed programs including for NEK7, CDK2, and CCNE1.

We expense all research and development costs in the periods in which they are incurred. Costs for certain research and development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and third-party service providers.

The process of conducting the necessary clinical research to obtain regulatory approval is costly and timeconsuming, and the successful development of our product candidates is highly uncertain. As a result, we are unable to determine the duration and completion costs of our research and development projects, the costs of related clinical development costs or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

We expect our research and development expenses to increase substantially for the foreseeable future as we continue to invest in research and development activities related to developing our product candidates, including investments in manufacturing, as we advance our programs and conduct clinical trials. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming, and the successful development of our product candidates is highly uncertain. As a result, we are unable to determine the duration and completion costs of our research and development projects, the costs of related clinical development costs or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

General and administrative expenses

Our general and administrative expenses consist primarily of personnel costs and other expenses for outside professional services, including legal fees relating to patent and corporate matters, professional fees for accounting, auditing, tax and administrative consulting services, insurance costs and other operating costs. We expect our general and administrative expenses to increase over the next several years to support our continued research and development activities, manufacturing activities, and the potential commercialization of our product candidates and development of commercial infrastructure. We also anticipate our general and administrative costs will increase with respect to the hiring of additional personnel, fees to outside consultants, lawyers and accountants, and increased costs associated with being a public company, such as expenses related to services associated with maintaining compliance with Nasdaq listing rules and SEC reporting requirements, insurance and investor relations costs.

Non-operating income and expense

Our non-operating income and expense includes (i) interest earned on our investments, including principally marketable securities and cash; (ii) gains and losses on transactions of our Swiss subsidiary denominated in currencies other than the U.S. Dollar; (iii) proceeds from the sale of fixed assets; and (iv) realized losses on the sale of marketable securities.

Results of operations for the years ended December 31, 2024 and 2023

The following sets forth our results of operations:

	_	Year ended December 31,				
(in thousands)		2024		2023		Dollar change
Collaboration revenue	\$	75,622	\$	_	\$	75,622
Operating expenses:						
Research and development		121,563		111,272		10,291
General and administrative		35,171		32,039		3,132
Total operating expenses	_	156,734		143,311		13,423
Loss from operations	_	(81,112)		(143,311)		62,199
Other income		10,982		8,297		2,685
Net loss before income taxes	\$	(70,130)	\$	(135,014)	\$	64,884
Provision for income taxes		(2,570)		(338)		(2,232)
Net loss	\$	(72,700)	\$	(135,352)	\$	62,652

Collaboration revenue

Collaboration revenue for the year ended December 31, 2024 was \$75.6 million, of which \$34.0 million and \$41.6 million were attributable to our license and collaboration agreements with Roche and Novartis, respectively. We did not recognize collaboration revenue for the year ended December 31, 2023.

Research and development expenses

We use our personnel and infrastructure resources across the breadth of our research and development activities, which are directed toward identifying and developing product candidates. As such, we do not track all of our internal research and development expenses on a program-by-program basis. The following table summarizes our research and development expense for each period presented (program expenses are not separately included in the table below prior to the year they are disclosed):

	Year Ended December 31,				
(in thousands)		2024		2022	Dollar
		2024		2023	change
External research and development expense:					
MRT-2359	\$	12,332	\$		\$ 12,332
MRT-6160		15,209			15,209
NEK7		10,163		_	10,163
Other development and discovery programs		14,432		46,404	(31,972)
Compensation and related personnel expense		39,796		37,570	2,226
Overhead and administrative expense		29,631		27,298	2,333
Total research and development expense	\$	121,563	\$	111,272	\$ 10,291

As of December 31, 2024, and December 31, 2023, we had 105 employees engaged in research and development activities in our facilities in the U.S. and Switzerland.

Most of our research and development expenses were driven by the successful achievement of key development milestones in our research and development organization, including the continuation of the MRT-2359 clinical study, the advancement of MRT-6160 into the clinic, the progression of our preclinical pipeline including research performed for our collaboration with Roche, and the continued development of the Company's QuEEN[™] discovery engine, and reflect increased personnel expense and external R&D costs to achieve these milestones. Research and development expenses included non-cash stock-based compensation of \$10.6 million and \$8.9 million for the years ended December 31, 2024 and 2023, respectively.

General and administrative expenses

General and administrative expenses to support our business activities were comprised of:

		Year ended December 31,				
(in thousands)	_	2024		2023		Dollar change
Personnel costs	\$	22,153	\$	19,648	\$	2,505
Professional services		5,091		4,355		736
Facility costs and other expenses		7,927		8,036		(109)
Total general and administrative expenses	\$	35,171	\$	32,039	\$	3,132

As of December 31, 2024, and December 31, 2023, respectively, we had 29 and 28 employees engaged in general and administrative activities principally in our U.S. facility. Personnel and professional service costs increased in the year ended December 31, 2024, as compared to 2023 as a result of increased headcount and expenses in support of our growth and operations as a public company. General and administrative expenses included non-cash stock-based compensation of \$7.5 million and \$7.7 million for the years ended December 31, 2024 and 2023, respectively.

Other expenses, net

Other income (expense), net was comprised of:

	Year ended						
	December 31,						
(in thousands)	2024			2023			
Interest income, net	\$	10,566	\$	9,334			
Foreign currency exchange gain (loss), net		416		(930)			
Gain on disposal of fixed assets				24			
Loss on sale of marketable securities				(131)			
Other income	\$	10,982	\$	8,297			

The increase in interest income for the year ended December 31, 2024, is principally attributable to higher interest rates on marketable securities.

Foreign exchange gain on transactions of our Switzerland based subsidiary denominated in currency other than the U.S. dollar increased in the year ended December 31, 2024, as to compared to the loss for year ended December 31, 2023, principally due to the strengthening of the U.S Dollar with respect to, principally, the Swiss Franc.

Provision for income taxes

For the year ended December 31, 2024, we recorded a provision for income taxes of \$2.6 million, primarily driven by the current federal and state taxes related to the \$50.0 million upfront payment for Roche Agreement, which will be recognized as taxable Global Intangible Low Tax Income, or GILTI.

Liquidity and capital resources

Overview

Due to our significant research and development expenditures, we have generated operating losses since our inception. We have funded our operations primarily through the issuance and sale of convertible promissory notes, convertible preferred stock, public offerings of our common stock or warrants to purchase common stock, registered direct offerings, and through our collaboration agreements.

In May 2024, we entered into an underwriting agreement with TD Securities (USA) LLC, as representative of the several underwriters, related to an underwritten public offering, or the Offering, of 10,638,476 shares of common stock at a price of \$4.70 per share, and, in lieu of Common Stock to certain investors, pre-funded warrants to purchase 10,638,524 shares of Common Stock at a price of \$4.6999 per pre-funded warrant, which represents the price per share at which shares of Common Stock were sold in this Offering, minus \$0.0001, which is the exercise price of each pre-funded warrant. The pre-funded warrants are immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. Aggregate gross proceeds from the Offering were \$100 million, or aggregate net proceeds of \$96.4 million after deducting the underwriter discounts, commissions, and other offering costs.

In December 2024, we also announced the closing of the global exclusive development and commercialization License Agreement with Novartis to advance VAV1-directed MGDs, including MRT-6160. Under the terms of the agreement, we received from Novartis an upfront payment of \$150 million.

As of December 31, 2024, we had cash, cash equivalents, restricted cash, and marketable securities, of \$377.0 million and an accumulated deficit of \$438.6 million. We believe that our cash, cash equivalents, restricted cash, and marketable securities will be sufficient to fund our planned operations for at least one year past the issuance date of these financial statements.

Cash flows

The following table summarizes our cash flows for the periods indicated:

	 Year ended December 31,						
(in thousands)	2024		2023				
Net cash provided by (used in):							
Operating activities	\$ 41,996	\$	(43,802)				
Investing activities	(44,452)		88,801				
Financing activities	98,892		27,492				
Net increase in cash, cash equivalents and restricted cash	\$ 96,436	\$	72,491				

Operating activities

During the year ended December 31, 2024, net cash provided by operating activities of \$42.0 million was attributable to our net loss of \$72.7 million off-set by an increase in deferred revenue of \$83.4 million, \$23.3 million in non-cash charges, and changes in our working capital accounts of \$8.0 million. Non-cash charges primarily include stock-based compensation expense of \$18.1 million and depreciation expense of \$8.1 million.

During the year ended December 31, 2023, net cash used in operating activities of \$43.8 million was attributable to our net loss of \$135.4 million off-set by an increase in deferred revenue of \$50.0 million, \$19.1 million in non-cash charges, and changes in our working capital accounts of \$22.5 million. Non-cash charges primarily include stock-based compensation expense of \$16.7 million and depreciation expense of \$6.2 million.

Investing activities

Cash used in investing activities of \$44.5 million during the year ended December 31, 2024, was primarily attributable to the purchases of marketable securities of \$230.4 million and property and equipment of \$4.0 million, off-set by cash provided by financing activities attributable to the maturities of marketable securities of \$189.9 million.

Cash provided by investing activities of \$88.8 million during the year ended December 31, 2023, was primarily attributable to proceeds from maturities of marketable securities of \$165.3 million and proceeds from the sale of marketable securities of \$45.6 million, off-set by purchases of marketable securities of \$103.2 million and property and equipment of \$19.0 million.

Financing activities

Net cash provided by financing activities for the year ended December 31, 2024 amounted to \$98.9 million principally attributable to net proceeds from our stock offerings of \$97.3 million.

Net cash provided by financing activities for the year ended December 31, 2023 amounted to \$27.5 million principally attributable to the sale of pre-funded warrants for aggregate net proceeds of \$24.9 million.

Funding requirements

Any product candidates we may develop may never achieve commercialization and we anticipate that we will continue to incur losses for the foreseeable future. We expect that our research and development expenses, general and administrative expenses, and capital expenditures will continue to increase. As a result, until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings, debt financings or other capital sources, including potentially collaborations, licenses and other similar arrangements. Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third-party clinical research, manufacturing and development services, costs relating to the build-out of our headquarters, laboratories and manufacturing facility, license payments or milestone obligations that may arise, laboratory and related supplies, clinical costs, manufacturing costs, legal and other regulatory expenses and general overhead costs.
Based upon our current operating plan, we believe that the existing cash, cash equivalents, restricted cash, and marketable securities of \$377.0 million, will enable us to fund our operating expenses and capital expenditure requirements for at least the next twelve months. We base this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect.

We will continue to require additional financing to advance our current product candidates through clinical development, to develop, acquire or in-license other potential product candidates and to fund operations for the foreseeable future. We will continue to seek funds through equity offerings, debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders, will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any failure to raise capital as and when needed could have a negative impact on our financial condition and on our ability to pursue our business plans and strategies. If we are unable to raise capital, we will need to delay, reduce or terminate planned activities to reduce costs.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the scope, progress, results and costs of researching, developing and manufacturing our current product candidates or any future product candidates, and conducting preclinical studies and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals or clearances for our lead product candidates or any future product candidates;
- the number and characteristics of any additional product candidates we develop or acquire;
- the cost of manufacturing our lead product candidate or any future product candidates and any products we successfully commercialize, including costs associated with building-out our manufacturing capabilities;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of any such agreements that we may enter;
- the expenses needed to attract and retain skilled personnel;
- the costs associated with being a public company;
- the timing, receipt and amount of sales of any future approved or cleared products, if any; and
- the effect of global economic uncertainty and financial market volatility caused by economic effects of rising inflation and interest rates, global health crises, geopolitical events, changes in international trade relationships and military conflicts on any of the foregoing or other aspects of our business or operations.

Further, our operating plans may change, and we may need additional funds to meet operational needs and capital requirements for clinical trials and other research and development activities. We currently have no credit facility or committed sources of capital. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated product development programs.

Critical accounting policies and significant judgments and estimates

Our management's 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 U.S. generally accepted accounting principles, or GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Research and development expense and accruals

We record research and development expenses to operations as incurred. Research and development expenses represent costs incurred by us for development of our technology discovery engine and the discovery and development of our product candidates and include: employee-related expenses, including salaries, benefits and non-cash stock-based compensation expense; external research and development expenses incurred under arrangements with third parties, including preclinical testing organizations, non-profit institutions and consultants; and other expenses, which include direct and allocated expenses for laboratory, facilities and other costs.

As part of the process of preparing financial statements, we are required to estimate and accrue expenses. We estimate costs of research and development activities conducted by service providers. Payments made prior to the receipt of goods or services to be used in research and development are deferred and recognized as expense in the period in which the related goods are received or services are rendered. If the costs have been prepaid, this expense reduces the prepaid expenses in the balance sheet, and if not yet invoiced, the costs are included in accrued expenses in the balance sheet. We classify such prepaid assets as current or non-current assets based on our estimates of the timing of when the goods or services will be realized or consumed. These costs are a significant component of our research and development expenses.

We estimate these costs based on factors such as estimates of the work completed and budget provided and in accordance with our agreements with established third-party service providers. We estimate the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and the agreed-upon fee to be paid for such services. We make significant judgments and estimates in determining the accrued expense balance in each reporting period. As actual costs become known, we adjust our estimates. 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 may vary from our estimates and could result in us reporting amounts that are too high or too low in any particular period. Our accrued expenses are dependent, in part, upon the receipt of timely and accurate reporting from external third-party service providers. Amounts ultimately incurred in relation to amounts accrued for these services at a reporting date may be substantially higher or lower than our estimates.

We have and may continue to enter into license agreements to access and utilize certain technology. We evaluate if the license agreement is an acquisition of an asset or a business. To date none of our license agreements have been considered to be an acquisition of a business. For asset acquisitions, the upfront payments to acquire such licenses, as well as any future milestone payments made before product approval, are immediately recognized as research and development expense when due, provided there is no alternative future use of the rights in other research and development projects.

Revenue Recognition

To date, our revenues have primarily consisted of consideration related to the Roche License and Collaboration Agreement and the Novartis License Agreement. Goods and service that we are required to provide to Roche and Novartis under these agreements are accounted for under ASC 606. In accordance with ASC 606, we recognize revenue when our customers obtain control of promised goods or services, in an amount that reflects the consideration which we expect to receive in exchange for those goods or services.

To determine the appropriate amount of revenue to be recognized for arrangements determined to be within the scope of ASC 606, we perform the following five steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the assessment of the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when, or as we satisfy each performance obligation.

As part of the accounting for arrangements under ASC 606, we must use significant judgment to determine the performance obligations based on the determination under step (ii) above. We also use judgment to determine whether milestones or other variable consideration, except for royalties and sales-based milestones, should be included in the transaction price as described below. We recognize revenue based on those amounts when, or as, the performance obligations under the contract are satisfied.

The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring goods and services to the customer. To the extent the transaction price includes variable consideration, we estimate the amount of variable consideration that should be included in the transaction price utilizing either the expected value method or the most likely amount method, depending on the nature of the variable consideration. Variable consideration is included in the transaction price if, in management's judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur. Any estimates, including the effect of the constraint on variable consideration, are evaluated at each reporting period for any changes.

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation on a relative standalone selling price basis unless the transaction price is variable and meets the criteria to be allocated entirely to a performance obligation or to a distinct service that forms part of a single performance obligation. The consideration to be received is allocated among the separate performance obligations based on relative standalone selling prices. Determining the standalone selling price of each performance obligation requires significant judgment and is discussed in further detail in Note 9.

We utilize judgment to assess the nature of the performance obligation to determine whether the performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition. The measure of progress, and the resulting periods over which revenue should be recognized, are subject to estimates by management and may change over the course of the arrangement, which are subject to review by the joint research committee, or JRC. Such a change could have a material impact on the amount of revenue we record in future periods. We concluded that the transfer of control to the customer for the performance obligation occurs over the time period that the research and development services are provided by us. We recognize revenue for the performance obligation as those services are provided using an input method, based on the cumulative costs incurred compared to the total estimated costs expected to be incurred to satisfy the performance obligation. The percentage of completion method is, in management's judgment, the best measure of progress towards satisfying the performance condition.

At the inception of each arrangement that includes research, development or regulatory milestone payments, we evaluate whether the milestones are considered likely to be met and estimate the amount to be considered for inclusion in the transaction price using the most-likely-amount method. If it is probable that a significant reversal in the amount of cumulative revenue recognized would not occur, the associated milestone value is included in the transaction price. For milestone payments due upon events that are not within our control, such as regulatory approvals, we are not able to assert that it is likely that the regulatory approval will be granted and that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur until those approvals are received. In making this assessment, we evaluate factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone. There is considerable judgment involved in determining whether it is probable that a significant reversal in the amount of cumulative reversal in the amount of cumulative reversal in the amount of cumulative reversal method. There is considerable judgment involved in determining whether it is probable that a significant reversal in the amount of cumulative reversal in the particular milestone. There is considerable judgment involved in determining whether it is probable that a significant reversal in the amount of cumulative reversal in the amount of cumulative revenue recognized would not occur.

We reevaluate the transaction price and our total estimated costs expected to be incurred at the end of each reporting period and as uncertain events, such as changes to the expected timing and cost of certain research, development and manufacturing activities that we are responsible for, are resolved or other changes in circumstances occur. If necessary, we will adjust our estimate of the transaction price or our estimates of the total costs expected to be incurred. To date, we have not had any significant changes in our estimates.

For a complete discussion of our significant accounting policies and recent accounting pronouncements, see Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report.

Recently issued and adopted accounting pronouncements

Refer to Note 2, "Summary of Significant Accounting Policies," in the accompanying notes to our consolidated financial statements appearing elsewhere in this Annual Report for a discussion of recent accounting pronouncements.

Contractual obligations and commitments

Roche Collaboration and License Agreement

On October 16, 2023, we entered into a Collaboration and License Agreement with Roche, for the discovery and development of molecular glue degraders against targets in cancer and neurological diseases. Under the Roche Agreement, we will lead the discovery and certain preclinical activities against multiple select targets. Following the completion of certain preclinical studies. Roche has the option to continue the further development and potential commercialization of compounds identified and generated under the collaboration and products containing such compounds at its sole responsibility and at its own cost. The initial scope of the agreement is limited to a specified number of targets but may be expanded to include additional targets subject to certain conditions and additional compensation payable to us. Pursuant to the terms of the Roche Agreement, we granted to Roche an exclusive license to use certain of its platform technology for the exploitation of compounds and products discovered and developed under the agreement. We received an upfront payment of \$50.0 million and milestone payments of \$9 million from Roche under the terms of the Roche Agreement. Additionally, we are eligible to receive additional contingent payments from Roche upon the occurrence of defined research, development, regulatory and sales-based events exceeding \$3 billion. We are also entitled to tiered royalties on sales of products containing compounds identified and generated from activities conducted under the arrangement. The Roche Agreement term commences on the execution date and continues until no payment obligations remain, unless otherwise terminated earlier.

Novartis License Agreement

On October 25, 2024, we entered into a License Agreement with Novartis. Pursuant to the Novartis Agreement, we will grant to Novartis an exclusive, royalty-bearing, sublicensable and transferable license to develop, manufacture, and commercialize VAV1 MGDs, including MRT-6160, which is currently in Phase 1 clinical development for immune-mediated conditions. We are responsible for completing the ongoing Phase 1 clinical study and Novartis is responsible for all subsequent development and commercial activities starting at Phase 2. Pursuant to the Agreement, we received from Novartis (1) an upfront payment of \$150 million, (2) are entitled to receive up to \$2.1 billion in development, regulatory, and sales milestones, beginning upon initiation of Phase 2 studies including (a) potential development and regulatory milestone payments, exceeding \$1.5 billion if multiple indications achieve regulatory approval in multiple territories, (b) potential sales milestones payments in connection with sales outside of the United States, and (3) tiered royalties on sales outside of the United States. We will continue to be responsible for costs associated with the ongoing Phase 1 clinical study and Novartis will be responsible for costs associated with any subsequent clinical studies. We and Novartis also agreed to a net profit and loss sharing arrangement, pursuant to which we will co-fund any global clinical development from Phase 3 onwards and will share 30% of any profits and losses associated with the manufacturing and commercialization of the licensed products in the United States. We have defined opportunities to opt out of the net profit and loss sharing arrangement, in such case, sales in the United States would be entitled to the potential sales milestones payments and tiered royalties as sales outside of the United States. Any costs for any co-funded development and commercialization activities are subject to budgets reviewed by us and Novartis.

See the section entitled "Business—Our services, collaboration and licenses agreements" elsewhere in this Annual Report as well as Note 9 to our annual consolidated financial statements appearing elsewhere in this Annual Report for a description of our collaboration and license agreements.

Lease Commitments

Our lease commitments reflect payments due for our two lease agreements for laboratory and office space in Boston, Massachusetts and Basel, Switzerland that expire in 2032 and 2027, respectively. As of December 31, 2024, our contractual commitments for our leases were \$61.6 million, which will be paid over the term of such leases. For additional information on our leases and timing of future payments, please read Note 7, Leases, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company, as defined in Rule 12b-2 under the Exchange Act, for this reporting period and are not required to provide the information required under this item.

Item 8. Financial Statements and Supplementary Data

The financial information required by Item 8 is located beginning on page F-1 of this Annual Report.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Limitations on effectiveness of controls and procedures

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints, and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Evaluation of disclosure controls and procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated, as of December 31, 2024, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on the evaluation, our principal executive officer and principal financial officer concluded that, as of December 31, 2024, our disclosure controls and procedures as of such date are effective at the reasonable assurance level.

Management's annual report on internal control over financial reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. Our management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth in "Internal Control - Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, our management concluded that, as of December 31, 2024, our internal control over financial reporting was effective.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm due to a transition period established by rules of the SEC for "emerging growth companies".

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the year ended December 31, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Rule 10b5-1 Trading Plans

During the fiscal quarter ended December 31, 2024, none of our directors or officers (as defined in Rule 16a-1(f) of the Exchange Act) adopted, terminated or modified a Rule 10b5-1 trading arrangement or any non-Rule 10b5-1 trading agreement (as defined in Item 408(c) 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 following table sets forth information about our directors and executive officers as of March 20, 2025.

Name	Positions and Offices Held with Monte Rosa	Officer/Director Since	Class and Year in Which Term Will Expire	Age
Executive Officers				
Markus Warmuth, M.D.	Chief Executive Officer, President and Director	2020	Class III - 2027	54
Filip Janku, M.D., Ph.D.	Chief Medical Officer	2021		51
Philip Nickson, J.D., Ph.D.	Chief Business and Legal Officer	2022		46
Sharon Townson, Ph.D.	Chief Scientific Officer	2021		50
Jennifer Champoux	Chief Operating Officer	2024		53
Non Employee Directors	·			
Andrew Schiff, M.D. (1)(3)	Chairman of the Board of Directors and Director	2020	Class II - 2026	59
Ali Behbahani, M.D. (2)	Director	2020	Class III - 2027	48
Christine Siu (1)	Director	2020	Class I - 2025	48
Kimberly L. Blackwell, M.D. (2)	Director	2020	Class I - 2025	56
Jan Skvarka, Ph.D., MBA (3)	Director	2023	Class I - 2025	58
Chandra P. Leo (1)	Director	2020	Class II - 2026	54
Anthony Manning, Ph.D. (2)(3)	Director	2023	Class II - 2026	63
Eric Hughes, M.D., Ph.D.	Director	2024	Class III - 2027	55

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of the Nominating and Corporate Governance Committee

Executive Officers

Markus Warmuth, M.D. has served as our President and Chief Executive Officer and a member of our board of directors since January 2020. Dr. Warmuth has also served as a Venture Partner at Versant Venture Management, LLC, a healthcare investment firm, since September 2019. From July 2018 to August 2019, he worked as an Entrepreneur-in-Residence for Third Rock Ventures, LLC, a venture capital firm. From October 2011 to May 2018, Dr. Warmuth was the Chief Executive Officer and, previously from August 2011 to October 2011, Chief Scientific Officer of H3 Biomedicine Inc., a drug development company. Dr. Warmuth has served as a member of the board of directors of IMV Inc., a clinical stage biopharmaceutical company, from November 2018 to September 2023, and Relay Therapeutics, a clinical stage precision medicine company, from July 2018 to August 2019. Dr. Warmuth has also previously served in multiple roles at the Novartis Institutes for Biomedical Research (NIBR) and the Genomics Institute of the Novartis Research Foundation (GNF), including as the Director of Kinase Biology, Head of Oncology Pharmacology. While at Novartis, he and his teams were involved in the development of Ceritinib and Ribociclib as well as the discovery of allosteric inhibitors of SHP2 and Abl, amongst others. He received an M.D. from Ludwig Maximilian University, Munich, Germany. We believe Dr. Warmuth is qualified to serve on our board of directors because of his scientific and medical background as well as his corporate leadership experience.

Filip Janku, M.D., Ph.D. has served as our Chief Medical Officer since June 2021. From February 2012 to May 2021, Dr. Janku served in various positions at The University of Texas MD Anderson Cancer Center, or MD Anderson, including as Center Medical Director for MD Anderson's Clinical and Translational Research Center and as Associate Professor in its Department of Investigational Cancer Therapeutics where he focused his research efforts in oncogenic mutations and molecular aberrations. Dr. Janku brings expertise in innovative early-phase clinical development of new cancer drugs with a special focus on proof-of-concept clinical studies of novel, biomarker-driven, personalized therapies. Dr. Janku's work has been recognized with multiple awards including

the Emil Frei, III Award for Excellence in Translational Research, Sabin Family Fellow Award, Khalifa Scholar Award, Sidney Kimmel Scholar Award; and he authored or coauthored over 280 scientific articles in peerreviewed journals. Dr. Janku received his M.D. and Ph.D. from Charles University in the Czech Republic.

Philip Nickson, J.D., Ph.D. has served as our Chief Business and Legal Officer since May 2024. From March 2022 to April 2024, Dr. Nickson served as our General Counsel. From March 2021 to March 2022, Dr. Nickson led our legal function serving as our Head of Legal Operations. From January 2012 to March 2021, Dr. Nickson served in various roles of increasing responsibility at Momenta Pharmaceuticals, acquired by Johnson and Johnson in October 2020, including most recently as Vice President of Intellectual Property and Associate General Counsel. From January 2006 to January 2012, Dr. Nickson served in various positions at the law firm Fish and Richardson, with a practice focusing on supporting small to mid-size biotech clients. Prior to practicing law, Dr. Nickson completed a post-doctoral research program at the Boston Biomedical Research Institute researching cardiomyocyte cell death. Dr. Nickson received his J.D. from Suffolk University and his Ph.D. from University of Manchester.

Sharon Townson, Ph.D., has served as our Chief Scientific Officer since May 2024. From December 2020 to April 2024, Dr. Townson served as our Chief Technology Officer. Dr. Townson originally joined Monte Rosa on July 2020 as Vice President, Biomolecular Sciences and brings expertise in molecular glues and targeted protein degradation technology platforms. Prior to joining Monte Rosa, Dr. Townson served as Executive Director of Platform Biology at Kymera Therapeutics from April 2019 to July 2020. Previously, from June 2013 to December 2018, Dr. Townson served in various leadership roles at Warp Drive Bio and was responsible for developing their novel molecular glue approach to target KRAS. Dr. Townson began her career at Pfizer as a structural biologist and holds a Ph.D. in structural biology and biochemistry from the University of Manchester Institute of Technology.

Jennifer Champoux, has served as our Chief Operating Officer since May 2024. Ms. Champoux joined Monte Rosa on March 2021 as Senior Vice President Operation. From March 2023 to May 2024, Ms. Champoux served as Chief People and Operations Officer. Prior to joining Monte Rosa, from May 2019 to March 2021, Ms. Champoux was Executive Director of Operations at H3 Biomedicine where she led the operations, communications, and finance operations teams. Prior to that, Ms. Champoux was a Director, Operations at H3 Biomedicine from June 2017 to May 2019. From February 2006 to May 2017, Ms. Champoux previously worked at Novartis Institutes for Biomedical Research and served in various roles of increasing responsibility, ultimately leading operations for the Discovery Chemistry group in Cambridge. Ms. Champoux started her career in several pharmaceutical development functions, including process chemistry, program management, and clinical operations at Merck and Array BioPharma. Ms. Champoux holds a B.S. in chemistry from University of Vermont and a M.S in organic chemistry from Indiana University.

Non-Employee Directors

Andrew Schiff, M.D., has been a member of our board of directors since September 2020 and as our chairman since June 2023. Dr. Schiff serves as a Managing Partner of Aisling Capital, a venture capital firm, that he has been affiliated with since 1999. Prior to joining Aisling Capital, Dr. Schiff practiced internal medicine at the New York Presbyterian Hospital, where he currently maintains his position as a Clinical Assistant Professor of Medicine. Dr. Schiff serves as a member of the board of directors of Aclaris Therapeutics, Inc., a pharmaceutical company, since 2017. Dr. Schiff received an M.D. from Cornell University Medical College, an M.B.A. from Columbia Business School, and a B.S. in neuroscience with honors from Brown University. We believe Dr. Schiff is qualified to serve as a member and Chairman of our board of directors because of his medical background as well as his corporate leadership experience.

Ali Behbahani, M.D., has been a member of our board of directors since April 2020. Dr. Behbahani joined New Enterprise Associates, Inc., a venture capital firm, in 2007 and is a Partner and Co-Head of Healthcare. Prior to joining New Enterprise Associates, Inc., Dr. Behbahani served as a consultant in business development at The Medicines Company, a pharmaceutical company, a Venture Associate at Morgan Stanley, a multinational investment bank and financial services company, and a Healthcare Investment Banking Analyst at Lehman Brothers, a global financial services firm, from 1998 to 2000. Dr. Behbahani serves as a member of the board of directors of Nkarta, Inc., a biotechnology company, since August 2015, Black Diamond Therapeutics, Inc., a biopharmaceutical company, since December 2018, Adaptimmune Therapeutics plc, a biopharmaceutical company, since Petruary 2015, Korro Bio, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since August 2019, and Arcellx, Inc., a biotechnology company, since February 2015. Dr. Behbahani formerly served as a member of the board of directors of CVRx, Inc., a medical device company, from July 2013 to September 2024, Nevro Corp., a global medical device company,

from August 2014 to March 2019, Oyster Point Pharma, Inc., a biopharmaceutical company, from July 2017 to January 2023, Genocea Biosciences, Inc., a biopharmaceutical company, from February 2018 to May 2022, Minerva Surgical Inc., a biotechnology company, from May 2011 to January 2024, and Marker Therapeutics, Inc. until 2017. Dr. Behbahani received an M.D. from the University of Pennsylvania School of Medicine, an M.B.A. from the Wharton School of the University of Pennsylvania and a B.S. in biomedical engineering, electrical engineering and chemistry from Duke University. We believe that Dr. Behbahani is qualified to serve as a member of our board of directors because of his extensive corporate leadership experience and expertise in finance and investment management.

Christine Siu, has been a member of our board of directors since December 2020. Ms. Siu has served as the Chief Executive Officer of ML Bio Solutions, an affiliate of BridgeBio Pharma Inc., a pharmaceutical company. since January 2022 and as Chief Executive Officer of Pancreative Sciences, a portfolio company of GondolaBio, LLC, a biopharma startup, since February 2025. She formerly served as the Chief Operating Officer in Residence of BridgeBio Pharma Inc., a pharmaceutical company, from January 2020 to January 2022 and as the Chief Financial Officer of Eidos Therapeutics, Inc., a biopharmaceutical company from December 2017 to December 2019 and previously as Chief Operating Officer of Eidos Therapeutics, Inc. from April 2016 to December 2017. Ms. Siu served as the Chief Business Officer of The Bluefield Project to Cure Frontotemporal Dementia from 2014 to 2017, and previously from 2012 to 2014 as Senior Director of Corporate Development at Global Blood Therapeutics, Inc., a biopharmaceutical company. Previously, she held positions at various private equity and venture capital firms, including Third Rock Ventures, LLC, Warburg Pincus LLC and Thomas, McNerney & Partners, LLC, where she invested in life sciences companies. Ms. Siu has served as a member of the board of directors of Bright Peak Therapeutics, Inc., a privately held biotechnology company, since June 2021. Ms. Siu received an M.B.A. from Harvard Business School and a B.S. with distinction in cellular molecular biology and economics from the University of Michigan. We believe Ms. Siu is gualified to serve as a member of our Board of Directors because of her experience serving in various commercial roles in the life sciences industry.

Kimberly L. Blackwell, M.D., has been a member of our board of directors since July 2020. Dr. Blackwell served as Chief Executive Officer at Zentalis Pharmaceuticals, Inc., a clinical-stage biopharmaceutical company, from May 2022 to November 2024. Dr. Blackwell formerly served as Chief Medical Officer of Tempus Labs, Inc., a biotechnology company, from March 2020 to May 2022 and as Vice President of Early Phase Oncology and Immuno-oncology at Eli Lilly and Company, a global pharmaceutical company, from March 2018 to March 2020. From 2012 to 2018, Dr. Blackwell served as Director of the Women's Cancer Program, Professor of Medicine, and Associate Director for Strategic Relations at the Duke Cancer Institute where she led the clinical development teams for promising early stage therapeutics. Dr. Blackwell serves as a member of the board of directors of Century Therapeutics, a biotechnology company, since June 2021. Dr. Blackwell formerly served as a member of the board of directors of Zentalis Pharmaceuticals, Inc., a clinical-stage biopharmaceutical company, from July 2020 to November 2024. Dr. Blackwell received an M.D. from the Mayo Clinic College of Medicine and Science and a B.A. in bioethics from Duke University. We believe Dr. Blackwell is qualified to serve as a member of our Board of Directors because of her scientific background and significant experience in clinical and research efforts, as well as her experience serving in various leadership roles in the life sciences industry.

Jan Skvarka, Ph.D, MBA, has been a member of our board of directors since March 2023. Dr. Skvarka serves as the Executive Chairman of DEM BioPharma, Inc, a privately held immune-oncology company, since March 2022 and as a member of the board of directors of Zentalis Pharmaceuticals, Inc., a clinical-stage biopharmaceutical company, since September 2022. He previously served as the Executive Chairman of GentiBio, Inc., a privately held biotherapeutics company, from June 2022 to November 2022. From September 2019 to November 2021, Dr. Skvarka was the President and Chief Executive Officer and a member of the board of directors of Trillium Therapeutics, Inc., a publicly traded, clinical-stage immuno-oncology company, where he led a highly successful, 360-degree business transformation that produced a leading CD47 drug candidate, propelling Trillium from a \$16 million market capitalization to a \$2.3 billion acquisition by Pfizer Inc. in two years. From 2014 to January 2019, Dr. Skvarka served as the President and Chief Executive Officer of Tal Medical, a private clinical-stage neuromodulation company, where he developed and executed the company's strategy, built an accomplished leadership team, and oversaw its clinical development program. He also held roles of increasing responsibility at Bain & Company, most recently as a Partner, and was a leading member of Bain Healthcare Practice, with a focus on life sciences. Dr. Skvarka received a BS in business administration and a PhD in economics from the University of Economics in Bratislava, Slovakia, and an MBA from Harvard Business School. We believe that Dr. Skvarka is qualified to serve as a member of our board of directors because of his extensive experience serving in various leadership roles in the life sciences industry.

Chandra P. Leo, has been a member of our board of directors since September 2020. Dr. Leo has served as an Investment Advisor in the private equity team at HBM Partners AG, a Swiss healthcare investment company, since 2007. Between 1997 and 2007, Dr. Leo worked as a postdoctoral scientist at Stanford University, as a physician at the University Hospital Leipzig and as a principal at Wellington Partners, a venture capital firm. Dr. Leo currently serves as a director on the boards of Fore Biotherapeutics Inc., River 2 Renal Corp. and River 3 Renal Corp., all of which are biotechnology companies. Dr. Leo previously served as a member of the board of directors of Gynesonics Inc., a privately held medical device company, Galecto, Inc., a biotechnology company, and Longboard Pharmaceuticals, Inc., a biopharmaceutical company. He received an M.D. from the Freie Universität Berlin, an M.B.A from INSEAD and an M.A.S. in medicines development from the University of Basel. We believe that Dr. Leo is qualified to serve as a member of our board of directors because of his medical background and expertise in finance and investment management.

Anthony Manning, Ph.D., has been a member of our board of directors since July 2023. Dr. Manning is a seasoned biochemist with a 30-year career in the pharmaceutical and biotechnology industry and currently is the Principal at Manning Bio Worldwide, LLC, assisting in the development of transformative medicines. He also serves as a Board Director for Palatin Technologies, a biopharmaceutical company, since September 2017, as Chairman of the Institute for Biomedical Entrepreneurship, and as a Scientific Advisor for several organizations since 2021. As the former Chief Scientific Officer at Momenta Pharmaceuticals, a biopharmaceutical company, from 2018 to March 2021, where he built a pipeline of first-in-class therapeutics, leading to the company's acquisition by Johnson & Johnson for \$6.5 billion in 2020. Earlier, he spearheaded research and drug discovery at Biogen Idec, a biopharmaceutical company, from 2007 to 2011, at Roche Pharmaceuticals, the pharmaceutical division of research healthcare company Roche Holding AG, from 2002 to 2007, and at Pharmacia Corp, a pharmaceutical company that merged with Pfizer in 2003, from 2000 to 2002. He has led the discovery and development of multiple therapeutics, contributing to the approval of two drugs for autoimmune diseases. We believe Dr. Manning is qualified to serve as a member of our board of directors because of his scientific background and significant experience in clinical and research efforts.

Eric Hughes, M.D., Ph.D., has been a member of our board of directors since December 2024. Dr. Hughes serves as Executive Vice President, Global R&D and Chief Medical Officer at Teva Pharmaceuticals Industries Ltd., a role he has held since August 2022. Prior to joining Teva Pharmaceuticals, from 2021 to 2022, Dr. Hughes was Senior Vice President of Clinical Development and Translational Medicine at Vertex Pharmaceuticals. From 2015 to 2021, Dr. Hughes served as Global Development Unit Head for Immunology, Hepatology and Dermatology at Novartis, ultimately responsible for leading all clinical development activities and biostatistician talent across multiple therapeutic areas and for expanding development in China. Additionally, between 2020 and 2021, during the COVID-19 pandemic, Dr. Hughes also served as Co-Chair of the Therapeutics Clinical Working Group for the Accelerating COVID-19 Therapeutic Interventions and Vaccines public-private partnership at the National Institutes of Health. From 2010 to 2015, Dr. Hughes held several executive and senior positions at Bristol Myers-Squibb, including Head of Virology, Fibrotic Diseases, Genetically Defined Diseases, Autoimmunity, and Cardiology Discovery Medicine, Exploratory Clinical & Translational Research. Dr. Hughes received his MD and Ph.D. from Yale School of Medicine. We believe Dr. Hughes is qualified to serve as a member of our board of directors because of his scientific background and significant experience in clinical and translational research efforts.

Family Relationships and Legal Proceedings

There are no family relationships between or among any of our directors or executive officers. Our executive officers are appointed by, and serve at the discretion of, our board of directors. The principal occupation and employment during the past five years of each of our directors was carried on, in each case except as specifically identified above, with a corporation or organization that is not a parent, subsidiary or other affiliate of us. There is no arrangement or understanding between any of our directors and any other person or persons pursuant to which he or she is to be selected as a director.

There are no material legal proceedings to which any of our directors, officers or affiliate, any owner of record or beneficially of more than five percent of any class of our voting securities, or any associate of any such director, officer, affiliate, or security holder is a party adverse to us or any of our subsidiaries or in which any such person has a material interest adverse to us or our subsidiary.

Board Committees

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee. Each of the audit committee, compensation committee, and nominating and corporate governance committee operates under a charter that satisfies the applicable standards of the SEC and

Nasdaq. Each such committee reviews its respective charter at least annually. A current copy of the charter for each of the audit committee, compensation committee and nominating and corporate governance committee is posted on the corporate governance section of our website, *https://ir.monterosatx.com/corporate-governance/documents-and-charters*. From time to time, our board of directors may establish certain committees for scientific, business or other matters.

Audit Committee

Christine Siu, Andrew Schiff, M.D. and Chandra Leo serve on the audit committee, which is chaired by Christine Siu. Our board of directors has determined that each member of the audit committee is "independent" for audit committee purposes as that term is defined by the rules of the SEC and Nasdaq, and that each has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has designated Christine Siu as an "audit committee financial expert," as defined under the applicable rules of the SEC. During the fiscal year ended December 31, 2024, the audit committee met four (4) times. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending based upon the audit committee's review and discussions with management and our independent registered public accounting firm whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the audit committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions;
- reviewing quarterly earnings releases. All audit and non-audit services, other than de minimis non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee;
- discussing the Company's risk assessment and management guidelines, including the Company's major financial risk exposures, cybersecurity risks and the steps that the Company's management has taken to monitor and control such exposures and risks.

Compensation Committee

Ali Behbahani, M.D., Kimberly L. Blackwell, M.D. and Anthony Manning, Ph.D. serve on the compensation committee, which is chaired by Kimberly L. Blackwell, M.D.. Our board of directors has determined that each member of the compensation committee is "independent" as defined in the applicable Nasdaq rules. During the fiscal year ended December 31, 2024, the compensation committee met six (6) times. The compensation committee's responsibilities include:

 annually reviewing and recommending to the board of directors corporate goals and objectives relevant to the compensation of our chief executive officer;

- evaluating the performance of our chief executive officer in light of such corporate goals and objectives and based on such evaluation (i) determine the cash compensation of our chief executive officer and (ii) reviewing and approving grants and awards to our chief executive officer under equity-based plans;
- reviewing and approving the compensation of our other executive officers;
- reviewing and establishing our overall management compensation, philosophy, and policy;
- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable Nasdaq rules;
- reviewing and making recommendations to our board of directors about our policies and procedures for the grant of equity-based awards;
- preparing the compensation committee report required by SEC rules, if and when required, to be included in our annual proxy statement;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis," if and when required, to be included in our annual proxy statement; and
- reviewing and approving the retention or termination of any consulting firm or outside advisor to assist in the evaluation of compensation matters.

Nominating and Corporate Governance Committee

Anthony Manning, Ph.D., Andrew Schiff and Jan Skvarka, Ph.D, MBA, serve on the nominating and corporate governance committee, which is chaired by Jan Skvarka, Ph.D, MBA. Our board of directors has determined that each member of the nominating and corporate governance committee is "independent" as defined in the applicable Nasdaq rules. During the fiscal year ended December 31, 2024, the nominating and corporate governance committee is responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- reviewing the composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- identifying individuals qualified to become members of the board of directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- reviewing and discussing with the board of directors corporate succession plans for our chief executive officer and other key officers;
- developing and recommending to the board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- overseeing the evaluation of our board of directors.

The nominating and corporate governance committee considers candidates for board of director membership suggested by its members and our Chief Executive Officer. Additionally, in selecting nominees for directors, the nominating and corporate governance committee will review candidates recommended by stockholders in the same manner and using the same general criteria as candidates recruited by the committee and/or recommended by our board of directors. Any stockholder who wishes to recommend a candidate for consideration by the committee as a nominee for director should follow the procedures described in our proxy statement under the heading "Stockholder Proposals." The nominating and corporate governance committee will also consider whether to nominate any person proposed by a stockholder in accordance with the provisions of our bylaws relating to stockholder nominations as described in our proxy statement under the heading "Stockholder nominations as described in our proxy statement under the heading "Stockholder nominations as described in our proxy statement under the heading "Stockholder nominations as described in our proxy statement under the heading "Stockholder nominations as described in our proxy statement under the heading "Stockholder Norder No

Identifying and Evaluating Director Nominees. Our board of directors is responsible for filling vacancies on our board of directors and for nominating candidates for election by our stockholders each year in the class of directors whose term expires at the relevant annual meeting. The board of directors delegates the selection and nomination process to the nominating and corporate governance committee, with the expectation that other members of the board of directors, and of management, will be requested to take part in the process as appropriate.

Generally, the nominating and corporate governance committee identifies candidates for director nominees in consultation with management, through the recommendations submitted by stockholders or through such other methods as the nominating and corporate governance committee deems to be helpful to identify candidates. Once candidates have been identified, the nominating and corporate governance committee confirms that the candidates meet all of the minimum qualifications for director nominees established by the nominating and corporate governance committee may gather information about the candidates through interviews, detailed questionnaires, comprehensive background checks or any other means that the nominating and corporate governance committee then meets as a group to discuss and evaluate the qualities and skills of each candidate, both on an individual basis and taking into account the overall composition and needs of our board of directors. Based on the results of the evaluation process, the nominating and corporate governance committee for the board of directors' approval to fill a vacancy or as director nominees for election to the board of directors by our stockholders each year in the class of directors whose term expires at the relevant annual meeting.

Insider Trading Policies and Procedures

We have adopted an insider trading policy that governs the purchase, sale, and/or other transactions of our securities by our directors, officers, employees and designated consultants that we believe is reasonably designed to promote compliance with applicable insider trading laws, rules and regulations, and listing standards applicable to us. A copy of our insider trading policy is filed as Exhibit 19.1 to this Annual Report on Form 10-K for the fiscal year ended December 31, 2024. In addition, with regard to trading in our own securities, it is our policy to comply with the federal securities laws and the applicable exchange listing requirements.

Our insider trading policy prohibits our directors, officers, employees and certain designated consultants, and their affiliated persons, from trading in company securities while in possession of material nonpublic information about our company to others who may trade of the basis of that information). Under our insider trading policy, designated insiders may only trade in company securities at a time when they do not possess material nonpublic information about our company. We also require our directors, officers and certain other employees to receive approval before trading in company securities. Our insider trading policy also expressly prohibits short sales; purchases or sales of puts, calls, or other derivative securities as collateral for a loan. Any waiver of the provisions of this policy requires the approval of our Audit Committee. To date, no such requests have been made or approved. We have also adopted an additional policy that governs adoption, modification and termination of written securities trading plans, known as Rule 10b5-1 plans, by our directors, executive officers and certain other persons. Our policy provides that all Rule 10b5-1 plans must comply with SEC rules applicable to the Rule 10b5-1 safe harbor and imposes additional requirements and limitations.

Code of Business Conduct and Ethics

We have 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 posted on the corporate governance section of our website, which is located at *https://ir.monterosatx.com/corporate-governance/documents-and-charters*. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a Current Report on Form 8-K.

Item 11. Executive Compensation

Our named executive officers for the year ended December 31, 2024 are:

• Markus Warmuth, M.D., our President and Chief Executive Officer;

- Filip Janku M.D., Ph.D., our Chief Medical Officer; and
- Philip Nickson, J.D., Ph.D., our Chief Business and Legal Officer

2024 Summary Compensation Table

The following table presents the compensation awarded to, earned by or paid to each of our named executive officers for the years indicated.

				Non-Equity		
			Option	Incentive Plan	All Other	
		Salary	Awards	Compensation	Compensation	Total
Name and principal position	Year	(\$)	(\$)(1)	(\$)(2)	(\$)(3)	(\$)
Markus Warmuth, M.D.	2024	616,400	1,469,981	354,430	_	2,440,811
Chief Executive Officer	2023	616,400	2,702,530	308,200	_	3,627,130
Filip Janku, M.D., Ph.D.	2024	500,000	514,069	230,000	13,800	1,257,869
Chief Medical Officer	2023	500,000	772,970	200,000	13,200	1,486,170
Phil Nickson, Ph.D.	2024	473,611	582,827	217,390	13,800	1,287,628
Chief Business and Legal Officer	2023	432,000	707,983	172,800	13,200	1,325,983

(1) Amounts reported represent the aggregate grant date fair value of the stock options award to the named executive officers during fiscal years 2024 and 2023, calculated in accordance with ASC Topic 718. Such grant date fair value does not take into account any estimated forfeitures. The assumptions used in calculating the grant date fair value of the awards reported in this column are set forth in Note 11 to the financial statements included elsewhere in this 2024 Annual Report. The amounts reported in this column reflect the accounting cost for the stock options and does not correspond to the actual economic value that may be received upon exercise of the stock option or any sale of any of the underlying shares of common stock.

- (2) The amounts reported represent bonuses paid under our Senior Executive Cash Incentive Bonus Plan based upon achievement of certain company and individual performance metrics.
- (3) Amounts reported represent the matching contributions to the Company's 401(k) plan.

Narrative to 2024 Summary Compensation Table

Our board of directors and compensation, nomination and corporate governance committee review compensation annually for our executive officers. In setting executive base salaries and bonuses and granting equity incentive awards, we 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 a long-term commitment to our Company. We target a general competitive position, based on independent third-party benchmark analytics to inform the mix of compensation of base salary, bonus or long-term incentives.

Our compensation, nomination and corporate governance committee is authorized to retain the services of one or more executive compensation advisors, as it sees fit, in connection with the establishment of our executive compensation programs and related policies. In fiscal year 2024, the compensation, nomination and corporate governance committee continued to retain Radford, an AonHewitt Company, or Radford, to provide it with market information, analysis and other advice relating to executive compensation on an ongoing basis. The compensation and corporate governance committee engaged Radford to, among other things, assist in developing a group of peer companies to help us determine overall compensation for our executive officers, as well as to assess each separate element of compensation. The goal was to ensure that the compensation we offer to our executive talent requirements. We do not believe the retention of, and the work performed by, Radford creates any conflict of interest because Radford performs no other work for the Company besides advising the compensation, nomination and corporate governance committee.

Our compensation, nomination and corporate governance committee is responsible for determining the compensation for all executive officers. Based on its discretion, taking into account the factors noted above, the compensation, nomination and corporate governance committee sets the compensation for each executive officer, including for the Chief Executive Officer, without the Chief Executive Officer present.

Base Salaries

Base salaries for our named executive officers are reviewed periodically and adjusted from time to time based on factors including market-competitive compensation levels, job responsibilities, individual performance and experience. The 2024 base salaries for Dr. Warmuth, Dr. Janku, and Dr. Nickson were \$616,400, \$500,000, and \$473,611, respectively.

Annual Bonuses

For the fiscal year 2024, each named executive officer was eligible to earn an annual cash bonus pursuant to our Senior Executive Cash Incentive Bonus Plan based on achievement of certain company and individual-performance goals as determined by the Company in its sole discretion. The target annual bonus for each of Dr. Warmuth, Dr. Janku, and Dr. Nickson were 50%, 40%, and 40% of each of the named executive officer's annual base salary.

Equity Compensation

Our equity grant program is intended to align the interests of our named executive officers with those of our stockholders and to motivate them to make important contributions to our performance. In 2024, we granted stock options to each of our named executive officers, as reflected in the "Outstanding Equity Awards at 2024 Fiscal Year End Table" below.

401(k) Plan

We maintain a tax-qualified retirement plan that provides all regular U.S. employees with an opportunity to save for retirement on a tax-advantaged basis. Under our 401(k) plan, participants may elect to defer a portion of their compensation on a pre-tax basis or after tax (Roth) basis subject to applicable annual limits under the Code. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. Employee elective deferrals are 100% vested at all times. As a U.S. tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan and all contributions are deductible by us when made and earnings on Roth contributions are not taxable when distributed from the 401(k) Plan. We make safe-harbor match contributions of 100% of the first 4% of each participant's eligible compensation.

Other Benefits

Our named executive officers are eligible to participate in our employee benefit plans on the same basis as our other employees, including our health and welfare plans.

Employment Arrangements with Our Named Executive Officers

We entered into employment agreements with each of Dr. Warmuth, Dr. Janku, and Dr. Nickson, effective upon our initial public offering in 2021. The employment agreements contain substantially similar terms that provide for each of the named executive officer's continued employment and annual base salary, and set forth the terms of their annual bonus, the at-will nature of their employment, certain expense reimbursements, the terms of severance payments payable upon certain terminations of employment and their eligibility to participate in our benefit plans generally.

In the event that Dr. Warmuth's, Dr. Janku's, or Dr. Nickson's service with the Company is terminated without "cause" or for "good reason" (in each case, as defined in his employment agreement), within three month prior to or twelve months after a "change in control" (as defined in his employment agreement), such named executive officer will be entitled to the following severance benefits, subject to the executive executing a separation agreement and it becoming effective, (i) a lump-sum payment equal to equal to the sum of (a) 12 months (or, in the case of Dr. Warmuth, 18 months) of such named executive officer's then-current base salary or the base salary in effect immediately prior to the change in control, if higher, plus (b) one times (or, in the case of Dr. Warmuth, 1.5 times) such named executive officer's annual target bonus for the then-current year; (ii) up to 12 months (or, in the case of Dr. Warmuth, any vested stock options granted prior to the effective date of his employment agreement shall be exercisable until the earlier of the expiration date of such options or the first anniversary of his date of termination unless the equity documents pursuant to which such stock options are granted require or authorize earlier termination in connection with a liquidation or sale of the Company.

In the event that Dr. Warmuth's service with the Company is terminated without "cause" or for "good reason," in each case, other than in connection with a change in control, such named executive officer will be entitled to the following severance benefits, subject to such executive executing a separation agreement and release and it becoming effective: (i) payments equal to the sum of (a) 12 months of Dr. Warmuth's then-current base salary, plus (b) his annual target bonus for the then-current year; and (ii) up to 12 months of the employer portion of COBRA premium payments.

In the event that Dr. Janku's or Dr. Nickson's service with the Company is terminated without "cause" or for "good reason," in each case, other than in connection with a change in control, such named executive officer will be entitled to the following severance benefits, subject to such executive executing a separation agreement and release and it becoming effective: (i) payments equal to 12 months of such named executive officer's then-current base salary, and (ii) up to 12 months of the employer portion of COBRA premium payments.

Upon the occurrence of a change of control, all payments and benefits received by Dr. Warmuth, Dr. Janku, and Dr. Nickson in connection with a change of control that constitute "excess parachute payments" under Section 280G of the Code will be subject to a modified economic cutback treatment such that the "excess parachute payments" to be received by each such affected named executive officer will either be (i) paid in full or (ii) reduced below such named executive officer's threshold amount under Code Section 280G in order to avoid triggering the excise tax that would otherwise be payable on such "excess parachute payment" amounts.

In addition, each of our named executive officers previously entered into our standard confidential information, non-competition, non-solicitation, and invention assignment agreement with us which continues to remain in effect and contains protections of confidential information, requires the assignment of inventions and contains other restrictive covenants.

	Option awards				
	Number of securities underlying	Number of securities underlying		0.11	0 //
	unexercised	unexercised		Option	Option
Name	exercisable	unexercisable		price (\$)	date
Markus Warmuth, M.D.	786,756 493,640	44,877	(1) (2) (3)	2.19 6.14	12/4/2030 4/12/2031
	216,975 226,166	98,625 245,834	(4) (5)	13.41 7.78	3/1/2032 1/3/2033
Filip Janku, M.D., Ph.D.		346,000 48,384 27,032	(7)(6)(4)	5.71 19.00 13.41	1/2/2034 6/24/2031 3/1/2032
	72,000 64,687	30,000 70,313	(8) (5)	7.35	10/3/2032 1/3/2033
Philip Nickson, J.D., Ph.D.		121,000 6,787 6,372	(7) (9) (10)	5.71 7.87 19.00	5/17/2034 5/17/2031 6/24/2031
	48,537 59,248	22,063 64,402	(4) (5)	13.41 7.78	3/1/2032 1/3/2033
		109,000 40,000	(7) (11)	5.71 3.98	1/2/2034 6/3/2034

Outstanding Equity Awards at 2024 Fiscal Year End Table

- (1) Subject to the executive's continuous service, the shares subject to this option vested 25% on December 4, 2021 and in 1/48th increments monthly thereafter.
- (2) Subject to the executive's continuous service, the shares subject to this option vest 25% on April 9, 2022 and in 1/48th increments monthly thereafter.
- (3) Subject to the executive's continuous service, the shares subject to this option vest 25% on May 28, 2022 and in 1/48th increments monthly thereafter.
- (4) Subject to the executive's continuous service, the shares subject to this option vest 25% on March 1, 2023 and in 1/48th increments monthly thereafter.

- (5) Subject to the executive's continuous service, the shares subject to this option vest 25% on January 3, 2024 and in 1/48th increments monthly thereafter.
- (6) Subject to the executive's continuous service, the shares subject to this option vest 25% on June 1, 2022 and in 1/48th increments monthly thereafter.
- (7) Subject to the executive's continuous service, the shares subject to this option vest 25% on January 1, 2025 and in 1/48th increments monthly thereafter.
- (8) Subject to the executive's continuous service, the shares subject to this option vest as follows: 36,000 shares satisfied a performance-based vesting condition on November 1, 2022, and vested in one lump installment on May 1, 2024, 36,000 shares satisfied a performance-based vesting condition on December 15, 2022, and vested in one lump installment on June 15, 2024, and 30,000 shares satisfied a performance-based vesting condition on September 13, 2024, and will vest in one lump installment on March 13, 2026.
- (9) Subject to the executive's continuous service, the shares subject to this option vest 25% on May 10, 2022 and in 1/48th increments monthly thereafter.
- (10) Subject to the executive's continuous service, the shares subject to this option vest 25% on June 24, 2022 and in 1/48th increments monthly thereafter.
- (11) Subject to the executive's continuous service, the shares subject to this option vest 25% on May 28, 2025 and in 1/48th increments monthly thereafter.

Compensation Risk Assessment

We believe that although a portion of the compensation provided to our named executive officers and other employees is performance-based, our executive compensation program does not encourage excessive or unnecessary risk taking. Our compensation programs are designed to encourage our named executive officers and other employees to remain focused on both short-term and long-term strategic goals, in particular in connection with our pay-for-performance compensation philosophy. As a result, we do not believe that our compensation programs are reasonably likely to have a material adverse effect on us.

Policy on Trading, Pledging and Hedging of Company Stock

Certain transactions in our securities (such as purchases and sales of publicly traded put and call options, and short sales) 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 derivative transactions of our stock by our executive officers, directors and employees. Our insider trading policy expressly prohibits purchases of any derivative securities that provide the economic equivalent of ownership.

Compensation Recovery Policy (Clawback Policy)

On September 27, 2023, we adopted a Compensation Recovery Policy (the "Clawback Policy") in compliance with the requirements of the Dodd-Frank Act, final SEC rules and applicable Nasdaq listing standards (the "final clawback rules"), which covers our current and former executive officers, including all of our named executive officers. Under the Clawback Policy, in the event that we are required to prepare a restatement of our previously issued financial statements due to our material noncompliance with any financial reporting requirement under securities laws, we are required to recover (subject to certain limited exceptions described in the Clawback Policy and permitted under the final clawback rules) any cash or equity incentive-based compensation received by any current or former executive officer after the effective date of the Clawback Policy and in the three years prior to the date we are required to restate our financial statements that is in excess of the amount that would have been received based on the restated financial statements.

Policy on the Timing of Awards of Options and Other Option-Like Instruments

Our compensation committee has generally granted annual equity awards, including stock option grants to our named executive officers, in the first quarter of each fiscal year, specifically early January. In addition, new hires receive stock option grants at the time of their hiring. Eligible employees, including our named executive officers, may voluntarily enroll in our Employee Stock Purchase Plan and receive an option to purchase shares at a discount using payroll deductions accumulated during the prior six months, with purchase dates occurring at the Administrator's (as defined under the Employee Stock Purchase Plan) discretion. During 2024, our compensation

committee did not take into account any material nonpublic information when determining the timing and terms of equity incentive awards, and we did not time the disclosure of material nonpublic information for the purpose of affecting the value of executive compensation. During 2024, we did not grant stock options to our named executive officers during any period beginning four business days before and ending one business day after the filing or furnishing of a Form 10-Q, 10-K or 8-K that discloses material nonpublic information.

Director Compensation

The table below shows all compensation earned by or paid to our non-employee directors during the year ended December 31, 2024, or fiscal year 2024. During fiscal year 2024, Markus Warmuth, M.D., our President and Chief Executive Officer, served as a member of our board of directors, as well as an employee, and received no additional compensation for his services as a member of our board of directors in 2024. Dr. Warmuth's compensation for service as an employee during fiscal years 2023 and 2024 is set forth in the section of this this Annual Report on Form 10-K captioned "Executive Compensation — 2024 Summary Compensation Table."

Non-Employee Director Compensation Table

	Fees earned or paid in	Option awards	
Name	cash (\$)	(\$)(2)(3)	Total (\$)
Alexander Mayweg, Ph.D	37,500		37,500
Ali Behbahani, M.D.	48,750	69,016	117,766
Kimberly Blackwell, M.D.	54,375	69,016	123,391
Chandra P. Leo, M.D. ⁽¹⁾	—	—	—
Anthony Manning, Ph.D	43,482	69,016	112,498
Andrew Schiff, M.D.	95,815	69,016	164,831
Christine Siu	55,000	69,016	124,016
Jan Skvarka, Ph.D, MBA	42,422	69,016	111,438
Eric Hughes, M.D., Ph.D ⁽⁴⁾	—	281,355	281,355

- (1) Dr. Leo has declined cash compensation and option awards that he is eligible to receive for his service on the Board of Directors and the Audit Committee.
- (2) The amounts reflect the grant date fair value of stock options granted in 2024 in accordance with Financial Accounting Standards Board, or FASB Accounting Standards Codification, or ASC Topic 718. Such grant date fair values do not take into account any estimated forfeitures related to service-based vesting conditions. The assumptions used in calculating the grant date fair value of the stock options reported in this column are set forth in Note 11 to the financial statements included elsewhere in this Annual Report. The amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by our non-employee directors upon the exercise of such options.
- (3) Except as noted below, none of our directors held outstanding options to purchase our common stock or any unvested stock awards as of December 31, 2024:

	Aggregate Number of Shares Subject
Name	to Stock Options
Alexander Mayweg, Ph.D	82,632
Ali Behbahani, M.D.	104,732
Kimberly Blackwell, M.D.	140,663
Chandra P. Leo, M.D.	—
Anthony Manning, Ph.D	63,100
Andrew Schiff, M.D.	104,732
Christine Siu	140,663
Jan Skvarka, Ph.D, MBA	83,600
Eric Hughes, M.D., Ph.D	44,200

(4) Dr. Hughes joined the board in December 2024. In connection with such appointment, he was granted an initial stock option grant for 44,200 shares that vest in 36 equal monthly installments following the grant date. 100% of the shares subject to the option will vest immediately upon his continued service to use through the consummation of a change in control.

Non-Employee Director Compensation Policy

Our non-employee directors are compensated pursuant to a formal policy, which we most recently amended and restated in June 2024, pursuant to which we pay our non-employee directors a cash retainer for service on the board of directors 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. The fees paid to non-employee directors for service on the board of directors and for service on each committee of the board of directors on which the director is a member are as follows:

Annual Retainer for Board Membership		
Annual service on the board of directors	\$	40,000
Additional compensation for service as non-executive chair of the board of directors	\$	30,000
Additional Annual Retainer for Committee Membership		
Annual service as member of the Audit Committee or the Compensation Committee (c	other	
than chair)	\$	7,500
Annual service as chair of the Audit Committee or the Compensation Committee	\$	15,000
Annual service as member of the Nominating and Corporate Governance Committee		
(other than chair)	\$	4,000 *
Annual service as chair of the Nominating and Corporate Governance Committee	\$	8,000 *
*Committee established in June 2024		

Non-employee directors are given the opportunity to elect to receive all or a portion of their cash retainer and committee fees in the form of an equity award of unrestricted shares having a grant date fair value equal to the amount (or portion of the amount) of such retainer and committee fees. We also reimburse our non-employee directors for reasonable out-of-pocket expenses incurred by our non-employee directors in connection with attending our meetings of the board of directors and committees thereof.

During 2024, pursuant to the terms of the non-employee director compensation policy then in effect, each new non-employee director elected to our board of directors was eligible to receive an option to purchase 44,200 shares of our common stock on the date of such director's election or appointment to the board of directors, which would vest ratably in thirty-six (36) equal monthly installments following the grant date, subject to the director's continued service on our board of directors through such vesting date and subject to 100% acceleration upon a change in control. In addition, on the date of our 2024 annual meeting of stockholders of our common stock, which vests in full upon the earlier to occur of the first anniversary of the date of grant or the date of the next annual meeting, subject to the director's continued service on our board of directors through such vesting date and such vesting date and subject to 100% acceleration upon a subject to 100% acceleration.

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.

Employee directors receive no additional compensation for their service as a director.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Equity Compensation Plan Information

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.

	Equity Compensation Plan Information					
					Number of	
					securities	
					remaining	
					available	
Plan Category	WeightedNumber ofaveragesecuritiesexerciseto be issuedprice ofupon exerciseoutstandingof outstandingoptions,options, warrantswarrants			for future issuance under equity compensation plans (excluding securities in first column (a))		
Equity compensation plans approved by security	unu rigino (#)(u)				(")(0)	
holders	11,725,467	(1)	\$ 8.02	(2)	4,661,993	(3)(4)
Equity compensation plans not approved by security holders	_		_		_	
Total	11,725,467	_	\$ 8.02		4,661,993	

- (1) Consists of the Monte Rosa Therapeutics, Inc. 2021 Stock Option and Incentive Plan, or the 2021 Plan, the Monte Rosa Therapeutics, Inc. 2020 Stock Option and Grant Plan, or the 2020 Plan, and the Monte Rosa Therapeutics, Inc. 2021 Employee Stock Purchase Plan, or the 2021 ESPP.
- (2) Consists of 11,613,308 shares issuable upon the exercise of outstanding options under the 2020 Plan and the 2021 Plan and 112,159 shares issuable upon the vesting of restricted stock units under the 2021 Plan. This does not include purchase rights under the 2021 ESPP because the purchase right (and therefore the number of shares to be purchased) will not be determined until the end of the current purchase period.
- (3) As of December 31, 2024, there were 3,226,165 shares available for grant under the 2021 Plan and 1,435,828 shares available for purchase under the 2021 ESPP. There are no shares that may be issued from the 2020 Plan as of December 31, 2024.
- (4) The 2021 Plan has an evergreen provision whereby the number of shares of common stock reserved and available for issuance under the 2021 Plan is subject to an automatic annual increase on each January 1, beginning in 2022, by an amount equal to five percent of the number of shares of common stock issued and outstanding on the immediately preceding December 31 or such lesser number of shares of common stock as determined by the Administrator (as defined in the 2021 Plan). Accordingly, on January 1, 2025, the number of shares of common stock reserved and available for issuance under the 2021 Plan increased by 3,075,372. The number in column (c) does not include such shares. No grants have been made or will be made under the 2020 Plan following our initial public offering. The 2021 ESPP has an evergreen provision whereby the number of shares of common stock reserved and available for purchase under the 2021 ESPP is subject to an automatic increase on each January 1, beginning in 2022, by the least of (i) 1% of the number of shares issued and outstanding on the immediately preceding December 31, (ii) 439,849 shares and (iii) such number of shares as determined by the Administrator (as defined in the 2021 ESPP). Accordingly, on January 1, 2025, the number of shares of common stock reserved and available for issuance under the 2021 ESPP).

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information, to the extent known by us or ascertainable from public filings, with respect to the beneficial ownership of our common stock as of March 17, 2025 by:

- each of our directors;
- each of our named executive officers;
- all of our current directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by us to be the beneficial owner of more than five
 percent of our capital stock.

The column entitled "Shares Beneficially Owned" is based on a total of 61,509,821 shares of our common stock outstanding as of March 17, 2025.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options that are currently exercisable or exercisable within 60 days of March 20, 2025, are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. Except as otherwise indicated in the table below, addresses of named beneficial owners are c/o Monte Rosa Therapeutics, Inc., 321 Harrison Avenue, Suite 900, Boston, MA 02118.

Name of Beneficial Owner	Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% or Greater Stockholders:		
Entities affiliated with New Enterprise Associates ⁽¹⁾	7,692,298	12.51%
T. Rowe Price Associates, Inc. ⁽²⁾	6,601,141	10.73%
Entities affiliated with FMR LLC ⁽³⁾	5,101,413	8.29%
Entities affiliated with Baker Bros ⁽⁴⁾	4,916,095	7.99%
Entities affiliated with BVF Partners L.P. ⁽⁵⁾	4,393,210	7.14%
Avoro Capital Advisors LLC ⁽⁶⁾	4,345,000	7.06%
Entities affiliated with Versant Ventures ⁽⁷⁾	4,079,469	6.63%
Blackrock, Inc. ⁽⁸⁾	3,840,165	6.24%
The Vanguard Group, Inc. ⁽⁹⁾	3,156,354	5.13%
Directors, Named Executive Officers and Other Executive Officers		
Ali Behbahani ⁽¹⁰⁾	82,632	*
Kimberly L. Blackwell ⁽¹¹⁾	118,563	*
Andrew Schiff ⁽¹²⁾	82,632	*
Chandra P. Leo		*
Christine Siu ⁽¹³⁾	118,563	*
Jan Skvarka ⁽¹⁴⁾	48,972	*
Anthony Manning ⁽¹⁵⁾	23,916	*
Eric Hughes ⁽¹⁶⁾	6,138	*
Markus Warmuth ⁽¹⁷⁾	2,520,998	3.96%
Filip Janku ⁽¹⁸⁾	650,945	1.06%
Philip Nickson ⁽¹⁹⁾	409,343	*
All executive officers and directors as a group (13 persons) ⁽²⁰⁾	4,556,381	6.9%

*Represent beneficial ownership of less than 1%

Based solely on a Schedule 13D/A filed with the SEC on August 12, 2024 by New Enterprise Associates 17, (1) L.P., or NEA 17, NEA Partners 17, L.P., or NEA Partners 17, which is the sole general partner of NEA 17. NEA 17 GP, LLC, or NEA 17 LLC, and together with NEA Partners 17, or the New Enterprise Associates, which is the sole general partner of NEA Partners 17, and Forest Baskett, or Baskett, Ali Behbahani, Carmen Chang, or Chang, Anthony A. Florence, Jr., or Florence, Liza Landsman, or Landsman, Mohamad H. Makhzoumi, or Makhzoumi, Joshua Makower, or Makower, Edward T. Mathers, or Mathers, Scott D. Sandell, or Sandell, Peter W. Sonsini, or Sonsini, Paul Walker, or Walker and Rick Yang, or Chang, and collectively, the Managers, Consists of 7.692,298 shares of common stock held by NEA 17 and options to purchase 82,632 shares of common stock held by Dr. Behbahani and exercisable within 60 days of August 12, 2024. The Managers are the managers of NEA 17 LLC. NEA Partners 17, NEA 17 LLC and the Managers share voting and dispositive power with respect to the shares held by NEA 17. The Managers, including Dr. Behbahani, who is also a member of our board of directors, disclaim beneficial ownership of the above referenced securities except to the extent of their pecuniary interests therein. The address of New Enterprise Associates and Sandell is 1954 Greenspring Drive, Suite 600, Timonium MD, 21093. The address of the principal business office of Baskett, Behbahani, Chang, Makhzoumi, Walker and Yang is New Enterprise Associates, 2855 Sand Hill Road, Menlo Park, CA 94025. The address of the principal business office of Florence and Mathers is New Enterprise Associates, 104 5th Avenue, 19th Floor, New York, NY 10011.

- (2) Based solely on a Schedule 13G/A filed with the SEC on November 14, 2024 by T. Rowe Price Associates, Inc., or Price Associates. Price Associates has sole voting power over 6,453,403 shares and sole dispositive power over 6,601,141 shares. Price Associates does not serve as custodian of the assets of any of its clients; accordingly, in each instance only the client or the client's custodian or trustee bank has the right to receive dividends paid with respect to, and proceeds from the sale of, such securities. The ultimate power to direct the receipt of dividends paid with respect to, and the proceeds from the sale of, such securities, is vested in the individual and institutional clients which Price Associates may be revoked in whole or in part at any time. Except as may be indicated if this is a joint filing with one of the registered investment companies sponsored by Price Associates which it also serves as investment adviser, not more than 5% of the class of such securities is owned by any one client subject to the investment advice of Price Associates. The address for Price Associates is 100 E. Pratt Street, Baltimore, MD 21202.
- (3) Based solely on a Schedule 13G/A filed with the SEC on November 12, 2024 by FMR LLC and Abigail P. Johnson. FMR LLC has sole voting power with respect to 5,100,211 shares and sole dispositive power over 5,101,413 shares and Abigail P. Johnson has sole dispositive power over 5,101,413 shares. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. 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. 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 LLC. The address of FMR LLC is 245 Summer Street, Boston, Massachusetts 02210.
- (4) Based solely on a Schedule 13G filed with the SEC on February 14, 2024 by Baker Bros. Advisors LP, or Baker, Baker Bros. Advisors (GP) LLC, or Baker GP, Felix J. Baker and Julian C. Baker. Represents 390,203 shares of Common Stock issuable upon the exercise of pre-funded warrants held by 667, L.P. and 4,525,892 shares of Common Stock issuable upon the exercise of pre-funded warrants held by Baker Brothers Life Sciences, L.P., which may be deemed to be indirectly beneficially owned by Baker. Baker GP, Felix J. Baker and Julian C. Baker as managing members of Baker GP, may be deemed to indirectly beneficially own the shares held by Baker and may be deemed to have the sole power to vote or direct the vote of and the power to dispose or direct the disposition of such securities. The address of Baker is 860 Washington Street, 3rd Floor, New York, NY 10014.
- (5) Based solely on a Schedule 13G filed with the SEC on January 31, 2025 by Biotechnology Value Fund. L.P., or BVF, BVF I GP LLC, or BVF GP, Biotechnology Value Fund II, L.P., or BVF2, BVF II GP LLC, or BVF2 GP, Biotechnology Value Trading Fund OS LP, or Trading Fund OS, BVF Partners OS Ltd., or Partners OS, BVF GP Holdings LLC, or BVF GPH, BVF Partners L.P., or Partners, BVF Inc., and Mark N. Lampert. Consists of (i) 2,257,204 shares of common stock held by BVF, (ii) 1,823,443 shares of common stock held by BVF2, (iii) 228,202 shares of common stock held by Trading Fund OS, and (iv) 84,361 shares of common stock held by a certain managed account, or the Partners Managed Account. BVF GP, as the general partner of BVF, may be deemed to beneficially own the securities beneficially owned by BVF. BVF2 GP, as the general partner of BVF2, may be deemed to beneficially own the securities beneficially owned by BVF2. Partners OS, as the general partner of Trading Fund OS, may be deemed to beneficially own the securities beneficially owned by Trading Fund OS. BVF GPH, as the sole member of each of BVF GP and BVF2 GP, may be deemed to beneficially own the securities beneficially owned in the aggregate by BVF and BVF2. Partners, as the investment manager of BVF, BVF2 and Trading Fund OS, and the sole member of Partners OS, may be deemed to beneficially own the securities beneficially owned in the aggregate by BVF, BVF2, and Trading Fund OS and held in the Partners Managed Account. BVF Inc., as the general partner of Partners, may be deemed to beneficially own the securities beneficially owned by Partners. Mr. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the securities beneficially owned by BVF Inc. The business address of BVF, BVF GP, BVF2, BVF2 GP, BVF GPH, Partners, BVF Inc., and Mr. Lampert is 44 Montgomery St., 40th Floor, San Francisco, California 94104. The business address of Trading Fund OS and Partners OS is PO Box 309 Ugland House, Grand Cayman, KY1-1104, Cayman Islands.
- (6) Based solely on a Schedule 13G/A filed with the SEC on February 14, 2025 by Avoro Capital Advisors LLC, a Delaware limited liability company, or Avoro, which provides investment advisory and management services and has acquired the securities of the Company solely for investment purposes on behalf of Avoro

Life Sciences Fund LLC, a Delaware limited liability company, and Behzad Aghazadeh, who serves as the portfolio manager and controlling person of Avoro. The address of Avoro is 110 Greene Street, Suite 800, New York, NY 10012.

- (7) Based solely on a Schedule 13D/A filed with the SEC on October 30, 2024 by Versant Venture Capital VI, L.P., or Versant VI, Versant Ventures VI GP, L.P., or Versant Ventures VI GP, Versant Ventures VI GP-GP, LLC, or Versant Ventures VI GP-GP, Versant Vantage I, L.P., or Versant Vantage I, Versant Vantage I GP, L.P., or Versant Vantage I GP, and Versant Vantage I GP-GP, LLC, or Versant Vantage I GP-GP, and together with Versant VI, Versant Ventures VI GP, Versant Ventures VI GP-GP, Versant Vantage I and Versant Vantage I GP, the Versant Venture Capital Funds. Versant VI has sole voting power with respect to 4,079,469 shares and sole dispositive power over 4,079,469 shares. Versant Vantage I has sole voting power with respect to 1,573,453 shares and sole dispositive power over 1,573,453 shares. Versant Ventures VI GP-GP is the general partner of Versant Ventures VI GP, which is the general partner of Versant VI. Each of Versant Ventures VI GP-GP and Versant Ventures VI GP share voting and dispositive power with respect to the shares held by Versant VI. Versant Vantage I GP-GP is the general partner of Versant Vantage I GP, which is the general partner of Versant Vantage I. Each of Versant Vantage I GP and Versant Vantage I GP-GP share voting and dispositive power with respect to the shares held by Versant Vantage I. All indirect holders of the above referenced shares disclaim beneficial ownership of all applicable shares except to the extent of their respective pecuniary interest therein. The address for Versant Ventures is One Sansome Street, Suite 1650, San Francisco, CA 94104.
- (8) Based solely on a Schedule 13G filed with the SEC on February 4, 2025 by BlackRock, Inc. In that filing, BlackRock, Inc. reports sole voting power with respect to 3,782,397 shares of common stock and sole dispositive power with respect to 3,840,165 shares, and lists its address as 50 Hudson Yards, New York, New York 10001.
- (9) Based solely on a Schedule 13G filed with the SEC on January 30, 2025 by The Vanguard Group. In that filing, The Vanguard Group reports shared voting power with respect to 26,661 shares of common stock, sole dispositive power with respect to 3,111,555 shares and shared dispositive power with respect to 44,799, and lists its address as 100 Vanguard Blvd., Malvern, PA 19355.
- (10) Consists of 82,632 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Behbahani within 60 days of March 20, 2025.
- (11) Consists of 118,563 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Blackwell within 60 days of March 20, 2025.
- (12) Consists of 82,632 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Schiff within 60 days of March 20, 2025.
- (13) Consists of 118,563 shares of common stock issuable upon conversion of common stock underlying options exercisable by Ms. Siu within 60 days of March 20, 2025.
- (14) Consists of 48,972 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Skvarka within 60 days of March 20, 2025.
- (15) Consists of 23,916 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Manning within 60 days of March 20, 2025.
- (16) Consists of 6,138 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Hughes within 60 days of March 20, 2025.
- (17) Consists of: (a) 416,538 shares of common stock held by Dr. Warmuth and (b) 2,104,460 shares of common stock issuable upon conversion of common stock underlying options exercisable within 60 days of March 20, 2025.
- (18) Consists of: (a) 9,189 shares of common stock acquired under the Company's 2021 Employee Stock Purchase Program and (b) 641,756 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Janku within 60 days of March 20, 2025.
- (19) Consists of 278,348 shares of common stock issuable upon conversion of common stock underlying options exercisable by Dr. Nickson within 60 days of March 20, 2025.
- (20) See notes (7) through (16); also includes (i) an aggregate of 417,870 shares of common stock subject to options exercisable within 60 days of March 20, 2025 held by Dr. Townson, our Chief Scientific Officer and

(ii) an aggregate of 215,993 shares of common stock subject to options exercisable within 60 days of March 20, 2025 held by Ms. Champoux, our Chief Operating Officer.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Certain Relationships and Transactions

Other than the compensation agreements and other arrangements described under the sections entitled "Executive Compensation" and "Director Compensation" in this this Annual Report on Form 10-K for the fiscal year ended December 31, 2024 and the transactions described below, since January 1, 2023, there has not been and there is not currently proposed, any transaction or series of similar transactions to which we were, or will be, a party in which:

- the amount involved exceeded, or will exceed, \$120,000 (or, if less, 1% of the average of our total asset amounts at December 31, 2024); and
- in which any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of the foregoing persons, had, or will have, a direct or indirect material interest.

October 2023 Offering

In October 2023, we sold in a registered direct offering, pursuant to a securities purchase agreement, pre-funded warrants to purchase 10,000,400 shares of the our common stock at a purchase price of \$2.4999 per pre-funded warrant. Certain existing holders of five percent or more of a class of our capital stock participated in the transaction, as evidenced by the table below.

	Aggregate Pre-Funded Warrants	Aggregate
Greater than Five Percent Holder	Purchased	Purchase Price
Entities affiliated with Baker Bros	10,000,400	\$ 24,999,999.96

May 2024 Offering

In May 2024, we sold in an underwritten public offering, 10,638,476 shares of common stock at a public offering price of \$4.70 per share and pre-funded warrants to purchase 10,638,524 shares of the our common stock at a purchase price of \$4.6999 per pre-funded warrant. Certain existing holders of five percent or more of a class of our capital stock participated in the transaction, as evidenced by the table below.

Creater than Five Recent Holder	Aggregate Pre-Funded Warrants	Shares	D	Aggregate
Greater than Five Percent Holder	Purchaseu	Purchaseu		urchase Price
Entities affiliated with Baker Bros	10,638,524		\$	49,999,999
T. Rowe Price Associates	—	829,342	\$	3,897,907
Entities affiliated with FMR LLC	_	882,415	\$	4,147,351
The Vanguard Group, Inc	_	250,000	\$	1,175,000

Indemnification Agreements

We have entered 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 incurred by such person in any action or proceeding on account of any services undertaken by such person on behalf of our Company or any other company or enterprise to which such person provides services at our request to the maximum extent allowed under Delaware law.

Agreements with Our Stockholders

In connection with our preferred stock financings prior to our IPO, we entered into investors' rights, voting and right of first refusal and co-sale agreements as well as management rights letters containing registration rights,

information rights, voting rights and rights of first refusal, among other things, with certain holders of our convertible preferred stock and certain holders of our common stock. The management rights letters provide for certain information rights and rights to consult with our management. These stockholder agreements and management rights letters terminated immediately prior to the completion of our IPO, other than the provisions relating to registration rights, which continued in effect following the completion of our IPO and entitle the holders of such rights to demand that we file a registration statement, subject to certain limitations, and to request that their shares be covered by a registration statement that we are otherwise filing.

Related Person Transaction Policy

Our board of directors adopted a written related person transaction policy providing that transactions with our directors, executive officers and holders of five percent or more of our voting securities and their affiliates, each a related person, must be approved by the audit committee. This policy became effective on June 23, 2021 in connection with our initial public offering, or IPO. 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 may be expected to exceed \$120,000 and in which a related person has or will have a direct or indirect material interest. For purposes of this policy, a related person will be defined as a director, executive officer, nominee for director, or greater than 5% beneficial owner of our common stock, in each case since the beginning of the most recently completed year, and their immediate family members.

Director Independence

Our common stock was approved for listing on The Nasdag Global Select Market. Under the Nasdag listing rules, independent directors must comprise a majority of a listed company's board of directors within twelve months from the date of listing. In addition, the Nasdag rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act and that compensation, nomination and corporate governance committee members satisfy independence criteria set forth in Rule 10C-1 under the Exchange Act. Under applicable Nasdaq rules, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 under the Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries, other than compensation for board service; or (2) be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1, the board of directors must consider, for each member of a compensation, nomination and corporate governance committee of a listed company, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation, nomination and corporate governance committee member, including, but not limited to: the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director, and whether the director is affiliated with the company or any of its subsidiaries or affiliates.

Our board of directors has determined that all members of the board of directors, except Markus Warmuth, are independent directors, including for purposes of the rules of Nasdaq and the SEC. In making such independence determination, our board of directors considered the relationships that each director has with us and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each director. In considering the independence of the directors listed above, our board of directors considered the association of our directors with the holders of more than 5% of our common stock. There are no family relationships among any of our directors or executive officers.

Item 14. Principal Accountant Fees and Services

Our independent public accounting firm is Deloitte & Touche LLP, Boston, Massachusetts, PCAOB Auditor ID No. 34.

We incurred the following fees from Deloitte & Touche LLP for the audit of the financial statements and for other services provided during the years ended December 31, 2024 and 2023.

Fee Category	Fiscal Year Fiscal Ye 2024 (\$) 2023 (\$		Fiscal Year 2023 (\$)
Audit fees	\$ 982,742	\$	807,150
Audit-related fees	_		_
Tax fees	_		_
All other fees ⁽¹⁾	1,895		1,895
Total Fees	\$ 984,637	\$	809,045

(1) All other fees for 2024 and 2023 were related to subscriptions to research databases.

Audit Committee Pre-approval Policy and Procedures

Our audit committee has adopted policies and procedures relating to the approval of all audit and non-audit services that are to be performed by our independent registered public accounting firm. This policy provides that we will not engage our independent registered public accounting firm 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.

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 registered public accounting firm 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.

During fiscal years 2024 and 2023, no services were provided to us by Deloitte other than in accordance with the pre-approval policies and procedures described above.

PART IV

Item 15. Exhibits and Financial Statement Schedules

- (1) For a list of the financial statements included herein, see Index to the Consolidated Financial Statements on page F-1 of this Annual Report on Form 10-K, incorporated into this Item by reference.
- (2) Financial statement schedules have been omitted because they are either not required or not applicable or the information is included in the consolidated financial statements or the notes thereto.
- (3) Exhibits:

Exhibit Number	Description
3.1	Fourth Amended and Restated Certificate of Incorporation of Registrant, as currently in effect
	(incorporated by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K (File No. 001-40522) filed on June 28, 2021)
3.2	Certificate of Amendment to the Fourth Amended and Restated Certificate of Incorporation of Registrant (incorporated by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K (File No. 001-40522) filed on June 14, 2023)
3.3	Second Amended and Restated By-laws of the Registrant, as currently in effect (incorporated by reference to Exhibit 3.3 of the Registrant's Quarterly Report on Form 10-Q (File No. 001-40522) filed on May 9, 2024)
4.1	Form of Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 28, 2021)
4.2	Second Amended and Restated Investors' Rights Agreement among the registrant and certain of its stockholders, dated March 11, 2021 (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 28, 2021).
4.3	Description of the Registrant's Securities registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (incorporated by reference to Exhibit 4.2 of the Registrant's Annual Report on Form 10-K filed March 14, 2024)
4.4	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K (File No. 001-40522) filed on October 26, 2023)
10.1#	2020 Stock Option and Grant Plan, as amended, and forms of award agreements thereunder (Incorporated by reference to Exhibit 10.1 to the registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 4, 2021)
10.2#	2021 Stock Option and Incentive Plan and forms of award agreements thereunder (incorporated by reference to Exhibit 99.2 of the Registrant's Registration Statement on Form S-8 (File No. 333-257406) filed on June 25, 2021)
10.3#	2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.3 of the Registrant's Registration Statement on Form S-1 (File No. 333-256773) filed on June 28, 2021)
10.4#	Senior Executive Cash Incentive Bonus Plan (Incorporated by reference to Exhibit 10.4 to the registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 4, 2021)
10.5#	Form of Officer Indemnification Agreement (Incorporated by reference to Exhibit 10.5 to the registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 4, 2021)
10.6#	Form of Director Indemnification Agreement (Incorporated by reference to Exhibit 10.6 to the registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 4, 2021)
10.7#	Employment Agreement between the Registrant and Markus Warmuth, effective as of June 28, 2021 (incorporated by reference to Exhibit 10.7 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 21, 2021)
10.8#	Employment Agreement between the Registrant and Owen Wallace, effective as of June 28, 2021 (incorporated by reference to Exhibit 10.9 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 21, 2021)

10.9#	Employment Agreement between the Registrant and Filip Janku, effective as of June 28, 2021 (incorporated by reference to Exhibit 10.12 of the Registrant's Registration Statement on Form S- 1, as amended (File No. 333-256773) filed on June 21, 2021)
10.10	Lease Agreement between the Registrant and B9 LS Harrison & Washington LLC, dated December 14, 2021 (incorporated by reference by reference to Exhibit 10.20 of the Registrant's Annual Report on Form 10-K filed March 29. 2022)
10.11#	Amended and Restated Employment Agreement between the Registrant and Philip Nickson, effective as of March 1, 2022 (incorporated by reference to Exhibit 10.22 of the Registrant's Annual Report on Form 10-K filed March 29, 2022)
10.12#	Employment Agreement between the Registrant and Sharon Townson, effective as of June 28, 2021 (incorporated by reference to Exhibit 10.10 of the Registrant's Registration Statement on Form S-1, as amended (File No. 333-256773) filed on June 21, 2021)
10.13#	Amended and Restated Employment Agreement between the Registrant and Jennifer Champoux, effective as of May 28, 2024 (incorporated by reference to Exhibit 10.1 of the Registrant's Quarterly Report on Form 10-Q (File No. 001-40522) filed on August 8, 2024)
10.14	Securities Purchase Agreement, dated October 26, 2023 (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K (File No. 001-40522) filed on October 26, 2023)
10.15†	Collaboration and License Agreement between Monte Rosa Therapeutics AG, F. Hoffmann-La Roche Ltd. and Hoffmann-La Roche Inc., dated as of October 16, 2023 (incorporated by reference to Exhibit 10.2 of the Registrant's Quarterly Report on Form 10-Q filed on November 9, 2023)
10.16†*	License Agreement between Monte Rosa Therapeutics AG and Novartis Pharma AG, dated as of October 25, 2024
19.1*	Insider Trading Policy and Rule 10b5-1 Trading Plan Policy
21.1*	List of Subsidiaries of the Registrant
23.1*	Consent of Deloitte & Touche LLP, independent registered public accounting firm
31.1*	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to Rules 13a- 14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
97.1*	Monte Rosa Therapeutics, Inc. Amended and Restated Compensation Recovery Policy
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

** Deemed to be furnished with this Annual Report on Form 10-K and will not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

Management compensatory plan, contract, or arrangement

† Portions of this exhibit (indicated by asterisks) will be omitted in accordance with the rules of the SEC.

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

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

Monte Rosa Therapeutics, Inc

Date: March 20, 2025

By: /s/ Markus Warmuth Markus Warmuth President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
/s/ Markus Warmuth Markus Warmuth, M.D.	President, Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer)	March 20, 2025
/s/ Edmund Dunn Edmund Dunn, CPA	SVP, Corporate Controller (Principal Accounting Officer)	March 20, 2025
/s/ Ali Behbahani Ali Behbahani	Director	March 20, 2025
/s/ Kimberly L. Blackwell Kimberly L. Blackwell	Director	March 20, 2025
/s/ Andrew Schiff Andrew Schiff	Director	March 20, 2025
/s/ Chandra P. Leo Chandra P. Leo	Director	March 20, 2025
/s/ Christine Siu Christine Siu	Director	March 20, 2025
/s/ Jan Skvarka Jan Skvarka	Director	March 20, 2025
/s/ Anthony Manning Anthony Manning	Director	March 20, 2025
/s/ Eric A. Hughes Eric A. Hughes	Director	March 20, 2025

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Index to Consolidated financial statements

Depart of independent registered nublic accounting firm (DCAOD ID No. 24)	Page
Report of independent registered public accounting IIIM (PCAOB ID No. 34)	F-2
Audited consolidated financial statements	
Consolidated balance sheets	F-3
Consolidated statements of operations and comprehensive loss	F-4
Consolidated statements of stockholders' equity	F-5
Consolidated statements of cash flows	F-6
Notes to consolidated financial statements	F-7

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Monte Rosa Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Monte Rosa Therapeutics, Inc. and subsidiaries (the "Company") as of December 31, 2024 and 2023, the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows, for each of the two years in the period ended December 31, 2024, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2024, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

Boston, Massachusetts March 20, 2025

We have served as the Company's auditor since 2021.

Monte Rosa Therapeutics, Inc. Consolidated balance sheets

	De	cember 31,	De	ecember 31,
(in thousands, except share and per share amounts)		2024		2023
Assets				
Current assets:				
Cash and cash equivalents	\$	224,254	\$	128,101
Marketable securities		147,895		104,312
Other receivables		173		505
Prepaid expenses and other current assets		5,118		3,294
Total current assets		377,440		236,212
Property and equipment, net		29,483		33,803
Operating lease right-of-use assets		26,831		28,808
Restricted cash		4,863		4,580
Other long-term assets		115		352
Total assets	\$	438,732	\$	303,755
Liabilities and stockholders' equity				
Current liabilities:				
Accounts payable	\$	17,215	\$	11,152
Accrued expenses and other current liabilities		18,785		14,600
Current deferred revenue		117,232		17,678
Current portion of operating lease liability		3,714		3,162
Total current liabilities		156,946		46,592
Deferred revenue, net of current		16,147		32,323
Defined benefit plan liability		3,702		2,713
Operating lease liability, net of current		39,001		42,877
Total liabilities		215,796		124,505
Commitments and contingencies (Note 8)				
Stockholders' equity				
Preferred stock, \$0.0001 par value, 10,000,000 shares authorized				
Common stock, \$0.0001 par value; 500,000,000 shares authorized, 61,507,446				
shares issued and outstanding as of December 31, 2024; and 50,154,929 shares				
issued and 50,140,233 shares outstanding as of December 31, 2023		6		5
Additional paid-in capital		664,874		547,857
Accumulated other comprehensive loss		(3,356)		(2,724)
Accumulated deficit		(438,588)		(365,888)
Total stockholders' equity		222,936		179,250
Total liabilities and stockholders' equity	\$	438,732	\$	303,755

Monte Rosa Therapeutics, Inc. Consolidated statements of operations and comprehensive loss

		Year e	nde	d
		Decemi	per 3	51,
(in thousands, except share and per share amounts)		2024		2023
Collaboration revenue	\$	75,622	\$	—
Operating expenses:				
Research and development		121,563		111,272
General and administrative		35,171		32,039
Total operating expenses		156,734		143,311
Loss from operations		(81,112)		(143,311)
Other income (expense):				
Interest income		10,566		9,334
Foreign currency exchange gain (loss), net		416		(930)
Gain on disposal of fixed assets		—		24
Loss on sale of marketable securities				(131)
Total other income		10,982		8,297
Net loss before income taxes		(70,130)		(135,014)
Provision for income taxes		(2,570)		(338)
Net loss	\$	(72,700)	\$	(135,352)
Net loss per share—basic and diluted	\$	(0.98)	\$	(2.63)
Weighted-average number of shares outstanding used in computing		73 010 026		51 306 061
Comprehensive loss:		10,910,020		51,530,301
Net loss	\$	(72 700)	\$	(135 352)
Other comprehensive income:	Ψ	(12,100)	Ψ	(100,002)
Provision for pension benefit obligation		(802)		(1 369)
I Inrealized gain on available-for-sale securities		170		397
Comprehensive loss	\$	(73 332)	\$	(136 324)
Comprehensive loss	Ψ	(13,332)	Ψ	(130,324)

Monte Rosa Therapeutics, Inc. Consolidated statements stockholders' equity

	Commo	n stock	I						
				Additional	Accumu	llated			Total
(in thousands, except share amounts)				paid-in	compreh	ensive	Accumulated	Sto	ckholders'
(unaudited)	Shares	Amount		capital	los	\$	deficit		equity
Balance—January 1, 2023	49,323,531	\$	θ	503,696	\$	(1,752)	\$ (230,536)	မ	271,413
Restricted common stock vesting	145,455	I		I		I	I		
Exercise of common stock options	561,905			2,030		I	I		2,030
Stock-based compensation expense	Ι	Ι		16,669		I	Ι		16,669
Provision for pension benefit obligation	I			I	U	(1,369)	I		(1,369)
Unrealized gain on available-for-sale securities	Ι	I				397	I		397
Issuance of shares under employee stock purchase plan	109,342			578		I	I		578
Issuance of pre-funded warrant, net of issuance costs of \$116	Ι	I		24,884		I	I		24,884
Net Loss	Ι					Ι	(135,352)		(135,352)
Balance—December 31, 2023	50,140,233	\$ 5	¢	547,857) \$	(2,724)	\$ (365,888)	\$	179,250
Restricted common stock vesting	136,730	1		I		I	I		
Exercise of common stock options	299,222	Ι		1,061		Ι	Ι		1,061
Provision for pension benefit obligation	Ι	I		I		(802)	I		(802)
Stock-based compensation expense	Ι	I		18,126		Ι	I		18,126
Unrealized gain on available-for-sale securities	Ι	I		I		170	I		170
Issuance of shares under employee stock purchase plan	162,279			527		I	I		527
Issuance of common stock pursuant to the at-the-market sales	130 506			100					100
agreement, het or issuance costs or pog	000,001	I		004		I	I		004
Defering and officient stock pursuant to the Office Miniter Fublic	10 620 176	T		16 700					16 710
Uttering, net of issuance costs of \$3,290	10,038,470			40,/09		I	I		40,710
Issuance of pre-funded warrant, net of issuance costs of \$290	I			49,710			I		49,710
Net Loss	Ι			I		I	(72,700)		(72,700)
Balance—December 31, 2024	61,507,446	\$	ŝ	664,874	\$	(3,356)	\$ (438,588)	မ	222,936

Monte Rosa Therapeutics, Inc. Consolidated statements of cash flows

		Year ended		
		Decem	ber 3	1,
(in thousands)		2024		2023
Cash flows from operating activities:				
Net loss	\$	(72,700)	\$	(135,352)
Adjustments to reconcile net loss to net cash used in operating activities				
Stock-based compensation expense		18,126		16,669
Depreciation		8,121		6,222
Net accretion of discounts/premiums on marketable securities		(2,948)		(3,914)
Loss on sale of marketable securities		—		131
Gain on disposal of property and equipment				(24)
Changes in operating assets and liabilities				
Other receivables		332		1,897
Prepaid expenses and other current assets		(1,588)		1,077
Accounts payable		6,252		5,758
Accrued expenses and other current liabilities		4,184		3,557
Defined benefit plan liability		187		(188)
Right-of-use assets and operating lease liabilities		(1,348)		10,365
Deferred revenue		83,378		50,000
Net cash provided by (used in) operating activities	\$	41,996	\$	(43,802)
Cash flows from investing activities:				
Purchases of property and equipment		(3,988)		(19,041)
Proceeds from the sale of property and equipment		_		62
Purchases of marketable securities		(230,361)		(103,151)
Proceeds from sale of marketable securities				45,631
Proceeds from maturities of marketable securities		189,897		165,300
Net cash provided by (used in) investing activities	\$	(44,452)	\$	88,801
Cash flows from financing activities:				
Proceeds from sale of common stock pursuant to the at-the-market sales				
agreement, net of underwriter's discount		944		—
Proceeds from underwritten public offering cost, net of underwriter's discount of \$3,000		47,001		_
Proceeds from the issuance of pre-funded warrants		50,000		25,000
Payment of common stock and pre-funded warrant issuance costs		(641)		(116)
Proceeds from exercise of employee stock options		1,061		2,030
Proceeds from employee stock purchase plan		527		578
Net cash provided by financing activities	\$	98.892	\$	27,492
Net increase in cash, cash equivalents and restricted cash	\$	96.436	\$	72,491
Cash, cash equivalents and restricted cash—beginning of period		132,681		60,190
Cash, cash equivalents and restricted cash—end of period	\$	229,117	\$	132.681
Reconciliation of cash cash equivalents and restricted cash	+	,	Ŧ	,
Cash and cash equivalents	\$	224,254	\$	128.101
Restricted cash	Ŧ	4.863	Ŧ	4,580
Total cash, cash equivalents and restricted cash	\$	229,117	\$	132,681
Supplemental disclosure of noncash items	Ψ	,	Ŧ	
Reduction of right-of-use assets for lease incentives receivable	\$		\$	5 253
Purchases of property and equipment in accounts payable and accrued expenses	ŝ	50	\$	237
	Ψ		٣	201
Monte Rosa Therapeutics, Inc. Notes to the consolidated financial statements

1. Description of business and liquidity

Business

Monte Rosa Therapeutics, Inc. is a biotechnology company developing a portfolio of novel small molecule precision medicines that employ the body's natural mechanisms to selectively degrade therapeutically-relevant proteins. As used in these consolidated financial statements, unless the context otherwise requires, references to the Company or Monte Rosa refer to Monte Rosa Therapeutics, Inc. and its wholly owned subsidiaries Monte Rosa Therapeutics AG and Monte Rosa Therapeutics Securities Corp. Monte Rosa Therapeutics AG, a Swiss operating company, was incorporated under the laws of Switzerland in April 2018. Monte Rosa Therapeutics, Inc. was incorporated in Delaware in November 2019. The Company is headquartered in Boston, Massachusetts with research operations in both Boston and Basel, Switzerland.

Risks and uncertainties

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, the successful discovery and development of its product candidates, new technological innovations, protection of proprietary technology, dependence on key personnel, compliance with government regulations and the need to obtain additional financing.

Liquidity considerations

Since inception, the Company has devoted substantially all its efforts to business planning, research and development, recruiting management and technical staff, and raising capital and has financed its operations primarily through issuance and sale of convertible promissory notes, convertible preferred stock, public offerings of common stock or warrants to purchase common stock, registered direct offerings, and through its collaborations with Roche and Novartis.

The Company's continued discovery and development of its product candidates 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 product development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

As of December 31, 2024, the Company had an accumulated deficit of \$438.6 million. The Company has incurred losses and negative cash flows from operations since inception, including net losses of \$72.7 million and \$135.4 million for the years ended December 31, 2024, and 2023, respectively. The Company expects that its operating losses and negative cash flows will continue for the foreseeable future as the Company continues to develop its product candidates. The Company currently expects that its cash, cash equivalents and marketable securities of \$372.1 million as of December 31, 2024, will be sufficient to fund operating expenses and capital requirements for at least 12 months from the date the consolidated financial statements are issued. However, additional funding will be necessary to fund future discovery research, preclinical and clinical activities. The Company will seek additional funding through public financings, debt financings, collaboration agreements, strategic alliances and licensing arrangements. Although it has been successful in raising capital in the past, there is no assurance that the Company will be successful in obtaining such additional financing on terms acceptable to it, if at all, and the Company may not be able to enter into collaborations or other arrangements. If the Company is unable to obtain funding, it could be forced to delay, reduce or eliminate its research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect the Company's business prospects, even the ability to continue operations.

2. Summary of significant accounting policies

Basis of presentation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America, or GAAP, and are stated in U.S. dollars. Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification and Accounting Standards Updates, or ASUs, of the Financial Accounting Standards Board, or FASB. All intercompany balances and transactions have been eliminated in consolidation.

Use of estimates

The preparation of the consolidated financial statements in conformity with GAAP requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and reported amounts of expenses during the reporting periods. Actual results could differ from those estimates. On an ongoing basis, the Company evaluates its estimates, including those related to revenue recognition, accrued research and development expenses, other long-lived assets, pension benefit obligation, stock-based compensation and the valuation of deferred tax assets. The Company bases its estimates using historical experience, Company forecasts and future plans, current economic conditions, and information from third-party professionals that management believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities and recorded amounts of expenses that are not readily apparent from other sources and adjusts those estimates and assumptions when facts and circumstances dictate.

Currency and currency translation

The consolidated financial statements are presented in U.S. dollars, the Company's reporting currency. The functional currency of the Company's wholly owned subsidiary, Monte Rosa Therapeutics AG, is the U.S. dollar. Adjustments that arise from exchange rate changes on transactions denominated in a currency other than the functional currency are included in foreign currency exchange gain (loss), net in the consolidated statements of operations.

Cash, cash equivalents and restricted cash

The Company considers all highly liquid investments with original maturities at the date of purchase of three months or less to be cash equivalents. Cash and cash equivalents are stated at fair value and may include money market funds, U.S. Treasury and U.S. government-sponsored agency securities, corporate debt, commercial paper and certificates of deposit. The Company's cash equivalents at December 31, 2024, and 2023 consist of bank demand deposits and money market fund investments.

The Company had restricted cash of \$4.9 million as of December 31, 2024, and 2023, primarily related to security deposits on its leases for offices in Boston, Massachusetts and Basel, Switzerland.

Marketable securities

Investments in marketable securities are classified as available-for-sale. Available-for-sale securities are measured and reported at fair value using quoted prices in active markets for similar securities. Unrealized gains and losses on available-for-sale securities are reported as a separate component of stockholders' equity. Premiums or discounts from par value are amortized to investment income over the life of the underlying investment. All of the Company's available-for-sale securities are available to the Company for use in current operations. As a result, the Company classified all of these securities as current assets even though the stated maturity of some individual securities may be one year or more beyond the balance sheet date.

The Company reviews marketable securities whenever the fair value of an investment is less than the amortized cost and evidence indicates that an investment's carrying value is not recoverable. For available-for-sale debt securities, the credit allowance is limited to the amount that fair value is less than amortized cost. Unrealized gains (losses) are evaluated for impairment under ASC 326, *Financial Instruments - Credit Losses*, to determine if the impairment is credit-related or noncredit-related. Credit-related impairment is recognized as an allowance on the consolidated balance sheets with a corresponding adjustment to earnings, and noncredit-related impairment is recognized in other comprehensive loss. Evidence considered in this assessment includes reasons for the impairment, compliance with our investment policy, the severity of the impairment, collectability of the security, and any adverse conditions specifically related to the security, an industry, or geographic area. No such adjustments were necessary during the periods presented.

Concentrations of credit risk and off-balance sheet risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash, cash equivalents, and marketable securities. The Company has invested in cash and cash equivalents at December 31, 2024, and 2023, held in a financial institution that management believes is creditworthy. These deposits may exceed federally insured limits. The Company has not experienced any losses historically in these accounts and believes it in not exposed to significant credit risk in its cash and cash equivalents. The Company has no significant off-balance sheet concentrations of credit risk, such as foreign currency exchange contracts, option contracts, or other hedging arrangements.

Fair value of financial instruments

Assets and liabilities recorded at fair value on a recurring basis in the balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability 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. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted prices included in Level 1) that are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value instrument.

Property and equipment

Property and equipment are stated at cost, subject to adjustments for impairments, less accumulated depreciation. Purchased assets that are not yet in service are classified as construction-in-process and no depreciation expense is recorded. Depreciation is calculated using the straight-line method over the estimated useful life of the asset as follows:

Asset	Estimated useful life
Laboratory equipment	Five years
Computer hardware	Three years
Furniture and fixtures	Five Years
Leasehold Improvements	Shorter of useful life or remaining lease term

Maintenance and repairs that do not improve or extend the life of the respective asset are expensed as incurred. Upon disposal of an asset, the related cost and accumulated depreciation are removed from the accounts and any resulting gain or loss is included in the results of operations. Leasehold improvements are amortized over the shorter of the useful life or remaining term of the lease.

Impairment of long-lived assets

The Company evaluates whether current facts or circumstances indicate that the carrying values of its long-lived assets may not be recoverable. If such facts or circumstances are determined to exist, an estimate of the undiscounted future cash flows of these assets is compared to the carrying value the assets to determine whether impairment exists. If the assets are determined to be impaired, the loss is measured based on the difference between the fair value and carrying value of the assets. No material impairment losses were recorded during the periods presented.

Research and development expenses

Research and development costs are expensed as incurred. The Company's research and development expenses consist primarily of costs incurred for the research and development of its product candidates and include expenses incurred under agreements with consultants to conduct preclinical and clinical studies, costs to acquire supplies for preclinical and clinical studies, salaries and related personnel costs, including stock-based compensation, depreciation and other allocated facility-related and overhead expenses.

Accrued research and development costs

The Company records accruals for estimated costs of discovery research activities, preclinical, and clinical studies. A portion of the Company's research and development activities are conducted by third-party service providers. The financial terms of these contracts are subject to negotiation, which vary by contract and may result in payments that do not match the periods over which materials or services are provided. The Company accrues the costs incurred under the agreements based on an estimate of actual work completed in accordance with the agreements. In the event the Company makes advance payments for goods or services that will be used or rendered for future research and development activities, the payments are deferred and capitalized as a prepaid expense and recognized as expense as the goods are received or the related services are rendered. Such payments are evaluated for current or long-term classification based on when they are expected to be realized. If the Company does not identify costs that have begun to be incurred or if the Company underestimates or overestimates the level of services performed or the costs of these services, actual expenses could differ from the Company's estimates.

Stock-based compensation

Stock-based compensation expense related to stock options granted to employees, directors and non-employees is recognized based on the grant-date estimated fair values of the awards using the Black-Scholes option pricing model, or Black-Scholes. Stock-based compensation expense related to stock options and other stock based awards granted to employees and non-employees is recognized based on the grant-date fair value of the Company's common stock. The value is recognized as expense ratably over the requisite service period, which is generally the vesting term of the award. For stock options with performance-based vesting conditions, the Company records the expense for these awards based upon the fair value of the awards on the date of grant and the number of shares expected to vest based on the terms of the underlying award agreement and the requisite service periods. The Company adjusts the expense for actual forfeitures as they occur. Stock-based compensation expense is classified in the accompanying consolidated statements of operations based on the function to which the related services are provided.

Income taxes

The Company uses the liability method to account for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between the financial statement carrying amounts of existing assets and liabilities and their tax bases. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company assesses the likelihood of deferred tax assets being realized. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. In assessing the realizability of deferred tax assets, the Company considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the temporary differences representing net future deductible amounts become deductible.

The Company files U.S. federal and state income tax returns, as well as Swiss income tax returns. The Company's tax positions are subject to audit. Financial statement effects of uncertain tax positions are recognized when it is more likely than not, based on the technical merits of the position, that it will be sustained upon examination. The Company evaluates uncertain tax positions on a regular basis. The evaluations are based on a number of factors, including changes in facts and circumstances, changes in tax law, correspondence with tax authorities during the course of the audit, and effective settlement of audit issues. Interest and penalties related to unrecognized tax benefits are included within the provision for income tax. To date, the Company has not been subject to any interest and penalties.

Defined pension benefit obligation

The Company maintains a mandatory pension for its employees in Switzerland through affiliation with the AXA Leben AG. All benefits in accordance with the regulations are reinsured in their entirety with AXA Leben AG within the framework of the corresponding contract. This plan is considered to be a defined benefit plan under GAAP.

The Company recognizes an asset for the plan's overfunded status or a liability for the plan's underfunded status in its consolidated balance sheets. Additionally, the Company measures the plan's assets and obligations that

determine its funded status as of the end of the year and recognizes the change in the funded status within the consolidated statements of operations and comprehensive loss.

The Company uses an actuarial valuation to determine its pension benefit costs and credits. The amounts calculated depend on a variety of key assumptions, including discount rates and expected return on plan assets. Details of the assumptions used to determine the net funded status are described in Note 13. The Company's pension plan assets are assigned to their respective levels in the fair value hierarchy in accordance with the valuation principles described in the Fair Value of Financial Instruments section above.

Segments

Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the chief operating decision maker, or CODM, in deciding how to allocate resources to an individual segment and in assessing performance. The Company's CODM is its chief executive officer. The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions.

Revenue recognition

The Company recognizes revenue in accordance with ASC No. 606, *Revenue from Contracts with Customers*, or ASC 606. ASC 606 applies to all contracts with customers, except for certain contracts that are within the scope of other guidance. Accordingly, the Company recognizes revenue when its customer obtains control of the promised goods and/or services in an amount that reflects the consideration it expects to receive in exchange for those goods and/or services. To determine the appropriate amount of revenue to be recognized, the Company performs the following steps: (i) Identify the contract(s) with the customer, (ii) Identify the promised goods and/or services in the contract and determine which promised goods and/or services represent performance obligations, (iii) Measure the transaction price, (iv) Allocate the transaction price to the performance obligations in the contract and (v) Recognize revenue when (or as) each performance obligation is satisfied.

Pursuant to the guidance in ASC 606, the Company accounts for a contract with a customer that is within the scope of ASC 606 when all of the following criteria are met: (i) The arrangement has been approved by the parties and the parties are committed to perform their respective obligations, (ii) Each party's rights regarding the goods and/or services to be transferred can be identified, (iii) The payment terms for the goods and/or services to be transferred can be identified, (iii) The payment terms for the goods and/or services to be transferred can be identified, (iii) The arrangement has commercial substance and (v) Collection of substantially all of the consideration to which the Company will be entitled in exchange for the goods and/or services that will be transferred to the customer is probable.

The Company assesses the goods and/or services promised within a contract that contains multiple promises to evaluate which promises are distinct. Promises are considered to be distinct and therefore, accounted for as separate performance obligations, provided that: (i) The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer and (ii) The promise to transfer the good or service to the customer is separately identifiable from other promises in the contract. The Company determines that a customer can benefit from a good or service if it could be used, consumed, or sold for an amount that is greater than scrap value, or otherwise held in a way that generates economic benefits. Factors that are considered in determining whether or not two or more promises are not separately identifiable include, but are not limited to, the following: (i) The Company provides a significant service of integrating goods and/or services with other goods and/or services promised in the contract, (ii) One or more of the goods and/or services significantly modifies or customizes, or are significantly modified or customized by, one or more of the other goods and/or services promised in the contract and (iii) The goods and/or services are highly interdependent or highly interrelated. In assessing whether promised goods and/or services are distinct from the other promises, the Company considers factors such as the stage of development of the underlying intellectual property, the capabilities of the collaborative partner and the availability of the associated expertise in the marketplace. The Company also considers whether the customer can benefit from a promise for its intended purpose without the receipt of the remaining promises, whether the value of a promise is dependent on the unsatisfied promises, whether there are other vendors that could provide the remaining promises and whether a promise is separately identifiable from the remaining promises. Individual goods or services (or bundles of goods and/or services) that meet both criteria for being distinct are accounted for as separate performance obligations. Promises that are not distinct at contract inception are combined into a single performance obligation.

The Company considers a customer's right to elect to obtain additional goods and/or services at such customer's discretion to be an option if it is not presently obligated to provide the goods and/or services and it is not entitled to compensation in exchange for the associated goods and/or services. Options to acquire additional goods

and/or services are evaluated to determine if the option provides a material right to the customer that it would not have received without entering into the contract. If so, the option is accounted for as a separate performance obligation. If not, the option is considered a marketing offer which would be accounted for as a separate contract upon the customer's exercise. Situations in which a customer has an ability to acquire additional goods and/or services for free or at significantly discounted rates are considered to provide the customer with a material right. Options to purchase goods and/or services at prices that reflect the standalone selling prices of the associated goods and/or services are accounted for as marketing offers.

The Company measures the transaction price based on the amount of consideration to which it expects to be entitled in exchange for transferring the promised goods and/or services to the customer. The Company utilizes either the expected value method or the most likely amount method to estimate the amount of variable consideration, depending on which method is expected to better predict the amount of consideration to which it will be entitled. Amounts of variable consideration are included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. With respect to research, development, regulatory and first sale milestone payments, at the inception of the arrangement, the Company evaluates whether the associated event is considered probable of achievement and estimates the amount to be included in the transaction price using the most likely amount method. As part of the evaluation for research and development milestone payments, the Company considers several factors, including the stage of development of the targets included in the arrangement, the risk associated with the remaining research and development work required to achieve the particular milestone and whether or not the achievement of the specific milestone event is within the Company's control. Milestone events that are not within the control of the Company or the licensee, such as those dependent upon receipt of regulatory approval or the first sale of a commercialized product, are not considered to be probable of achievement until the triggering event occurs. With respect to royalties, including milestone payments based upon the achievement of a certain level of product sales, wherein the license is deemed to be the sole or predominant item to which the payments relate, the Company recognizes revenue upon the later of: (i) When the related sales occur or (ii) When the performance obligation to which some or all of the payment has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any regulatory or sales-based milestone payments or royalty revenue resulting from its collaboration arrangements.

The Company updates its assessment of the estimated transaction price, including the constraint on variable consideration, at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur. Any adjustments to the transaction price are recorded on a cumulative catch-up basis, which affect revenue and net loss in the period of adjustment. Amounts to be received with respect to customer options are included in the transaction price upon exercise. And payments associated with milestone events that may only be achieved after the exercise of a customer option are excluded from the initial determination of the transaction price.

The Company generally allocates the transaction price to each performance obligation identified in the contract on a relative standalone selling price basis. However, certain components of variable consideration are allocated specifically to one or more particular performance obligations to the extent both of the following criteria are met: (i) The terms of the payment relate specifically to the efforts to satisfy the performance obligation or transfer the distinct good or service and (ii) Allocating the variable amount of consideration entirely to the performance obligation or the distinct good or service is consistent with the allocation objective of the standard whereby the amount allocated depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services. Option exercise fees are allocated to the goods and/or services underlying the associated option. The Company develops assumptions that require judgment to determine the standalone selling price for each performance obligation identified in the contract. The key assumptions utilized in determining the standalone selling price for each performance obligation include projected development timelines, estimated research costs, likelihood of exercise and probabilities of technical success.

Revenue is recognized based on the amount of the transaction price that is allocated to each respective performance obligation when or as the performance obligation is satisfied by transferring a promised good and/or service to the customer. For performance obligations that are satisfied at a point in time, the Company recognizes revenue when control of the goods and/or services are transferred to the customer. For performance obligations that are satisfied over time, the Company recognizes revenue by measuring the progress toward complete satisfaction of the performance obligation using a single method of measuring progress which depicts the performance in transferring control of the associated goods and/or services to the customer. The Company uses

input methods to measure the progress toward the complete satisfaction of performance obligations satisfied over time. With respect to promises related to licenses to intellectual property that is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenue from amounts allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. Any such adjustments are recorded on a cumulative catch-up basis, which affect revenue and net loss in the period of adjustment. Amounts allocated to material rights are recognized as revenue the earlier of: (i) When or as the option is exercised and the underlying future goods and/or services are transferred or (ii) When the option expires.

Significant judgments and estimates made in accounting for contracts with customers include: identifying the performance obligations in the contract, measuring the amount of variable consideration to include in the transaction price, estimating the standalone selling prices of the individual performance obligations, assessing the nature of a combined performance obligation to determine whether control is transferred over time or at a point in time, selecting the appropriate method of measuring progress used to recognize revenue for performance obligations satisfied over time and updating measures of progress to reflect revisions in the outcome of performance obligations. Certain of these judgments and estimates are subject to change over the course of the arrangement, particularly with respect to estimating variable consideration and updating the measure of progress, which would impact the revenue recognized. Significant changes in these assumptions and estimates could have a material impact on the timing and amount of revenue recognized in future periods.

The Company receives payments from its licensee based on billing schedules established in the contract. Amounts received or due prior to the Company performing its obligations under the arrangement are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified as current deferred revenue. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion. Amounts payable to the Company are recorded as accounts receivable when the Company's right to the consideration is unconditional.

Warrants

The Company accounts for common stock warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in ASC No. 480, *Distinguishing Liabilities from Equity*, or ASC 480, and ASC No. 815, *Derivatives and Hedging*, or ASC 815. The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, whether the warrants meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own common stock and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be recorded at their initial fair value on the date of issuance and remeasured each balance sheet date thereafter. Changes in the estimated fair value of the liability-classified warrants are recognized as a non-cash gain or loss in the accompanying consolidated statements of operations and comprehensive loss.

Comprehensive income (loss)

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. The Company's other comprehensive income (loss) includes adjustments to unrecognized pension benefit costs for Monte Rosa Therapeutics AG and changes in unrealized gains and losses from available-for-sale investments. The Company reported other comprehensive loss of \$0.6 million and \$1.0 million for the years ended December 31, 2024, and 2023, respectively.

Recently issued accounting pronouncements

The Company has elected to use the extended transition period for complying with new or revised accounting standards as available under the Jumpstart Our Business Startups Act (JOBS Act).

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, which is intended to provide enhancements to annual income tax disclosures. The standard will require more detailed information in the rate reconciliation table and for income taxes paid, among other enhancements. The standard is effective for years beginning after December 15, 2024, and early adoption is permitted. The Company is evaluating this standard to determine if adoption will have a material impact on the Company's consolidated financial statements.

In November 2024, the FASB issued ASU No. 2024-03, *Disaggregation of Income Statement Expenses*, which requires disaggregation and disclosure of specified information about certain costs and expenses in the notes to the financial statements. The requirements of the ASU are effective for annual periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027, with early adoption permitted. The Company is currently evaluating the impact ASU No. 2024-03 will have on its consolidated financial statements.

Recently adopted accounting pronouncements

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*, which is intended to provide enhanced segment disclosures. The standard will require disclosures about significant segment expenses and other segment items and identifying the Chief Operating Decision Maker and how they use the reported segment profitability measures to assess segment performance and allocate resources. These enhanced disclosures are required for all entities on an interim and annual basis, even if they have only a single reportable segment. The Company adopted the new standard on January 1, 2024. The adoption of the standard did not have a material impact on the Company's consolidated financial statements. See Note 15 for disclosure related to segment reporting.

3. Fair value measurements

The following tables present information about the Company's financial assets and liabilities measured at fair value on a recurring basis and indicate the level of the fair value hierarchy utilized to determine such fair values (in thousands):

	As of December 31, 2024						
	 Level 1		Level 2	I	Level 3		Total
Current assets							
Money market funds	\$ 223,657	\$		\$	—	\$	223,657
Pension plan assets	_		9,413		_		9,413
Corporate debt securities	_		63,758		_		63,758
U.S Treasury securities	_		84,137		_		84,137
Total assets measured at fair value	\$ 223,657	\$	157,308	\$	—	\$	380,965
	 	Α	s of Decem	ber	31, 2023		
	 Level 1		Level 2	l	Level 3		Total
Current assets							
Money market funds	\$ 122,791	\$	_	\$	_	\$	122,791
Pension plan assets	_		9,317		_		9,317
Corporate debt securities	_		79,816		_		79,816
U.S Treasury securities			24,496		_		24,496
Total assets measured at fair value	\$ 122,791	\$	113,629	\$	_	\$	236,420

Money market funds are highly liquid investments and are actively traded. The pricing information on the Company's money market funds are based on quoted prices in active markets for identical securities. This approach results in the classification of these securities as Level 1 of the fair value hierarchy.

The fair value of pension plan assets has been determined as the surrender value of the portfolio of active insured members held within the Columna Collective Foundation Group investment fund and are classified within Level 2 of the fair value hierarchy.

Marketable securities consist of corporate debt securities and U.S. Treasury securities which are classified as available-for-sale pursuant to ASC 320, Investments—Debt and Equity Securities. Marketable securities are classified within Level 2 of the fair value hierarchy because pricing inputs are other than quoted prices in active markets. The fair values of these investments are estimated by taking into consideration valuations obtained from

third-party pricing services. The pricing services utilize industry standard valuation models, including both incomeand market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker/dealer quotes on the same or similar securities, issuer credit spreads, benchmark securities based on historical data and other observable inputs.

There were no transfers among Level 1, Level 2 or Level 3 categories in the years ended December 31, 2024, or 2023.

4. Marketable securities

Marketable securities as of December 31, 2024, consisted of the following (in thousands):

	Amortized Cost		Amortized Unrea Cost Ga		Unrealized Unrealized Gains Losses		nrealized Losses	Fair Value
Description								
Corporate debt securities	\$	63,710	\$	56	\$	(8)	63,758	
U.S Treasury securities		84,068		75		(6)	84,137	
Total	\$	147,778	\$	131	\$	(14) \$	147,895	

Marketable securities as of December 31, 2023, consisted of the following (in thousands):

	Amortized Cost		zed Unrealized t Gains		Unrealized Unrealized Gains Losses		Fair Value
Description							
Corporate debt securities	\$	79,870	\$	4	\$	(58)	79,816
U.S Treasury securities		24,495		11		(10)	24,496
Total	\$	104,365	\$	15	\$	(68) \$	104,312

As of December 31, 2024, the Company held 53 marketable securities, 9 of which were in an unrealized loss position. The aggregate fair value of securities in a loss position was \$20.0 million. As of December 31, 2023, the Company held 28 marketable securities, 20 of which were in an unrealized loss position. The aggregate fair value of securities in a loss position was \$72.9 million. There were no individual securities that were in a significant unrealized loss position as of December 31, 2024, or 2023. The Company also believes that it will be able to collect both principal and interest amounts due to it at maturity.

5. Property and equipment, net

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

	Dec	ember 31,	De	cember 31,	
		2024			
Laboratory equipment	\$	25,041	\$	22,079	
Computer hardware and software		1,256		1,052	
Furniture and fixtures		1,099		1,099	
Leasehold improvements		22,387		20,893	
Construction in process		64		924	
Total property and equipment, at cost	\$	49,847	\$	46,047	
Less: accumulated depreciation		(20,364)		(12,244)	
Property and equipment, net	\$	29,483	\$	33,803	

Depreciation expense for the years ended December 31, 2024, and 2023 was \$8.1 million and \$6.2 million, respectively.

6. Accrued expenses and other current liabilities

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

	De	cember 31, 2024	December 31, 2023		
Compensation and benefits	\$	8,220	\$	7,593	
Accrued research and development		7,211		5,336	
Other		3,354		1,671	
Total other current liabilities	\$	18,785	\$	14,600	

7. Leases

The Company determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use or ROU assets and operating lease liabilities in the consolidated balance sheets. The Company has no finance leases as of December 31, 2024.

ROU assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As the Company's leases do not provide an implicit rate, management estimated the incremental borrowing rate based on the rate of interest the Company would have to pay to borrow a similar amount on a collateralized basis over a similar term. The Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments.

Klybeck Lease

In March 2021, the Company entered into an operating lease agreement for office and lab space with Wincasa AG, or the landlord, that occupies approximately 21,422 square feet located at Klybeckstrasse 191, 4057 Basel, Basel-City, Switzerland. In April 2023, the Company and the Landlord amended the Klybeck Lease which increased the office and lab space square footage from 21,422 square feet to 44,685 square feet and extended the term of the lease through June 30, 2027. The amendment was accounted for as a lease modification and resulted in an increases to the related ROU asset and operating lease liability of \$1.8 million.

Harrison Avenue Lease

In December 2021, the Company entered into a non-cancelable lease agreement for 63,327 square feet of office and laboratory space to support its expanding operations, or the Harrison Avenue Lease. The term of the lease commenced on April 1, 2022, and the Company's obligation to pay rent began on December 21, 2022. The initial term of the lease is 128 months following the commencement date at which point the Company has the option to extend the lease an additional 5 years. As of the lease commencement date, the Company has determined that it is not reasonably certain to exercise the option to extend the lease and has not included the extension period in the lease term. The annual base rent under the Harrison Avenue Lease is \$95.00 per square foot for the first year, which is subject to scheduled annual increases of 3%, plus certain costs, operating expenses and property management fees.

Pursuant to the terms of the Harrison Avenue Lease, the landlord reimbursed the Company for \$13 million of tenant improvements. The Company reduced the related ROU asset by the amounts reimbursed by the landlord and capitalized the leasehold improvements as fixed assets on the consolidated balance sheet.

The components of lease expense for the years ended December 31, 2024, and 2023 are as follows (in thousands):

	_	Year Decer	ende nber 3	d 31,
		2024		2023
Operating lease expense	\$	6,501	\$	7,141
Variable lease expense		3,954		2,317
Total lease expense	\$	10,455	\$	9,458

The variable lease expenses generally include common area maintenance and property taxes. Of the total lease expense recorded in the consolidated statements of operations and comprehensive loss, \$8.7 million and \$7.9 million were recorded within research and development expenses and \$1.8 million and \$1.6 million were recorded in general and administrative expenses for the years ended December 31, 2024, and 2023, respectively. There were no short-term lease costs in the years ended December 31, 2024, and 2023.

The weighted average remaining lease term and discount rate related to the Company's leases are as follows:

	December 31, 2024	December 31, 2023
Weighted average remaining lease term (years)	7.7	8.6
Weighted average discount rate	9.8%	9.8%

Supplemental cash flow information relating to the Company's leases for the year ended December 31, 2024, and 2023 are as follows (in thousands):

	Year e Decem	endec ber 3	l 1,
	2024		2023
Right-of-use assets obtained in exchange for operating lease obligations	\$ 108	\$	1,871
Cash paid for amounts included in the measurement of lease liabilities	\$ 3,161	\$	2,995

The amortization of the ROU assets for the year ended December 31, 2024, and 2023 was \$2.1 million and \$2.5 million, respectively.

Future undiscounted lease payments under non-cancelable leases as of December 31, 2024 for each of the years ending December 31st are as follows (in thousands):

Undiscounted lease payments	
2025	\$ 7,682
2026	7,879
2027	7,621
2028	7,360
2029	7,581
Thereafter	23,443
Total undiscounted minimum lease payments	61,566
Less: Imputed interest	(18,851)
Total operating lease liability	\$ 42,715

8. Commitments and contingencies

Legal Proceedings

From time to time, the Company may be subject to legal proceedings, claims and disputes that arise in the ordinary course of business. The Company accrues a liability for such matters when it is probable that future expenditures will be made and that such expenditures can be reasonably estimated. As of December 31, 2024, the Company is not a party to any litigation and does not have a contingency reserve established for any litigation liabilities.

Indemnification

The Company, as permitted under Delaware law and in accordance with its certification of incorporation and bylaws and pursuant to indemnification agreements with certain of its officers and directors, indemnifies its officers and directors for certain events or occurrences, subject to certain limits, which the officer or director is or was serving at the Company's request in such capacity.

The Company enters into certain types of contracts that contingently require the Company to indemnify various parties against claims from third parties. These contracts primarily relate to (i) the Company's bylaws, under which the Company must indemnify directors and executive officers, and may indemnify other officers and employees, for liabilities arising out of their relationship, (ii) contracts under which the Company must indemnify directors and executive officers and event which the Company must indemnify directors and executive officers, and may indemnify other officers and employees, for liabilities arising out of their relationship, (ii) contracts under which the Company must indemnify directors and certain officers and consultants for liabilities arising out of their relationship, and (iii) procurement, service or license agreements under which the Company may be required to indemnify vendors, service providers or licensees for certain claims, including claims that may be brought against them arising from the Company's acts or omissions with respect to the Company's products, technology, intellectual property or services.

From time to time, the Company may receive indemnification claims under these contracts in the normal course of business. In the event that one or more of these matters were to result in a claim against the Company, an adverse outcome, including a judgment or settlement, may cause a material adverse effect on the Company's future business, operating results or financial condition. As of December 31, 2024, and 2023, the Company was not aware of any claims under indemnification arrangements and does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible. Therefore, no related reserves have been established.

9. Collaboration and license agreements

Roche Collaboration and License Agreement

Description

In October 2023, Monte Rose Therapeutics AG, a wholly-owned subsidiary of Monte Rosa Therapeutics, Inc, or the Company, entered into a collaboration and license agreement with Roche. Pursuant to the collaboration and license agreement, or the Roche Agreement, the parties will seek to identify and develop molecular glue degraders, or MGDs, against cancer or neurological disease targets using the Company's proprietary drug discovery platform for an initial set of targets in oncology and neuroscience selected by Roche, with Roche having an option to expand the collaboration to include additional option targets, wherein a certain number of targets selected by Roche are subject to replacement rights owned by Roche. The Company will lead preclinical discovery and research activities with Roche leading late preclinical and clinical development activities.

Under the Agreement, Roche will have a worldwide, exclusive license under patents and know-how controlled by the Company to develop and commercialize products directed to applicable targets. The license exclusivity is subject to the Company's retained rights solely to fulfill its obligations under the arrangement.

The research collaboration activities governed by the Agreement will be overseen by a joint research committee.

Unless earlier terminated, the Agreement will remain in effect for each product licensed under the Agreement until expiration of the royalty term for the applicable product. The parties have included termination provisions in the agreement, allowing termination of the Agreement in its entirety, on a country-by-country or a target-by-target basis.

Pricing

In November 2023, the Company received a \$50.0 million non-refundable upfront payment for the initial set of targets. Pursuant to the terms of the agreement, the Company expects to be entitled to receive from Roche certain variable consideration including potential preclinical milestones up to \$172 million, and potential clinical, commercial and sales milestones exceeding \$2 billion. For the additional option targets, upon Roche's exercise of their option, the Company is entitled to receive an upfront payment of up to \$28 million and potential preclinical, clinical, commercial and sales milestones exceeding \$1 billion. The Company is also eligible to receive tiered royalties ranging from high-single-digits to low-teens on any products that are commercialized by Roche as a result of the collaboration.

As of December 31, 2024, the Company has received \$9.0 million related to Roche's decision to exercise its option rights for continued research and development services. The related payments are initially classified as deferred revenue in the accompanying consolidated balance sheet and recognized in revenue as the related research and development services are performed.

Accounting

This agreement represents a transaction with a customer and therefore is accounted for under ASC 606.

The Company determined that the development and commercialization licenses for each of the collaboration targets is neither capable of being distinct nor distinct within the context from the promised initial research services. In addition, the Company has determined that each target in the agreement is distinct from other targets because: (i) Roche can benefit from the license and research services for a given target on their own since the results related thereto can be evaluated discretely and (ii) the results of the research and development of each target does not affect either the Company's ability to perform or Roche's ability to assess the results for any other target. As such, the Company has identified certain performance obligations within the agreement as follows:

- Performance obligations for the research and development of initial targets
- Performance obligations for the research and development services related to Roche's option to replace certain targets

The total transaction price of the Roche Agreement is allocated to the performance obligations based on their relative standalone selling price. The Company developed the standalone selling price for the performance obligations included in the Roche Agreement by determining the total estimated costs to fulfill each performance obligation identified with the objective of determining the price at which it would sell such an item if it were to be sold regularly on a standalone basis. The allocated transaction price is recognized as revenue from collaboration agreements in one of two ways:

- Research and development of the initial targets: The Company recognizes the portion of the transaction price allocated to each of the research and development performance obligations as the research and development services are provided, using an input method, in proportion to costs incurred to date for each research development target as compared to total costs incurred and expected to be incurred in the future to satisfy the underlying obligation related to said research and development target. The transfer of control occurs over this period and, in management's judgment, is the best measure of progress towards satisfying the performance obligation.
- Option rights: The transaction price allocated to the options rights, which are considered material rights, is
 deferred until the period that Roche elects to exercise or elects to not exercise its option right to license and
 commercialize the underlying research and development target. Upon Roche's exercise of an option right,
 the Company will recognize the portion of the transaction price allocated using the input method described
 above. Any payments made to exercise option rights will be added to the allocated value and recognized as
 the related services are performed.

As of December 31, 2024, \$34.0 million has been recognized as collaboration revenue in the consolidated statements of operations and comprehensive loss and the remaining \$25.0 million of the upfront payment and subsequent milestone payments related to customer options are recorded as deferred revenue in the liabilities section of the consolidated balance sheets.

As of December 31, 2024, the potential research, development and regulatory milestone payments that the Company is eligible to receive were excluded from the transaction price as they were fully constrained by uncertain events. The Company will reevaluate the transaction price at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur, and if necessary, the Company will adjust its estimate of the transaction price. Any additions to the transaction price would be reflected in the period as a cumulative revenue catch-up based on the ratio of costs incurred to the total estimated costs expected applied to the revised transaction price. Sales-based royalties and milestone payments, which predominantly relate to the license, will be recognized if and when the related sales occur.

Novartis License Agreement

Description

In October 2024, Monte Rose Therapeutics AG, a wholly-owned subsidiary of Monte Rosa Therapeutics, Inc, or the Company, entered into a license agreement with Novartis, or the Novartis Agreement. Pursuant to the Novartis Agreement, the Company granted to Novartis an exclusive, royalty-bearing, sublicensable and transferable license to develop, manufacture, and commercialize VAV1 MGDs, including MRT-6160, which is currently in Phase 1 clinical development for immune-mediated conditions. The Company is responsible for completing the ongoing Phase 1 clinical study and Novartis is responsible for all subsequent development and commercial activities starting at Phase 2.

Pricing

In December 2024, the Company received a \$150 million non-refundable upfront payment. Pursuant to the Agreement, the Company is entitled to receive from Novartis up to \$2.1 billion in development, regulatory, and sales milestones, beginning upon initiation of Phase 2 studies including (a) potential development and regulatory milestone payments, exceeding \$1.5 billion if multiple indications achieve regulatory approval in multiple territories, (b) potential sales milestones payments in connection with sales outside of the United States, and tiered royalties on sales outside of the United States. The Company will continue to be responsible for costs associated with the ongoing Phase 1 clinical study and Novartis will be responsible for costs associated with any subsequent clinical studies. The Company and Novartis also agreed to a net profit and loss sharing arrangement, pursuant to which the Company could co-fund any global clinical development from Phase 3 onwards and will share 30% of any profits and losses associated with the manufacturing and commercialization of the licensed products in the United States. The Company has defined opportunities to opt out of the net profit and loss sharing arrangement prior to the initiation of Phase 3 clinical trials, in such case, sales in the United States would be entitled to the potential sales milestones payments and tiered royalties as sales outside of the United States. Any costs for any co-funded development and commercialization activities are subject to budgets reviewed by the Company and Novartis.

Accounting

The goods and services that the Company is obligated to deliver and perform (the license and Licensor Clinical Trial) will be accounted for under ASC 606 as they represent a transaction with a customer.

The Company has concluded that the license and the completion of the Licensor Clinical Trial promises are treated as a single, combined performance obligation. The Company has determined the total transaction price to be \$150 million, which consists solely of the upfront payment. All milestone payments were constrained as the achievement of the milestones are contingent upon the success of the underlying research and development activities and are generally outside the control of the Company. The Company's options to share in further development and commercialization efforts via its opt-in/opt-out rights will be assessed and accounted for as separate units of accounting under the relevant guidance if, and when, such options are exercised by the Company.

The Company recognizes revenue associated with the combined performance obligation will be recognized over time using a cost-based input methodology. The transfer of control occurs over the course of the Licensor Clinical Trial promise and, in management's judgment, is the best measure of progress towards satisfying the combined performance obligation. The amounts received that have not yet been recognized as revenue are classified as deferred revenue on the Company's consolidated balance sheet and will be recognized over the remaining Phase 1 clinical trial period until the performance obligation is satisfied.

As of December 31, 2024, \$41.6 million of revenue has been recognized as collaboration revenue in the consolidated statements of operations and comprehensive loss and the remaining \$108.4 million of the upfront payment is recorded as deferred revenue in the current liabilities section of the consolidated balance sheets as related performance obligations are expected to be completed within the next 12 months.

10. Equity

Undesignated Preferred Stock

The Company had 10,000,000 shares authorized of undesignated preferred stock, par value of \$0.0001, of which no shares were issued and outstanding as of December 31, 2024.

Common Stock

The Company had 500,000,000 shares of common stock authorized, of which 61,507,446 shares were issued and outstanding at December 31, 2024.

Additionally, the Company has issued pre-funded warrants to purchase 20,638,924 shares of the Company's common stock to accredited investors. The pre-funded warrants are immediately exercisable at an exercise price of \$0.0001 per share. The Pre-Funded Warrants are exercisable at any time after the date of issuance. A holder of a Pre-Funded Warrant may not exercise such Pre-Funded Warrant if the holder, together with its affiliates, would beneficially own more than 4.99% (or, at the election of the holder, up to 19.99%) of the number of shares of the Company's common stock outstanding immediately after giving effect to such exercise. No pre-funded warrants have been exercised as of December 31, 2024.

The Company has assessed the Pre-Funded Warrant for appropriate equity or liability classification pursuant to the Company's accounting policy described in Note 2, "Summary of Significant Accounting Policies." During this assessment, the Company determined the Pre-Funded Warrant is a freestanding instrument that does not meet the definition of a liability pursuant to ASC 480 and does not meet the definition of a derivative pursuant to ASC 480 and does not meet the definition of a derivative pursuant to ASC 815. The Pre-Funded Warrant is indexed to the Company's common stock and meets all other conditions for equity classification under ASC 480 and ASC 815. Based on the results of this assessment, the Company concluded that the Pre-Funded Warrant is a freestanding equity-linked financial instrument that meets the criteria for equity classification under ASC 480 and ASC 815. Accordingly, the Pre-Funded Warrant is classified as equity and is accounted for as a component of additional paid-in capital at the time of issuance. The Company also determined that the Pre-Funded Warrant should be included in the determination of basic and diluted earnings per share in accordance with ASC 260, *Earnings per Share*.

The holders of common stock are entitled to dividends when and if declared by the board of directors, subject to the preferences applicable to outstanding shares of Convertible Preferred Stock. The board of directors has not declared any dividends and the Company has not paid any dividends.

The holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders.

The Company has issued restricted stock to founders, employees and consultants, and expense for this restricted stock is recognized on a straight-line basis (see Note 11). The restricted stock generally vests monthly over 4 years.

As of December 31, 2024, and 2023, the Company has reserved the following shares of of common stock for the vesting of restricted stock and exercise of stock options:

	December 31, 2024	December 31, 2023
Options to purchase common stock	11,589,269	9,394,930
Unvested restricted common stock awards	_	14,696
Unvested restricted common stock units	112,159	236,519
Pre-funded warrants	20,638,924	10,000,400
	32,340,352	19,646,545

Registered Direct Offering

On October 30, 2023, the Company sold in a registered direct offering pursuant to a securities purchase agreement pre-funded warrants to purchase 10,000,400 shares of the Company's common stock to an accredited investor at a purchase price of \$2.4999 per pre-funded warrant resulting in proceeds to the Company of \$24.9 million, net of offering costs of \$0.1 million. The pre-funded warrants are immediately exercisable at an exercise price of \$0.0001 per share, and may be exercised at any time until the pre-funded warrants are exercised in full.

At-the-Market Offering

In July 2022, the Company entered into a sales agreement, or the Sales Agreement, with Jefferies LLC, or Jefferies, pursuant to which the Company may offer and sell shares of its common stock having aggregate gross proceeds of up to \$100 million from time to time in "at-the-market" offerings through Jefferies, as the Company's sales agent. The Company agreed to pay Jefferies a commission of up to 3.0% of the gross proceeds of any shares sold by Jefferies under the Sales Agreement. During the year ended December 31, 2024, the Company sold 130,506 shares of common stock under the Sales Agreement for aggregate gross proceeds of \$1.0 million, or aggregate net proceeds of \$0.9 million after deducting sales agent discounts, commissions, and other offering costs. During the year ended December 31, 2023, the Company did not sell shares of its common stock under the Sales Agreement.

Underwritten Public Offering

In May 2024, the Company entered into an underwriting agreement with TD Securities (USA) LLC, as representative of the several underwriters, related to an underwritten public offering, or the Offering, of 10,638,476 shares of common stock at a price of \$4.70 per share, and, in lieu of Common Stock to certain investors, pre-funded warrants to purchase 10,638,524 shares of Common Stock at a price of \$4.6999 per pre-funded warrant, which represents the price per share at which shares of Common Stock were sold in this Offering, minus \$0.0001, which is the exercise price of each pre-funded warrant, including shares and warrants to existing shareholders. The pre-funded warrants are immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. Aggregate gross proceeds from the Offering were \$100 million, or aggregate net proceeds of \$96.4 million after deducting the underwriter discounts, commissions, and other offering costs.

11. Stock-based compensation

2020 Stock incentive plan

The Company's 2020 Stock Option and Grant Plan, or the 2020 Plan, provided for the Company to grant stock options, restricted stock, and other stock awards, to employees, non-employee directors, and consultants. Upon effectiveness of the 2021 Plan (as defined below), no further issuances will be made under the 2020 plan.

2021 Stock incentive plan

The Company's 2021 Stock Option and Incentive Plan, or the 2021 Plan, was approved by the Company's board of directors on May 28, 2021, and the Company's stockholders on June 17, 2021, and became effective on the date immediately prior to the date on which the registration statement for the Company's IPO was declared effective. The 20c21 Plan provides for the grant of incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock units, restricted stock awards, unrestricted stock awards, cash-based awards and dividend equivalent rights to the Company's officers, employees, directors and consultants. The number of shares initially reserved for issuance under the 2021 Plan was 4,903,145, which will be automatically increased on each January 1st by 5% of the outstanding number of shares of the Company's common stock on the immediately preceding December 31st or such lesser number of shares as determined by the Company's compensation, nomination and corporate governance committee. As of December 31, 2024, 3,226,165 shares of common stock were available for issuance under the 2021 Plan.

2021 Employee stock purchase plan

The Company's 2021 Employee Stock Purchase Plan, or the 2021 ESPP, was approved by the Company's board of directors on May 28, 2021, and the Company's stockholders on June 17, 2021, and became effective on the date immediately prior to the date on which the registration statement for the Company's IPO was declared effective. A total of 439,849 shares of the Company's common stock were initially reserved for issuance under the 2021 ESPP which will be automatically increased on each January 1st through January 1, 2031, by the least of (i) 439,849 shares of the Company's common stock, (ii) 1% of the outstanding number of shares of the Company's common stock as determined by the plan administrator of the 2021 ESPP. As of December 31, 2024, 1,435,828 shares of common stock remained available for issuance under the 2021 ESPP.

Stock option activity

The following summarizes stock option activity:

	Number of options	Weighted average exercise price	Weighted average remaining contractual term (years)	(in	Aggregate intrinsic value thousands)
Outstanding—December 31, 2023	9,394,930	\$ 8.78	8.0	\$	4,741
Granted	3,037,465	5.55	_		_
Exercised	(299,222)	3.55	—		—
Forfeited	(543,904)	8.09	_		_
Outstanding—December 31, 2024	11,589,269	\$ 8.10	7.6	\$	11,419
Vested or expected to vest—December 31, 2024	11,589,269	\$ 8.10	7.6	\$	11,419
Exercisable—December 31, 2024	6,342,308	\$ 8.96	6.8	\$	6,626

The aggregate intrinsic value of options granted is calculated as the difference between the exercise price of the options and the estimated fair value of the Company's common stock. The weighted average grant date fair value of options granted in during the years ended December 31, 2024 and 2023 was \$4.13 and \$5.40 per share, respectively. The total intrinsic value of options exercised during the years ended December 31, 2024, and 2023, was \$1.0 million and \$1.1 million, respectively.

Fair value of stock option awards

The Company estimates the fair value of stock option awards on the grant date using Black-Scholes. The fair value of options granted were estimated using the following weighted-average assumptions:

	Year ended December 31,			
	2024	2023		
Expected term (years)	6.25	6.24		
Expected volatility	84.81%	82.72%		
Risk-free interest rate	3.99%	3.95%		
Expected dividend yield	—%	—%		

Black-Scholes requires the use of subjective assumptions which determine the fair value of stock-based awards. These assumptions include:

Expected term: The Company's expected term represents the period that options are expected to be outstanding and is determined using the simplified method. The Company does not have sufficient historical data to use any other method to estimate expected term.

Expected volatility: The Company has limited information on the volatility of stock options as the shares were not actively traded on any public markets prior to June 24, 2021. The expected volatility was derived from historical stock volatilities of comparable peer public companies within its industry based on their similarities to the Company, including life cycle stage, therapeutic focus and size over a period equivalent to the expected term of the stock-based awards.

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the stock option grants.

Expected dividend: The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

Restricted stock award activity

Unvested restricted stock awards, or RSAs, as of December 31, 2023, were granted to employees under the 2020 Plan. There were no unvested restricted stock awards as of December 31, 2024. Restricted stock awards generally vest over a four year period provided the individual remains in continuous service of the Company.

The following summarizes restricted stock activity:

		Weighted
	Number of	average grant date
	shares	fair value
Unvested restricted stock awards as of December 31, 2023	14,696	\$ 2.19
Vested	(14,696)	\$ 2.19
Unvested restricted stock awards as of December 31, 2024		\$

The aggregate fair value of restricted stock that vested during the year ended December 31, 2024 and 2023 was \$0.1 million and \$0.7 million, respectively. The weighted average grant date fair value of restricted stock that vested during the year ended December 31, 2024, and 2023 was \$2.19 and \$0.82 per share, respectively.

Restricted stock unit activity

Starting in 2022, the Company granted restricted stock units, or RSUs, to employees under the 2021 Plan. Each of the RSUs represents the right to receive one share of the Company's common stock upon vesting. The RSUs granted generally vest over two years provided the individual remains in continuous service of the Company. Accordingly, stock-based compensation expense for each RSU is recognized on a straight-line basis over the vesting term. The fair value of each RSU is based on the closing price of the Company's common stock on the date of grant.

The following summarizes restricted stock unit activity:

	Number of shares	Weighted average grant date fair value
Unvested restricted stock units as of December 31, 2023	236,519	\$ 8.00
Granted	_	\$ _
Vested	(122,034)	\$ 8.42
Forfeited	(2,326)	\$ 7.55
Unvested restricted stock units as of December 31, 2024	112,159	\$ 7.55

The aggregate fair value of restricted stock that vested during the years ended December 31, 2024, and 2023 was \$0.5 million and \$0.3 million, respectively. The weighted average grant date fair value of restricted stock that vested during the years ended December 31, 2024 and 2023 was \$8.42 per share and \$10.11 per share, respectively.

Stock-based compensation expense

Stock-based compensation expense is classified as follows (in thousands):

	Year ended December 31,			
		2024		2023
Research and development	\$	10,629	\$	8,939
General and administrative		7,497		7,730
Total stock-based compensation expense	\$	18,126	\$	16,669

As of December 31, 2024, total unrecognized stock–based compensation cost related to unvested stock options and restricted stock units was \$23.2 million and \$0.3 million, respectively. The Company expects to recognize this remaining cost over a weighted average period of 2.3 years and 0.4 years, respectively.

12. Income Taxes

For the year ended December 31, 2024 the Company recorded a provision for income taxes of \$2.6 million, representing an effective tax rate of (3.6)%. The income tax provision and the effective tax rate is primarily driven by the current federal and state taxes related to the \$50.0 million upfront payment for Roche Collaboration Agreement, which will be recognized as taxable Global Intangible Low Tax Income, or GILTI, in the current year, and the required capitalization of research and development costs pursuant to Internal Revenue Code Section 174. As a result, the Company expects to have taxable income in the current year, which will be reduced by utilizing available net operating loss carryforwards and research and development tax credit carryforwards.

The Company has incurred net operating losses for all the periods presented. The Company has not reflected the benefit of any such net operating loss carryforwards in the accompanying consolidated financial statements. Domestic and foreign components of net loss are as follows (in thousands):

	 Year ended December 31,			
	2024		2023	
United States	\$ (20,708)	\$	(19,543)	
Foreign	(49,422)		(115,471)	
Net loss	\$ (70,130)	\$	(135,014)	

The effective tax rate for the years ended December 31, 2024, and 2023 is different from the federal statutory rate primarily due to the valuation allowance against deferred tax assets as a result of insufficient sources of income. The reconciliation of the federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year end Decembe	Year ended December 31,			
	2024	2023			
Income tax benefit at the federal statutory rate	21.0%	21.0%			
State income taxes, net of federal benefit	6.2%	6.2%			
Research and development tax credits	4.2%	(0.1)%			
Foreign rate differential	(5.6)%	(6.8)%			
Stock-based compensation	(3.2)%	(0.7)%			
GILTI	(7.1)%				
Reduction in Unrecognized Tax Benefit (UTB)	5.7%	_			
Other	(0.2)%	(0.2)%			
Change in valuation allowance	(24.6)%	(19.5)%			
Total	(3.6)%	(0.1)%			

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The principal components of the Company's deferred tax assets consisted of the following (in thousands):

	 December 31,		
	2024		2023
Deferred tax assets			
Federal, state, and foreign net operating loss carryforwards	\$ 50,002	\$	41,888
Research and development tax credits	6,952		2,245
Capitalized research and development	5,957		3,679
Lease liability	11,676		12,403
Compensation related items	8,044		6,283
Other	482		147
Total deferred tax assets	\$ 83,113	\$	66,645
Less: valuation allowance	(72,157)		(54,465)
Total net deferred tax assets	\$ 10,956	\$	12,180
Deferred tax liabilities			
Right-of-use asset	(7,162)		(7,573)
Defined benefit plan adjustment			(332)
Depreciation	(3,794)		(4,275)
Total deferred tax liabilities	 (10,956)		(12,180)
Net deferred tax assets	\$ 	\$	_

The Company has incurred annual net operating losses in each year since inception. The Company has not reflected the benefit of any such net operating loss carryforwards in the financial statements. Due to the Company's history of losses, and lack of other positive evidence, the Company has determined that it is more likely than not that its net deferred tax assets will not be realized, and therefore, the net deferred tax assets are fully offset by a valuation allowance at December 31, 2024, and 2023. The Company increased its valuation allowance by \$17.7 million for the year ended December 31, 2024 in order to maintain a full valuation allowance against its deferred tax assets.

As of December 31, 2024, the Company had federal net operating loss carryforwards, or NOLs, of \$0.6 million and federal tax credits of \$4.4 million available to offset tax liabilities. The Company's federal NOLs have an indefinite life and federal tax credit carryforwards begin to expire in 2040. The Company also had gross foreign NOLs of \$332.1 million that begin to expire in 2026. The Company also had gross state tax credits of \$2.6 million which are available to offset state tax liabilities and begin to expire in 2025. Federal and state NOLs and tax credit carryforwards are also subject to annual limitations in the event that cumulative changes in the ownership interests of significant stockholders exceed 50% over a three-year period, as defined under Sections 382 and 383 of the Internal Revenue Code of 1986. The Company completed an analysis as of December 31, 2023, and determined that an ownership change occurred on September 14, 2020 and October 30, 2023. As a result of these ownership changes, the utilization of the Company's net operating loss carryforwards is subject to an annual limitation of \$0.3 million for attributes accumulated prior to September 14, 2020 and \$0.8 million for the attributes generated prior to October 30,2023. The Company has not completed an additional analysis for the tax year ending December 31, 2024 and an ownership change could impact the R&D credit carryforward, but does not expect a change would further limit the net operating loss carryforward.

The Company determines its uncertain tax positions based on whether and how much of a tax benefit taken by the Company in its tax filings is more likely than not to be sustained upon examination by the relevant income tax authorities.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

	Year ended December 31,			
		2024		2023
Unrecognized tax benefits, beginning of year	\$	4,475	\$	2,235
Additions for tax positions of prior years				2,369
Reductions for tax provisions of prior years		(4,475)		(129)
Unrecognized tax benefits, end of year	\$		\$	4,475

The Company recognizes interest and penalties related to unrecognized tax benefits in U.S. Federal, state, and foreign income tax expense. For the years ended December 31, 2024, and 2023, the unrecognized tax benefits

were related to a reserve for the Federal and State Research and Development Credit. The Company had approximately \$4.5 million unrecognized tax benefit as of December 31, 2023. The Company reduced the unrecognized tax benefit after the completion of a Research and Development study. The Company did not have unrecognized tax benefits as of December 31, 2024.

The Company files income tax returns in the U.S., Switzerland and Massachusetts. The Company is not currently under examination by any taxing authority for any open tax year. Due to net operating loss carryforwards, all years remain open for income tax examination. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service, or IRS, or state tax authorities to the extent utilized in a future period. No federal, foreign, or state tax audits are currently in process.

13. Employee retirement plans

Defined benefit plan

The Company, in compliance with Swiss Law, is contracted with the AXA Leben AG, or AXA, for the provision of pension benefits in a defined benefit plan. All benefits are organized in a semi-autonomous collective foundation within the framework of the contract with AXA. Insurance benefits due are paid directly to the entitled persons by AXA in the name of and for the account of the collective foundation. The pension plan is financed by contributions of both employees and employer.

The contract between the Company and AXA can be terminated by either side. In the event of a termination, the Company would have an obligation to find alternative pension arrangements for its employees. Because there is no guarantee that the employee pension arrangements would be continued under the same conditions, there is a risk, albeit remote, that a pension obligation may fall on the Company.

The pension assets are pooled for all affiliated companies; the investment of assets is done by the governing bodies of the collective foundation.

The following table represents the changes in benefit obligations and plan assets and the net amount recognized on the consolidated balance sheets (in thousands):

	Year ended December 31,			
	 2024		2023	
Change in benefit obligation:				
Benefit obligation—beginning of period	\$ 12,029	\$	6,851	
Service cost employer	1,029		774	
Contributions paid by employees	425		657	
Interest cost	174		198	
Contributions paid by plan participants	690		2,752	
Benefits paid	(1,276)		(594)	
Plan Amendment	(9)		(1,463)	
Actuarial loss	960		2,854	
Foreign currency revaluation	(907)			
Benefit obligation—end of period	\$ 13,115	\$	12,029	
Change in plan assets:				
Fair value of plan assets—beginning of period	\$ 9,316	\$	5,318	
Actual return on plan assets	106		(96)	
Contributions paid by employer	826		1,279	
Contributions paid by employees	425		657	
Contributions paid by plan participants	690		2,752	
Benefits paid	(1,276)		(594)	
Foreign currency revaluation	(674)			
Fair value of plan assets—end of period	\$ 9,413	\$	9,316	
Defined benefit plan liability	\$ 3,702	\$	2,713	

The net pension costs was as follows (in thousands):

	Year ended December 31,			
	 2024		2023	
Service cost	\$ 1,029	\$	774	
Interest cost	174		198	
Net pension cost	\$ 1,203	\$	972	

The provision for pension benefit obligation recognized in other comprehensive loss was as follows (in thousands):

	Year ended December 31,			
		2024		2023
Actuarial gain (loss) arising from experience adjustments	\$	80	\$	(1,614)
Actuarial loss arising from changes in financial assumptions		(1,040)		(1,240)
Defined benefit cost for the year recognized in other comprehensive loss	\$	(960)	\$	(2,854)

The assumptions used to measure the projected benefit obligation and net pension costs were as follows:

	Year o Decem	ended iber 31,
	2024	2023
Inflation rate	1.00%	1.25%
Discount rate	1.00%	1.50%
Interest rate on savings accounts	1.00%	1.00%
Expected rate of return on assets	1.00%	1.50%
Salary increase	1.25%	1.25%
Social Security increase	1.00%	1.25%
Pension increase	0.00%	0.00%
Definement and	100% Male 65	100% Male 65
Reurement age	Female 65	Female 64
Mortality and disability rates	BVG 2020 Table	BVG 2020 Table

Estimated benefit payments, which reflect future expected service, are expected to be paid as follows (in thousands):

		December 31,	
2025	\$	656	
2026	\$	670	
2027	\$	682	
2028	\$	695	
2029	\$	705	
2030-2034	\$	4,197	

Defined contribution plans

In February 2021, the Company adopted a defined contribution plan intended to qualify under Section 401(k) of the Internal Revenue Code covering all eligible U.S. based employees of the Company. All employees are eligible to become participants of the plan immediately upon hire. Each active employee may elect, voluntarily, to contribute a percentage of their compensation to the plan each year, subject to certain limitations. The Company reserves the right, but is not obligated, to make additional contributions to this plan. The Company makes safe-harbor match contributions of 100% of the first 4% of each participant's eligible compensation. In January 2024, the Company adopted a defined contribution supplemental pension plan for eligible Swiss based employees defined by Swiss Law Art.1e BVV 2, or the 1e Plan. Employees earning above a defined threshold are eligible and automatically enrolled in the 1e Plan and required contributions are determined by age and salary under Swiss Law. The Company and the employee share the costs of the 1e Plan. The Company recorded \$0.8 million

and \$0.6 million in defined contribution related expenses during the years ended December 31, 2024, and 2023, respectively.

14. Net loss per common share

Basic and diluted net loss per share is calculated based upon the weighted-average number of shares of common stock outstanding during the period. Shares of the Company's common stock underlying pre-funded warrants are included in the calculation of the basic and diluted earnings per share. Basic and diluted net loss per share are as follows (in thousands except share and per share amounts):

	Year ended December 31,			
		2024		2023
Net loss	\$	(72,700)	\$	(135,352)
Net loss per share attributable to common stockholders—basic and diluted	\$	(0.98)	\$	(2.63)
Weighted-average number of common shares used in computing net loss				
per share—basic and diluted		73,910,026		51,396,961

The following outstanding potentially dilutive securities have been excluded from the calculation of diluted net loss per common share, as their effect is anti-dilutive:

	December 31, 2024	December 31, 2023
Stock options to purchase common stock	11,589,269	9,394,930
Restricted common stock	_	14,696
Restricted stock units	112,159	236,519

15. Segment Data

The Company defines its segments on the basis of the way in which internally reported financial information is regularly reviewed by the chief operating decision maker, or CODM, to analyze financial performance, make decisions, and allocate resources. The Company manages its operations as a single operating and reportable segment committed to developing a portfolio of novel and proprietary MGDs. MGDs are small molecule drugs that employ the body's natural protein destruction mechanisms to selectively degrade therapeutically-relevant proteins. As the internal reporting is based on the consolidated results, the Company has identified one operating and reportable segment. The CODM uses net income (loss) in the budget and forecasting process and considers budget-to-actual variances on a quarterly basis when making decisions about the allocation of operating and capital resources. The measure of the operating segment assets is reported on the consolidated balance sheet as total assets.

The accounting policies used in the segment reporting are the same as those described in the summary significant accounting policies (Note 2). The Company's CODM is the Chief Executive Officer.

The Company's reportable segment net revenues and loss for the years ended December 31, 2024, and 2023, consisted of the following:

(in thousands)	 Year ended December 31,			
	2024		2023	
Revenue:				
Collaboration revenue	\$ 75,622	\$		
Operating expense:				
Research and development:				
External research and development expenses:				
MRT-2359	12,332		*	
MRT-6160	15,209		*	
NEK7	10,163		*	
Other development and discovery programs	14,432		46,404	
Personnel expense	39,796		37,570	
Overhead and administrative expense	29,631		27,298	
General and administrative expenses:				
Personnel expense	22,153		19,648	
Professional services	5,091		4,355	
Facility costs and other expense	7,927		8,036	
Loss from operations	 (81,112)		(143,311)	
Other income (expense):				
Interest and other income, net	10,982		8,297	
Provision for income taxes	(2,570)		(338)	
Net loss	\$ (72,700)	\$	(135,352)	

*External research and development expenses were not tracked by program prior to 2024

Other development and discovery expenses are related to the development of our QuEEN[™] discovery engine and our disclosed and undisclosed programs, including CDK2 and CCNE1. The Company's tangible assets are held in the United States and Switzerland with 28% of the assets held in Switzerland. All of the Company's revenue has been generated in Switzerland.

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