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 001-40532

LENZ THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**84-4867570**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

201 Lomas Santa Fe Dr., Suite 300
Solana Beach, California 92075
(Address of principal executive offices, including zip code)

(858) 925-7000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.00001 per share	**LENZ**	**The Nasdaq Stock Market LLC**

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

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

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

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

☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

☐

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

☐

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

☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates, based upon the closing price of the common stock on June 28, 2024, as reported by The Nasdaq Stock Market LLC, was $362.6 million. Shares of common stock held by each executive officer and director and by each other person who is deemed to be an affiliate of the registrant have been excluded from such computation. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 12, 2025, 27,542,874 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

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Cautionary Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K ("Annual Report") contains forward-looking statements. All statements other than statements of historical facts contained in this Annual Report, including statements regarding our future results of operations and financial position, business strategy, commercial activities and costs, research and development costs, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that are in some cases beyond our control and may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "would," "expect," "plan," "anticipate," "could," "intend," "target," "project," "believe," "estimate," "predict," "potential," or "continue" or the negative of these terms or other similar expressions. Forward-looking statements contained in this Annual Report include, but are not limited to, statements about:

- the likelihood of our clinical trials demonstrating safety and efficacy of our product candidates to the satisfaction of the Food and Drug Administration ("FDA"), and other positive results;
- the timing, scope and likelihood of regulatory approval for LNZ100;
- our ability to obtain and maintain regulatory approval of LNZ100;
- our plans relating to commercializing LNZ100, if approved, including the anticipated timing and geographic areas of focus and sales strategy;
- our plans relating to the development of LNZ100;
- the size of the market opportunity for LNZ100, including our estimates of the size of the affected population and potential adoption rate;
- our competitive position and the success of competing therapies that are or may become available;
- the beneficial characteristics, and the potential safety, efficacy and therapeutic effects of LNZ100;
- the need to hire additional personnel and our ability to attract and retain such personnel;
- our plans relating to the further development and manufacturing of LNZ100 and any future product candidates;
- the expected potential benefits of strategic collaborations with third parties and our ability to attract collaborators with development, regulatory and commercialization expertise;
- the rate and degree of market acceptance and clinical utility of LNZ100 and any other product candidates we may develop;
- the impact of existing laws and regulations and regulatory developments in the United States and other jurisdictions;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering LNZ100, including the extensions of existing patent terms where available, the validity of intellectual property rights held by third parties, and our ability not to infringe, misappropriate or otherwise violate any third-party intellectual property rights;
- our continued reliance on third parties to conduct any additional clinical trials of LNZ100 or any future product candidates, and for the manufacture of our product candidates for any such trials;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our financial performance;
- costs related to the Merger (as defined in Part II, Item 8, Note 1, "Organization and Liquidity," in our notes to consolidated financial statements in this Annual Report on Form 10-K);

- our expectation that our existing cash, cash equivalents, and marketable securities will be sufficient to fund the Company to positive operating cash flow subsequent to commercial launch, if LNZ100 is approved;
- our expectations regarding the period during which we will remain an emerging growth company under the Jumpstart Our Business Startups Act (the "JOBS Act"); and
- our anticipated use of our existing resources, the proceeds from the Merger and the concurrent March 2024 PIPE Financing (as defined in Part II, Item 8, Note 3, "Merger and Related Transactions," in our notes to consolidated financial statements in this Annual Report on Form 10-K), and the July 2024 PIPE Financing (as defined in Part II, Item 8, Note 8, "Stockholders' Equity," in our notes to consolidated financial statements in this Annual Report on Form 10-K).

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this Annual Report and are subject to a number of risks, uncertainties and assumptions described in the section titled "Risk Factors" and elsewhere in this Annual Report. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we undertake no obligation to update or revise any forward-looking statements contained herein to reflect events or circumstances after the date of this Annual Report, whether as a result of any new information, future events or otherwise.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely upon these statements.

Part I

Item 1. Business

Overview

We are a pre-commercial biopharmaceutical company focused on the development and commercialization of innovative therapies to improve vision. Our initial focus is the treatment of presbyopia, the inevitable loss of near vision that impacts the daily lives of nearly all people over 45. In the United States, the estimated addressable population who suffer from this condition, known as presbyopes, is 128 million, almost four times the number of individuals suffering from dry eye disease and three times the number of individuals suffering from childhood myopia, macular degeneration, diabetic retinopathy and glaucoma combined. We believe that a once-daily pharmacological eye drop that can effectively and safely improve near vision throughout the full workday, without the need for reading glasses, could be a highly attractive commercial product with an estimated U.S. market opportunity in excess of $3 billion. It is our goal to develop and commercialize such a product, and we have assembled an executive team with extensive clinical and commercial experience to execute this goal and become the category leader.

Our lead product candidate LNZ100 is a preservative-free, single-use, once-daily eye drop containing aceclidine. We believe our product candidate is differentiated based on rapid onset, degree and duration of near vision improvement, its ability to be used across the full age range of presbyopes, from their mid-40s to well into their mid-70s, as well as a broad refractive range. Aceclidine's pupil-selective mechanism of action was demonstrated in our clinical trials where near vision improved while avoiding blurry distance vision. Our product candidate was well-tolerated in clinical trials, and its active ingredient aceclidine has a favorable tolerability profile that have been well-established empirically. LNZ100 has patent protection until 2039 in the United States, at a minimum, due to a robust intellectual property portfolio underpinned by issued patents.

In the safety and efficacy trials of our Phase 3 study ("CLARITY 1 and 2"), LNZ100 achieved the primary endpoints and key secondary endpoints, with statistically significant three-lines or greater improvement in Best Corrected Distance Visual Acuity ("BCDVA") at near, without losing one or more lines in distance visual acuity. In the vehicle-controlled CLARITY 2 trial, the day 1 results showed (all $p<0.0001$):

- **Rapid onset:** 71% achieved three-lines or greater improvement at 30 minutes.
- **Primary endpoint:** 71% achieved three-lines or greater improvement at 3 hours.
- **Long duration:** 40% achieved three-lines or greater improvement at 10 hours.

Near vision improvement was reproducible and consistent across both CLARITY 1 and 2 throughout the four-week study periods. LNZ100 was well-tolerated with no serious treatment-related adverse events observed in the over 30,000 treatment days, including the six-week safety study period in CLARITY 1 and 2, and the six-month period in the CLARITY 3 Phase 3 long-term safety trial (collectively, the "CLARITY study").

Our other product candidate LNZ101, a preservative-free eye drop containing aceclidine and brimonidine, showed similar results, including achieving primary and secondary endpoints in both CLARITY 1 and 2, but did not show superiority to LNZ100. Based on these results, we selected LNZ100 as our lead product candidate, for which we submitted a New Drug Application ("NDA") to Food and Drug Administration ("FDA") in August 2024. In October 2024, the FDA assigned a Prescription Drug User Fee Act ("PDUFA") target action date of August 8, 2025, which, if approved, will be immediately followed by a commercial launch in the United States, with the product anticipated to be available in the market in the fourth quarter of 2025. We believe that LNZ100 could be the first and only aceclidine-based product approved by the FDA and would then be eligible for five years of new chemical entity ("NCE") exclusivity in the United States.

It is estimated that there are 1.8 billion presbyopes globally and 128 million presbyopes in the United States. As people age, the crystalline lens in their eyes gradually hardens, resulting in a loss of lens elasticity that reduces the ability of the lens to increase its curvature and refractive power to focus incoming light for near vision onto the retina, known as accommodation. Although the progression of presbyopia is gradual, presbyopes often experience an abrupt change in their daily life as the symptoms become more pronounced starting in their mid-40s, when reading glasses or other corrective aids are suddenly necessary to read text or conduct close-up work. Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an eye care professional ("ECP"), with prescription reading or bifocal glasses or multifocal contact lenses. Currently, the only approved and marketed pharmaceutical treatment for presbyopia is marketed by AbbVie under the brand name Vuity.

Based on data collected in a third-party study commissioned by us in early 2023 that is further described in the section "*Market Opportunity,*" we found that presbyopes have high willingness to use a daily prescription eye drop that improves their near vision throughout the full workday. We expect that there will be a wide range of presbyopes that will be interested in using the eye drops at least four times a week. The large initial demand seen for Vuity during its launch in late 2021 and early 2022 corroborates the market demand for a pharmaceutical option for the treatment of presbyopia. However, despite a promising initial launch, Vuity's user uptake has been limited by reportedly lower-than-expected efficacy and duration of effect across users. Additionally, Vuity use is associated with some side effects, including rare incidences of retinal tears and detachments, induced by the stimulation of the ciliary muscle. These limitations on efficacy and safety subsequently resulted in lower than anticipated prescription refill rates and a label amendment reflecting the risk of retinal tears and detachment specifically associated with Vuity. We believe that our once-daily eye drop, if approved, could become the leading brand for presbyopes, by improving near vision throughout the full workday.

LNZ100 is formulated with aceclidine, a miotic, and is designed to achieve optimal pupil diameter without impacting distance vision, a key limitation of other miotics. Miotics are compounds that cause pupil constriction, or miosis, creating a pinhole effect that enables better focus of incoming light from near objects onto the retina. Research has shown that a pupil diameter below two millimeters (2 mm) is optimal for presbyopia treatment and results in clinically meaningful improvement in near vision. Unlike other miotics such as pilocarpine and carbachol, aceclidine's mechanism of action is pupil-selective, meaning it can activate the iris sphincter muscle and cause miosis of the pupil to a diameter below 2 mm without overstimulating the ciliary muscles that can cause a myopic shift and impair distance vision. As a result, aceclidine does not require any remaining accommodation to improve near vision, broadening its benefits to older presbyopes whose lens has lost this capacity. Therefore, we expect that users may be able to benefit from treatment even as they age from mid-40s to well into their mid-70s and across a broad range of refractive errors, as demonstrated in clinical testing to date.

While aceclidine is new to the United States, it has a long-established history outside of the United States, having been approved in Europe since the 1970s for the treatment of glaucoma and marketed by Merck under the brand Glaucostat, at higher concentrations than in LNZ100 and up to four times a day. Given the known favorable tolerability profile of aceclidine, LNZ100's sole active ingredient, its decades-long use, and unique mechanism of action, we believe LNZ100 has the potential to treat the broadest population of presbyopes and become the category leader.

Given our goal to develop and commercialize the leading, once-daily eye drop for presbyopia that can effectively and safely improve near vision throughout the full workday, we continue to build a robust commercial strategy in the United States and plan to be launch-ready upon potential FDA approval. We retain the flexibility to not only seek commercialization of our product candidates, but to also remain opportunistic in developing, in-licensing or partnering other products or product candidates to further leverage our commercial infrastructure to drive growth and operating leverage.

To execute our vision, we have assembled a team with extensive experience in building successful life science and consumer product companies. Our team has helped launch and commercialize over a dozen ophthalmic products and therapies, including Acuvue, Alphagan P, Combigan, Dailies AquaComfort Plus, Durysta, Latisse, Lumigan, Pred Forte, Refresh, Restasis, Truetear, and Vuity, as well as major consumer-focused brands such as Red Bull, Dermalogica, Botox, Herbalife and Ray-Ban. Members of our management team have held senior positions at Alcon, Allergan, Alvotech, Avanir, Bausch + Lomb, Coca-Cola, Dermalogica, Herbalife, Hospira, Johnson & Johnson, Pfenex, Pfizer, Red Bull, STAAR, VISX, Prometheus Laboratories, Regulus Therapeutics and others. We have also engaged a strong team of medical advisors across the ophthalmology and optometry fields. Our team is further supported by a strong group of investors that share our commitment to helping the millions of people experiencing symptoms of presbyopia in the United States and globally.

LENZ Strategy

We are a pre-commercial biopharmaceutical company focused on the development and commercialization of innovative therapies to improve vision. Our goal is to develop and commercialize the leading, once-daily eye drop for presbyopia that can effectively and safely improve near vision throughout the full workday. We intend to achieve this goal by pursuing the following key strategic objectives:

- **Capitalize on the unique characteristics of aceclidine through LNZ100.** A key part of our strategy was the selection and development of aceclidine as a miotic agent for the treatment of presbyopia. As the only known pupil-selective miotic, aceclidine has a unique mechanism of action that we believe should allow for development as a category leading eye drop for presbyopia. We have since demonstrated our ability to enable rapid onset, degree and duration of near vision improvement with minimal risk of impact to distance vision in multiple clinical

trials. Furthermore, we believe that aceclidine can address both a wider age range of presbyopes from mid-40s to well into their mid-70s, as well as broader refractive range, relative to currently available eye drops.

- **Pursue approval and commercialization of LNZ100.** Based on our positive Phase 3 results, we selected LNZ100 as our lead product candidate. We submitted an NDA for LNZ100 in August 2024 and in October 2024, the FDA assigned a Prescription Drug User Fee Act ("PDUFA") target action date of August 8, 2025. Commercial launch is planned to immediately follow the potential approval in the United States, with the product anticipated to be available in the market in the fourth quarter of 2025. We believe that LNZ100 could be the first and only aceclidine-based product approved by the FDA and would then be eligible for five years of NCE exclusivity in the United States. If approved by FDA, our objective is to best create loyalty and value based on an "all eyes, all day" brand mission.

- **Pursue our focused commercial strategy across U.S. ECPs and presbyopes.** We are focused on targeting and partnering with the estimated 15,000 ECPs who prescribed over 85% of the pharmaceutical presbyopia prescriptions in the United States in 2022 to enable efficient commercialization and rapid adoption of our product. We are currently educating ECPs on the importance of pupil-selective miotics that have a clinical profile that reduces pupil diameter below 2 mm without overstimulating the ciliary muscles with our EYEAMSELECTIVE campaign. If approved, we plan to communicate the efficacy profile of the approved product and highlight the value proposition of an alternative treatment option for presbyopia for ECPs. In parallel, our commercial team will deploy a cost-effective, highly targeted and digitally-focused consumer strategy to identify, target, and build loyalty among presbyopes in the United States. We expect to commercialize through the self-pay healthcare market (without third-party reimbursement), which is strategically advantageous in the United States and enables immediate patient access and volume-based pricing strategies.

- **Continue to build an experienced commercial team with the capabilities of a leading consumer-focused company.** We have built a leadership team with extensive experience across successful life science and consumer product companies who have launched and commercialized over a dozen ophthalmic products and therapies and well-known consumer-focused brands. Our leadership team is complemented by a team of leading medical advisors across the ophthalmology and optometry fields. To ensure immediate commercialization upon the potential approval of LNZ100, we are timing the expansion of our existing commercial capabilities and the establishment of a sales organization of 100 to 150 individuals to coincide with the expected timing of any such approval.

- **Continue to strengthen our intellectual property portfolio.** We have developed and continue to expand a strong portfolio of intellectual property for the treatment of presbyopia with aceclidine-based eye drops. We have patent protection until 2039, at a minimum, in the United States due to a robust intellectual property portfolio underpinned by issued patents. If LNZ100 is approved, we believe that it could be the first FDA-approved aceclidine-based product and would then be eligible for five years of NCE exclusivity in the United States. We plan to actively seek to obtain, where appropriate, the broadest intellectual property protection possible by filing for additional patents or other applicable intellectual property protection covering new or enhanced proprietary technology, including new methods of use, formulations, and dosing regimens. We also rely on regulatory frameworks, trademarks, trade secrets, know-how, and continuing technological innovation and may consider in-licensing opportunities to develop and maintain our proprietary position.

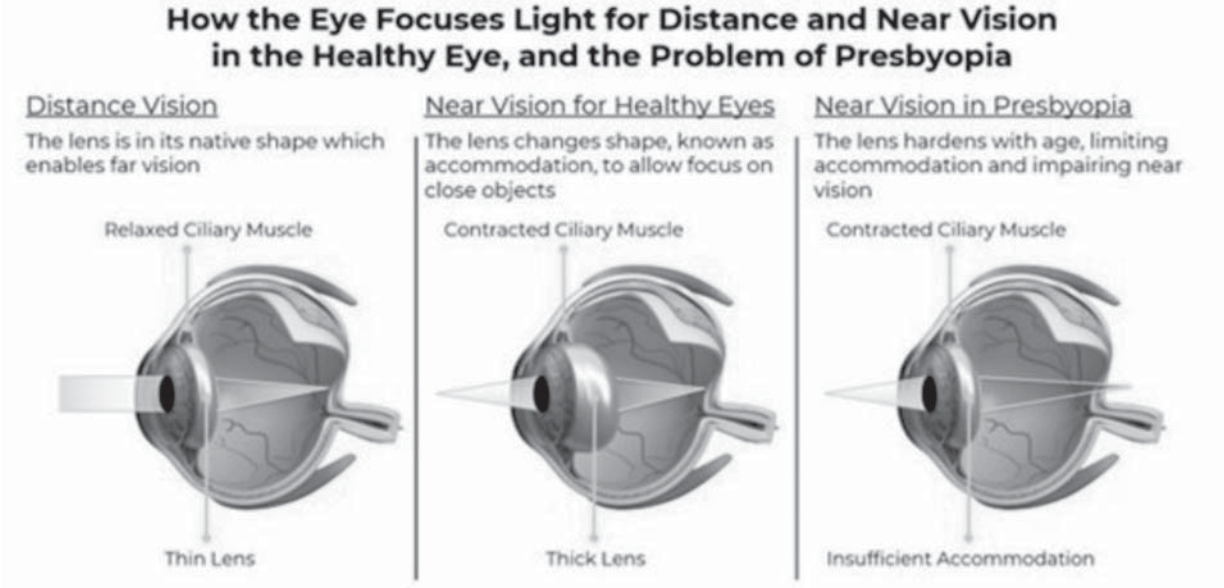
- **Opportunistically evaluate strategic and commercial opportunities.** We are focused on commercializing in the United States on our own. In addition, we have entered into a license and collaboration agreement (the "CORXEL License") with CORXEL Pharmaceuticals (formerly known as Ji Xing Pharmaceuticals Hong Kong Limited) ("CORXEL") to develop product candidates in Greater China and are developing regulatory strategies and intend to opportunistically seek partnerships for Europe, Canada, and other markets. For more details, see the subsection entitled "License and Collaboration Agreement with CORXEL." We believe our presbyopia program, if approved and successful, can serve as a cornerstone for building a suite of ophthalmology biopharmaceuticals. As a result, we may acquire other products or product candidates that we believe can make a substantial impact on vision and yield high user satisfaction. We may seek to maximize the commercial infrastructure and relationships with ECPs that we are currently building for our presbyopia program, to potentially offer a broad portfolio of ophthalmology biopharmaceuticals to our users to drive growth and operating leverage.

Presbyopia

Background

Presbyopia is the inevitable loss of near vision associated with aging. It impacts the daily lives of nearly all people over 45. As people age, the crystalline lens in their eyes gradually hardens and becomes less able to change shape. This loss of elasticity of the lens reduces the ability of the lens to focus incoming light from near objects onto the retina. Adults over age 50 lose on average 1.5 lines of near vision every six years. Although the progression of presbyopia is gradual, presbyopes often experience an abrupt change in their daily life as the symptoms become more pronounced starting in their mid-40s, when reading glasses or other corrective aids are suddenly necessary to read text or conduct close-up work. Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an ECP, with prescription reading or bifocal glasses or multifocal contact lenses. Currently, the only approved and marketed pharmaceutical treatment for presbyopia is marketed by AbbVie under the brand name Vuity.

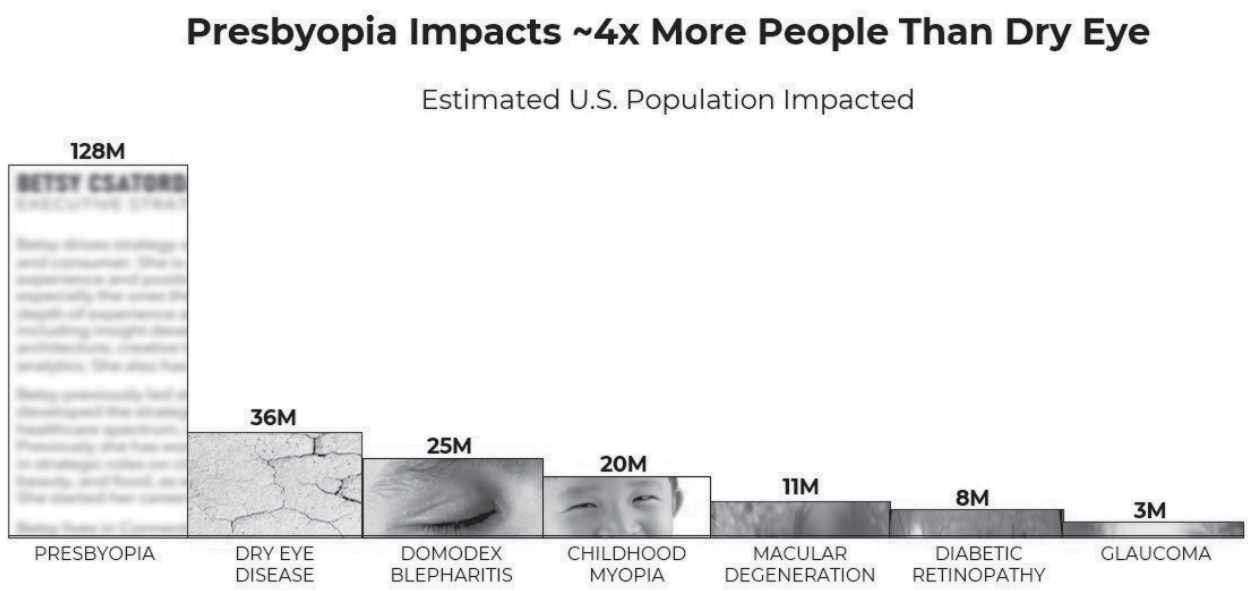
As illustrated in the figure below, contraction of the ciliary muscle allows the flexible lens in a healthy eye (center panel) to increase its curvature and refractive power and focus incoming light for near vision onto the retina in a process known as accommodation. As the lens hardens with age, the presbyopic lens (right panel) loses its flexibility and ability to accommodate and, despite contraction of the ciliary muscles, the incoming light for near vision no longer focuses on the surface of the retina, resulting in blurry near vision.



Market Opportunity

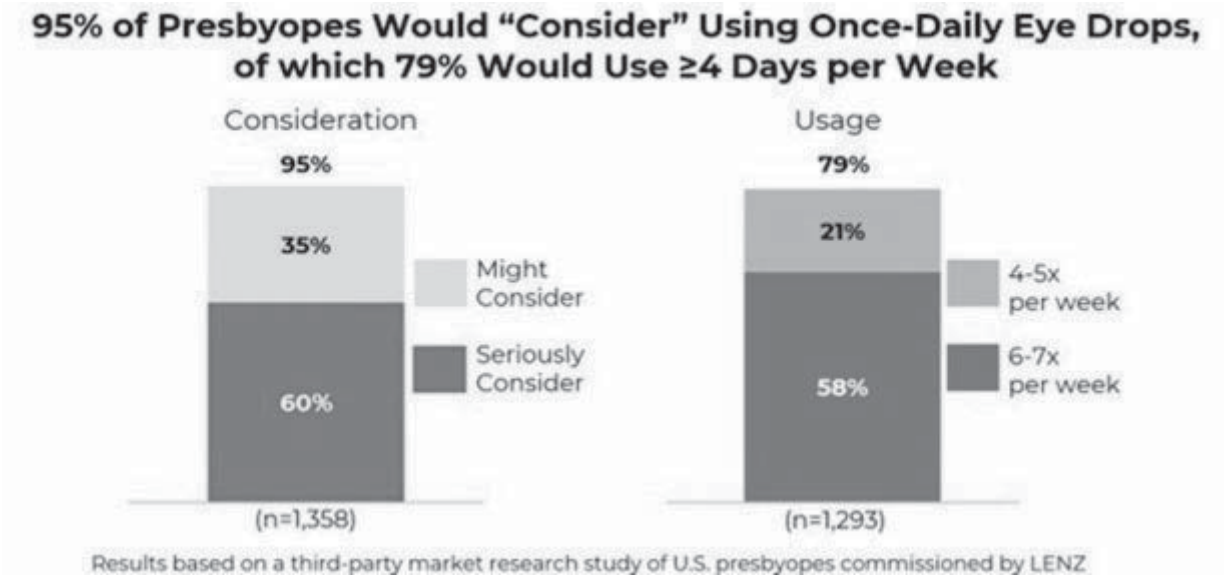
Presbyopia impacts an estimated 1.8 billion people globally and 128 million people in the United States, which makes it the most prevalent ophthalmology indication, outside latent refractive errors. On an addressable population basis, presbyopia is almost four times greater than dry eye disease and three times greater than childhood myopia, macular degeneration, diabetic retinopathy and glaucoma combined. Furthermore, the market opportunity for presbyopia is growing due to the

aging of the general population. As people continue working and stay active longer, they will require effective treatment for presbyopia for near vision acuity in their daily lives.

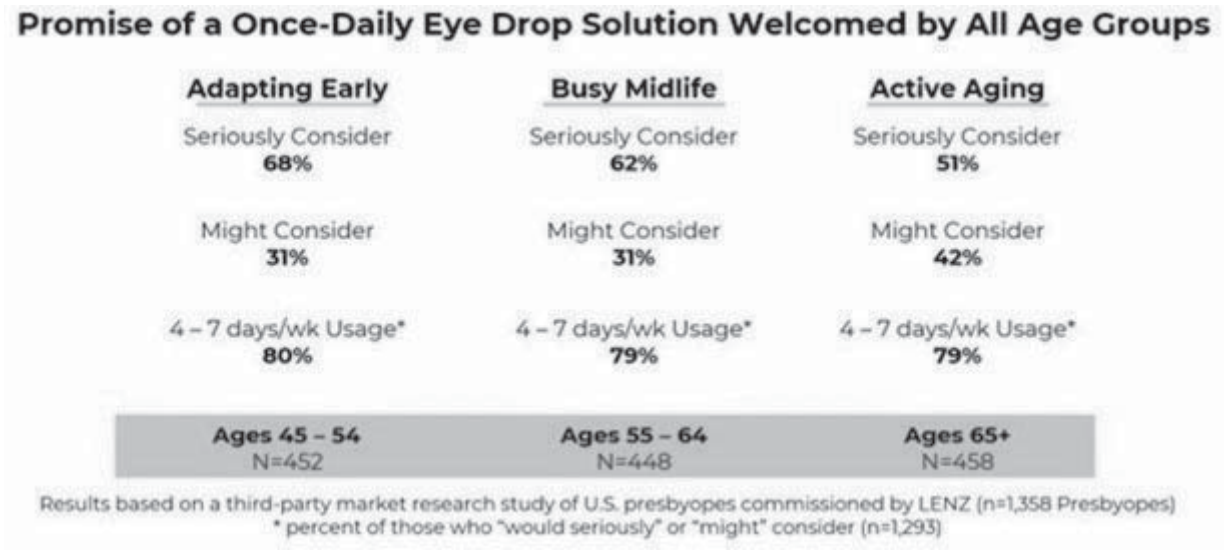


Presbyopia is a consumer-driven and cash pay market that requires intense focus on the needs and desires of presbyopes. We believe that the likely demand for a pharmaceutical option is driven by multiple factors, most notably presbyopes seeking to have a functional visual benefit in their day-to-day life, as well as those that want the cosmetic benefit of not requiring reading glasses. From a functional and cosmetic perspective, we see many similarities to the market dynamics between contact lenses and glasses. The contact lens market has grown to approximately $17 billion globally and approximately $6 billion in the United States in 2022. Contact lens users tend to have strong brand loyalty and the market has shown they are willing to spend out of pocket as an alternative to glasses for a variety of factors, including convenience, a more natural field of vision, enabling an active lifestyle and the ability to look younger. Similarly, over 10 million individuals have elected to complete laser vision correction, such as LASIK, which demonstrates a willingness to undergo elective surgical procedures to improve vision. Additionally, global sales of Botox injections for non-therapeutic applications, such as for cosmetic purposes, were $2.6 billion in 2022, demonstrating a high willingness to pay out of pocket for differentiated pharmaceutical brands. Currently, as people begin to develop presbyopia, they often have to stop using contact lenses, which seldom allow for simultaneous effective distance and near vision correction. A prescription eye drop that can be used in combination with distance correcting lenses can allow patients to stay in their contact lenses longer.

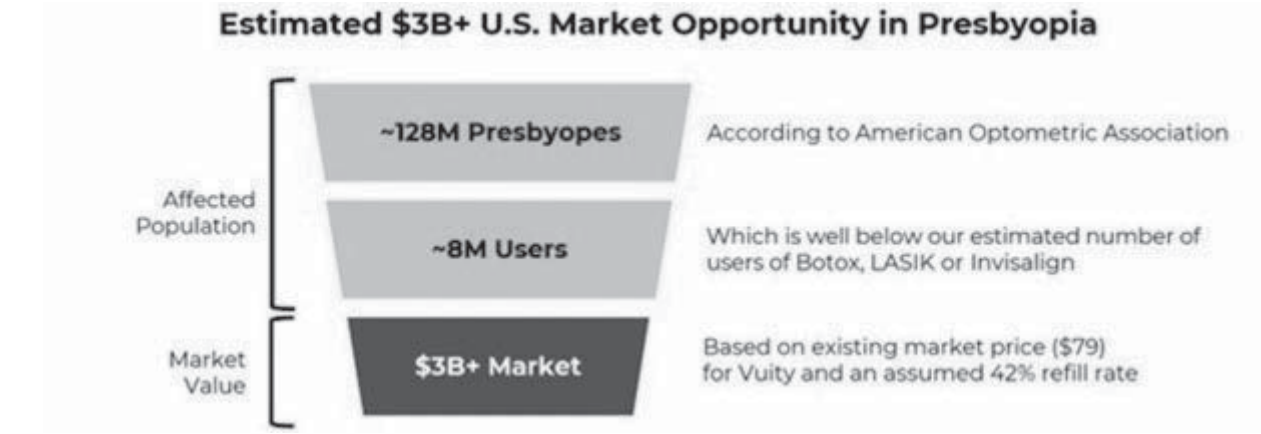
We expect that there will be a wide range of presbyopes that will be interested in using the eye drops at least four times a week as well as a smaller group that will use them on a more episodic basis. In early 2023, we commissioned a third-party consultant to conduct a market research study of at least 1,000 presbyopes in the United States, ranging from ages 45 to 74, through an online survey. The third-party consultant contacted and screened individuals who self-identified to be open to online surveys to ensure the participants satisfied the pre-specified age and near vision acuity requirements and that the group of respondents were balanced in gender and household income. Of the individuals screened, 1,358 individuals were qualified and completed the survey, and approximately 95% indicated they would "consider" using a once-daily prescription eye drop for up to 10 hours of near vision improvement, including 60% who indicated they would “seriously consider” using such eye drop. Of the respondents who also indicated that they would either “seriously consider” or “might consider” such eye drops, 79% indicated they would use such eye drops at least four times a week, including 58% who indicated they would use such eye drop six to seven times a week.



Furthermore, presbyopes indicated potential demand across multiple age cohorts across the following stages, including those adapting early (ages 45 to 54), busy midlife (ages 55 to 64) and active aging (ages 65+). 68% of respondents ages 45 to 54 (n=452) would "seriously consider" and another 31% "might consider" such eye drop, of which 80% (of those who would consider such eye drops) would use such eye drop at least four times a week. For respondents ages 55 to 64 (n=448), 62% would "seriously consider" and another 31% "might consider" such eye drop, of which 79% would use such eye drop at least four times a week, and for respondents ages 65 to 74 (n=458), 51% would "seriously consider" and another 42% "might consider" such eye drop, of which 79% would use such eye drop at least four times a week. This market survey aligns with our patient reported outcomes from our CLARITY Phase 3 study, where 75% of the 223 participants surveyed on the 28th day of receiving LNZ100 indicated interest in continuing to use the eye drops after the study, of which 81% would use the drops at least four times a week.



There is high demand for prescription eye drop-based treatments. In 2022 alone, more than 120,000 unique users paid out-of-pocket for a prescription for Vuity, the first miotic-based eye drop approved by the FDA in late 2021. Furthermore, the market opportunity for presbyopia is growing due to the aging of the general population and as people continue working and stay active longer they will require effective treatment for presbyopia for near vision acuity in their daily lives. Assuming a 6% adoption rate of the addressable presbyope patient population in the United States, we estimate there are eight million potential users in the United States for LNZ100, if approved and marketed, well below our estimate of the number of users of other out-of-pocket products such as LASIK. Using existing market price for Vuity of $79 per prescription and assuming a 42% refill rate (or five refills in a twelve-month period), we estimate a U.S. market opportunity in excess of $3 billion.



Approaches to Manage or Treat Presbyopia and Their Limitations

Currently, the primary options available for the management of presbyopia are limited to reading glasses or multi-focal glasses and contact lenses. The only currently FDA-approved and marketed pharmaceutical treatment for presbyopia is marketed by AbbVie under the brand name Vuity.

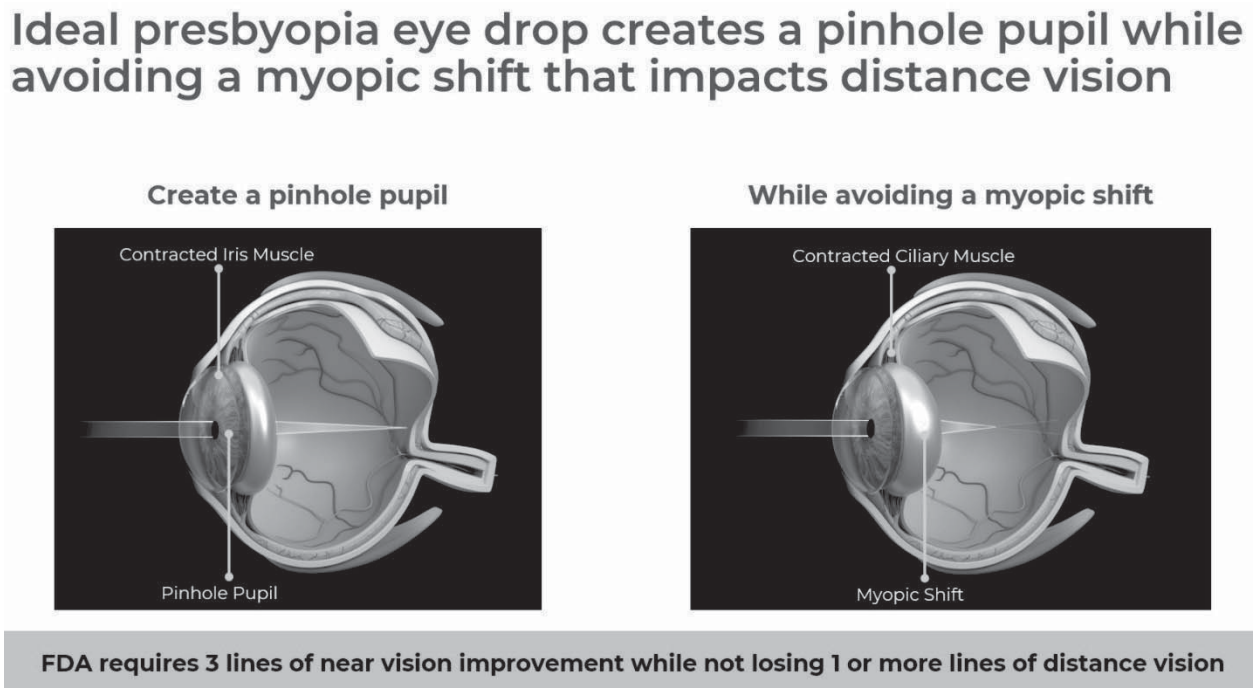
Glasses and Contact Lenses

Over-the-counter or prescription reading glasses ("readers"), prescription bifocal glasses and lenses ("bifocals"), graduated glasses ("transitions"), and multifocal contact lenses are commonly used to correct for presbyopia by focusing near objects on the retina. The additional refractive power that these types of corrective lenses offer can also be combined with other vision corrections in the same prescription lenses. However, users often report dissatisfaction with the inconvenience caused by having to wear and carry glasses or insert and remove contact lenses. There are also undesirable cultural connotations associated with the use of glasses, especially reading glasses, as they can be associated with aging. Additionally, these products require a trade-off between near vision and distance vision, either removing the readers, or looking at different areas of the bifocals.

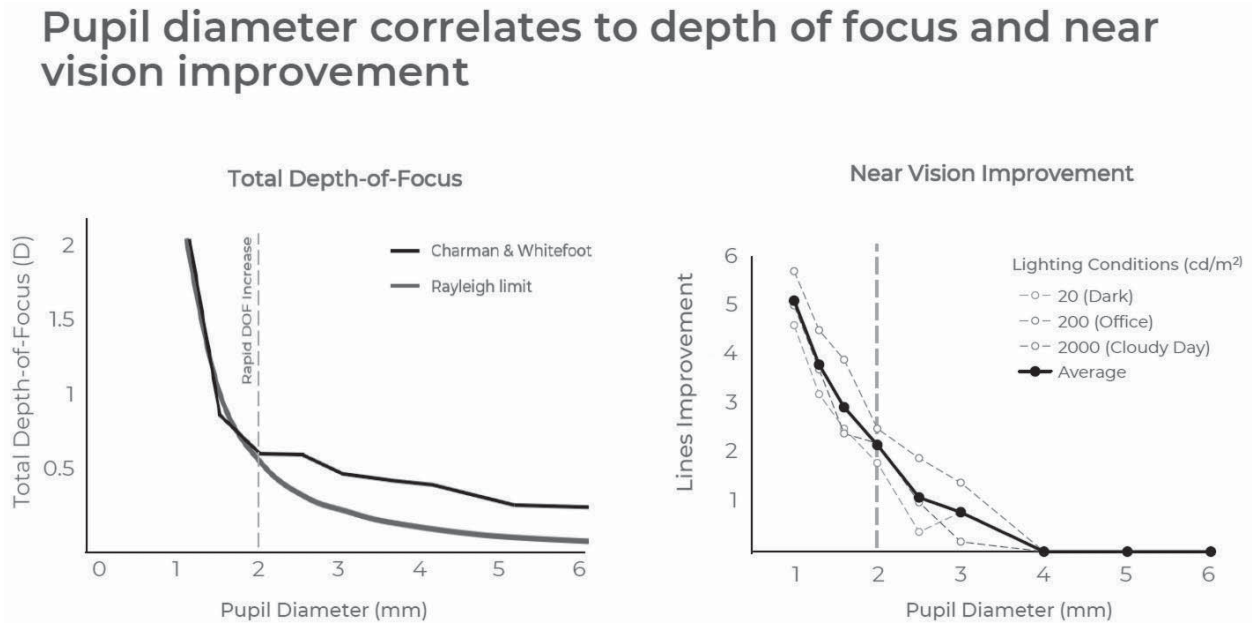
Eye Drops

Eye drops can be an attractive method of treatment for presbyopia, especially when they only need to be administered once daily and effectively improve near vision throughout the full workday. Such an option can obviate the need to carry and wear reading glasses.

Miotics are pharmacological agents that are being developed and commercialized for the treatment of presbyopia. Miotic agents treat presbyopia by creating a pinhole effect to increase the depth of focus and thus improve the ability to see up-close. The pinhole effect is based on an optical effect whereby the depth of focus is inversely correlated with the size of the opening that light travels through. When light passes through a small pinhole or pupil, the rays that hit the outer areas of the eye and would need the most refraction to be focused on one point of the retina are blocked, leaving only the center rays which require minimal refraction to land on the retina to form a clear image. In presbyopes who have minimal accommodation or refraction ability left in their lens, this pinhole effect improves their ability to clearly see objects that are up-close. Because some miotics are historically known to negatively impact distance vision caused by a potential myopic shift associated with stimulation of the ciliary muscle, the FDA has indicated that the clinical endpoint for the approval of eye drops for the treatment of presbyopia is showing three-lines or greater (15 letters) of improvement in near visual acuity as a result of the reduction of the pupil diameter without losing one or more line (5 letters) in distance visual acuity.



Independent, peer-reviewed, academic studies conducted by third parties and summarized by W. Neil Charman in a published editorial[1] have shown that pupil diameter is highly correlated with the depth of focus and that reducing pupil diameters below 2 mm is correlated with a dramatic increase in depth of focus (left graphic below). Similarly, in another independent, peer-reviewed, academic study[2] of near vision improvement conducted by a third party across a variety of lighting conditions, pupil diameters below 2 mm were correlated with two- to five-lines or greater improvement in near visual acuity (right graphic below).



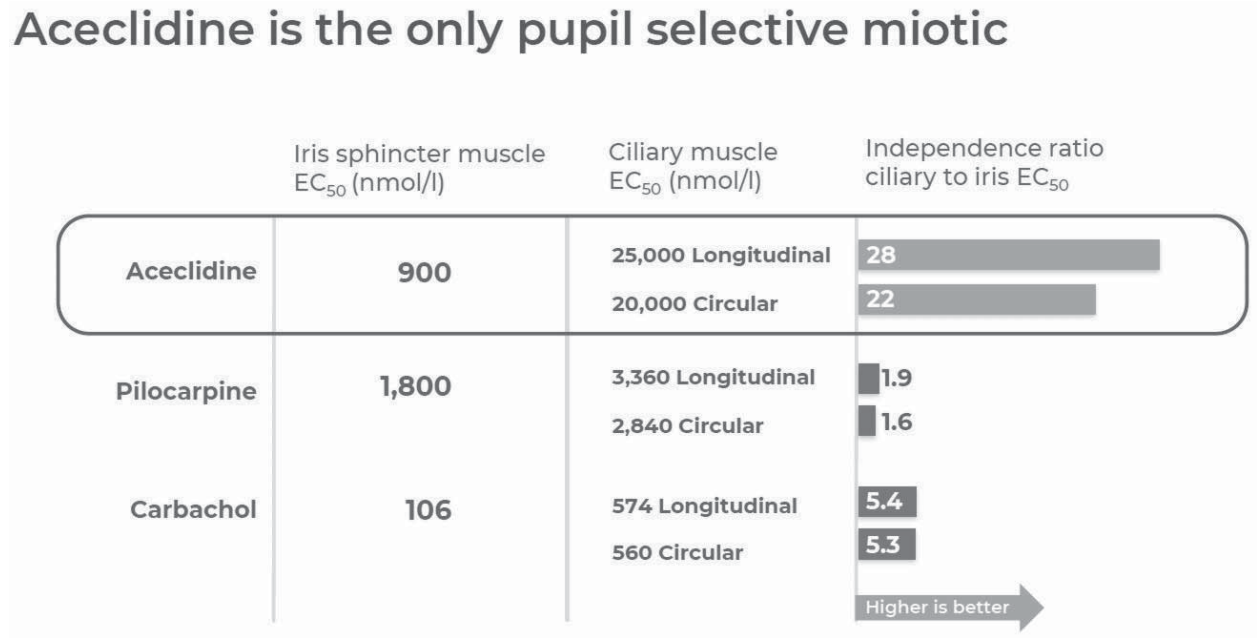
[1] Charman, W.N. (2019), Pinholes and presbyopia: solution or sideshow?. Ophthalmic Physiol Opt, 39: 1-10; Ciuffreda, K.J., Rosenfield, M., Mordi, J., Chen, HW. (2000). Accommodation, age and presbyopia. In: Franzén, O., Richter, H., Stark, L. (eds) Accommodation and Vergence Mechanisms in the Visual System. Birkhäuser, Basel.

[2] Xu, R, Gil, D, Dibas, M, Hare, W, and Bradley, A, The Effect of Light Level and Small Pupils on Presbyopic Reading Performance. Investigative Ophthalmology & Visual Science October 2016, Vol.57, 5656-5664.

Comparison of Miotics

LNZ100 is designed and formulated with aceclidine, a unique miotic, to achieve the below 2 mm pupil diameter without impacting distance vision, a key limitation seen by other miotics. Unlike other miotics such as pilocarpine and carbachol, aceclidine's mechanism of action is pupil-selective, meaning it can activate the iris sphincter muscle and cause miosis without overstimulating the ciliary muscles that can cause a myopic shift and impair distance vision. Due to its pupil-selectivity and its ability to reduce the pupil diameter below 2 mm, aceclidine does not require any remaining accommodation to improve near vision, broadening its benefit to older presbyopes whose lens has lost this capacity.

The potency of a miotic towards the iris sphincter muscle or ciliary muscles can be expressed by EC50, the drug concentration required to produce 50% of its maximal effect, and its degree of pupil-selectivity can be expressed by the independence ratio, the ratio of the EC50 for the ciliary muscles to EC50 for the iris sphincter muscle. Based on a third-party, independent, peer-reviewed, academic study[3] of the selectivity of certain miotics on human intraocular muscles, the independence ratio of aceclidine between the longitudinal ciliary muscle and the iris sphincter muscle can be calculated to be 28, and between the circular ciliary muscle and iris sphincter muscle to be 22, compared to 1.9 and 1.6, respectively, for pilocarpine and 5.4 and 5.3, respectively, for carbachol. The 11 to 17 times higher independence ratio of aceclidine compared to pilocarpine reflects its pupil-selectivity.



In addition to the independence ratio, another independent, peer-reviewed, academic in vivo study[4] looked at the correlation of pupil diameter and visual distortion caused by the myopic shift of various miotics, including aceclidine at a concentration different from LNZ100, which contains 1.75% aceclidine. The distortion is expressed in diopters ("D"), a measurement of focusing strength and distance used widely by ECPs to measure vision. Less change in diopter strength equates to lower disruption to distance vision. The results show that, among 40- to 60-year-old patients, treatment with 2% aceclidine results in reducing the pupil diameter below 2 mm with a negligible myopic shift as compared to 2% pilocarpine and 3% carbachol which drive respectively a -1.3D and -1.15D of myopic shift, respectively. A 1.0D myopic shift changes 20/20 vision to 20/50 distance vision, which can be measured as a decrease of four lines of vision in an eye exam. 20/20 visual acuity means that a person can see at 20 feet what should normally be seen at that distance. 20/50 visual acuity means that a person needs to be at 20 feet to see what a normal person can see at 50 feet. A minimum of 20/40 vision is required to complete a driver's test, so the >1.0D myopic shift caused by pilocarpine and carbachol is enough to make an otherwise able driver now unfit to drive.

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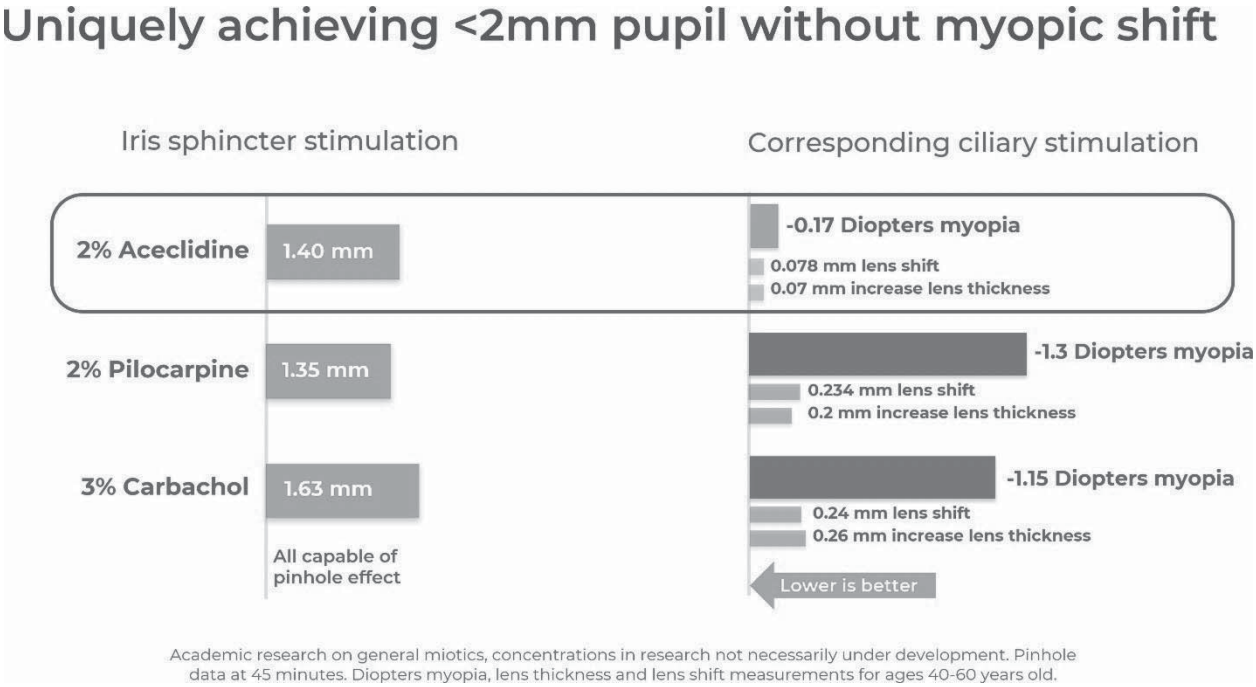
[3] H Ishikawa, L DeSantis, PN Patil, Selectivity of muscarinic agonists including (+/-)-aceclidine and antimuscarinics on the human intraocular muscles, J Ocul Pharmacol Ther. 1998 Aug;14(4):363-73

[4] J. François; F. Goes, Ultrasonographic Study of the Effect of Different Miotics on the Eye Components, Ophthalmologica (1977) 175 (6): 328–338.



When using non-pupil selective miotics, a trade-off is required between improvement in near vision and reduction in distance vision. Because aceclidine is a pupil-selective miotic and can reduce pupil diameter below 2 mm without overstimulating the ciliary muscles, no such compromise is needed.

In addition, contraction of the ciliary muscle by drugs such as carbachol and pilocarpine pulls on a critical area of the eye where these muscle fibers connect to the retina. This constant tugging or pulling by the stimulated ciliary muscle can lead to retinal traction, vitreous detachments, secondary retinal pathology, and in severe cases, retinal detachments. Besides being described in peer-reviewed literature on chronic pilocarpine use for glaucoma, retinal detachments have also been reported by Vuity users. In August 2022, Vuity's label was amended by the FDA to include a warning related to cases of retinal tears and detachments being reported with Vuity specifically, as opposed to miotics in general. In addition, the revised label advises having ECPs examine the retina of all patients prior to initiation of therapy. Despite the potential severity, concerns related to the risk of retinal tears and detachments ranked third behind low efficacy and low duration of efficacy among reasons why survey participants discontinued treatment with Vuity. Given that aceclidine has minimal effect on the ciliary muscle, we believe that the risk of side effects caused by activating the ciliary muscle are also reduced.

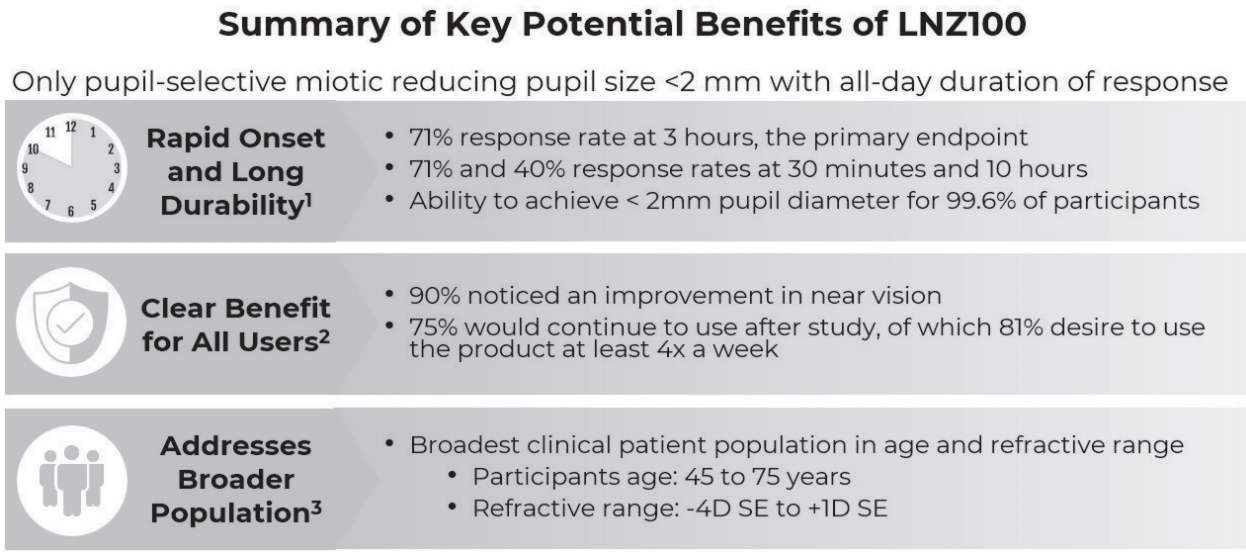
To date, the only approved and marketed pharmaceutical treatment for presbyopia is an eye drop using pilocarpine as the active ingredient that is marketed by AbbVie under the brand Vuity. Despite an initial strong commercial launch with over 120,000 unique user prescriptions filled in 2022, the refill rate has lagged, primarily due to lower-than-expected efficacy and duration. Based on our commissioned survey of 40 ECPs, a majority reported that the barrier to Vuity adoption was that the product either did not work or did not work long enough. An additional survey of 18 optometrists indicated that 66% of their patients did not see duration past four hours despite one of the Vuity clinical trial results showing some effectiveness to the sixth hour. While this aligns with the primary endpoint of at three hours in both Phase 3 trials, the functional benefit was not sufficient enough to support patient needs. The ECPs and their patients identified the low effectiveness and short duration of effectiveness as the key factors for discontinuing use. To resolve the duration issue, AbbVie tested a twice-a-day dosing of the same formulation following initial approval of Vuity and achieved FDA approval for this updated dosing frequency in March 2023. The updated Vuity label now recommends that a second dose may be administered three to six hours after the first dose. Nonetheless, we believe users are looking for a once-daily solution that can last the full workday, which is further supported by the lack of increased Vuity uptake thus far following FDA approval of this label amendment.

Furthermore, Vuity was primarily tested in younger presbyopes ranging from ages 40 to 55 with the average age of 50 in each of its Phase 3 GEMINI trials. Therefore, we expect that older users may experience even less effect as they have little or no remaining accommodation to be activated to improve near vision, and Vuity has not been shown to reduce pupil diameter below 2 mm.

Overall, the current treatment paradigm for presbyopia leaves much to be desired and is largely limited to symptom management or insufficiently effective pharmaceutical options. Evidence from patient surveys on their experience demonstrates patient appetite for a longer-lasting and holistic solution to the treatment of presbyopia.

Our Solution: LNZ100

Our lead product candidate LNZ100 is a single-use eye drop developed to restore loss of near vision associated with presbyopia. LNZ100 contains 1.75% aceclidine as the sole active ingredient and is designed to be a once-daily dose that can potentially provide at least 10 hours of improved near vision. LNZ100 is preservative-free enabling it to be single-use, which is a more convenient delivery method for eye drops for users, and further differentiates us from Vuity. In our CLARITY 1 and CLARITY 2 Phase 3 trials, LNZ100 achieved its pre-specified primary endpoint of three-lines or greater improvement in BCDVA at near without losing one or more lines in distance visual acuity at three hours post-treatment, with a response rate of 71% ($p<0.0001$) compared to 8% for vehicle. Based on these positive results in our Phase 3 trial, we selected LNZ100 as our lead product candidate and submitted an NDA to the FDA in August 2024. In October 2024, the FDA assigned a Prescription Drug User Fee Act ("PDUFA") target action date of August 8, 2025, which, if approved, will be immediately followed by a commercial launch in the United States, with the product anticipated to be available in the market in the fourth quarter of 2025.



1. LNZ100 CLARITY 2 - Vehicle controlled, day 1 results (n=72)

2. Pooled responses of LNZ100 in CLARITY 1 & 2 on day 28 (n=233)

3. CLARITY 1, 2 & 3

Aceclidine

We selected aceclidine, the key ingredient in LNZ100, for presbyopia because of its pupil-selective mechanism of action. The formulation was specifically designed to achieve a below 2 mm pupil diameter without impacting distance vision, a key limitation seen with other miotic agents, such as pilocarpine and carbachol. As evidenced above in the independence ratio and degree of myopic shift, aceclidine as an agent has robust clinical evidence to support the mechanism of action in achieving the key measures to both improve vision in normal and low light, while avoiding a myopic shift that impairs distance vision. Additionally, due to this pupil-selective mechanism of action, aceclidine does not require any remaining accommodation.

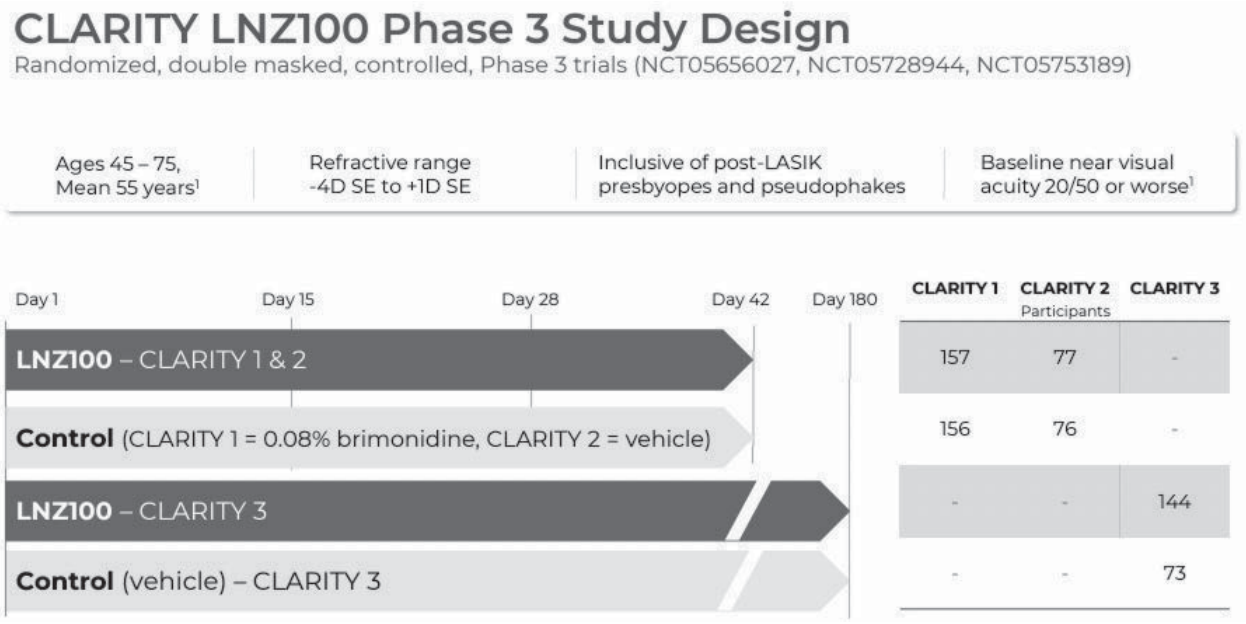
Furthermore, aceclidine has also been used in Europe since the 1970s as an eye drop for treatment of glaucoma and was marketed by Merck under the brand name Glaucostat. Aceclidine was previously marketed in at least twelve European countries, during which time over 400 million doses were administered up to four times a day and at higher concentrations than proposed for LNZ100, and it was well-tolerated with no known reports of tachyphylaxis, which is a sudden decrease in drug response. Aceclidine's pupil-selective mechanism of action and reduced effect on the ciliary muscles made it a less desirable glaucoma treatment because it did not lower pressure as much as other marketed miotics. For the same reasons, it is potentially a better treatment for presbyopia than those other miotics. Though it has been used extensively throughout Europe, aceclidine was never commercialized in the United States, reportedly because the lyophilized, or freeze-dried,

nature of the glaucoma product presented complex supply chain issues. Nonetheless, given aceclidine's broad safety profile, documented through decades of commercial use in Europe, and unique mechanism of action, we believe LNZ100 has the potential to treat a broad population of presbyopes globally as they are ready-to-use, stable liquid formulations of aceclidine.

CLARITY Phase 3 Clinical Trials (the "CLARITY Study")

In April and June 2024, we reported topline and capstone results, respectively, from the CLARITY study, a Phase 3 multi-center, double-masked, randomized, controlled, efficacy and safety study for LNZ100 and LNZ101 for the treatment of presbyopia. The CLARITY study is comprised of three Phase 3 trials:

- ***CLARITY 1*** ("NCT05656027") is a six-week, multi-center, double-masked, randomized trial that evaluated the efficacy and safety of LNZ100 and LNZ101. CLARITY 1 enrolled 469 participants, who were randomized to receive LNZ100, LNZ101 or brimonidine (at a 1:1:1 ratio) bilaterally.
- ***CLARITY 2*** ("NCT05728944") is also a six-week, multi-center, double-masked, randomized, Phase 3 evaluation of the efficacy and safety of LNZ100 and LNZ101 for the treatment of presbyopia. CLARITY 2 enrolled 229 participants, who were randomized to receive LNZ100, LNZ101 or vehicle (at a 1:1:1 ratio) bilaterally.
- ***CLARITY 3*** ("NCT05753189") is a six-month multi-center, double-masked, randomized, Phase 3 long-term safety study of LNZ100 and LNZ101 for the treatment of presbyopia. CLARITY 3 enrolled 361 participants, who were randomized to receive LNZ100, LNZ101 or vehicle (at a 2:2:1 ratio) bilaterally.



1. CLARITY 1 & 2, 25 sites participated in CLARITY 1, 17 sites participated in CLARITY 2 and 40 sites participated in CLARITY 3

The trials enrolled a total of 1,059 participants ranging from ages 45 to 75, and a refractive range of -4.0D SE to +1.0D SE with a baseline near visual acuity of 20/50 or worse. Some participants had previously undergone prior vision correction, such as LASIK, or cataract extraction with lens implant (referred to as "pseudophakia"). At the first visit, the participants were randomly assigned to one of three cohorts, which determined whether the participant would be treated with LNZ100, LNZ101 or the control, which was brimonidine for CLARITY 1 and vehicle for CLARITY 2 and 3. Participants used their assigned treatment agent every day once-daily. An aggregate of 234 participants in CLARITY 1 and 2 combined were assigned to use LNZ100 over the 42-day safety study period and in CLARITY 3, 144 participants assigned to use LNZ100 over the 180-day period, resulting in more than 30,000 LNZ100 treatment days across all three CLARITY trials.

The primary efficacy endpoint in both CLARITY 1 and 2 is the percentage of participants who achieve three-lines or greater improvement in BCDVA at near without losing one-line or more (5 letters or more of distance vision) at three hours post-treatment relative to control. BCDVA in this context refers to the best possible distance vision that an individual's eye can see using corrective lenses. BCDVA is a standard used in ophthalmology and optometry to determine the refractive state of the eye (nearsighted vs. farsighted). Having subjects use appropriate corrective lenses to see well at distance allows

assessment of near vision deficits and comparisons across participants who may have different distance visual acuity. Additionally, we believe that using BCDVA provides the most accurate representation of the impact of the product candidate as it is intended to be used together with any distance corrective lenses that a user may need.

Each participant was monitored and visual acuity was measured by a standardized eye test at certain timepoints from 30 minutes to 10 hours post-treatment, provided that on Day 15, efficacy in CLARITY 1 and 2 was measured over shorter period of 3 hours and on Day 42, only safety parameters were measured. We also measured the impact on distance vision in normal and low light at various timepoints. Participants also completed on Day 28 a patient-reported outcome questionnaire, and other assessments and measurements, such as the pupil diameter, which is considered a biomarker for near vision improvement, were also taken.

Summary Trial Results

As shown in the figure below (with all p-value <0.0001), both LNZ100 and LNZ101 achieved the primary endpoint of three-lines or greater improvement in near visual acuity at three hours post-treatment, without losing one or more lines in BCDVA, in both CLARITY 1 and CLARITY 2. In the vehicle-controlled CLARITY 2, 71% (p<0.0001) and 91% (p<0.0001) of participants receiving our lead product candidate LNZ100 achieved three- and two-lines or greater improvement, respectively, compared to 12% and 22% for vehicle on Day 1. For the brimonidine-controlled CLARITY 1, 64% (p<0.0001) and 83% (p<0.0001) of participants receiving LNZ100 achieved three- and two-lines or greater improvement, respectively.

		CLARITY 1			CLARITY 2		
		LNZ100	LNZ101	Brimonidine	LNZ100	LNZ101	Vehicle
30 Min (Onset)	3 line	72%	56%	14%	71%	63%	12%
	2 line	87%	78%	38%	91%	72%	22%
3 Hour (Primary for ≥ 3-line)	3 line	64%	49%	12%	71%	57%	8%
	2 line	83%	70%	29%	91%	81%	24%
10 Hour (Duration)	3 line	27%	37%	6%	40%	39%	5%
	2 line	61%	59%	21%	69%	67%	21%

Day 1 Based on full analysis set.

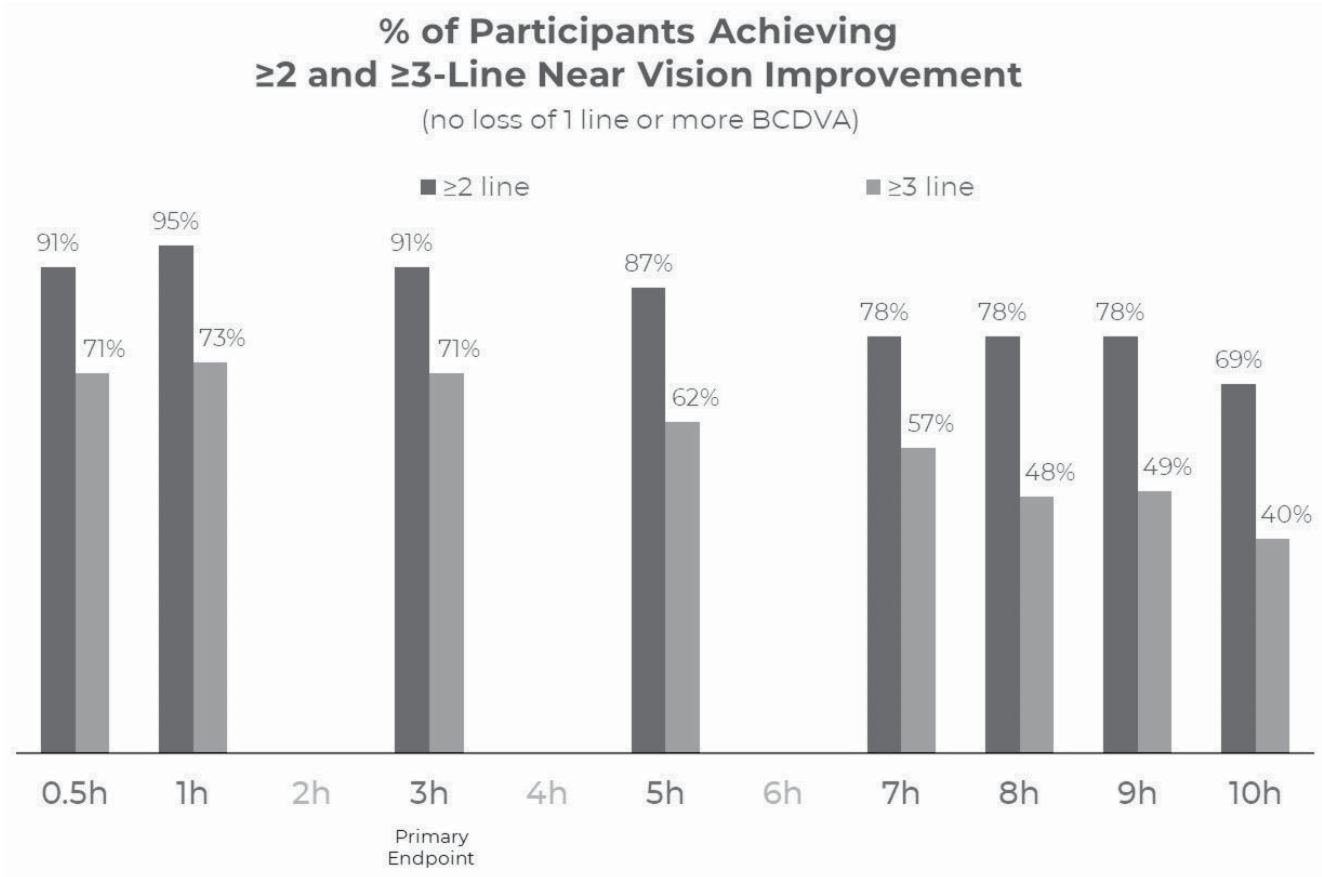
In the description of the results of our clinical trials herein, p or p-values represent the probability that random chance caused the result (e.g., p<0.0001 means that there is less than a 0.01% probability that the difference between the vehicle and the treatment groups is due to random chance). A p-value ≤ 0.05 is a commonly used criterion for statistical significance and is usually considered supportive of a finding of efficacy by regulatory authorities.

Our other product candidate LNZ101 showed similar results, including achieving primary and secondary endpoints in both CLARITY 1 and 2, but did not show superiority to LNZ100.

LNZ100: Vehicle-controlled CLARITY 2 Efficacy Results

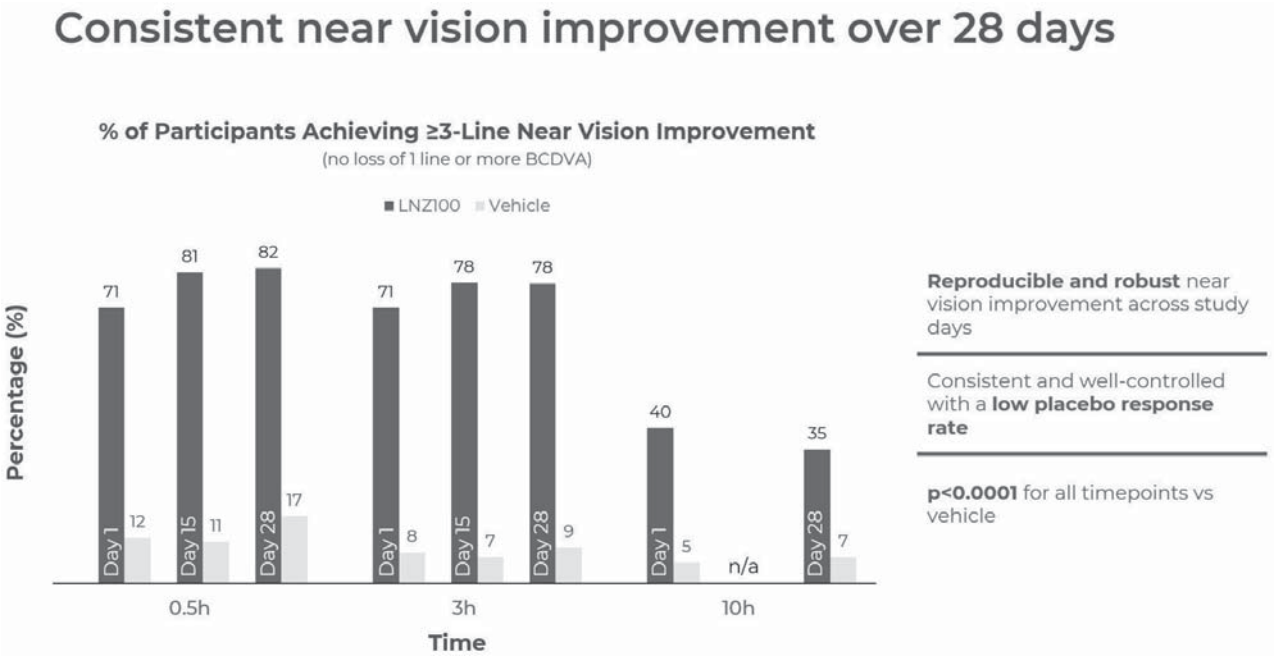
LNZ100 showed rapid onset with response rates of 71% (p<0.0001), at 30 minutes post-treatment, the earliest timepoint measured, and LNZ100 maintained statistical significance of three-lines or greater improvement in near visual acuity compared to vehicle for all timepoints measured. At 10 hours post-treatment, the last measured timepoint, 40% (p<0.0001) of users dosed with LNZ100 maintained a three-lines or greater improvement in near visual acuity compared with 5% of users dosed with vehicle.

LNZ100 also achieved the pre-specified secondary endpoint of two-lines or greater improvement in BCDVA at near without losing one or more lines in distance visual acuity at three hours post-treatment, with a response rate of 91% (p<0.0001) compared to 24% for vehicle. LNZ100 also showed rapid onset with response rates of 91% (p<0.0001) compared to 22% for vehicle at 30 minutes post-treatment, the earliest timepoint measured, and maintained statistical significance of two-lines or greater improvement in near visual acuity compared to vehicle for all timepoints measured. At 10 hours post-treatment, the last measured timepoint, 69% (p<0.0001) of users dosed with LNZ100 maintained a two-lines or greater improvement, compared to 21% of users dosed with vehicle. Standard clinical practice considers two-lines or greater improvement in near visual acuity to be clinically meaningful.



CLARITY 2, day 1 results, full analysis set. Near visual acuity was assessed at 40cm using Monocular BCDVA (best-corrected distance visual acuity), 3-line placebo 5-12%, 2-line placebo 17-24%

We believe the clinical benefit of LNZ100 is consistent, robust and reproducible. As shown in the figure below, participants experienced similar near vision improvement across the four-week study period with 81% ($p<0.0001$) and 82% ($p<0.0001$) response on Day 15 and Day 28, respectively, at 30 minutes post-treatment compared to 71% ($p<0.0001$) on Day 1, with 78% ($p<0.0001$) and 78% ($p<0.0001$) response on Day 15 and Day 28, respectively, at three hours post-treatment compared to 71% ($p<0.0001$) on Day 1, and 35% ($p<0.0001$) on Day 28 at ten hours post-treatment compared to 40% ($p<0.0001$) on Day 1. On Day 15, no measurements were taken beyond 3 hours post-treatment.



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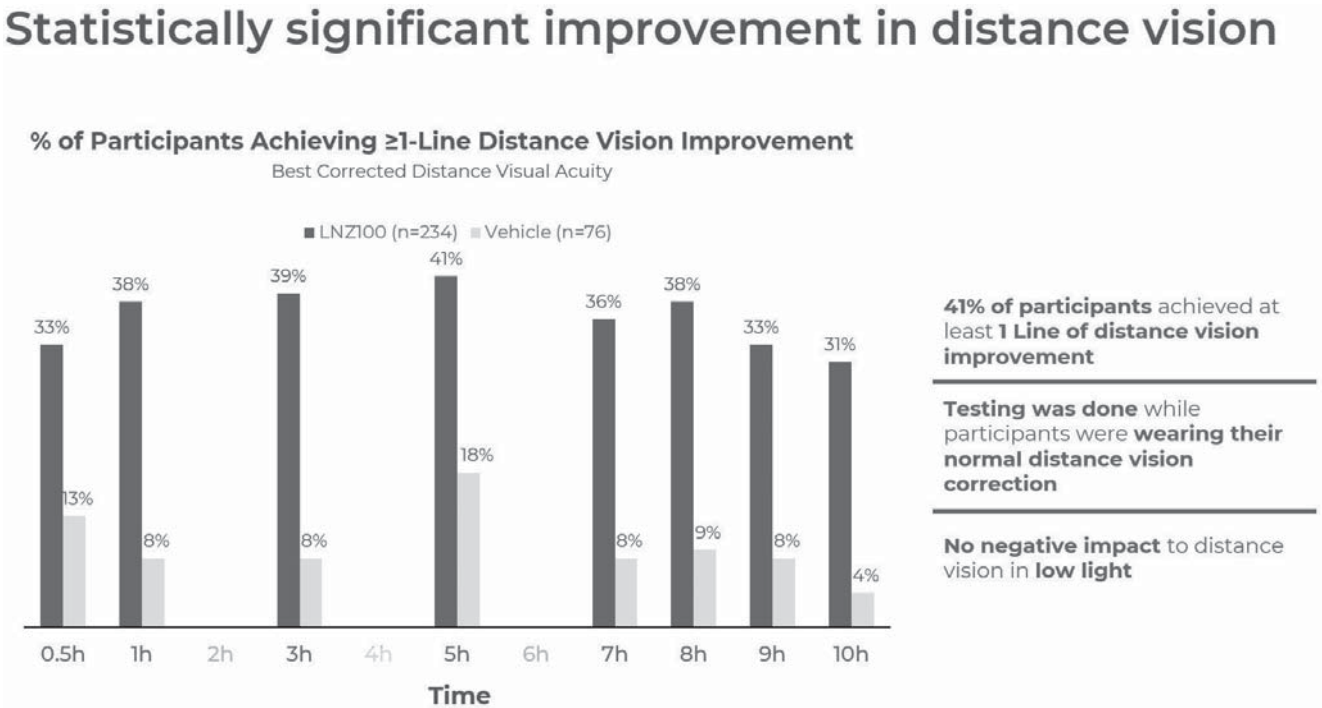
LNZ100 had no adverse impact on distance vision across all timepoints measured including 30 minutes and 1, 3, 5, 7, 8, 9 and 10 hours post-treatment in normal light conditions and 1, 3 and 10 hours in low light conditions. In fact, at normal light, there was statistically significant improvement of two to four letters of distance vision at all time points. We believe these improvements are due to pupil constriction which block the peripheral light that is most likely to travel across aberrations, or nuanced distortions within the eye's structure, and cause blurry vision.

We believe the reduction in distance vision observed in the placebo group is due to progressive eye fatigue across multiple assessments for each timepoint measurement.



CLARITY 1 & 2, day 1 results, full analysis set. Near visual acuity was assessed at 40cm using Monocular BCDVA (best-corrected distance visual acuity), all p-values ≤ 0.0007

LNZ100: Pooled Safety Analysis

Across all three CLARITY trials, an aggregate of 378 participants received LNZ100. LNZ100 was well tolerated with no drug-related serious adverse events in the more than 30,000 treatment days across all CLARITY trials. The only reported adverse events with an incidence at 5% or more were instillation site pain, visual impairment, hyperemia and headaches.

95% of all the adverse events experienced were mild. Of participants that reported a headache, 33% no longer experienced such transient response to installation after day 2 of product use, 44% after day 7 and 70% after day 28.

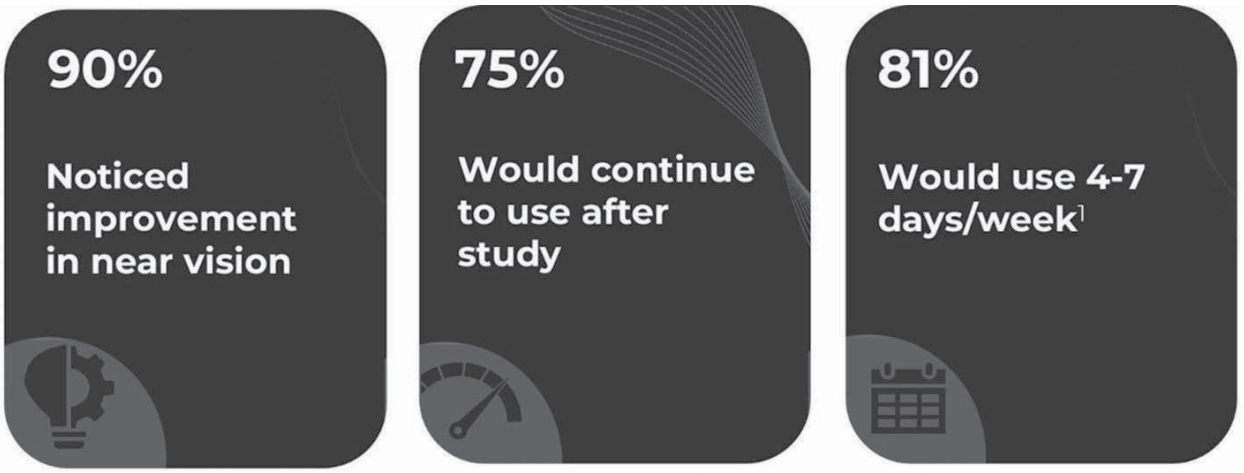
Pooled analysis of CLARITY 1 & 2

	LNZ100 N=234 n(%)		Vehicle N=76 n(%)
Ocular AEs			
Instillation site irritation *(mild stinging upon instillation)*[1]	47 (20.1%)	100% mild	8 (10.5%)
Visual impairment *(mild dimness)*[1]	31 (13.2%)	100% mild	1 (1.3%)
Hyperemia *(mild eye redness)*	21 (9.0%)	100% mild	2 (2.6%)
Non-Ocular AEs			
Headache	27 (11.5%)	89% mild 7% moderate	3 (3.9%)

33% no longer experienced such transient response to installation after day 2 of product use, 44% after day 7 and 70% after day 28[2]

LNZ100: Patient Reported Outcomes in CLARITY 1 and 2

On Day 28, each participant in CLARITY 1 and 2 completed a patient-reported outcome questionnaire regarding their experience across the prior 30 days. 90% of participants who received LNZ100 and were surveyed (n=223) indicated that they noticed improvement in near vision and 75% wished to continue to use drops after the study, of which 81% indicated that they were likely to use the drops at least four times a week.



Pooled responses of LNZ100 in Clarity 1 & 2 on day 28, n=223. Based on patient questionnaire "Reflecting on the last 30 days..." "Have you noticed an improvement in your near vision/ability to see up close after taking the drop?", "Would you be interested in continuing to use these eye drops after the study?", "How many days a week are you likely to use these eye drops?" 1. % of participants that indicated 'yes' to "Would you be interested in continuing to use these eye drops after the study?"

Having successfully completed all three CLARITY trials, we submitted an NDA for LNZ100 to the FDA in August 2024 with a potential approval in mid-2025 and launch target date, if approved, in the second half of 2025.

Currently Marketed Eye Drops

Vuity was approved as the first pharmaceutical treatment for presbyopia in October 2021. Despite enthusiasm for the concept of an eye drop improving near vision throughout the full workday, Vuity's reportedly lower than expected

efficacy, duration and adverse event profile, contributed to lower than anticipated prescription refill rates. To resolve the duration issue, AbbVie tested a twice a day dosing of the same formulation following initial approval of Vuity and achieved FDA approval for this updated dosing frequency in March 2023. In addition, Vuity's label was amended to include a warning and precaution related to rare cases of retinal detachment and retinal tears reported with miotics, including Vuity. Vuity remains commercially available, but is no longer promoted.

Vuity's FDA approval in October 2021 was based on results from two 30-day pivotal, Phase 3, randomized, double-masked, vehicle-controlled trials, GEMINI 1 and GEMINI 2. A total of 750 participants aged 40 to 55 with presbyopia with best distance correction inclusion criteria of sphere ranging from -4.00D to +1.00D (inclusive) and cylinder ≤ ±2.00D were randomized in these two trials and patients were instructed to administer one drop of Vuity or vehicle daily in each eye. In both trials, a statistically significant but minority portion of participants (31% of patients in GEMINI 1 and 26% of patients in GEMINI 2) showed three-lines or greater improvement in Distance Corrected Near Visual Acuity ("DCNVA") which is equivalent to BCDVA measured at 40 centimeters, without losing more than 1 line of Corrected Distance Visual Acuity ("CDVA") at three hours post-treatment (the last statistically significant timepoint in GEMINI 2) on Day 30. The peak response rate at 1 hour post-treatment relative to vehicle in GEMINI 2 is 25%.

Although our CLARITY trials focused on enrolling presbyopes from ages of 45 to 75, the GEMINI trials enrolled a younger patient population ranging from ages 40 to 55 with an average age of 50 in each trial and predominantly emmetropic subjects (76% were emmetropes with sphere ranging from –0.50 D to +0.75 D and cylinder: ≤0.75 D). Moreover, data from the GEMINI 1 trial demonstrated that Vuity could not achieve a pupil diameter below 2 mm at any timepoint over the course of 10 hours post-treatment.

Commercialization

Our objective is to commercialize a product that we believe will most effectively meet the needs of the widest range of presbyopes and best create loyalty and value based on an "all eyes, all day" brand mission. Based on the Phase 3 CLARITY results, we selected LNZ100 as our lead product candidate to prepare for commercialization and submitted an NDA in August 2024. In October 2024, the FDA assigned a Prescription Drug User Fee Act ("PDUFA") target action date of August 8, 2025, which, if approved, will be immediately followed by a commercial launch in the United States, with the product anticipated to be available in the market in the fourth quarter of 2025.

We are focused on commercializing in the United States on our own. In addition, we are developing regulatory strategies and intend to opportunistically seek partnerships for Europe, Canada, and other markets. In 2022, we entered into the CORXEL License to develop product candidates and products containing aceclidine and brimonidine for the treatment of patients with presbyopia in Greater China. For more details, see the subsection entitled "License and Collaboration Agreement with CORXEL." We are continuing to evaluate potential partnerships to pursue regulatory and commercialization in other markets.

Experienced Commercial Team

We plan to use the cash and cash equivalents from the Merger, the March 2024 PIPE Financing and the July 2024 PIPE Financing, in part, to continue to build the sales and marketing infrastructure required to successfully commercialize our lead product candidate in anticipation of FDA approval.

We have substantially completed hiring of all senior leadership roles in the commercial team, including adding industry veterans with extensive experience in the pharmaceutical space. Our commercialization effort is led by our Chief Commercial Officer Shawn Olsson, who manages a team of seasoned sales and marketing executives, who have helped launch and commercialize over a dozen ophthalmic products and therapies, including Acuvue, Alphagan P, Combigan, Dailies AquaComfort Plus, Durysta, Lumigan, Pred Forte, Refresh, Restasis, Truetear, and Vuity, as well as major user-focused brands such as Botox, Dermalogica, Herbalife, Ray-Ban and Red Bull.

To ensure immediate commercialization upon the potential approval of our lead product candidate, we are timing the expansion of our existing commercial capabilities and the establishment of a sales organization of 100 to 150 individuals to coincide with the expected timing of such potential approval.

Proactive Execution of Commercial Strategy

Our commercial team has already made substantial progress in executing on our foundational commercial strategy, including selection and submission of a proprietary name, selection of an advertising agency, development of sales organization size and design, ECP segmentation and targeting, selection of a sampling vendor, selection of an e-pharmacy

partner, selection of our third-party logistics ("3PL") provider, obtaining relevant state licensures, and setting up a customer relationship management system.

ECP-Focused Sales Strategy

We plan to launch with our own sales organization in the United States, which we envision will expand to 100 to 150 individuals. Our strategy involves initially targeting and partnering with the estimated 15,000 ECPs who prescribed over 85% of the pharmaceutical presbyopia prescriptions in the United States in 2022. Additionally, we will expand beyond the initial set of high-prescribing ECPs by demonstrating the unique value proposition of providing a treatment for presbyopia. We will leverage our strong relationships with key opinion leaders to facilitate awareness regarding the importance of reducing the pupil diameter below 2 mm and using a pupil-selective miotic to avoid overstimulating the ciliary muscle. Our sales strategy will empower ECPs to be actively involved in the diagnosis and treatment of presbyopia for the aging population, including a consumer sampling program described in "Consumer Sampling Strategy." If our product is approved, we expect to see more ECPs begin to prescribe prescription-based eye drops, which will drive more patients requesting prescriptions who otherwise may not have sought appointments with ECPs for other eye conditions. If we elect to expand our product offerings in the future, we will be able to leverage a larger community of prescribing ECPs to support product uptake.

Consumer Focused Strategy

If the NDA is approved, we also plan to deploy, in parallel, a cost-effective, highly targeted and digitally-focused consumer strategy designed to efficiently target the early adopters among the estimated 128 million presbyopes in the United States. This will drive user awareness and interest through digital, offline, and social marketing to create brand awareness, develop brand loyalty, and eventually enable long-term brand durability and recognition. Our strategy involves driving consumer awareness of an effective treatment of presbyopia with prescription eye drops and creating an emotional connection to returning to life prior to presbyopia. A key component to consumer experience is our sampling program that will provide a free option for potential users to try as described in "Consumer Sampling Strategy". To meet the long-term usage needs of young and old presbyopes, we plan to offer both retail access and collaborate with e-pharmacy vendors to provide easy and convenient prescription fulfillment and home delivery.

Consumer Sampling Strategy

If the NDA is approved, we intend to establish a consumer sampling program that will be a key component to the consumer experience and reduce barriers to trial and adoption. We believe LNZ100 is highly suitable for a consumer sampling program as users in our clinical trials have experienced rapid onset and noticeable near vision improvement after a single dose. Our commercial team has already engaged with vendors for storage and distribution of samples to support both field representative delivery and mail delivery to ECPs. With in-office samples, a potential customer can try the product at the ECP's offices or at home without having to fill a prescription. The sampling program is a strategy for potential customers to experience near vision improvement of the product at no-cost, which can accelerate customer acceptance and desire to use the product.

Self-Pay

If the NDA is approved, we intend to commercialize our product through the self-pay healthcare marketplace, without third-party reimbursement. We believe pursuing a non-reimbursed product strategy will allow for strategic advantages in the United States, including immediate user access without having to negotiate with formularies and insurers, pricing and marketing flexibility, and without being subject to the Inflation Reduction Act of 2022.

Manufacturing

Our LNZ100 product candidate is a ready-to-use, self-administered, once-daily eye drop that is a formulation of aceclidine hydrochloride together with commonly used excipients. LNZ100 is delivered via a single-use Blow-Fill-Seal ("BFS") container and is preservative-free.

We do not currently own or operate facilities for manufacturing, storing, distributing or testing our product candidates and products. We currently use different contract manufacturing organizations ("CMOs") to supply our active pharmaceutical ingredient ("API"), aceclidine hydrochloride, and formulate and fill LNZ100, our drug product ("DP") submitted for approval to the FDA. All of our CMOs, including analytical and distribution chain partners, have been inspected by the FDA for compliance with current Good Manufacturing Practices ("cGMP") regulatory guidelines. A Drug Master File ("DMF") is on file with the FDA for the API. Commercial supply agreements have been secured with our API suppliers with commercially reasonable terms to meet our planned clinical and commercial activities, and we are continuing to

negotiate and enter into additional contracts for secondary supply. Similarly, we have secured both clinical and commercial-scale supply. Our manufacturing and testing processes are common to the pharmaceutical and ophthalmic industry, and we have identified and are working with additional API suppliers for aceclidine hydrochloride and identified secondary DP manufacturers with similar equipment for additional commercial supply. We have initiated process transfer activities for both the API suppliers and DP manufacturers.

We have completed contracting with our 3PL provider. We expect that the 3PL provider will support cold storage commercial warehousing and distribution activities, the drug product will ship directly from the DP CMO via a qualified shipping vendor at controlled cold storage temperature to the 3PL provider, and the 3PL provider will maintain inventory and comply with the Drug Supply Chain Security Act ("DSCSA") requirements for product serialization and track and trace capabilities.

Competition

The biotechnology, pharmaceutical, and ophthalmology industries are characterized by rapidly advancing technologies, intense competition, and a strong emphasis on intellectual property. We believe that our product candidates, intellectual property portfolio, business strategy, internal capabilities, and experience provide us with competitive advantages. However, we face competition from many different sources, including large and specialty pharmaceutical, biotechnology and ophthalmology companies, academic research institutions and governmental agencies, and public and private research institutions. Any product candidate we develop and commercialize will have to compete with existing therapies as well as therapies currently in development and that may be developed in the future. We believe that the key competitive factors affecting the success of any of our product candidates will include efficacy, safety profile, convenience, cost, level of promotional activity devoted to them and intellectual property protection.

As LNZ100 is being developed for the treatment of presbyopia, we may face competition from a variety of companies developing or marketing other pharmaceutical presbyopia therapies, including AbbVie (formerly Allergan), AceVision, Bausch & Lomb, Eyenovia, Glaukos, Johnson & Johnson, Orasis, OSRX Pharmaceuticals (an affiliate of Ocular Science), Viatris (through licensing of Ocuphire's presbyopia products), Tenpoint Therapeutics, and Vyluma. A large majority of the new pharmaceutical drops are miotic. Other than Tenpoint which is developing a carbachol-based eye drop, most of the drops in clinical development are based on pilocarpine, similar to Vuity.

Many of our current or potential competitors, either alone or with their collaboration partners, have substantially greater financial resources and may have greater expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical, biotechnology, and ophthalmology 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 strong competitors, particularly through collaborative arrangements with large and established companies. These companies also compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies and intellectual property complementary to, or necessary for, our product candidates. Because of the size of the ophthalmology and vision correction markets and the high growth profile of such markets, we anticipate that companies will dedicate substantial resources to developing competing products. We believe that the principal competitive factors in these markets will include:

- improved outcomes for users and other product quality attributes;
- product innovation;
- acceptance by ECPs;
- ease of use and reliability;
- regulatory status and speed to market; and
- marketing and product price.

We expect that any such treatment options that are successfully developed could eventually be available both within and outside the United States. Consolidations and mergers and acquisitions in the pharmaceutical, medical device, and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Our commercial opportunity could be reduced or eliminated if our competitors develop or market products or other novel therapies that are more effective, safer, or less costly than our current or future products, or obtain regulatory approval for their products more rapidly than we may obtain approval for our products. Our success will also be based in

part on our ability to identify, develop and manage a portfolio of products that are safer and more effective than competing therapies.

Intellectual Property

We have developed and continue to expand our patent portfolio for the treatment of presbyopia with LNZ100. As of December 31, 2024, we hold at least 44 issued patents. 16 of these patents are in the United States, and 28 of these patents are in other countries throughout the world, with granted patents in Australia, Brazil, Canada, China, India, Japan, Korea, Mexico, and Singapore. These patents are expected to expire between 2034 and 2041. Our patents cover compositions for and methods of treating presbyopia with LNZ100. We also have at least 83 pending applications, with patent applications filed in Australia, Bolivia, Brazil, Canada, China, Europe, Hong Kong, India, Japan, Korea, Macao, Mexico, Singapore, Taiwan, the United States, Uruguay, and the Patent Cooperation Treaty system.

Patents related to LNZ100 may be eligible for patent term extensions in certain jurisdictions, including up to five years in both the United States and Europe, if granted, upon approval of commercial use of the corresponding product by a regulatory agency in the jurisdiction where the patent was granted.

No drug product containing aceclidine, an active pharmaceutical agent of LNZ100, has yet been approved in the United States under section 505(b) of the Federal Food, Drug and Cosmetic Act, for any indication. Therefore, we believe LNZ100, if approved, could be eligible for five years of New Chemical Entity (NCE) exclusivity in the United States upon such approval so long as no other drug product containing aceclidine is approved by the FDA before approval of such product candidate. Further, as LNZ100 has not previously been approved in Europe for any indication, LNZ100 may be eligible for eight years of data exclusivity, as well as two years of market exclusivity upon approval in Europe. In Europe, an additional one year of exclusivity may be obtained if LNZ100 is approved for a new indication that provides a significant clinical benefit. In addition to patent protection, we rely on trade secret protection and know-how to expand our proprietary position around our chemistry, technology, and other discoveries and inventions that we consider important to our business. We also seek to protect our intellectual property in part by entering into confidentiality agreements with companies with whom we share proprietary and confidential information in the course of business discussions, and by having confidentiality terms in our agreements with employees, consultants, scientific advisors, clinical investigators, and other contractors. We also require our employees, commercial contractors, and certain consultants and investigators, to enter into invention assignment agreements that grant us ownership of any discoveries or inventions made by them while in our employ.

License and Collaboration Agreement with CORXEL

In April 2022, we entered into the CORXEL License. Under this agreement, we granted CORXEL (i) an exclusive (even as to us), royalty-bearing, nontransferable license, with the right to grant sublicenses (our prior written consent is required for sublicenses for commercialization purposes), under the technology we control including know-how and patents for CORXEL to develop, use, import and sell pharmaceutical products containing aceclidine and brimonidine for the treatment of presbyopia in humans in mainland China, Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan (collectively, "Greater China"), (ii) a non-exclusive, nontransferable license, with the right to grant sublicenses, under the same technology we control to manufacture the same products for the same use in Greater China, and (iii) a first right of negotiation for CORXEL to license any other product that we develop or commercialize containing aceclidine or brimonidine for uses outside of the treatment of presbyopia in Greater China. We retain the rights to use the same technology to perform our obligations in the agreement and the non-exclusive right to manufacture and have manufactured such products in Greater China. The agreement provides that we shall refrain from developing or commercializing any competing product, or knowingly enabling a third party to develop or commercialize a product containing aceclidine or brimonidine that would reasonably be expected to result in off-label sales of such products, for the treatment of presbyopia in humans in Greater China. Under the terms of the agreement, we received an upfront, non-refundable payment of $15.0 million, and an investment from three funds managed or advised by RTW Investments, LP for an aggregate purchase price of approximately $10.0 million in exchange for shares of our Series A-1 preferred stock. We are also eligible to receive an additional up to $15.0 million in development milestone payments, $80.0 million in sales milestone payments, tiered, escalating royalties in the range of 5% to 15% on net sales of such products by CORXEL, its affiliates or sublicensees in Greater China during the royalty term, and tiered, deescalating royalties in the range of 15% to 5% of CORXEL's sublicensing income prior to the regulatory approval of the first such product in Greater China. Royalties are subject to adjustment if no valid claim of a patent is covering such product, if a generic product exceeds 10% of the market share on a volume basis, or if a third-party license is necessary to manufacture or sell such products. The royalty term in each region is on a product-by-product basis and the longer of (a) expiration of the last valid claim of a patent covering such product in such region, (b) expiration of regulatory exclusivity for such product in such region, and (c) ten years from the date of first commercial sale of such product in such region. CORXEL may terminate the agreement

in its entirety at any time upon 180 days' prior written notice. Either party may terminate the agreement for the other's uncured and material breach, subject to a disputed breach resolution mechanism. Either party may also terminate the agreement upon the other party's insolvency. We may terminate the agreement upon 60-days' prior written notice if CORXEL or its affiliates or sublicensees challenge the validity, enforceability, or scope of any licensed patent. On October 27, 2024, CORXEL and the Company announced positive topline data from the Phase 3 JX07001 clinical trial of LNZ100 in patients with presbyopia in China. In this China Phase 3 safety and efficacy trial, LNZ100 achieved the primary endpoint and key secondary endpoints, with statistically significant three-lines or greater improvement in BCDVA at near, without losing one-line or more in distance visual acuity.

Government Regulation

Our product candidates and operations are subject to extensive regulation by the Food and Drug Administration ("FDA") and other federal and state authorities in the United States, as well as comparable authorities in other countries. For example, our current product candidate, LNZ100, which is ophthalmic pharmaceutical product delivered through a single-use eye dropper device, is subject to regulation as drug-device combination products in the United States.

The FDA and other federal, state, local, and foreign authorities regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drug and combination products. Generally, before a new drug can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized into a format specific for each regulatory authority, submitted for review, and approved by the regulatory authority.

U.S. Drug Development

In the United States, the FDA regulates drugs under the Food, Drug, and Cosmetic Act ("FDCA") and its implementing regulations. Drug products and substances are subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local, and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or post-market may subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Our lead product candidate and any future small molecule product candidates must be approved by the FDA through the new drug application ("NDA") process before they may be legally marketed in the United States. The process generally involves the following:

- Completion of extensive preclinical studies in accordance with applicable regulations, including the FDA's good laboratory practice ("GLP") requirements;
- Submission to the FDA of an investigational new drug ("IND") application, which must become effective before clinical trials may begin;
- Approval by an independent institutional review board ("IRB") or 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, good clinical practice ("GCP") requirements and other clinical trial-related regulations to establish the safety and efficacy of an investigational product for each proposed indication;
- Preparation and submission to the FDA of an NDA;
- A determination by the FDA within 60 days of its receipt of an NDA to file the application for review;
- Satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities where the drug product will be produced to assess compliance with current good manufacturing practice ("cGMP"), requirements to assure that the facilities, methods and controls are adequate to preserve the drug identity, strength, quality, and purity;

- Potential FDA audit of the preclinical study and/or clinical trial sites that generated the data in support 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 United States; and
- Compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy ("REMS"), and the potential requirement to conduct post-approval studies.

Preclinical and Clinical Studies

The preclinical and clinical testing and approval process requires substantial time, effort, and financial resources, and we cannot be certain that any approvals for any future product candidates will be granted on a timely basis, or at all.

Preclinical tests generally involve laboratory evaluations of drug chemistry, formulation, and stability, as well as studies to evaluate toxicity in animals, including pharmacology, pharmacokinetics, toxicokinetic, and metabolism studies that support subsequent clinical testing in humans. The results of the preclinical studies, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, are submitted to the FDA as part of the Investigational New Drug ("IND") application. 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.

Long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted.

The central focus of an IND submission is the general investigation plan and the protocol(s) for human studies. An IND must become effective before clinical trials may begin. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

For each successive clinical trial conducted with the investigational drug, a separate, new protocol submission to an existing IND must be made, along with any subsequent changes to the investigational plan. Sponsors are also subject to ongoing reporting requirements, including submission of IND safety reports for any serious adverse experiences associated with use of the investigational drug or findings from preclinical studies suggesting a significant risk for human subjects, as well as IND annual reports on the progress of the investigations conducted under the IND.

Clinical studies involve the administration of the investigational product 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 Good Clinical Practice ("GCP") requirements, which include the requirement 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 to be used to monitor subject safety and assess efficacy. 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 Institutional Review Board ("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 in relation to 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. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries, including the website maintained by the U.S. National Institutes of Health, ClinicalTrials.gov.

A sponsor who wishes to conduct a clinical trial outside of the United States 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 may submit data from the clinical trial to the FDA in support of an NDA. The FDA will generally 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 in the United States generally are conducted in three phases, known as Phase 1, Phase 2, and Phase 3. Although the phases are usually conducted sequentially, they may overlap or be combined.

- Phase 1 clinical trials generally involve a small number of healthy volunteers or disease-affected patients who are initially exposed to a single dose and then multiple doses of the product candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, tolerability and safety of the drug.
- Phase 2 clinical trials typically involve studies in a limited population of disease-affected patients to determine possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- Phase 3 clinical trials generally involve a large number of patients at multiple sites and are designed to evaluate the effectiveness of the product for its intended use, its safety in use and to establish the overall benefit/risk relationship of the product and provide an adequate basis for product approval. These trials may include comparisons with placebo and/or other comparator treatments.

Post-approval clinical 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. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical study investigators. Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the drug, findings from animal or in vitro testing that suggest a significant risk for human subjects, 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 submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information.

Phase 1, Phase 2, and Phase 3 clinical trials may not be successfully completed within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated check-points based on access to certain data from the trial. Concurrent with clinical trials, companies usually complete additional animal safety studies and also must develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of our product candidates. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that our product candidates do not undergo unacceptable deterioration over their labeled shelf life.

NDA Review

Following the completion of clinical trials, data are analyzed to assess whether the investigational product is safe and effective for the proposed indicated use or uses. The results of preclinical studies and clinical trials are then submitted to the FDA as part of an NDA, along with proposed labeling, chemistry, and manufacturing information in a request for approval to market the drug for one or more specified indications. The application must 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 United States.

Under the Prescription Drug User Fee Act, as amended ("PDUFA"), each NDA must be accompanied by an application user fee. FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual program fee for each marketed human drug. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a qualifying small business.

The FDA reviews all submitted NDAs before it accepts them for filing to determine if they are sufficiently complete to permit a substantive review, and the FDA may request additional information rather than accepting the NDA for filing. In this event, the application must be resubmitted with the additional information and is subject to payment of additional user fees. The FDA must make a decision on accepting an NDA for filing within 60 days of receipt. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the NDA. Under PDUFA, the FDA has agreed to certain performance goals in the review of NDAs through a two-tiered classification system, standard review and priority review. According to PDUFA performance goals, the FDA endeavors to review applications subject to standard review within ten months, whereas the FDA's goal is to review priority review applications within six months. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs, and the review process is often extended by FDA requests for additional information or clarification.

The FDA may refer applications for novel drug products or products which present difficult questions of safety or efficacy to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. Of note, the FDA notified the Company in its letter to notify its acceptance to review the NDA that they do not plan to hold an advisory committee meeting, which was reiterated during the mid-cycle review.

Before approving an NDA, the FDA typically will conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with cGMP requirements. The FDA will not approve the product 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. The FDA also may audit data from clinical trials to ensure compliance with GCP requirements. The FDA also closely analyzes the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates an NDA and conducts inspections of manufacturing facilities, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The Complete Response Letter may require additional clinical data, including the potential requirement to conduct additional pivotal Phase 3 clinical trial(s) and/or other significant and time-consuming requirements related to clinical trials, or to conduct additional preclinical studies or manufacturing changes. If a Complete Response Letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data.

Post-Approval Requirements

Following approval of a new product, the product is subject to continuing regulation by the FDA, including, among other things, requirements relating to facility registration and drug listing monitoring and record-keeping adverse event and other periodic reporting, product sampling and distribution, and product promotion and advertising. The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such uses. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use or first publication.

After approval, if there are any changes to the approved product, 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. There also are continuing user fee requirements, under which FDA assesses an annual program fee for each product identified in

an approved NDA. In addition, quality control, drug manufacture, packaging, and labeling products must continue to conform to cGMP requirements after approval. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. Manufacturers and other entities involved in the manufacture and distribution of approved drugs 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 cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. The discovery of violative conditions, including failure to conform to cGMP regulations, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, its manufacturer or the NDA holder, including recalls.

The FDA may also place other conditions on approvals including the requirement for a REMS, to assure the safe use of the product. If the FDA concludes that a REMS is needed, the NDA sponsor must submit a proposed REMS. The FDA will not approve the product without an approved REMS, if required. A REMS 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. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

The FDA may withdraw approval of a product if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Corrective action could delay drug distribution and require significant time and financial expenditures. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, suspension of the approval, complete withdrawal of the product from the market, or product recalls;
- fines, warning letters, or holds on clinical trials;
- refusal of the FDA to approve pending applications or supplements to approved applications;
- suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- mandated modifications of promotional materials and labeling and the issuance of corrective information;
- issuance of safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product; or injunctions or the imposition of civil or criminal penalties.

We also must comply with the FDA's advertising and promotion requirements, such as those related to direct-to-consumer advertising, the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling, known as "off-label use," industry-sponsored scientific and educational activities, and promotional activities involving the internet and social media.

The FDA may also require post-approval studies and clinical trials if the FDA finds that scientific data, including information regarding related drugs, deem it appropriate. The purpose of such studies would be to assess a known serious risk or signals of serious risk related to the drug or to identify an unexpected serious risk when available data indicate the potential for a serious risk. The FDA may also require a labeling change if it becomes aware of new safety information that it believes should be included in the labeling of a drug.

Failure to comply with the applicable regulatory requirements at any time during the product development process, approval process or after approval may subject an applicant or manufacturer to, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, clinical hold, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts,

mandated corrective advertising or communications with doctors, debarment, restitution, disgorgement of profits, or civil or criminal penalties.

U.S. Regulation of Drug/Device Combination Products

We expect LNZ100 to be subject to regulation in the United States as a combination product comprised of a drug product candidate and a device delivery system. A combination product is the combination of two or more regulated components, such as a drug/device, that are combined or mixed and produced as a single entity, packaged together in a single package or a drug or device packaged separately that according to its investigational plan or proposed labeling is intended for use only with an approved individually specified drug or device where both are required to achieve the intended use, indication or effect. If marketed individually, each component would be subject to different regulatory pathways and would require approval of independent marketing applications by the FDA – one for the device component and one for the drug component of the combination.

A combination product, however, is assigned to a center within FDA that will have primary jurisdiction over its regulation based on a determination of the combination product's primary mode of action, which is the single mode of action that provides the most important therapeutic action. To determine which FDA center or centers will review a combination product candidate submission, companies may submit a request for assignment to the FDA. Those requests may be handled formally or informally. In some cases, jurisdiction may be determined informally based on FDA experience with similar products. However, informal jurisdictional determinations are not binding on the FDA. Companies also may submit a formal Request for Designation to the FDA Office of Combination Products. The Office of Combination Products will review the request and make its jurisdictional determination within 60 days of receiving a Request for Designation.

For LNZ100, which is an ophthalmic pharmaceutical product prefilled and packaged in a single-use eye dropper device, the mechanism of action and the pharmacological effect are attributable to the drug component of the drug-device combination product. Consistent with our communications with FDA to date and the regulatory pathway for other ophthalmic pharmaceutical products, we submitted an NDA for LNZ100 in August 2024, and we do not expect that the FDA will require a separate marketing authorization for the device component. However, each component of LNZ100 will need to meet the applicable quality and manufacturing standards set by FDA, meaning the drug product must be manufactured in accordance with GMPs for drugs, and the device component must be manufactured in a manner consistent with the device GMPs set forth in FDA's Quality Management System Regulation, as amended.

U.S. Patent-Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of any of our future product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act permits restoration of the patent term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. Application for patent extension must be filed with the USPTO within 60 days of FDA approval of the drug product even if the product cannot be commercially marketed at that time.

The patent term restoration period is generally one-half the time between the effective date of an IND or the issue date of the patent, whichever is later, and the submission date of an NDA plus the time between the submission date of an NDA or the issue date of the patent, whichever is later, and the approval of the NDA application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for our currently owned or licensed patents to add patent life beyond their current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain 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 an abbreviated new drug application ("ANDA"), or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) 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 conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Such three-year and five-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 all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Other U.S. Regulatory Matters

Although we do not expect any of our products, if approved, would be covered by any government healthcare programs or other third-party payors, we may still be subject to state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payers, including self-pay patients; state and foreign 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 or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value made to physicians and other healthcare providers or marketing expenditures; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the collection, export, privacy, use, protection and security of biological materials, health-related information and other personal information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

For more information, see the sections titled "*Risk Factors—Risks Related to Our Regulatory Approval and Other Legal Compliance Matters—we may be subject to federal and state healthcare fraud and abuse laws, false claims laws, transparency laws, and health information privacy and security laws, which could expose us to, among other things, criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings*" and "*Risk Factors—Risks Related to Our Regulatory Approval and Other Legal Compliance Matters —restrictive laws and regulations govern the collection, use, transfer, and other processing of personal information."*

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions or safe harbors, it is possible that some of our activities could be subject to challenge under one or more of such laws. The growth of our business and sales organization and our expansion outside of the United States may increase the potential of violating these laws or our internal policies and procedures. The risk of us being found in violation of these or other laws and regulations is further increased by the fact that many have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to various interpretations. Any action brought against us for violations of these laws or regulations, even successfully defended, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

If our operations are found to be in violation of any of the federal, state and foreign laws described above or any other current or future fraud and abuse or other healthcare laws and regulations that apply to us, we may be subject to penalties, including significant civil, criminal and administrative penalties, including damages, fines, disgorgement, individual imprisonment, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings, injunctions, requests for recall, seizure of products, total or partial suspension of production, denial or withdrawal of product approvals or refusal to allow a firm to enter into supply contracts, including government contracts, and we could be required to curtail or cease our operations. Any of the foregoing consequences could seriously harm our business and our financial results.

U.S. Healthcare Reform

Although we do not expect any of our products, if approved, would be covered by any government healthcare programs or other third-party payors, legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether FDA or other agency regulations, guidance or interpretations will be changed, or what the impact of such changes on the regulatory approvals of our product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent regulatory approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements. Further, in June 2024, in *Loper Bright Enterprises v. Raimondo* the U.S. Supreme Court overruled the *Chevron* doctrine, which gives deference to regulatory agencies' statutory interpretations in litigation against federal government agencies, such as the FDA, where the law is ambiguous. This landmark Supreme Court decision may invite various stakeholders to bring lawsuits against the FDA or other agencies to challenge longstanding decisions and policies of the FDA, including FDA's statutory

interpretations of market exclusivities and the "substantial evidence" requirements for drug approvals, which could undermine FDA's authority, lead to uncertainties in the industry, and disrupt the FDA's normal operations, any of which could delay the FDA's review of our regulatory submissions. Further, changes in the leadership of the FDA and other federal agencies under the Trump administration may lead to new policies and changes in the regulations, which may impact our clinical development plans. We cannot predict the likelihood, nature or extent of government regulation that may arise from future litigation, legislation or administrative or executive action, and their impact on our business and the pharmaceutical industry as a whole. For more information, see the section titled *"Risk Factors—Risks Related to Our Regulatory Approval and Other Legal Compliance Matters—we may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations."*

In addition, different pricing and reimbursement schemes exist in different countries. In the United States, federal and state governments have become increasingly active in implementing regulations designed to control pharmaceutical product pricing. Cost-containment measures on prescription drugs and alternative treatment options covered and reimbursed by payors could exert a downward pressure on the pricing of other treatment options, even if not covered or reimbursed by payors. For example, in August 2022, Congress passed the Inflation Reduction Act of 2022, which includes prescription drug provisions that have significant implications for the pharmaceutical industry and Medicare beneficiaries. Various industry stakeholders have initiated lawsuits against the federal government, asserting that the price negotiation provisions of the Inflation Reduction Act are unconstitutional. The impact of these and future judicial challenges, legislative, executive, and administrative actions and any future healthcare measures and agency rules implemented by the government on us and the pharmaceutical industry as a whole is unclear. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may be marketed only once a reimbursement price has been agreed upon. Some of these countries may require, as condition of obtaining reimbursement or pricing approval, the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

Coverage and Reimbursement

In most foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and generally prices tend to be significantly lower. For more information, see the section titled *"Risk Factors—Risks Related to Our Company—we may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations."*

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our product candidates to the extent we choose to develop or sell any product candidates outside of the United States. The approval process varies from country to country and the time may be longer or shorter than that required to obtain FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Employees and Human Capital Resources

As of December 31, 2024, we had 42 employees, 21 of whom were engaged in research and development activities. We also engage contractors and consultants. None of our employees are represented by a labor union or covered under a collective bargaining agreement. We have not experienced any work stoppages due to employee disputes, and 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 and cash incentive plans are to attract, retain and reward personnel through the granting of stock-based and cash-based compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Corporate and Available Information

We were incorporated in Ontario, Canada on June 1, 2017, as Longbow Therapeutics Inc. and were reincorporated in the State of Delaware in October 2019. In February 2020, we changed our name to Integral Medicines, Inc. and in August 2020, we changed our name to Graphite Bio, Inc. On March 21, 2024 (the "Closing Date"), we consummated a merger pursuant to the terms of the Agreement and Plan of Merger, dated as of November 14, 2023 (the "Merger Agreement"), by and among us, Generate Merger Sub, Inc., a Delaware corporation and our wholly-owned subsidiary ("Generate Merger Sub") and LENZ Therapeutics Operations, Inc. (previously named Lenz Therapeutics, Inc.), a Delaware corporation ("LENZ OpCo").

Pursuant to the Merger Agreement, on the Closing Date, (i) we effected a reverse stock split of our issued common stock at a ratio of 1:7, (ii) we changed our name to "LENZ Therapeutics, Inc.", and (iii) Generate Merger Sub merged with and into LENZ OpCo (the "Merger"), with LENZ OpCo as the surviving company in the Merger and, after giving effect to such Merger, LENZ OpCo becoming our wholly-owned subsidiary.

Our principal executive offices are located at 201 Lomas Santa Fe Dr., Suite 300, Solana Beach, California 92075, and our telephone number is (858) 925-7000. Our investor relations website is located at https://ir.lenz-tx.com/. Information contained on the website is not incorporated by reference into this Form 10-K or any other filings we make with the U.S. Securities and Exchange Commission ("SEC").

We use our investor relations website to post important information for investors, including news releases, analyst presentations, and supplemental financial information, and as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. Accordingly, investors should monitor our investor relations website, in addition to following press releases, SEC filings and public conference calls and webcasts. We also make available, free of charge, on our investor relations website under "SEC Filings," our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to these reports as soon as reasonably practicable after electronically filing or furnishing those reports to the SEC.

Item 1A. Risk Factors

An investment in our common stock involves a high degree of risk. In addition to the risk and uncertainties described under the section titled "Cautionary Note Regarding Forward-Looking Statements," in this Annual Report on Form 10-K you should consider carefully the risks and uncertainties described below, together with all of the other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes, before deciding to invest in our common stock. If any of the following events occur, our business, financial condition and operating results may be materially adversely affected. In that event, the trading price of our common stock could decline, and you could lose all or part of your investment. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business or results of operations.

Summary Risk Factors

Our business is subject to numerous risks and uncertainties that you should consider before investing in our company, as more fully described below. The principal factors and uncertainties that make investing in our company risky include, among others:

- We are a pre-commercial biopharmaceutical company with limited operating history. We have incurred significant losses and negative cash flows from operations since our formation, and we anticipate that we will continue to incur losses as we seek approval and begin commercialization. We have no products approved for commercial sale, which may make it difficult for you to evaluate our current business and predict our future success and viability.

- Our business depends entirely on the development and commercialization of LNZ100, and we do not have additional product candidates in our current development pipeline. If we are unable to successfully complete our clinical development program for LNZ100 and obtain the marketing approvals necessary to commercialize LNZ100, or experience significant delays in doing so, or if after obtaining marketing approvals, we fail to commercialize LNZ100, our business will be materially harmed. We currently generate no revenue from sales of any products and may never generate revenue or be profitable.

- Clinical trials are expensive, time-consuming, difficult to design and implement and involve an uncertain outcome. The outcome of preclinical testing and earlier clinical trials may not be predictive of the success of later clinical trials. The results of our clinical trials may not satisfy the requirements of the FDA, European Medicines Agency ("EMA") or other comparable foreign regulatory authorities, and we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of such product candidate.

- Even if LNZ100 or any other product candidate receives marketing approval, they may fail to achieve market acceptance by eye care professionals ("ECPs") and patients, and the market opportunity for these products, if approved, may be smaller than we estimate.

- If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market our product candidates on acceptable terms, we may be unable to successfully commercialize our product candidates that obtain regulatory approval.

- We intend to deploy a targeted, cost-effective, digitally focused direct-to-consumer marketing strategy, but if we are unable to be sufficiently effective with a limited budget and are required to spend more than anticipated, we may need to raise more capital, divert resources from other strategies, or just fail to reach the intended market, in each case which could have a material adverse effect on our business.

- If we are unable to obtain and maintain sufficient intellectual property protection for our technology and products and product candidates we may develop, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors or other third parties could develop and commercialize products similar or identical to ours, and our ability to successfully develop and, if approved, commercialize our product candidates may be adversely affected.

- We face significant competition, and if our competitors develop and market technologies or products more rapidly than we do or that are more effective, safer or less expensive than the product candidates we develop, our commercial opportunities will be negatively impacted. Our product candidates may, if approved, also face competition from existing branded, generic and off-label products.

- We contract with third parties for the manufacture of our product candidates for our ongoing clinical trials, and expect to continue to do so for additional clinical trials and ultimately for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or drugs or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

- The manufacture of drugs is complex and our third-party manufacturers may encounter difficulties in production. If any of our third-party manufacturers encounter such difficulties, our ability to provide adequate supply of LNZ100 for patients, if approved, could be delayed or prevented.

- We have relied, and expect to continue to rely on third parties, including independent clinical investigators and CROs, to conduct, supervise and monitor certain aspects of our clinical trials and any future preclinical studies. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates, or such approval or commercialization may be delayed, and our business could be substantially harmed.
- Our success is highly dependent on our ability to attract and retain highly skilled executive officers and employees.
- The market price of our common stock is expected to be volatile.

Risks Related to Our Limited Operating History, Development and Commercialization of Our Product Candidates

We are a pre-commercial biopharmaceutical company with limited operating history. We have incurred significant losses and negative cash flows from operations since our formation, and we anticipate that we will continue to incur losses as we seek approval and begin commercialization. We have no products approved for commercial sale, which may make it difficult for you to evaluate our current business and predict our future success and viability.

We are a pre-commercial biopharmaceutical company with limited operating history. Our operations to date have been limited to organizing the company, raising capital, developing our product candidates and beginning to prepare for commercialization, including building our commercial strategy, supply chain and distribution network. Consequently, any predictions you 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 new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. If LNZ100 is approved by the FDA, we will need to further expand our commercialization infrastructure to successfully launch such product. We have not yet demonstrated our ability to successfully obtain marketing approvals, complete arrangements for third parties to manufacture the commercial-scale product on our behalf, or conduct sales and marketing activities necessary for successful product commercialization, and we may not be successful in such a transition.

We do not have any products approved for sale, we have not generated any revenue from the sale of products, we have incurred significant net losses since the company's formation and have funded our operations primarily from the sale and issuance of redeemable convertible preferred stock, common stock, and the Merger. Our net losses were $49.8 million and $70.0 million for the years ended December 31, 2024 and 2023, respectively. As of December 31, 2024, we had an accumulated deficit of $145.0 million. Additionally, the net losses we incur may fluctuate significantly from year to year such that a period-to-period comparison of our results of operations may not be a good indicator of our future performance. The size of our future net losses and our ability to potentially achieve profitability will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue.

We expect to continue incurring significant expenses and increasing operating losses as we seek approval and begin commercialization. We anticipate that our expenses will increase substantially if and as we:

- initiate additional clinical and other studies for our product candidates;
- change or add additional manufacturers or suppliers, some of which may require additional permits or other governmental approvals;
- create additional infrastructure to support our operations as a public company and our product development and planned future commercialization efforts;
- seek marketing approvals for our product candidates;
- establish a sales, marketing, and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- seek to identify, acquire, and develop additional product candidates;
- acquire or in-license other product candidates and technologies;
- make milestone or other payments in connection with the development or approval of our product candidates, if any;
- maintain, protect, and expand our intellectual property portfolio; and
- experience any delays or encounter issues with any of the above.

Our prior losses and expected future losses have had and will continue to have an adverse effect on our working capital and ability to achieve and maintain profitability.

Our business depends entirely on the development and commercialization of LNZ100, and we do not have additional product candidates in our current development pipeline. If we are unable to successfully complete our clinical development program for LNZ100 and obtain the marketing approvals necessary to commercialize LNZ100, or experience significant delays in doing so, or if after obtaining marketing approvals, we fail to commercialize LNZ100,

our business will be materially harmed. We currently generate no revenue from sales of any products and may never generate revenue or be profitable.

We have devoted a significant portion of our financial resources and business efforts to the development of LNZ100 and LNZ101, both of which include aceclidine as an active ingredient, for the treatment of presbyopia. Based on the results of our Phase 3 CLARITY trials, we selected LNZ100 as our lead product candidate, for which we submitted an NDA to FDA in August 2024. In October 2024, the FDA assigned a Prescription Drug User Fee Act ("PDUFA") target action date of August 8, 2025. We can provide no assurance that FDA will approve our NDA by this PDUFA target action date or at all. We do not currently have other product candidates in our development pipeline, and our success depends entirely on LNZ100. We have no products approved for commercial sale and do not anticipate generating any revenue unless LNZ100 receives the regulatory approval necessary for commercialization. Our ability to generate revenue from product sales will depend on us obtaining marketing approval for and commercializing LNZ100, and we cannot accurately predict when or if LNZ100 will be determined by the FDA to be effective in humans for the proposed indication or whether it will receive marketing approval. Our ability to generate revenue and achieve profitability also depends significantly on our ability, or any future collaborator's ability, to achieve a number of objectives, including:

- successful and timely completion of clinical development of LNZ100 and any other future product candidates;
- effective investigational new drug applications ("INDs") from the FDA or comparable foreign applications that allow the commencement of our clinical trials or future clinical trials for such product candidates;
- completion of clinical studies in compliance with the FDA's current Good Clinical Practices ("GCPs") with positive results;
- the prevalence and severity of adverse events experienced with any of our product candidates;
- establishing and maintaining relationships with CROs and clinical sites for the clinical development, both in the United States and internationally, of our product candidates, including LNZ100 and any other future product candidates;
- timely receipt of marketing approvals from applicable regulatory authorities for any product candidates for which we successfully complete clinical development for their intended uses;
- making any required post-marketing approval commitments to applicable regulatory authorities;
- establishing and maintaining commercially viable supply and manufacturing relationships with third parties that can provide adequate products and services, in both amount and quality, to support clinical development and meet the market demand for product candidates that we develop, if approved;
- successful commercial launch following any marketing approval, including the development of a commercial infrastructure, whether in-house or with one or more collaborators;
- maintaining compliance with regulatory requirements, including the FDA's current Good Manufacturing Practice ("cGMP") requirements;
- a continued acceptable safety profile both prior to and following any marketing approval of our product candidates;
- commercial acceptance of our product candidates by patients and the medical community;
- identifying, assessing and developing new product candidates;
- obtaining, maintaining and expanding patent protection, trade secret protection and regulatory exclusivity, both in the United States and internationally;
- protecting our rights in our intellectual property portfolio;
- defending against third-party interference or infringement claims, if any;
- obtaining favorable terms in any collaboration, licensing or other arrangements that may be necessary or desirable to develop, manufacture or commercialize our existing or acquired product candidates;
- addressing any competing therapies and technological and market developments; and

- attracting, hiring and retaining qualified personnel.

We may never be successful in achieving our objectives and, even if we are successful, we may never generate revenue that is significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. If we fail to become and remain profitable, the value of our company could decrease. This could impair our ability to maintain or expand our research and development efforts, raise necessary additional capital, grow our business, and continue our operations.

Our current product candidate, LNZ100, is based on an active pharmaceutical ingredient ("API") that has been previously approved and marketed outside of the United States, which exposes us to additional risks.

The API in LNZ100, aceclidine, has been marketed in more than 12 countries throughout Europe for the treatment of glaucoma by decreasing intraocular pressure. Although we expect to obtain NCE exclusivity in the United States if we are the first to obtain FDA approval of a product candidate containing aceclidine as an API, such determination is only made at the time of approval. Accordingly, no regulatory authority, including the FDA, has established or provided any confirmation that our product candidate will in fact be regarded as an NCE, and there can be no assurance that LNZ100 will be the first and only product containing aceclidine to be approved by the FDA.

Additionally, we anticipate that manufacturers in Europe could make and sell aceclidine in generic form in the future, which could compete with our ability to commercialize in Europe. Previously, aceclidine was used as a treatment for glaucoma at concentrations higher than the concentrations used in LNZ100. It is possible that if aceclidine is used again in Europe, it could be used at the wrong dosage and increase the possibility that patients experience adverse side effects related to aceclidine. Any adverse side effects that arise from the use of any form of aceclidine could prevent or inhibit the commercialization of LNZ100 and seriously harm our business. Furthermore, if manufacturer demand for aceclidine increases in the future, particularly as a result of generic forms of aceclidine becoming available, we may not be able to continue to obtain aceclidine on commercially reasonable terms, which would seriously harm our business.

In addition, any approved or commercial drug product having the same API, including off-label use of such approved drug products, such as Glaucostat and other generic forms of the API, could reduce the profitability of LNZ100 even if we obtain marketing approval from FDA or regulatory authorities outside of the United States. Any commercially available drug product having the same API could prevent us from or limit our ability to commercialize or to establish market share in the same jurisdiction even if we were to obtain marketing authorization in such jurisdiction.

Clinical trials are expensive, time-consuming, difficult to design and implement and involve an uncertain outcome. The outcome of preclinical testing and earlier clinical trials may not be predictive of the success of later clinical trials. The results of our clinical trials may not satisfy the requirements of the FDA, EMA or other comparable foreign regulatory authorities, and we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of such product candidate.

Research and development of pharmaceutical products is inherently risky. We cannot give any assurance that any of our product candidates will receive regulatory, including marketing, approval, which is necessary before they can be commercialized. The clinical trials and manufacturing of our product candidates are, and the manufacturing and marketing of our products, if approved, will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test and market our product candidates. Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that our product candidates are both safe and effective for use in each target indication. Product candidates in later stages of clinical trials may fail to show the desired safety, efficacy and durability profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. Failure can occur at any time during the clinical trial process. Even if our ongoing and any future clinical trials are completed as planned, we cannot be certain that our results will support the safety and effectiveness of our product candidates for their targeted indications or support continued clinical development of such product candidates. Product candidates in later stages of clinical studies may fail to show the desired safety and efficacy data or meet endpoints despite having progressed through preclinical and clinical studies.

The results of our preclinical and clinical studies of product candidates may not be predictive of the results of early-stage or later-stage clinical trials, and results of early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. The results of clinical trials in one set of subjects may not be predictive of those obtained in another. In some instances, there can be significant variability in safety, efficacy or durability results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants.

In addition, even if such clinical trials are successfully completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. For example, although we have sought and received feedback from FDA on the designs of our clinical trials, FDA may ultimately disagree that our Phase 3 trials support approval for LNZ100. Moreover, results acceptable to support approval in one jurisdiction may be deemed inadequate by another regulatory authority to support regulatory approval in that other jurisdiction. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available, to conduct additional trials in support of potential approval of LNZ100 or any future product candidates. Even if we secure regulatory approval for any of our product candidates, the terms of such approval may limit the scope and use of the product candidate, which may also limit its commercial potential.

While we have completed our Phase 3 CLARITY trials, we may experience numerous unforeseen events during, or as a result of, any future clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates or significantly increase the cost of such trials, including:

- changes in regulatory requirements or guidance, or receiving feedback from regulatory authorities, that requires us to modify the design of our clinical trials;
- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we or our investigators might have to suspend or terminate clinical trials of our product candidates for various reasons, including non-compliance with regulatory requirements, a finding that our product candidates have undesirable side effects or other unexpected characteristics, or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our product candidates may be greater than we anticipate and we may not have funds to cover the costs;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;
- regulators may revise the requirements for approving our product candidates, or such requirements may not be as we anticipate; and
- any future collaborators that conduct clinical trials may face any of the above issues, and may conduct clinical trials in ways they view as advantageous to them but that are suboptimal for us.

If we are required to conduct additional clinical trials or other testing of LNZ100 beyond our Phase 3 CLARITY trials, if we are unable to successfully complete clinical trials of any future product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- incur unplanned costs;
- be delayed in obtaining marketing approval for LNZ100 or any future product candidates or not obtain marketing approval at all;

- obtain marketing approval in some countries and not in others;
- obtain marketing approval for indications or patient populations that are not as broad as intended or desired;
- obtain marketing approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings or a Risk Evaluation Mitigation Strategy ("REMS");
- be subject to additional post-marketing testing requirements;
- be subject to changes in the way the product is administered; or
- have regulatory authorities withdraw or suspend their approval of the product.

We cannot be certain that any future clinical trials will be successful. For example, use of LNZ100 requires the patient to follow a prescribed technique to administer the eye drops. In our Phase 2 clinical trial, patients were dosed by clinical staff in the office while in our Phase 3 clinical trials the product was self-administered by patients on the vast majority of days.

In the CLARITY study, patients were only measured for efficacy on days they are in the office during the trial, during which they were dosed by clinical staff, and failure to properly administer the eye drops by the patient or inappropriate technique demonstration by the eye care professional ("ECP"), could have adversely affected the outcome of LNZ100 in demonstrating safety or efficacy in one or more clinical trials. Additionally, any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications, which could have a material adverse effect on our business, financial condition and results of operations.

Even if LNZ100 or any other product candidate receives marketing approval, they may fail to achieve market acceptance by ECPs and patients, and the market opportunity for these products, if approved, may be smaller than we estimate.

If LNZ100 or any other product candidate we develop receives marketing approval, they may nonetheless fail to gain sufficient market acceptance by ECPs, patients, and others in the medical community. Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an ECP, with prescription reading or bifocal glasses or multifocal contact lenses. LNZ100, if approved, would require a prescription by an ECP, which would require a visit to an ECP, which can be perceived to be more burdensome to an individual who has never previously visited an ECP and limit the number of prescriptions that are written. Some ECPs may also be deterred by the potential loss of revenue from the sale of contact lenses and glasses or feel uncomfortable prescribing a new product.

Currently, there is only one pharmacologic option for the treatment of presbyopia, under the brand Vuity. Despite an initial strong commercial launch with over 120,000 prescriptions filled in 2022, the refill rate for Vuity has lagged due to a variety of reasons. Based on a survey of 40 ECPs in a study we commissioned, the majority of ECPs reported that the barrier to Vuity adoption was that the product either did not work or did not work long enough.

An additional survey of 18 optometrists indicated that 66% of their patients did not see duration past four hours despite one of the Vuity clinical trial results showing some effectiveness to the sixth hour. While the reported patient experience at three hours post-treatment aligns with the primary endpoint of Vuity efficacy at three hours in both Phase 3 trials, the limited functional benefit of Vuity at and beyond three hours was reportedly not sufficient to drive continued usage by patients. In fact, the ECPs and their patients identified both the low rate of effectiveness and the short duration of effectiveness as the key factors for discontinuing use. Because Vuity's clinical success did not translate to commercial success, it is possible that prior users of Vuity may be reluctant to try another miotic as a result of their negative experiences with Vuity. Similarly, even if we believe that the clinical data supporting LNZ100 may offer advantages over Vuity, the products have not been evaluated head-to-head, and LNZ100 may not, in fact, provide meaningful advantages resulting in greater adoption or acceptance by ECPs and patients, even if LNZ100 obtains marketing authorization.

Additionally, Vuity was launched by AbbVie, a much larger pharmaceutical company with established brand recognition. As a result, even if LNZ100 demonstrates promising or superior clinical results, including the treatment of presbyopia, it is possible that ECPs may continue to rely on these treatments rather than LNZ100 or any other product candidate we develop, even if approved for marketing by the FDA. In addition, if generic versions of any products that compete with any of our product candidates are approved for marketing by the FDA, they would likely be offered at a substantially lower price than we expect to offer for our product candidates, if approved. As a result, ECPs, patients and others may choose to rely on such products rather than our product candidates.

If LNZ100 or any other product candidate does not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable. The degree of market acceptance of LNZ100 or any other product candidate that we develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and potential advantages of our product candidates compared to alternative treatments, including the existing standard of care;
- our ability to offer products for sale at competitive prices, particularly in light of the lower cost of alternative treatments;
- the clinical indications for which the product is approved;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of ECPs to prescribe these therapies;
- the strength of our marketing and distribution support;
- the timing of market introduction of competitive products;
- the potential for our competitors to limit our access to the market through anti-competitive contracts or other arrangements;
- the prevalence and severity of any side effects; and
- any restrictions on the use of our products together with other medications.

Our assessment of the potential market opportunity for LNZ100 and other product candidates is based on industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties, some of which we commissioned. Industry publications and third-party research, surveys and studies generally indicate that our information has been obtained from sources believed to be reliable, although we do not guarantee the accuracy or completeness of such information. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research and other surveys, which may be based on a small sample size and fail to accurately reflect market opportunities. Further, we have commissioned a number of market studies that are specific to us and to our product candidates and used the results of these studies to help assess our market opportunity. If any of our assumptions or estimates, or these publications, research, surveys or studies prove to be inaccurate, then the actual market for LNZ100 or any other product candidates we may develop may be smaller than we expect, and as a result our product revenue may be limited and we may be more difficult for us to achieve or maintain profitability.

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

Trials may be subject to delays as a result of patient enrollment taking longer than anticipated or patient withdrawal. While we have completed our three Phase 3 clinical trials for LNZ100, if we are required to conduct additional trials, we may not be able to initiate or continue such clinical trials if we are unable to locate and enroll a sufficient number of subjects to participate in these trials to such trial's conclusion as required by the FDA, EMA or other comparable foreign regulatory authorities. Patient enrollment is a significant factor in the timing of clinical trials.

Our inability to enroll a sufficient number of subjects 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, we expect to rely on CROs and clinical trial sites to ensure the proper and timely conduct of any future clinical trials and we will have limited influence over their performance. Even if we are able to enroll a sufficient number of subjects for any future clinical trials, we may have difficulty maintaining enrollment of such subjects in such clinical trials.

Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates progress through preclinical and clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered along the way in an effort to optimize yield and manufacturing batch size, minimize costs and achieve consistent quality

and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of product candidates and jeopardize our ability to commercialize our product candidates, if approved, and generate revenue.

We face significant competition, and if our competitors develop and market technologies or products more rapidly than we do or that are more effective, safer or less expensive than the product candidates we develop, our commercial opportunities will be negatively impacted. Our product candidates may, if approved, also face competition from existing branded, generic and off-label products.

The development and commercialization of new drug products is highly competitive. We face competition with respect to LNZ100 and will face competition with respect to any other product candidates that we may seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. As LNZ100 is for the treatment of presbyopia, we may face competition from a variety of companies developing or marketing other pharmaceutical presbyopia therapies, including AbbVie (formerly Allergan), Bausch & Lomb, Eyenovia, Glaukos, Johnson & Johnson, Orasis, OSRX Pharmaceuticals (an affiliate of Ocular Science), Viatris (through licensing of Ocuphire's presbyopia products), Tenpoint Therapeutics and Vyluma. 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.

Presbyopia is typically self-diagnosed and self-managed with over-the-counter reading glasses, or managed, after evaluation by an ECP, with prescription reading or bifocal glasses or multifocal contact lenses. LNZ100, if approved, would require a prescription by an ECP, which would require a visit to an ECP, which can be perceived to be more burdensome to an individual who has never previously visited an ECP and limit the number of prescriptions that are written. Some ECPs may also be deterred by the potential loss of revenue from the sale of contact lenses and glasses or feel uncomfortable prescribing a new product.

LNZ100 may not demonstrate sufficient additional clinical benefits to ECPs, patients or payors to justify a higher price compared to using glasses, which are potentially just a one-time purchase.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than LNZ100, if approved, or any other products we develop that are approved. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for LNZ100 or any other products, which could result in our competitors establishing a strong market position before we are able to enter the market.

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

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market our product candidates on acceptable terms, we may be unable to successfully commercialize our product candidates that obtain regulatory approval. In addition, our intended sales strategies may be unsuccessful and/or more costly than anticipated.

We plan to use our existing cash, cash equivalents, and marketable securities, in part, to continue to build the sales and marketing infrastructure required to successfully commercialize LNZ100, subject to FDA approval. We plan to launch with our own sales organization in the United States, which we envision expanding to a substantially larger number of individuals, focused on partnering with ECPs, while also deploying, in parallel, a highly targeted consumer strategy. In order to achieve these commercialization goals for LNZ100, if approved, we must build marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services for each of the territories in which we may have approval to sell and market LNZ100. We may not be successful in accomplishing these required tasks.

Establishing and building out an internal sales and marketing team with technical expertise and supporting distribution capabilities to commercialize LNZ100, if approved, will be expensive and time-consuming and will require significant attention of our executive officers to manage. Any failure or delay in the development of our internal sales, marketing and distribution capabilities could adversely impact the commercialization of LNZ100 or any other product candidates that we obtain approval to market, if we do not have arrangements in place with third parties to provide such services on our behalf. Alternatively, if we choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems, we will be required to negotiate and enter into arrangements with such third parties relating to the proposed collaboration. If we are unable to enter into such arrangements when needed, on acceptable terms, or at all, we may not be able to successfully commercialize LNZ100 or any other product candidates that receive regulatory approval, or any such commercialization may experience delays or limitations. If we are unable to successfully commercialize our approved product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer, and we may incur significant additional losses.

Our commercial strategy is focused on targeting and partnering with the estimated 15,000 ECPs that prescribed over 85% of the pharmaceutical presbyopia prescriptions in the United States in 2022. If we are unable to obtain access to these ECPs or successfully demonstrate the clinical benefits of our products to adequate numbers of ECPs, if approved, our efforts to commercialize such products will be severely inhibited, which would have a material adverse effect on our business.

Additionally, a direct-to-consumer ("DTC") strategy can potentially be extremely costly. We intend to deploy a targeted, cost-effective, digitally focused DTC strategy, but if we are unable to be sufficiently effective with a limited budget and are required to spend more than anticipated, we may need to raise more capital, divert resources from other strategies or just fail to reach the intended market. As a result, a DTC strategy that is not sufficiently cost-effective can have a material adverse effect on our business.

We may need to raise additional financing in the future to fund our operations, which may not be available to us on favorable terms or at all.

If we are unsuccessful in generating sufficient revenue and operating cash flow from sales of LNZ100, if approved, we may require additional financing to fund our operations. Our future capital requirements will depend upon a number of factors, including: the rate and degree of market acceptance of LNZ100, if approved, or any other product candidate that we develop; the number and timing of future product candidates in the pipeline; progress with and results from preclinical testing and clinical trials; the ability to manufacture sufficient drug supplies to complete preclinical and clinical trials; the costs involved in preparing, filing, acquiring, prosecuting, maintaining and enforcing patent and other intellectual property claims; and the time and costs involved in obtaining regulatory approvals and favorable reimbursement or formulary acceptance. Raising additional capital may be costly or difficult to obtain and could, for example, through the sale of common stock or securities convertible or exchangeable into common stock, significantly dilute our stockholders' ownership interests or inhibit our ability to achieve our business objectives. If we raise additional funds through public or private equity offerings, the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. In addition, any debt financing may subject us to fixed payment obligations and covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish certain valuable intellectual property or other rights to our product candidates, technologies, future revenue streams or research programs, or grant licenses on terms that may not be favorable to us. Even if we were to obtain funding, there can be no assurance that it will be available on terms acceptable to us or our stockholders.

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

Our business exposes us to significant product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments. Product liability claims could delay or prevent completion of our development programs. If LNZ100 or any future product candidates are approved for marketing, such claims could still result in an FDA, EMA or other regulatory authority investigation of the safety and effectiveness of such products, our manufacturing processes and facilities or our marketing programs. These investigations could potentially lead to a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in injury to our reputation, withdrawal of clinical trial participants, costs to defend the related litigation, a diversion of management's time and our resources, initiation of investigations by regulators, substantial monetary awards to patients or other claimants, the inability to commercialize our product candidates and decreased demand for our product candidates, if approved for

commercial sale. We currently have product liability insurance that we believe is appropriate for our stage of development and may need to obtain higher levels prior to marketing LNZ100, if approved. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business and cause our stock price to decline. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to maintain or obtain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses, including those caused by product liability claims.

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

We are developing regulatory strategies for LNZ100 outside the United States and, accordingly, we expect that we or our partners would seek regulatory approval of our product candidates outside of the United States. As such, we expect that we will be subject to additional risks related to operating in foreign countries if we or such partners obtain the necessary approvals, including:

- differing regulatory requirements and drug pricing regimes in foreign countries;
- potential issues due to aceclidine having been previously marketed and sold in Europe as a treatment for glaucoma, including, but not limited to potential competition from or for manufacturers and suppliers, and potential assumptions, concerns or biases resulting from the limited efficacy of the prior marketed products;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- 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 United States;
- potential liability under the U.S. Foreign Corrupt Practices Act ("FCPA") or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- 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.

These and other risks associated with our international operations or those of any applicable international partners may materially adversely affect our ability to attain or maintain profitable operations.

In particular, there is currently significant uncertainty about the future relationship between the United States and various other countries, most significantly China, with respect to trade policies, treaties, tariffs, taxes, and other limitations on cross-border operations. The U.S. government has made and continues to make significant additional changes in U.S. trade policy and may continue to take future actions that could negatively impact U.S. trade. For example, legislation has been introduced in Congress to limit certain U.S. biotechnology companies from using equipment or services produced or provided by select Chinese biotechnology companies, and others in Congress have advocated for the use of existing executive branch authorities to limit those Chinese service providers' ability to engage in business in the U.S. In addition, in recent years the U.S. has increased tariffs on certain imported goods and trade tensions between the U.S. and China escalated, with each country imposing significant, additional tariffs on a wide range of goods imported from the other country. We cannot predict what actions may ultimately be taken with respect to trade relations between the United States and China or other countries, what products and services may be subject to such actions or what actions may be taken by the other countries in retaliation. Tariffs imposed upon products and materials used in manufacturing our products, or

responsive tariffs imposed upon our exported products could impact our costs of manufacturing and ability to sell products in foreign countries, which could have a negative impact on our business. If we are unable to obtain or use services from existing service providers or become unable to export or sell our products to any of our customers or service providers, our business, liquidity, financial condition, and/or results of operations would be materially and adversely affected.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our technology and products and product candidates we may develop, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors or other third parties could develop and commercialize products similar or identical to ours, and our ability to successfully develop and, if approved, commercialize our product candidates may be adversely affected.

We rely upon a combination of patents, trademarks, trade secret protection, and confidentiality agreements to protect the intellectual property related to our development programs and product candidates. Our success depends in part on our ability to obtain and maintain patent protection in the United States and other countries with respect to LNZ100 or any future product candidates. If we are unable to obtain or maintain patent protection with respect to LNZ100 or any future product candidates, and their uses, our business, financial condition, resultant operations and prospects could be materially harmed.

We generally seek to protect our proprietary position by filing patent applications in the United States and abroad related to LNZ100, any of our future product candidates, our development programs, product candidates and novel discoveries that are important to our business, as appropriate. Our pending and future patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless, and until, patents issue from such applications, and then only to the extent the issued claims cover the technology. There can be no assurance that our patent applications will result in patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around or invalidated by third parties, including generics. The patent prosecution process is expensive and time-consuming, and we may not be able to file, prosecute, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. Additionally, recent reforms and changes at government agencies of the United States and those of non-U.S. jurisdictions could increase the delays, uncertainties and costs surrounding the prosecution of our patent applications, and the maintenance, enforcement, or defense of our issued patents. For example, the ability of the USPTO and other applicable patent authorities to properly administer their functions is highly dependent on the levels of funding available to the agency and their ability to retain personnel and fill key leadership appointments, among various factors. Termination of employees or delays in replacing or hiring for positions could significantly impact the ability of the USPTO and other applicable patent authorities to fulfill their functions and could greatly impact our ability to timely and adequately prosecute or maintain our patent applications, and our ability to timely and adequately maintain, enforce, or defend our issued patents.

The patents and patent applications that we own may fail to result in issued patents with claims that protect LNZ100 or any future product candidate in the United States or in other foreign countries. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found, which can prevent a patent from issuing from a pending patent application, or be used to invalidate a patent. Even if patents do successfully issue and even if such patents cover LNZ100 or any future product candidate, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated or held unenforceable. Any successful opposition to these patents or any other patents owned by or licensed to us could deprive us of rights necessary for the successful commercialization of any product candidates that we may develop. Further, the scope and coverage of such patents may be so narrow that a third party could successfully design around our patents without materially impacting the therapeutic effectiveness of the resulting drug product. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate under patent protection could be reduced.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our potential future collaborators will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- the USPTO requires us to disclose all material references to the Patent Examiner during prosecution of our patent applications at the USPTO, and failure to do so could result in a third party successfully challenging our ability to enforce a patent against an infringer;
- patent applications may not result in any patents being issued;
- granted patents may not have a claim scope that covers LNZ100 or any future product candidates;

- patents may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- our competitors, many of whom have substantially greater resources than we do and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or block our ability to make, use and sell our product candidates;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for treatments of diseases or conditions that prove successful, as a matter of public policy regarding worldwide health concerns; and
- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing products.

The patent prosecution process is also expensive and time-consuming, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications or maintain and/or enforce patents that may issue based on our patent applications, at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. We may not be able to obtain or maintain patent applications and patents due to the subject matter claimed in such patent applications and patents being in disclosures in the public domain. 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, if we choose to license certain patent rights in the future from third parties, we may not have the right to control the preparation, filing, and prosecution of such patent applications, or to maintain the patents, directed to technology that we license from those third parties. We may also require the cooperation of our future licensor, if any, in order to enforce the licensed patent rights, and such cooperation may not be provided. Therefore, any licensed patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. We cannot be certain that patent prosecution and maintenance activities by any of our future licensors have been or will be conducted in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. If they fail to do so, this could cause us to lose rights in any applicable intellectual property that we in-license, and as a result our ability to develop and commercialize products or product candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing products.

If the patent applications we hold or may in-license in the future with respect to our development programs and product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for LNZ100 or any future product candidate, it could dissuade other companies from collaborating with us to develop product candidates, and threaten our ability to commercialize LNZ100 or future product candidates. Any such outcome could have a materially adverse effect on our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has been and will continue to be the subject of litigation and new legislation, resulting in court decisions, including Supreme Court decisions, which have increased uncertainties as to the ability to enforce patent rights in the future. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, many countries restrict the patentability of methods of treatment of the human body. Publications in scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after 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 our own patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result of these and other factors, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products.

Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. For example, the America Invents Act created new administrative post-grant proceedings, including post-grant review, inter partes review, and derivation proceedings that allow third parties to challenge the validity of issued patents. This applies to all of our U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. 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. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents,

once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

Moreover, we may be subject to a third-party pre-issuance submission of prior art to the USPTO or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. The costs of defending patents or enforcing proprietary rights in post-issuance administrative proceedings and litigation can be substantial and the outcome can be uncertain. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products 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.

The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability, and our owned and licensed patents and patent applications may be challenged in the courts or patent offices in the United States and abroad. Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. An adverse decision in any such challenges may result in loss of exclusivity 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 products, or limit the duration of the patent protection of our technology and products. Generally, issued patents are granted a term of 20 years from the earliest claimed non-provisional filing date. In certain instances, patent term can be adjusted to recapture a portion of delay incurred by the USPTO in examining the patent application (patent term adjustment). The scope of patent protection may also be limited.

Without patent protection for our current or future product candidates, we may be open to competition from generic versions of such products. 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, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

We cannot be certain that the claims in patents or our pending patent applications directed to LNZ100 or any of our future product candidates will be considered patentable by the USPTO, by patent offices in foreign countries, by the courts, or by other relevant authority. One aspect of the determination of patentability of our inventions depends on the scope and content of the "prior art," information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim relevant to our business. There is no assurance that there is not prior art of which we are aware, but which we do not believe is relevant to our business, which may, nonetheless, ultimately be found to limit our ability to make, use, sell, offer for sale or import our products that may be approved in the future, or impair our competitive position. Even if the patents do issue based on the patent applications we own, co-own or exclusively license, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, patents in our portfolio may not adequately exclude third parties from practicing relevant technology or prevent others from designing around our claims. If the breadth or strength of our intellectual property position with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. In the event of litigation or administrative proceedings, we cannot be certain that the claims in any of our issued patents will be considered valid by courts in the United States or foreign countries.

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

We rely on patent, trademark, trade secret and other intellectual property protection in the discovery, development, manufacturing and sale of LNZ100 and any future product candidates. In particular, patent protection is important in the development and eventual commercialization of LNZ100 or any of our future product candidates. Patents covering LNZ100 or any of our future product candidates normally provide market exclusivity, which is important in order for LNZ100 or any of our future product candidates to become profitable.

Patent rights are of limited duration. In the United States, if all maintenance fees are paid timely, the natural expiration of a patent is generally 20 years after its first effective filing date. Various extensions may be available, but the life of a patent, and the protection it affords is limited. Given the amount of time required for the development, testing, and regulatory

review of new product candidates, patents protecting such candidates might expire before or shortly after such product candidates are commercialized. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from generic products. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing product candidates similar or identical to ours. Upon issuance in the United States, the term of a patent can be increased by patent term adjustment, which is based on certain delays caused by the USPTO, but this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. The term of a U.S. patent may also be shortened if the patent is terminally disclaimed over an earlier-filed patent.

Depending upon the timing, duration and specifics of FDA marketing approval of LNZ100 and future product candidates, one or more of our U.S. patents 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 beyond the normal expiration of the patent as compensation for patent term lost during drug development and the FDA regulatory review process, which is limited to the approved indication (or any additional indications approved during the period of extension). This extension is based on the first approved use of a product and is limited to only one patent that covers the approved product, the approved use of the product, or a method of manufacturing the product. Such patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. We may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Additionally, administrative changes at the USPTO or other applicable patent authorities, such as reduced hiring and/or funding, may result in delays in issuance of a patent or in accrual of patent term extension, thereby reducing the amount of patent term extension that could otherwise be received. Administrative changes (e.g., at the FDA or USPTO) may also lead to delays in review and analysis of regulatory submissions or requests for patent term extension, which could result in a patent term extension not being timely granted (e.g., before the expiration of the patent) and there may be no patent eligible for extension. Moreover, the applicable time-period or the scope of patent protection afforded could be less than we project or request. If we are unable to extend the expiration date of our existing patents or obtain new patents with longer expiry dates, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data to obtain approval of competing products following our patent expiration and launch their product earlier than might otherwise be the case.
In addition, upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Upon submission of an ANDA or a 505(b)(2) NDA, an applicant must certify to the FDA that (1) no patent information on the drug product that is the subject of the application has been submitted to the FDA; (2) such patent has expired; (3) the date on which such patent expires; or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. We cannot guarantee that a patent that may cover LNZ100 or a future product candidate can or will be appropriately listed in the Orange Book.

Laws governing analogous patent term extension ("PTE") in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. If we are unable to obtain PTE or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration and may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data to launch their product earlier than might otherwise be the case, and our revenue could be reduced, possibly materially.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for noncompliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or patent applications will be due to be paid to the USPTO and other foreign patent agencies in several stages over the lifetime of our patents and patent applications. The USPTO and various foreign national or international patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. While an inadvertent lapse can in many 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 patent rights include, but are not limited to, failure to timely file national and regional stage patent applications based on our international patent application, failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents. We employ reputable law firms and other professionals to help us comply with these provisions. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If such an event were to occur, it could have a material adverse effect on our business. If we or any of our licensors fail to maintain the patents and patent applications covering LNZ100 or any future product candidate, our competitors may be able to enter the market, which would have an adverse effect on our business, financial conditions, results of operations and growth prospects. We do not have granted patents in certain major markets, including Europe, and cannot guarantee that we will obtain patent coverage in such markets that cover LNZ100 or any future product candidate.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect our ability to develop and market our products.

As the biopharmaceutical industry expands and more patents are issued, the risk increases that LNZ100 or any of our future product candidates may be subject to claims of infringement of the patent rights of third parties. There can be no assurance that our operations do not, or will not in the future, infringe, misappropriate or otherwise violate existing or future third-party patents or other intellectual property rights. Identification of third-party patent rights that may be relevant to our operations is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. We cannot provide any assurances that third-party patents do not exist which might be enforced against our existing products or current technology, including our research programs, LNZ100, any of our future product candidates, their respective methods of use, and manufacture thereof, and could result in either an injunction prohibiting our manufacture or future sales, or, with respect to our future sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties, which could be significant. We cannot guarantee that any of our 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 application in the United States and abroad that is relevant to or necessary for the commercialization of our current and future product candidates in any jurisdiction.

Numerous U.S. and foreign patents and pending patent applications exist in our market that are owned by third parties. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use and sell our product candidates. We do not always conduct independent reviews of pending patent applications and patents issued to third parties. Patent applications in the United States and elsewhere are typically 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. Certain U.S. applications that will not be filed outside the United States can remain confidential until patents issue. In addition, patent applications in the United States and elsewhere can be pending for many years before issuance, or unintentionally abandoned patents or applications can be revived. Furthermore, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use of our product candidates. As such, there may be applications of others now pending or recently revived patents of which we are unaware. These patent applications may later result in issued patents, or the revival of previously abandoned patents, that may be infringed by the manufacture, use or sale of our product candidates or will prevent, limit or otherwise interfere with our ability to make, use or sell our 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 products. For example, we may incorrectly determine that our 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 United States or abroad that we consider relevant may be incorrect, and our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

We may become involved in third-party claims of intellectual property infringement, which may delay or prevent the development and commercialization of LNZ100 and any future product candidate.

Our commercial success depends in part on our ability to develop, manufacture, market and sell LNZ100 and any future product candidates, while avoiding infringement and other violations of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, derivation, and administrative law proceedings, inter partes review, and post-grant review before the USPTO, as well as oppositions and similar processes in foreign jurisdictions. We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights who allege that our product candidates, uses and/or other proprietary technologies infringe 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 and our collaborators are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, and as we gain greater visibility and market exposure as a public company, the risk increases that our product candidates or other business activities may be subject to claims of infringement of the patent and other proprietary rights of third parties. Third parties may assert that we are infringing their patents or employing their proprietary technology without authorization.

Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time consuming and, even if resolved in our favor, is likely to divert significant resources from our core business, including distracting 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 or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain 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.

Also, there may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our current and future product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our current or future product candidates may infringe.

In addition, third parties may obtain patent rights in the future and claim that use of our technologies infringes upon their rights. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any molecules formed during the manufacturing process, methods of treating certain diseases or conditions that we are pursuing with our product candidates, our formulations including combination therapies, or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire. Such a license may not be available on commercially reasonable terms or at all. In addition, we may be subject to claims that we are infringing other intellectual property rights, such as trademarks or copyrights, or misappropriating the trade secrets of others, and to the extent that our employees, consultants or contractors use intellectual property or proprietary information owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our current and future product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful infringement or other intellectual property claim 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 affected 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 to obtain licenses from third parties to advance our research or allow commercialization of our product candidates, and we have done so from time to time. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our product candidates, resulting in 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 to third parties.

During the course of any intellectual property litigation, there could be public announcements of the initiation of the litigation as well as results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities

analysts or investors regard these announcements as negative, the perceived value of our existing products, programs or intellectual property could be diminished. Accordingly, the market price of shares of our common stock may decline. Such announcements could also harm our reputation or the market for our future products, which could have a material adverse effect on our business.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property rights, or the patents or other intellectual property rights of any licensors, which could be expensive, time consuming, and unsuccessful, and could result in a court or administrative body finding our patents to be invalid or unenforceable.

Competitors may challenge, infringe or otherwise violate our patents, the patents of our licensors or our other intellectual property rights. To counter challenges, infringement or unauthorized use or misappropriations, we or any future licensors may be required to file or defend legal claims, which can be expensive and time-consuming. In addition, in such a proceeding, a court may decide that one or more patent of ours or any of our current or future licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing. The initiation of a claim against a third party may also cause the third party to bring counter claims against us such as claims asserting that our patents are invalid or unenforceable. In patent litigation in the United States, 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, including lack of novelty, obviousness (inventive step), non-enablement, insufficient written description, or failure to claim patent-eligible subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as ex parte reexaminations, inter partes review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. Additionally, delays caused by the federal agencies may increase the time period that we are subject to such claims. For example, administrative changes, including reduced personnel and budgets experienced by the Patent and Trial Appeal Board, could further delay our ability to timely challenge any such patents. The outcome following legal assertions of invalidity and unenforceability is unpredictable. In any patent infringement proceeding, there is a risk that a court will decide that a patent of ours or any future licensors is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that it or any future licensors' patent claims do not cover the invention, or decide that the other party's use of our or any future licensors' patented technology falls under the safe harbor to patent infringement under 35 U.S.C. §271(e)(1). An adverse outcome in a litigation or proceeding involving our or any future licensors' patents could limit our ability to assert our own or any future licensors' patents against those parties or other competitors and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Any of these occurrences could adversely affect our competitive position, and our business, financial condition, results of operations and prospects. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

We cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. For any patents and patent applications that we may license from third parties in the future, we may have limited or no right to participate in the defense of such licensed patents against challenge by a third party. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our current or future product candidates. Such a loss of patent protection could harm our business.

We may not be able to prevent, alone or with our licensees, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Our business could be harmed if in litigation the prevailing party does not offer us a license on commercially reasonable terms. Any litigation or other proceedings to enforce our intellectual property rights may fail, and even if successful, may result in substantial costs and distract our management and other employees.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. 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. There could also 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 an adverse effect on the price of our common stock. Moreover, we cannot assure you that we will have sufficient financial or other resources to file and pursue such infringement claims,

which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings.

Because of the expense and uncertainty of litigation, we may not be in a position to enforce our intellectual property rights against third parties.

Because of the expense and uncertainty of litigation, we may conclude that even if a third party is infringing our patents, any patents that may be issued as a result of our future patent applications, or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action may be too high or not in the best interest of our company or our stockholders. In such cases, we may decide that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution.

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

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents relating to LNZ100 and any future product candidates. Obtaining, defending, maintaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. 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, and may diminish our ability to protect our inventions, obtain, maintain, enforce and protect our intellectual property rights and, more generally, could affect the value of our intellectual property or narrow the scope of our future owned and licensed patents. The United States has enacted and implemented wide-ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on actions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce patents that we have or that we might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions or changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we have or that we may obtain in the future. For example, the complexity and uncertainty of European patent laws have also increased in recent years. In Europe, a new unitary patent system took effect June 1, 2023, which will significantly impact European patents, including those granted before the introduction of such a system. Under the unitary patent system, European applications have the option, upon grant of a patent, of becoming a Unitary Patent which will be subject to the jurisdiction of the Unitary Patent Court (the "UPC"). As the UPC is a new court system, there is no precedent for the court, increasing the uncertainty of any litigation. Patents granted before the implementation of the UPC have the option of opting out of the jurisdiction of the UPC over the first seven years of the court's existence and remaining as national patents in the UPC countries. Patents that remain under the jurisdiction of the UPC will be potentially vulnerable to a single UPC-based revocation challenge that, if successful, could invalidate the patent in all countries who are signatories to the UPC. We cannot predict with certainty the long-term effects of any potential changes. We may decide to opt out our future European patents from the UPC, but doing so may preclude us from realizing the benefits of the UPC. Moreover, if we do not meet all of the formalities and requirements for opt-out under the UPC, our future European patents could remain under the jurisdiction of the UPC. The UPC will provide our competitors with a new forum to centrally revoke our European patents and allow for the possibility of a competitor to obtain pan-European injunction. Such a loss of patent protection could have a material adverse impact on our business and our ability to commercialize our technology and product candidates due to increased competition and, resultantly, on our business, financial condition, prospects and results of operations.

We may not be able to protect our intellectual property rights throughout the world, which could impair our business.

Patents are of national or regional effect, and filing, prosecuting, and defending patents covering LNZ100 and any future product candidate throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States, even in jurisdictions where we do pursue patent protection. Consequently, we may not be able to prevent third parties from practicing our or any future licensors' inventions in all countries outside the United States, even in jurisdictions where we or any future licensors do pursue patent protection, or from selling or importing products made using our or any future licensors' inventions in and into the United States or other jurisdictions. Competitors may use our or any future licensors'

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 may have or obtain patent protection, but where patent enforcement is not as strong as that in the United States. These competitors' products may compete with our products in such jurisdictions and take away our market share where we do not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property and proprietary rights generally. In addition, certain jurisdictions do not protect to the same extent or at all inventions that constitute new methods of treatment. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents 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 that we develop or license. Furthermore, while we intend to protect our intellectual property rights in our expected significant markets, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our product candidates. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate, which may have an adverse effect on our ability to successfully commercialize LNZ100 or any of our future product candidates in all of our expected significant foreign markets.

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. As a result, the patent owner may have limited remedies in certain circumstances, which could materially diminish the value of such patent. If we or any of our licensors are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected. Accordingly, our efforts to protect or enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license. Furthermore, while we intend to protect our intellectual property rights in our expected significant markets, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our product candidates. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate, which may have an adverse effect on our ability to successfully commercialize LNZ100 or any of our future product candidates in all of our expected significant foreign markets.

Further, the standards applied by the USPTO and foreign patent offices in granting patents are not always applied uniformly or predictably. As such, we do not know the degree of future protection that we will have on our technologies, products and product candidates. While we will endeavor to try to protect our technologies, products and product candidates with intellectual property rights such as patents, as appropriate, the process of obtaining patents is time-consuming, expensive and unpredictable.

Further, geo-political actions in the United States and in foreign countries (such as the Russia and Ukraine conflict) could increase the uncertainties and costs surrounding the prosecution or maintenance of our patent applications or those of any current or future licensors and the maintenance, enforcement or defense of our issued patents or those of any current or future licensors. Accordingly, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected.

Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws within the United States. We may need to share our trade secrets and proprietary know-how with current or future 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 United States and abroad. In addition, some courts inside and outside the United States are sometimes less willing or unwilling to protect trade secrets. If we choose to go to court to stop a third party from using any of our trade secrets, we may incur substantial costs. Even if we are successful, these types of lawsuits may consume our time and other resources. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to the protection afforded by patents, we may seek to rely on trade secret protection to protect proprietary know-how that is not 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 is not covered by our patents. We may not be able to meaningfully protect our trade secrets. Although we require all of our employees to assign their inventions to us, and 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 confidentiality agreements, we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed to our competitors or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws within the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States 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, operating results, and financial condition.

Because we expect to rely on third parties to manufacture LNZ100 and any future product candidates, and we expect to collaborate with third parties on the continuing development of LNZ100 and any future product candidates, we must, at times, share trade secrets with them. We also expect to conduct R&D programs that may require us to share trade secrets under the terms of our partnerships or agreements with CROs. We seek to protect our proprietary technology in part by entering into agreements containing confidentiality and use restrictions and obligations, including material transfer agreements, consulting agreements, manufacturing and supply agreements, confidentiality agreements or other similar agreements with our advisors, employees, contractors, CMOs, CROs, other service providers and consultants prior to disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have an adverse effect on our business and results of operations.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors CMOs, CROs, other service providers and consultants to publish data potentially relating to our trade secrets, although such agreements may contain certain limited publication rights. Despite our efforts to protect our trade secrets, our competitors may discover such trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

Monitoring unauthorized disclosure and detection of unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time-consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. 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. For example, significant elements of our products, including confidential aspects of sample preparation, methods of manufacturing, and related processes and software, are based on unpatented trade secrets. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of their former employers or other third parties or claims asserting ownership of what we regard as our own intellectual property.

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies, or at research institutions, including our competitors or potential competitors. Although 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 these individuals have or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Further, although we seek to protect our

ownership of intellectual property rights by ensuring that our agreements with our employees, collaborators, and other third parties with whom we do business include provisions requiring such parties to assign rights in inventions to us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. 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. An inability to incorporate such technologies or features would harm our business and may prevent us from successfully commercializing our technologies or product candidates. In addition, we may lose personnel as a result of such claims and any such litigation, or the threat thereof, may adversely affect our ability to hire employees or contract with independent contractors. A loss of key personnel or their work product could hamper or prevent our ability to commercialize our technologies or product candidates, which could adversely affect our business, financial condition, results of operations and prospects. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, we may also be subject to claims that former employers, consultants or other third parties have an ownership interest in our patents or patent applications 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. There is no guarantee of success in defending these claims, and 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 challenges may also result in our inability to develop, manufacture or commercialize our technologies and 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 technologies and product candidates. Even if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees. Any of the foregoing could adversely affect our business, financial condition, results of operations and prospects.

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

We intend to use registered or unregistered trademarks or trade names to brand and market ourselves and our products. Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. During trademark registration proceedings, we may receive rejections of our applications by the USPTO or in other foreign jurisdictions. Although we are given an opportunity to respond to such rejections, we may be unable to overcome them. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, which may not survive such proceedings.

We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. 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 trade names by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our financial condition or results of operations.

In addition, any proprietary name we propose to use with our current or future product candidates in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of the potential for confusion with other

product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable proprietary product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- others may be able to make formulations or compositions that are the same as or similar to our current and future product candidates, but that are not covered by the pending patent applications or patents that we own or any pending patent applications or patents that we may in-license in the future;
- others may be able to make product that is similar to our current and future product candidates that we intend to commercialize and that is not covered by the patents that we exclusively licensed and have the right to enforce;
- we, any of our future licensors or collaborators might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or may in-license in the future;
- we or any of our future licensors might not have been the first to file patent applications covering certain of its or those licensors' inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing or otherwise violating our owned intellectual property rights or any patent applications that we may license in the future;
- it is possible that our pending patent applications or those that we may own or license in the future will not lead to issued patents;
- issued patents that we either own or that we may license in the future may be revoked, modified or held valid or unenforceable, as a result of legal challenges by our competitors;
- issued patents that we either own or that we may license in the future may not provide us with any competitive advantages;
- others may have access to the same intellectual property rights licensed to us in the future on a non-exclusive basis;
- our competitors might conduct research and development activities in the United States 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 then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- we cannot predict the scope of protection of any patent issuing based on our or any future licensors' patent applications, including whether the patent applications that we own, or, in the future, in-licenses will result in issued patents with claims directed to our product candidates or uses thereof in the United States or in other foreign countries;
- the claims of any patent issuing based on our patent applications may not provide protection against competitors or any competitive advantages, or may be challenged by third parties;
- if enforced, a court may not hold that our patents are valid, enforceable or infringed;
- we may need to initiate litigation or administrative proceedings to enforce and/or defend our patent rights which will be costly whether we win or lose;
- we may choose not to file a patent application in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent application covering such intellectual property;

- we may fail to adequately protect and police our trademarks and trade secrets; and
- the patents of others may have an adverse effect on our business, including if others obtain patents claiming subject matter similar to or improving that covered by our patent applications.

Any collaboration or partnership arrangements that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our products.

Any future collaborations that we enter into may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborations are subject to numerous risks, which may include that:

- collaborators have significant discretion in determining the efforts and resources that they will apply to collaborations;
- collaborators may not pursue development and commercialization of our products or may elect not to continue or renew development or commercialization programs based on trial or test results, changes in our 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 could independently develop, or develop with third parties, products that compete directly or indirectly with our current and future product candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- 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 causes the delay or termination of the research, development or commercialization of our current or future product candidates or that results 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 develop or commercialize such intellectual property; and
- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

If we fail to comply with our obligations under any license, collaboration or other agreements, such agreements may be terminated, we may be required to pay damages and could lose intellectual property rights that are necessary for developing and protecting our product candidates.

We may in the future license or otherwise acquire development or commercialization rights to current and future product candidates or data from third parties. If any future licensors fail to prosecute, maintain, enforce, and defend such patents, or lose rights to those patents, the rights we have licensed may be reduced or eliminated, and our right to develop and commercialize future product candidates that may be subject of such licensed rights could be adversely affected. In spite of our efforts, any future licensors might conclude that we are in material breach of obligations under our license agreements. If we breach any material obligations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and the licensor may have the right to terminate the license, which could result in us being unable to develop, manufacture, and sell products that are covered by the licensed technology or enable a competitor to gain access to the licensed technology. If such in-licenses are terminated, or if the underlying patents fail to provide the intended exclusivity, our competitors will have the freedom to seek regulatory approval of, and to market, products identical to our product candidates and the licensors to such in-licenses could prevent us from developing or commercializing product candidates that rely upon the patents or other intellectual property rights which were the subject matter of such terminated

agreements. Any of these events could adversely affect our business, financial condition, results of operations, and prospects.

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

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

If disputes over intellectual property that we license prevent or impair our ability to maintain our licensing arrangements on acceptable terms, we may not be able to successfully develop and commercialize the affected product candidates, which would have a material adverse effect on our business.

In addition, certain of our current or future agreements with third parties may limit or delay our ability to consummate certain transactions, may impact the value of those transactions, or may limit our ability to pursue certain activities.

Further, we or our current or future licensors, if any, may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Therefore, we may miss potential opportunities to strengthen our patent position. It is possible that defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, ownership, claim scope, or requests for patent term adjustments. If such defects are identified in a granted patent, we may reissue the granted patent, which would require us to relinquish the patent, and subject the patent to subsequent reissue patent examination. During reissue examination, there is no guarantee that a similar scope of claim would again be granted or that any claim would be granted at all. In addition, if defects in ownership or assignment of rights are identified, there is no guarantee that we would be able to perfect such ownership or assignment of rights. If our current or future licensors are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. If there are material defects in the form, preparation, prosecution, or enforcement of our patents or patent applications, such patents may be invalid and/or unenforceable, and such applications may never result in valid, enforceable patents. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

In addition, even where we have the right to control patent prosecution of patents and patent applications under a license from third parties, we may still be adversely affected or prejudiced by actions or inactions of our predecessors or licensors and their counsel that took place prior to us assuming control over patent prosecution.

Our acquired technologies and current or future licensed technology may be subject to retained rights. Our predecessors or 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 predecessors or future licensors limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse.

If we are limited in our ability to utilize acquired technologies or current or future licensed technologies, or if we lose our rights to critical acquired or in-licensed technology, we may be unable to successfully develop, out-license, market and sell our products, which could prevent or delay new product introductions. Our business strategy depends on the successful development of acquired technologies, and current or future licensed technology, into commercial products. Therefore, any

limitations on our ability to utilize these technologies may impair our ability to develop, out-license or market and sell our product candidate.

We may not be able to license or acquire new or necessary intellectual property rights or technology from third parties.

Because our development programs may in the future require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire, in-license, or use these third-party proprietary rights. Further, other parties, including our competitors, may have patents and have filed and are likely filing patent applications potentially relevant to our business. In order to avoid infringing these patents, we may find it necessary or prudent to obtain licenses to such patents from such parties. The licensing or acquisition of intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These 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. No assurance can be given that we will be successful in licensing any additional rights or technologies from third parties. Our inability to license the rights and technologies that we have identified, or that we may in the future identify, could have a material adverse impact on our ability to complete the development of our product candidates or to develop additional product candidates. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. Failure to obtain any necessary rights or licenses may detrimentally affect our planned development of our current or future product candidates could be impacted and costs could increase, extending timelines associated with the development of such other product candidates if we fail to acquire necessary rights or licenses. We may even have to abandon the development of the relevant program or product candidate. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may enter into license agreements in the future with others to advance our existing or future research or allow commercialization of our existing or future product candidates. These licenses may not provide exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology and product candidates in the future. In that event, we may be required to expend significant time and resources to redesign our product candidates, or the methods for manufacturing them, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates, which could harm our business, financial condition, results of operations, and prospects significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our current manufacturing methods, product candidates, or future methods or product candidates resulting in either an injunction prohibiting their manufacture or future sales, or, with respect to their future sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties, which could be significant.

Risks Related to Our Regulatory Approval and Other Legal Compliance Matters

The regulatory approval processes of the FDA and other comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals for our product candidates, we will not be able to commercialize, or will be delayed in commercializing, our product candidates, and our ability to generate revenue will be materially impaired.

Our product candidates, including LNZ100 and any future product candidates we may seek to develop, 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 United States and by comparable foreign regulatory authorities. Before we can commercialize any of our product candidates, we must obtain marketing approval. We submitted an NDA for LNZ100 in August 2024, which has been accepted by FDA for substantive review with a PDUFA target action date of August 8, 2025. We can provide no assurance that FDA will approve our NDA by this goal date or at all.

Obtaining approval by the FDA and other comparable foreign regulatory authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the type, complexity and novelty of the product candidates involved. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. Further, securing regulatory approval also requires the submission of information about the drug manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority.

Prior to obtaining approval to commercialize any drug product candidate in the United States or abroad, we must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA or foreign regulatory agencies, that such product candidates are safe and effective for their intended uses. Results from preclinical studies and clinical trials can be interpreted in different ways. Even if we believe the preclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional nonclinical, clinical or other data. Even if we eventually complete clinical testing and receive approval for our product candidates, the FDA and other comparable foreign regulatory authorities may approve our product candidates for a more limited indication or a narrower patient population than we originally requested or may impose other prescribing limitations or warnings that limit the product's commercial potential. The FDA may also require us to conduct additional preclinical studies or clinical trials for our product candidates either prior to or after approval, or may object to elements of our clinical development programs. We have not obtained regulatory approval for any product candidate, and it is possible that none of our product candidates will ever obtain regulatory approval. Further, development of our product candidates or regulatory approval may be delayed for reasons beyond our control.

Applications for LNZ100 or any future product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or other comparable foreign regulatory authorities may disagree with the design, implementation or results of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or other comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- the population studied in the clinical trials may not be sufficiently broad or representative to assure efficacy and safety in the full population for which we seek approval;
- the FDA or other comparable foreign regulatory authorities may disagree with our interpretation of data from nonclinical studies or clinical trials;
- we may be unable to demonstrate to the FDA or other comparable foreign regulatory authorities that our product candidate's risk-benefit ratio for its proposed indication is acceptable;

- the FDA or other comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or other comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval or resulting in delays in their regulatory approval.

Of the large number of drugs in development, only a small percentage successfully complete the FDA or comparable foreign regulatory approval processes and are commercialized. The lengthy approval processes as well as the unpredictability of future clinical trial results may result in us failing to obtain regulatory approval to market our product candidates, which would significantly harm our business, results of operations and prospects.

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in us failing to obtain regulatory approval to market LNZ100 or any future product candidates, which would significantly harm our business, results of operations and prospects. In addition, even if we obtain approval of LNZ100 or any future product candidates, regulatory authorities may approve any of such product candidates for fewer or more limited indications than we request, may impose significant limitations in the form of narrow indications, warnings, or a REMS. In addition, the FDA or comparable foreign regulatory authorities may change its policies, issue additional regulations or revise existing regulations, or take other actions, which may prevent or delay approval of LNZ100 or any future product candidates on a timely basis. Such policy or regulatory changes could impose additional requirements upon us that could delay our ability to obtain approvals, increase the costs of compliance or restrict our ability to maintain any marketing authorizations we may have obtained.

Our current or future product candidates may fail to demonstrate substantial evidence of their safety and efficacy or cause significant adverse events or other undesirable side effects may be identified during the development of our product candidates, which could prevent, delay or limit the scope of regulatory approval of our product candidates, prevent market acceptance, limit our commercial potential or result in significant negative consequences.

To obtain the requisite regulatory approvals for the commercial sale of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are safe and effective for use in each target indication. Preclinical studies and clinical trials are expensive and time-consuming, and their outcomes are inherently uncertain. Failures can occur at any time during the development process. Product candidates often fail to demonstrate safety or efficacy of the product candidate studied for the target indication, and most product candidates that begin clinical trials are never approved.

While we believe our Phase 3 CLARITY trials were completed successfully, we may fail to demonstrate with substantial evidence from adequate and well-controlled trials, and to the satisfaction of the FDA or comparable foreign regulatory authorities, that LNZ100 or any future product candidates are safe and effective for their intended uses.

If our product candidates are associated with undesirable side effects or have unexpected characteristics in nonclinical studies or clinical trials when used alone or in combination with other approved products or investigational new drugs, we may decide or be required to perform additional clinical studies or to interrupt, delay or abandon our 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. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the clinical trial, or result in potential product liability claims. Any of these occurrences may prevent us from achieving or maintaining market acceptance of the affected product candidate and may harm our business, financial condition, and prospects significantly. Moreover, if we elect, or are required, to not initiate, 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 revenue 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.

Patients in our clinical trials may in the future suffer significant adverse events or other side effects not observed in our nonclinical studies or previous clinical trials. Some of our product candidates may be used as chronic therapies or be used in populations for which safety concerns may be particularly scrutinized by regulatory agencies. In addition, if our product candidates are used in combination with other therapies, our product candidates may exacerbate adverse events associated with the therapy. Patients treated with our product candidates may also be undergoing separate treatments which can cause side effects or adverse events that are unrelated to our product candidates, but may still impact the success of our clinical trials, including, for example, by interfering with the effects of our product candidates.

If significant adverse events or other side effects are observed in any of our future clinical trials, we may have difficulty recruiting patients to the clinical trials, patients may drop out of our clinical trials, or we may be required to abandon the clinical trials or our development efforts of that product candidate altogether. We, the FDA or other comparable regulatory authorities, or an IRE may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects in such clinical trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage clinical trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product candidate from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance due to its tolerability versus other therapies. Any of these developments could materially harm our business, financial condition, and prospects.

Further, if any of our product candidates obtains marketing approval, and we or others later identify adverse events or other side effects associated with such products, a number of potentially negative consequences could result, including:

- regulatory authorities may suspend, withdraw or limit approvals of that product, or seek an injunction against its manufacture or distribution;
- regulatory authorities may require additional warnings on the label;
- we may decide to remove the product from the market;
- we may be required to conduct post-marketing studies or change the way the product is administered;
- we may be sued and held liable for harm caused to subjects or patients;
- we may be subject to fines, injunctions or the imposition of criminal penalties; and
- our reputation and physician or patient acceptance of our products may suffer.

There can be no assurance that we will resolve any issues related to any product-related adverse events to the satisfaction of the FDA or any foreign regulatory agency in a timely manner or at all. Moreover, any of these events could diminish the usage or otherwise limit the commercial success of our product candidates and prevent us from achieving or maintaining market acceptance of the affected product, if approved by applicable regulatory authorities.

Additional time may be required to develop and obtain regulatory approval for LNZ100 because we expect it will be regulated as a drug-device combination product.

We expect LNZ100 to be regulated as a drug-device combination product that will require coordination within the FDA and comparable foreign regulatory authorities and notified bodies for review of its drug and device components. Although the FDA and comparable foreign regulatory authorities and notified bodies have systems in place for the review and approval of drug-device combination products such as LNZ100, we may experience delays in the development, approval and commercialization of LNZ100 due to regulatory timing constraints and uncertainties in the product development and approval process.

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

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion and pricing of the product candidate in those countries. However, a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional nonclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, the pricing of a prescription drug candidate is subject to regulatory approval before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

We may also submit marketing applications in other countries. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which we must comply prior to marketing in those jurisdictions. 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 the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our potential product candidates will be harmed.

Even if we receive regulatory approval of LNZ100 or any future product candidates, we will be subject to ongoing regulatory obligations and continued regulatory oversight, 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.

Even if we obtain any regulatory approval for LNZ100 or any future product candidates, such product candidates will be subject to ongoing regulatory requirements applicable to manufacturing, labeling, packaging, storage, advertising, promoting, sampling, record-keeping and submission of safety or other post-market information, among other things. Any regulatory approvals that we receive for our product candidates will require surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS, limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or requirements that we conduct potentially costly post-market testing and surveillance studies, including Phase 4 trials and surveillance to monitor the quality, safety and efficacy of the drug. An unsuccessful post-marketing study or failure to complete such a study could result in order to approve our product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools.

Any new legislation addressing drug safety issues could result in delays in our product development or commercialization, or increased costs to assure compliance. We will also have to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drug products are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we will not be allowed to promote our products for indications or uses for which they do not have approval, commonly known as off-label promotion. The holder of an approved NDA must submit new or supplemental applications and obtain prior approval for certain changes to the approved product, product labeling, or manufacturing process. A company that is found to have improperly promoted off-label uses of its products may be subject to significant civil, criminal and administrative penalties.

In addition, drug manufacturers are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP requirements and adherence to commitments made in the NDA or foreign marketing application. If we, the FDA or a comparable foreign regulatory authority, discover previously unknown problems with our product candidates, such as adverse events of unanticipated severity or frequency, or problems with the facility where the drug is manufactured or if a regulatory authority disagrees with the promotion, marketing or labeling of that drug, a regulatory authority may impose restrictions relative to that drug, the manufacturing facility or us including requesting a recall or requiring withdrawal of the drug from the market or suspension of manufacturing.

Failure by us to comply with applicable regulatory requirements following approval of any product candidates, 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 requiring remediation;
- revisions to the labeling, including limitation on approved uses or the addition of additional 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;
- suspension or withdrawal of regulatory approvals;
- issuance of fines, untitled letters, warning 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 our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

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 product candidates. 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, and we may not achieve or sustain profitability. We also cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. It is difficult to predict how current and future legislation, executive actions, and litigation, including the executive orders, will be implemented, and the extent to which they will impact our business, our clinical development, and the FDA's and other agencies' ability to exercise their regulatory authority, including FDA's pre-approval inspections and timely review of any regulatory filings or applications we submit to the FDA. To the extent any executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

Moreover, the FDA strictly regulates the promotional claims that may be made about drug products. In particular, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling. 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 civil, criminal and administrative 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.

Disruptions at the FDA, the SEC, and other government agencies caused by funding shortages or global health concerns 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, return-to-office policies and other executive actions by the Trump administration, changes in the leadership of the FDA, 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 agency 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 or approved by necessary government agencies, which would adversely affect our business. If a prolonged government shutdown or other disruption occurs, or if global health or other concerns prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities in a timely manner, 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, 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.

Separately, in response to the COVID-19 pandemic, the FDA announced its intention to postpone most inspections of foreign and domestic manufacturing facilities at various points. Even though the FDA has since resumed standard inspection operations of domestic facilities, if a prolonged government shutdown occurs, either for global health related reasons or other reasons, preventing the FDA or other regulatory authorities from conducting business as usual or conducting 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 effect on our business.

We may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations.

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our product candidates or any future product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell a product for which we obtain

marketing approval. Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example:

- changes to our manufacturing arrangements;
- additions or modifications to product labeling;
- the recall or discontinuation of our products; or
- additional record-keeping requirements, if any such changes were to be imposed on us, could adversely affect the operation of our business.

In June 2024, the U.S. Supreme Court overruled the Chevron doctrine, which gives deference to regulatory agencies' statutory interpretations in litigation against federal government agencies, such as the FDA, where the law is ambiguous. This landmark Supreme Court decision may invite more companies and other stakeholders to bring lawsuits against the FDA to challenge longstanding decisions and policies of the FDA, including FDA's statutory interpretations of market exclusivities and the "substantial evidence" requirements for drug approvals, which could undermine the FDA's authority, lead to uncertainties in the industry, and disrupt the FDA's normal operations, any of which could delay the FDA's review of our regulatory submissions. Further, the new Trump administration, including changes in the leadership at the FDA and other federal agencies, may issue new policies and regulations that can impact the compliance status of our product candidate. We cannot predict the full impact of this decision, future judicial challenges brought against the FDA, or the nature or extent of government regulation that may arise from future legislation or administrative action.

LNZ100, if approved, will be directed to the out-of-pocket, cash-pay market in the United States, which we believe makes the market less sensitive to changes in insurance coverage and reimbursement. That said, changes in healthcare legislation and healthcare cost containment measures could impact the pricing of other products and procedures that compete with LNZ100, which can indirectly impact our pricing strategy and profitability. If a competitor treatment is covered by health plans or has more favorable pricing for consumers, the pricing of LNZ100 may be negatively impacted, which could have a material adverse effect on our ability to generate revenue and to attain profitability. Additionally, the out-of-pocket, cash-pay market for our patient population may be negatively impacted by other price increases and market conditions, including rising costs of other consumer goods, which patients may prioritize over any product candidates we may commercialize.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, 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 contained provisions that may reduce the profitability of drug products through, among other things, increased rebates for drugs reimbursed by Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs.

There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. In August 2022, Congress passed the Inflation Reduction Act of 2022 (the "IRA"), which includes prescription drug provisions that have significant implications for the pharmaceutical industry and Medicare beneficiaries, including allowing the federal government to negotiate a maximum fair price for certain high-priced single source Medicare drugs, imposing penalties and excise tax for manufacturers that fail to comply with the drug price negotiation requirements, requiring inflation rebates for all Medicare Part B and Part D drugs, with limited exceptions, if their drug prices increase faster than inflation, and redesigning Medicare Part D to reduce out-of-pocket prescription drug costs for beneficiaries, among other changes. Only high-expenditure single-source drugs that have been approved for at least 7 years (11 years for single-source biologics) can qualify for negotiation, with the negotiated price taking effect two years after the selection year. For 2026, CMS selected 10 high-cost Medicare Part D drugs in 2023 and the negotiated maximum fair price for each drug has been announced. CMS has selected 15 additional Medicare Part D drugs for negotiated maximum fair pricing in 2027. For 2028, up to an additional 15 drugs, which may be covered under either Medicare Part B or Part D, will be selected, and for 2029 and subsequent years, up to 20 additional Part B or Part D drugs will be selected. Various industry stakeholders, including pharmaceutical companies and the Pharmaceutical Research and Manufacturers of America, have initiated lawsuits against the federal government asserting that the price negotiation provisions of the IRA are unconstitutional. The impact of these judicial challenges, future lawsuits in view of the Supreme Court's overturn of the *Chevron* doctrine, as well as future legislative, executive, and administrative actions and any future healthcare measures and agency rules implemented by the Trump administration, including the Department of Government Efficiency, on our

company and the pharmaceutical industry as a whole is unclear. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our product candidates if approved.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control prescription drug 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. A number of states are considering or have recently enacted state drug price transparency and reporting laws that could substantially increase our compliance burdens and expose us to greater liability under such state laws once we begin commercialization after obtaining regulatory approval for any of our products. 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 product candidates or additional pricing pressures.

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

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

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

The implementation of cost containment measures or other healthcare reforms may lower the pricing of competitor products or procedures, which in turn may constrain the pricing of our product candidates, if approved, and prevent us from being able to generate revenue, attain profitability or commercialize our product candidates.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for biotechnology products. We cannot be sure to what extent the trajectory of these legislative and regulatory proposals will be implemented by the federal and state governments, whether additional legislative changes will be enacted, whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

We may be subject to federal and state healthcare fraud and abuse laws, false claims laws, transparency laws, and health information privacy and security laws, which could expose us to, among other things, criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens, and diminished profits and future earnings.

Although we expect that LNZ100, if approved, will be directed to the out-of-pocket, cash-pay market in the United States, our current and future arrangements with healthcare professionals, clinical investigators, CROs, and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval.

The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or

the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. 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. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Violations are subject to civil and criminal fines and penalties for each violation, plus up to three times the remuneration involved, imprisonment, and exclusion from government healthcare programs.

- federal civil and criminal false claims laws, including the False Claims Act ("FCA"), which can be enforced through civil "qui tam" or "whistleblower" actions, and civil monetary penalty laws, impose criminal and civil penalties against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal health care programs that are false or fraudulent; knowingly making or causing a false statement material to a false or fraudulent claim or an obligation to pay money to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing such an obligation. 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. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. The FCA also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. When an entity is determined to have violated the federal civil FCA, the government may impose civil fines and penalties for each false claim, plus treble damages, and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs.

- the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which created new federal criminal statutes that prohibit 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 statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA without actual knowledge of the statute or specific intent to violate it.

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH"), and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates and their subcontractors that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions.

- the federal Physician Payments Sunshine Act, created under the ACA and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to CMS information related to payments or other transfers of value made to covered recipients, including physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician healthcare professionals (such as physician assistants and nurse practitioners, among others), and teaching hospitals, as well as information regarding ownership and investment interests held by physicians and their immediate family members.

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

- analogous and related state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection, and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims

involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; 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 that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of available statutory exceptions and regulatory safe harbors, it is possible that some of our business activities, including our advisory board arrangements with physicians, some of whom receive stock or stock options as compensation for services provided, and any sales and marketing activities after a product candidate has been approved for marketing in the United States, could be subject to legal challenge and enforcement actions. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to significant civil, criminal, and administrative penalties, including, without limitation, damages, fines, disgorgement, imprisonment, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, 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.

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

We are exposed to the risk that our employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs, suppliers, and vendors may engage in misconduct or other improper activities. Misconduct by these parties could include failures to comply with FDA regulations, provide accurate information to the FDA, comply with federal and state health care fraud and abuse laws and regulations, accurately report financial information or data, or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the health care 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. Misconduct by these parties could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct by these 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. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of our operations.

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 our company 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. These current or future laws and regulations may impair our research, development or commercialization efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations and 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 are collectively referred 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. We also expect our non-U.S. activities to increase over time. We plan to engage third parties for clinical trials or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals and we can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

Restrictive laws and regulations govern the collection, use, transfer, and other processing of personal information.

In conducting and/or enrolling patients in current or future clinical trials, we are subject to restrictions relating to privacy, data protection and cybersecurity and may be subject to additional restrictions associated with clinical operations in the future. For example, the collection, use, storage, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the General Data Protection Regulation ("GDPR"), which is wide-ranging in scope and imposes numerous requirements on companies that process personal data. The GDPR permits data protection authorities to impose large penalties for violations, including potential fines of up to €20 million or 4% of annual global revenue, whichever is greater, for the most serious of violations. The GDPR also confers a private right of action on data subjects and consumer associations. Certain aspects of cross-border data transfers under the GDPR are uncertain as the result of legal proceedings in the EU, including a July 2020 decision by the Court of Justice for the European Union ("CJEU") that invalidated the EU-U.S. Privacy Shield and called into question the efficacy and legality of using standard contractual clauses ("SCCs"). To address certain concerns of the CJEU, the European Commission issued revised SCCs in June 2021. The EU also has enacted numerous new laws and regulations addressing cybersecurity.

In the United Kingdom ("UK"), the Data Protection Act of 2018 implements and complements the GDPR and is effective along with a version of the GDPR referred to as the UK GDPR. These regimes authorize significant fines, up to the greater of £17.5 million or 4% of global turnover, and expose us to two parallel regimes and potentially divergent enforcement actions. Further, aspects of data protection in the UK remain uncertain. On June 28, 2021, the European Commission issued an adequacy decision, pursuant to which personal data generally may be transferred from the EU to the UK without restriction; however, this adequacy decision is subject to a four-year "sunset" period, after which it may be renewed. This decision may be revoked or modified at any time. Additionally, the UK's Information Commissioner's Office has issued standard contractual clauses to support personal data transfers out of the UK ("UK SCCs"). Regulatory guidance and other developments relating to cross-border personal data transfers, including the necessity of putting in place SCCs and UK SCCs, may increase the complexity of transferring personal data across borders and may require us to engage in additional contractual negotiations and to modify our policies and practices. Other jurisdictions also increasingly maintain laws and regulations addressing privacy, data protection, and cybersecurity. We may incur liabilities, expenses, costs, and other operational losses under the GDPR and local laws of applicable EU member states, the UK, and other regions in connection with any measures we take to comply with them.

In the United States, in addition to HIPAA, HITECH and state laws addressing health-related information, numerous federal and state laws and regulations govern the collection, use, disclosure, and other processing of information relating to individuals. In California, the California Consumer Privacy Act ("CCPA") requires covered companies to provide disclosures to consumers about such companies' data collection, use and sharing practices, provide such consumers ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action in data breach situations. The CCPA went into effect on January 1, 2020, and was modified significantly by the California Privacy Rights Act ("CPRA"), which was approved by California voters in the November 3, 2020 election and became effective January 1, 2023. The CCPA has prompted numerous proposals for federal and state privacy legislation. Numerous

U.S. states have proposed, and in certain cases enacted, laws addressing privacy and cybersecurity matters. Many of these laws are comprehensive privacy statutes imposing obligations similar to the CCPA. Certain U.S. states also have enacted laws and regulations addressing specific subject matter, such as Washington's My Health, My Data Act, which, among other things, provides for a private right of action.

Compliance with U.S. and international laws and regulations relating to privacy, data protection, and cybersecurity 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, and may increase our costs of doing business and require us to change our policies and practices. Any actual or alleged failure to comply with U.S. or international laws and regulations relating to privacy, data protection, or cybersecurity could result in governmental investigations, proceedings, and enforcement actions (which could include civil or criminal penalties), private litigation or adverse publicity, harm to our reputation, and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information or impose other obligations or restrictions in connection with our use, retention, and other processing of information, and we may otherwise face contractual restrictions applicable to these activities. 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.

Risks Related to Our Reliance on Third Parties

We contracted with third parties for the manufacture of our product candidates for our clinical trials for LNZ100, and expect to continue to do so for any additional clinical trials and ultimately for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of LNZ100 or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not currently have the infrastructure or internal capability to manufacture supplies of LNZ100 for use in development and commercialization. We relied on third-party manufacturers for the production of our product candidates for our clinical trials under the guidance of members of our organization, and would expect to continue to do so for any additional clinical trials. Furthermore, the raw materials for our product candidates are sourced, in some cases, from a single-source supplier. For any future clinical trials, if we were to experience an unexpected loss of supply of LNZ100 or any of our future product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any such clinical trials.

We also expect to continue to rely on third-party manufacturers for the commercial supply of LNZ100 if we obtain marketing approval. We may be unable to maintain or establish required agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third party to manufacture LNZ100 according to our schedule, or at all, including if our third-party contractors give greater priority to the supply of other products over the supply of LNZ100 or otherwise do not satisfactorily perform according to the terms of the agreements between us and them;
- the reduction or termination of production or deliveries by suppliers, or the raising of prices or renegotiation of terms;
- the termination or nonrenewal of arrangements or agreements by our third-party contractors at a time that is costly or inconvenient for us;
- the breach by the third-party contractors of their agreements with us;
- the failure of third-party contractors to comply with applicable regulatory requirements;
- the failure of the third party to manufacture LNZ100 according to our specifications;
- the mislabeling of clinical supplies for any future clinical trials we conduct, potentially resulting in the wrong dose amounts being supplied or active drug or placebo not being properly identified;
- clinical supplies not being delivered to clinical sites on time for any future clinical trials we conduct, leading to clinical trial interruptions, or drug supplies not being distributed to commercial vendors in a timely manner, resulting in lost sales; and
- the misappropriation of our proprietary information, including our trade secrets and know-how.

We do not have complete control over all aspects of the manufacturing process of, and are dependent on, our contract manufacturing partners for compliance with cGMP regulations for manufacturing both active drug substances and finished drug products. Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside of the United States. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, EMA or others, we will not be able to secure and/or maintain marketing approval for our manufacturing facilities. In addition, we do not have control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, EMA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of LNZ100 or any future product candidates we may seek to develop, or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain marketing approval for, or market LNZ100 or any such product candidates, if approved. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates or drugs and harm our business and results of operations. Our current and anticipated

future dependence upon others for the manufacture of LNZ100 may adversely affect our future profit margins and our ability to commercialize LNZ100, if approved, on a timely and competitive basis.

The manufacture of drugs is complex and our third-party manufacturers may encounter difficulties in production. If any of our third-party manufacturers encounter such difficulties, our ability to provide adequate supply of LNZ100 for patients, if approved, could be delayed or prevented.

Manufacturing drugs, especially in large quantities, is complex and may require the use of innovative technologies. Each lot of an approved drug product must undergo thorough testing for identity, strength, quality, purity, potency, and stability. Manufacturing drugs requires facilities specifically designed for and validated for this purpose, and sophisticated quality assurance and quality control procedures are necessary. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures, product recalls or spoilage. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. If microbial, viral or other contaminations are discovered at the facilities of our manufacturer, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could adversely harm our business. If our manufacturers are unable to produce sufficient quantities for any future clinical trials or for commercialization as a result of these challenges, or otherwise, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

We have relied, and expect to continue to rely on third parties, including independent clinical investigators and CROs, to conduct, supervise and monitor certain aspects of our clinical trials and any future preclinical studies. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates, or such approval or commercialization may be delayed, and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third parties, including independent clinical investigators and third-party CROs, to conduct certain aspects of our prior preclinical studies and clinical trials and to monitor and manage data for our ongoing clinical programs and any future preclinical studies or clinical trials.

We rely on these parties for execution of our trials, and generally do not control their activities. Nevertheless, we are responsible for ensuring that each of our studies and trials is conducted in accordance with the applicable clinical investigation plan and protocol, legal, regulatory and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our third-party contractors and CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for all of our product candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties or our CROs fail to comply with applicable GCPs, 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 by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply or, with respect to completed clinical trials, complied with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be adversely affected if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Further, these investigators and CROs are not our employees and we are not able to control, other than by contract, the amount of resources, including time, which they devote to our product candidates and clinical trials. 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. If independent investigators or CROs fail to devote sufficient resources to the development of our product candidates, if 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 is compromised due to the failure to adhere to our clinical protocols, regulatory requirements, or for other reasons, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed or precluded entirely.

Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated. If any of our relationships with these third parties terminate, we may not be able to timely enter into arrangements with alternative third parties or to do so on commercially reasonable terms, if at all. Switching or adding CROs involves substantial cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we intend to carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition, and prospects.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Additionally, CROs may lack the capacity to absorb higher workloads or take on additional capacity to support our needs. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition, and prospects.

We entered into a collaboration agreement with CORXEL and depend on CORXEL to develop and commercialize its products within Greater China. We have limited control over how CORXEL will conduct development and commercialization activities for LNZ100 or LNZ101.

In April 2022, we entered into the CORXEL License, pursuant to which we granted CORXEL an exclusive license to certain of our intellectual property rights to develop, use, import, and sell products containing LNZ100 or LNZ101 ("LNZ Products") for the treatment of presbyopia in humans in mainland China, Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan (collectively, "Greater China") and the first right of negotiation for CORXEL to license any other product that we develop or commercialize containing aceclidine or brimonidine for uses outside of the treatment of presbyopia in Greater China. Under the terms of the CORXEL License, we shall refrain from developing or commercializing any competing product, or knowingly enabling a third party to develop or commercialize a product containing aceclidine or brimonidine that would reasonably be expected to result in off-label sales of such products, for the treatment of presbyopia in humans in Greater China.

As a result of the CORXEL License, we are dependent upon CORXEL for the development, regulatory, and commercialization activities for LNZ Products in Greater China, and we have limited control over the amount and timing of resources that CORXEL devotes to such activities. In addition, payments associated with development, regulatory and commercial milestones that we may be eligible to receive, as well as royalties, will be dependent upon further advancement of LNZ Products by CORXEL. If these milestones are not met and no LNZ Products are commercialized in Greater China, we will not receive future revenue from the collaboration. CORXEL may fail to develop or effectively commercialize any LNZ Product for a variety of reasons and the CORXEL License Agreement subjects us to a number of risks, including:

- CORXEL may not commit sufficient resources to the development, regulatory approval, marketing, or distribution of any LNZ Product;
- CORXEL may be unable to successfully complete the clinical development of any LNZ Product or obtain all necessary approvals from foreign regulatory agencies in any of the Greater China territories required to market any LNZ Product;
- CORXEL may develop or commercialize (or attempt to develop or commercialize) an LNZ Product in a manner that may adversely impact our development or commercialization of either such product candidate and/or future product candidates outside of such collaboration, including for example (1) the risk that any clinical trials conducted by CORXEL may result in unfavorable safety or efficacy results that negatively impact our ability to obtain regulatory approval of our products in jurisdictions outside Greater China and (2) the risk that, if approved and commercialized, patients report that the products developed by CORXEL are not effective, or not effective for long enough, and it negatively impacts our ability to market any products outside Greater China, if approved;
- CORXEL may not properly maintain our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation;

- CORXEL may terminate its agreement with us prior to completing development or commercialization of any LNZ Product under the collaboration, in whole or in part, adversely impacting the potential approval and our revenue from the licensed product;
- CORXEL may fail to manufacture any applicable LNZ Product in compliance with requirements of applicable foreign regulatory agencies and in commercial quantities sufficient to meet market demand;
- there may be disputes between us and CORXEL, including disagreements regarding the CORXEL License, that may result in (1) the delay or prevention of the achievement of development, regulatory and commercial objectives that would result in milestone payments, (2) the delay or termination of the development or commercialization of any LNZ Product in Greater China, costly litigation or arbitration that diverts our management's attention and resources and/or termination of the underlying agreement;
- CORXEL may not comply with applicable regulatory guidelines with respect to developing or commercializing any LNZ Product, which could adversely impact the development of or sales thereof, either in Greater China or (depending on the scope of the noncompliant activities) by us in other jurisdictions, and could result in administrative or judicially imposed sanctions, including warning letters, civil and criminal penalties, injunctions, product seizures or detention, product recalls, total or partial suspension of production and refusal to approve any new drug applications;
- CORXEL may experience financial difficulties; and
- business combinations or significant changes in the business strategy of CORXEL may also adversely affect its ability to perform its obligations under its license agreement with us.

If CORXEL does not perform in the manner we expect or fulfill its responsibilities in a timely manner, or at all, the development, regulatory approval, and commercialization efforts related to an LNZ Product in Greater China could be delayed and it may be necessary for us to either assume the responsibility at our own expense for the development of LNZ100 or LNZ101 in Greater China or seek out a different collaboration partner for such efforts. In that event, our potential to generate future revenue from the Greater China region could be significantly reduced and our business could be materially and adversely harmed.

Risks Related to Our Business Operations

Our success is highly dependent on our ability to attract and retain highly skilled executive officers and employees.

To succeed, we must recruit, retain, manage and motivate qualified executives as we build out the management team, and we face significant competition for experienced personnel. We are highly dependent on the principal members of our management and need to add executives with operational and commercialization experience as we plan for commercialization of our product candidates and build out a leadership team that can manage our operations as a public company. If we do not succeed in attracting and retaining qualified personnel, particularly at the management level, it could adversely affect our ability to execute our business plan and harm our operating results. In particular, the loss of one or more of our executive officers could be detrimental to us if we cannot recruit suitable replacements in a timely manner. The competition for qualified personnel in the biotechnology field is intense and as a result, we may be unable to continue to attract and retain qualified personnel necessary for the future success of our business. We could, in the future, have difficulty attracting experienced personnel and may be required to expend significant financial resources in employee recruitment and retention efforts.

Many of the other biotechnology companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better prospects for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. If we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can discover, develop and commercialize our product candidates will be limited and the potential for successfully growing our business will be harmed.

If we engage in acquisitions, in-licensing or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities and subject us to other risks.

We may engage in various acquisitions and strategic partnerships in the future, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of indebtedness or contingent liabilities;
- the issuance of equity securities which would result in dilution to our stockholders;
- assimilation of operations, intellectual property, products and product candidates of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of management's attention from our existing product candidates and initiatives in pursuing such an acquisition or strategic partnership;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and
- our inability to generate revenue from acquired intellectual property, technology and/or products sufficient to meet our objectives or even to offset the associated transaction and maintenance costs.

In addition, if we undertake such a transaction, we may incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

We expect to significantly expand our organization, including building sales and marketing capability and creating additional infrastructure to support our operations as a public company, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of sales and marketing and finance and accounting. To manage our anticipated future growth, 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. Due to our limited financial resources and our limited experience in managing such

anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert or stretch our management and business development resources in a way that we may not anticipate. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

We could be subject to securities class action litigation, which is expensive and could divert management attention.

In the past, 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 pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business, operating results, or financial condition. We have been subject to litigation and received demands in connection with the Merger as previously disclosed in our public filings with the SEC.

Our internal computer systems, or those of any of our CROs, manufacturers, other contractors or consultants or potential future collaborators, may fail or suffer actual or suspected security or privacy breaches or incidents or other unauthorized or improper access to, use of, or destruction of our proprietary or confidential data, employee data, or personal data, which could result in additional costs, loss of revenue, significant liabilities, harm to our brand and material disruption of our operations, and potentially significant delays in our delivery to market.

Despite the implementation of security measures in an effort to protect systems that store our information, given their size and complexity and the increasing amounts of information maintained on our internal information technology systems and external processing and storage systems (e.g., cloud), and those of our third-party CROs, other contractors (including sites performing our current or future clinical trials) and consultants and other third-party service providers, these systems are potentially vulnerable to breakdown or other damage or interruption. Our systems and the systems of third parties who support our operations are vulnerable to service interruptions, system malfunction, natural disasters, terrorism, war (such as the ongoing conflicts in the Middle East and between Ukraine and Russia) and telecommunication and electrical failures, as well as security breaches and incidents arising from or caused by inadvertent or intentional actions by our employees, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information), which may compromise our system infrastructure or lead to unauthorized access to or disruption of our or third-party systems used in our business and the unauthorized access to, misuse, disclosure, loss, destruction, alteration or dissemination of, or damage to, our data, including trade secrets or other confidential information, intellectual property, proprietary business information, and personal information. For example, companies have experienced an increase in phishing and social engineering attacks from third parties in recent years. Our employees generally work in a hybrid model in our offices and from home, and we may need to adjust our working model from time to time. As a result, we have increased cyber security and data security risks, due to increased use of home wi-fi networks and virtual private networks, as well as increased disbursement of physical machines. While we implement controls to reduce the risk of a resulting cyber security or data security incident or breach, we may experience data security incidents, and there is no guarantee that the measures we have implemented will be adequate to safeguard all systems and data, especially with an increased number of employees working from home or in a hybrid model where it is more difficult for us to monitor our employees.

Any disruption, security incident, or security breach resulting in any loss, destruction, unavailability, alteration or dissemination of, or damage to, our data (including confidential information) or other data we or any of our CROs, other contractors or consultants or potential future collaborators or other third-party service providers maintain or otherwise process, or our applications, or for it to be believed or reported that any of these occurred, could result in us incurring liability and reputational damage and the development and commercialization of our product candidates could be delayed. For example, if a security incident were to cause interruptions in our operations, it could result in a material disruption of our programs and the development of our product candidates could be delayed. In addition, the loss or unavailability of clinical trial data for our product candidates could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. Furthermore, disruptions of our internal information technology systems or those of third parties used in our business, or security breaches or incidents impacting us or any of our CROs, other contractors or consultants or potential future collaborators or other third-party service providers, could result in the loss, misappropriation, and/or unauthorized access, use, or disclosure of, or the inability to access, data (including trade secrets or other confidential information, intellectual property, proprietary business information, and personal information), which could result in financial, legal, business, and reputational harm to us. Unauthorized access, use, or disclosure of personal information, including personal information regarding our clinical trial subjects or employees, could harm our reputation directly, compel us to notify individuals or regulators under data breach notification laws, cause us to incur costs

related to investigation of the incident (including legal expenses, forensic examination costs, and remediation costs), subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse effect on our business. Our preclinical studies in China could increase our risk to such disruptions.

We expect to incur significant costs in our efforts to detect, prevent, and respond to security incidents. We also rely on third parties to manufacture our product candidates, and similar events relating to their systems could also have a material adverse effect on our business. There have been and may continue to be significant supply chain attacks and operational technology attacks globally, and we cannot guarantee that our systems or those of third-party service providers or other third parties that support us or our operations have not been breached or that they do not contain exploitable defects or bugs that could result in a security incident or breach of, or other disruption to, our systems and the systems of third parties that support us and our operations. To the extent that any disruption or security incident were to result in a loss, destruction or alteration of, or damage to, our data, or inappropriate disclosure of confidential or proprietary information, we could be exposed to litigation and governmental investigations, the further development and commercialization of our product candidates could be delayed, and we could be subject to significant fines or penalties for any noncompliance with certain state, federal and/or international laws relating to privacy, data protection, and information security. Litigation and governmental investigations could force us to spend money in defense or settlement, divert management's time and attention, increase our costs of doing business, and/or adversely affect our reputation. We could be required to fundamentally change our business activities and practices in response to such litigation or investigations, which could have an adverse effect on our business. Any actual or perceived inability to adequately protect data in our possession, custody or control could have a material adverse effect upon our reputation, business, operations, or financial condition.

Our insurance policies may not be adequate to compensate us for the potential losses arising from any such disruption in or, failure or security breach of, or incident impacting, our systems or third-party systems where information important to our business operations or commercial development is stored. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and could have high deductibles in any event, and defending a suit, regardless of its merit, could be costly and divert management attention.

Risks Related to Our Common Stock

An active trading market for our common stock may never develop or be sustained.

Prior to the Merger, there was no public trading market for LENZ OpCo common stock. Although our common stock is listed on the Nasdaq Global Select Market, if an active trading market does not develop, or develops but is not maintained, you may have difficulty selling any of our common stock due to the limited public float. We cannot predict the prices at which our common stock will trade. It is possible that in one or more future periods our results of operations and progression of our product pipeline may not meet the expectations of public market analysts and investors, and, as a result of these and other factors, the price of our common stock may fall. Accordingly, we cannot assure you of your ability to sell your shares of our common stock when desired or at prices at or above the price you paid for your shares or at all.

The market price of our common stock is expected to be volatile, and the market price of the common stock may drop.

The market price of our common stock has been, and may continue to be, subject to significant fluctuations. For example, from April 1, 2024 through December 31, 2024, the closing price for our common stock ranged from a low of $14.68 to a high of $37.37 per share. Some of the factors that may cause the market price of our common stock to fluctuate include:

- price and volume fluctuations in the overall stock market from time to time;
- the timing and results of clinical trials for LNZ100 and any future product candidates that we may develop;
- our ability to obtain regulatory approvals for LNZ100 or any future product candidates that we may develop, and any delays or failures to obtain such approvals;
- commencement or termination of collaborations for our product development and research programs;
- failure to achieve development, regulatory or commercialization milestones under our collaborations;
- failure or discontinuation of any of our product development and research programs;
- results of preclinical studies, clinical trials or regulatory approvals of product candidates of our competitors, or announcements about new research programs or product candidates of our competitors;
- the level of expenses related to any of our research programs, clinical development programs or product candidates that we may develop;
- the results of our efforts to develop additional product candidates or products;
- regulatory actions with respect to our products or those of our competitors;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- announced or completed acquisitions of businesses, products or intellectual property by us or our competitors;
- actual or anticipated changes in the financial projections or development timelines we may provide to the public or our failure to meet those projections or timelines;
- market conditions in the biotechnology, pharmaceutical and ophthalmology sectors;
- changes in the structure of healthcare payment systems;
- sales of shares of our common stock by us or our stockholders, or expectations that such sales may occur, and the expiration of market stand-off or lock-up agreements;
- the recruitment or departure of key personnel;
- the public's reaction to our press releases, other public announcements, and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- fluctuations in the trading volume of our shares or the size of our public float;
- actual or anticipated changes or fluctuations in our results of operations;

- actual or anticipated developments in our business, our competitors' businesses, or changes in the market valuations of similar companies and the competitive landscape generally;
- changes in the market valuations of similar companies;
- failure of securities analysts to maintain coverage of us, changes in actual or future expectations of investors or securities analysts, or our failure to meet these estimates or the expectations of investors;
- litigation involving us, our industry or both;
- governmental or regulatory actions or audits;
- regulatory or legal developments in the United States and other countries;
- general economic conditions and trends;
- announcement or expectation of additional financing efforts;
- sales of securities by us or our security holders in the future; and
- changes in accounting standards, policies, guidelines, interpretations, or principles.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of our common stock. In addition, a recession, depression or other sustained adverse market event could materially and adversely affect our business and the value of our common stock. In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against such companies. Furthermore, market volatility may lead to increased shareholder activism if we experience a market valuation that activists believe is not reflective of our intrinsic value. Activist campaigns that contest or conflict with our strategic direction or seek changes in the composition of our board of directors could have an adverse effect on our operating results, financial condition and cash flows.

A sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

Sales of a substantial number of shares of our common stock by holders of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of our common stock intend to sell shares, could reduce the market price of our common stock.

On April 9, 2024, we filed a registration statement on Form S-1 to register the offer and sale of 1,297,411 shares of common stock issued in the March 2024 PIPE Financing, and on April 10, 2024, that registration statement was declared effective by the SEC.

Additionally, on July 14, 2024, we entered into the Purchase Agreement for the July 2024 PIPE Financing. Pursuant to the Purchase Agreement, we agreed to sell 1,578,947 shares of the Company's common stock at a purchase price of $19.00 per share. The gross proceeds of the July 2024 PIPE Financing were $30.0 million. The July 2024 PIPE Financing closed on July 17, 2024. Pursuant to the Purchase Agreement, we filed a registration statement to register the offer and resale of the shares sold in the July 2024 PIPE Financing, and that registration statement was declared effective by the SEC on September 19, 2024.

A significant portion of our securities are restricted from immediate resale and transfers of our securities pursuant to Rule 144 are limited. We anticipate holders will be able to sell their restricted securities pursuant to Rule 144 without registration beginning March 22, 2025, the date that is one year from the date we filed the Current Report on Form 8-K following the closing of the Merger that included the required Form 10 information that reflected we are no longer a shell company. In addition, we anticipate that we will become eligible to use Form S-3 on April 1, 2025, which is 12 full calendar months following the closing of the Merger. We anticipate filing a post-effective amendment to each of our prior registration statements on Form S-1 declared effective by the SEC on April 10, 2024 and September 19, 2024, to convert such registration statements on Form S-3. We also anticipate filing an additional resale registration statement on Form S-3 to register certain shares pursuant to registration agreements with certain of our stockholders as previously filed with the SEC.

We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. However, future sales of substantial amounts of our common stock in the public

market, including shares issued upon exercise of outstanding options, or the perception that such sales may occur, could adversely affect the market price of our common stock.

Our board of directors is authorized to issue and designate shares of our convertible preferred stock in additional series without stockholder approval.

Our amended and restated certificate of incorporation authorizes our board of directors, without the approval of our stockholders, to issue shares of convertible preferred stock, subject to limitations prescribed by applicable law, rules and regulations and the provisions of our amended and restated certificate of incorporation, as shares of convertible preferred stock in series, to establish from time to time the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations or restrictions thereof. The powers, preferences and rights of these additional series of convertible preferred stock may be senior to or on parity with our common stock, which may reduce its value.

We will continue to be 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 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 of 2002, as amended (the "Sarbanes-Oxley Act"), reduced disclosure obligations regarding executive compensation in this prospectus and 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 will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the closing of Graphite's initial public offering (i.e., December 31, 2026), (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, among other things, that the market value of our common stock that is held by non-affiliates to exceed $700 million as of the prior June 30th, and (2) the date on which we have issued more than $1 billion in non-convertible debt during the prior three-year period.

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 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 (if we are also a non-accelerated filer at that time) and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. It cannot be predicted 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.

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. It is expected that we will elect to use this extended transition period under the JOBS Act. As a result, our financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make comparison of our financials to those of other public companies more difficult. As a result, changes in rules of U.S. generally accepted accounting principles or their interpretation, the adoption of new guidance, or the application of existing guidance to changes in our business could significantly affect our financial position and results of operations.

Once we are no longer an emerging growth company, a smaller reporting company or otherwise no longer qualify for applicable exemptions, we will be subject to additional laws and regulations affecting public companies that will increase our costs and the demands on management and could harm our operating results and cash flows.

We are subject to the reporting requirements of the Exchange Act, which requires, among other things, that we file with the SEC, annual, quarterly and current reports with respect to our business and financial condition as well as other disclosure and corporate governance requirements. However, as an emerging growth company, we may take advantage of exemptions from various requirements such as an exemption from the requirement to have our independent auditors attest to our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002 as well as an exemption from the "say on pay" voting requirements pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act

of 2010. We will no longer qualify as an emerging growth company after December 31, 2026 (or upon such earlier time as we no longer meet the other applicable requirements). After we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting company," as such term is defined in Rule 12b-2 under the Exchange Act, which may allow us 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 this prospectus and in our periodic reports and proxy statements. Once we are no longer an emerging growth company or a smaller reporting company or otherwise no longer qualify for these exemptions, we will be required to comply with these additional legal and regulatory requirements applicable to public companies and will incur significant legal, accounting and other expenses to do so. If we are not able to comply with the requirements in a timely manner or at all, our financial condition or the market price of our common stock may be harmed.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the rules and regulations of Nasdaq. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting in our Annual Report on Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. As a private company, LENZ OpCo was not required to test its internal controls within a specified period. Doing so will require that we incur substantial professional fees and internal costs to expand our accounting and finance functions and that we expend significant management efforts. We may experience difficulty in meeting these reporting requirements in a timely manner.

We may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, or if we are unable to maintain proper and effective internal controls, we may not be able to produce timely and accurate financial statements. If that were to happen, the market price of our common stock could decline and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities.

Our certificate of incorporation and bylaws and provisions under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our management.

Provisions in our certificate of incorporation and bylaws may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which our common stockholders might otherwise receive a premium price for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors will be responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- authorize "blank check" preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- create a classified board of directors whose members serve staggered three-year terms;
- specify that special meetings of our stockholders can be called only by our board of directors;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;

- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- provide that our directors may be removed (i) only for cause and (ii) only by the affirmative vote of the holders of 75% or more of the outstanding shares of capital stock then entitled to vote at an election of directors;
- expressly authorize our board of directors to make, alter, amend or repeal our amended and restated bylaws; and
- require supermajority votes of the holders of our common stock to amend specified provisions of our amended and restated certificate of incorporation and amended and restated bylaws; however, if our board of directors recommends that the stockholders approve the amendment at a meeting of stockholders, the amendment shall only require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment.

Moreover, we are governed by the provisions of Section 203 of the DGCL, which prohibits stockholders owning in excess of 15% of the outstanding voting stock from merging or combining with us. Although we believe these provisions collectively will provide for an opportunity to receive higher bids by requiring potential acquirors to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove then current management by making it more difficult for stockholders to replace members of the board of directors, which is responsible for appointing the members of management.

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, certain designated courts will be the sole and exclusive forum for certain legal actions between us and our stockholders, which could limit stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on the company's behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or employees to the company or its stockholders; (iii) any action asserting a claim arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our bylaws (including their interpretation, validity or enforceability); or (iv) any action asserting a claim governed by the internal affairs doctrine. Unless we consent in writing to the selection of an alternate forum, the United States federal district courts shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933 (the "Securities Act"). In addition, our bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have notice of and consented to these exclusive forum provisions. The forum selection provisions in our bylaws may limit our stockholders' ability to litigate disputes with us 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 the company and its directors, officers and employees, even though an action, if successful, might benefit the company's stockholders. In addition, these forum selection provisions may impose additional litigation costs for stockholders who determine to pursue any such lawsuits against the company or its directors, officers or employees.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our certificate of incorporation and bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. In addition, as permitted by Section 145 of the Delaware General Corporation Law, our bylaws and the indemnification agreements that we plan to enter into with our directors and officers provide that:

- We may, at our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;
- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;
- We are not obligated pursuant to our bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification;

- The rights conferred in our bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents, and to obtain insurance to indemnify such persons; and

- We may not retroactively amend our bylaw provisions to reduce our indemnification obligations to directors, officers, employees, and agents.

We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.

To the extent that a claim for indemnification is brought by any of our directors or officers, it would reduce the amount of funds available for use in our business.

Transfers of our securities utilizing Rule 144 of the Securities Act may be limited.

A significant portion of our securities are restricted from immediate resale. Holders should be aware that transfers of our securities pursuant to Rule 144 may be limited as Rule 144 is not available, subject to certain exceptions, for the resale of securities initially issued by shell companies (other than business combination related shell companies) or issuers that have been at any time previously a shell company. The disposal of Graphite's historical assets and operations in connection with the Merger made Graphite subject to the SEC requirements applicable to reporting shell company business combinations. Following the Merger, we are no longer a shell company. As a result, we anticipate that holders will not be able to sell their restricted securities pursuant to Rule 144 without registration until one year after March 22, 2024, the date that we filed the Current Report on Form 8-K following the closing of the Merger that includes the required Form 10 information that reflects we are no longer a shell company.

The disposal of Graphite's historical assets and operations in connection with the Merger made us subject to the SEC requirements applicable to reporting shell company business combinations. As a result, we will be subject to more stringent reporting requirements, offering limitations, and resale restrictions.

According to SEC guidance, the requirements applicable to reporting shell company business combinations apply to any company that sells or otherwise disposes of its historical assets or operations in connection with or as part of a plan to combine with a non-shell private company in order to convert the private company into a public one. Prior to the completion of the Merger, Graphite had no remaining ongoing development programs and disposed of its legacy technology and intellectual property. As such, we are subject to the SEC requirements applicable to reporting shell company business combinations, which are as follows:

- we were required to file a Form 8-K to report the Form 10 type information after closing of the Merger with the SEC reflecting our status as an entity that is not a shell company;

- we will not be eligible to use a Form S-3 until 12 full calendar months after closing of the Merger;

- we will need to wait at least 60 calendar days after closing of the Merger to file a Form S-8;

- we will be an "ineligible issuer" for three years following the closing of the Merger, which will prevent us from (i) incorporating by reference in our Form S-1 filings, (ii) using a free writing prospectus, or (iii) taking advantage of the well-known seasoned issuer (WKSI) status regardless of our public float;

- investors who (i) were affiliates of LENZ OpCo or Graphite at the time the Merger was submitted for the vote or consent of the respective company's stockholders, (ii) received securities in the Merger (i.e., Rule 145(c) securities) and (iii) publicly offer or sell such securities will be deemed to be engaged in a distribution of such securities, and therefore to be underwriters with respect to resales of those securities, and accordingly such securities may not be included in any resale registration statement unless such securities are sold only in a fixed price offering in which such investors are named as underwriters in the prospectus; and

- Rule 144(i)(2) will limit the ability to publicly resell Rule 145(c) securities per Rule 145(d), as well as any other "restricted" or "control" securities per Rule 144 until one year after the Form 10 information is filed with the SEC.

The foregoing SEC requirements will increase our time and cost of raising capital, offering stock to under equity plans, and compliance with securities laws. Further, such requirements will add burdensome restrictions on the resale of our shares by affiliates and any holders of "restricted" or "control" securities.

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business, or our market, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that equity research analysts publish about us and our business. Equity research analysts may elect to not provide research coverage of our common stock, and such lack of research coverage may adversely affect the market price of our common stock. In the event we do have equity research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. The price of our common stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which in turn could cause our stock price or trading volume to decline.

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

The rules dealing with U.S. federal, state, and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect us or our stockholders. We continually assess the impact of various tax reform proposals in all jurisdictions where we have operations to determine the potential effect on our business and any assumptions we will make about our future taxable income. We cannot predict whether any specific proposals will be enacted, the terms of any such proposals or what effect, if any, such proposals would have on our business if they were to be enacted. Such changes, among others, may adversely affect our effective tax rate, results of operation, and general business condition.

Our ability to use net operating loss carryforwards and other tax attributes may be limited, including those obtained as a result of the Merger.

At December 31, 2024, the Company had federal and state net operating loss ("NOL") carryforwards of $72.9 million and $3.9 million, respectively. The federal NOL carryforwards of $72.9 million may be carried forward indefinitely. State NOL carryforwards totaling $3.9 million begin to expire in 2040, unless previously utilized. In addition, the Company had federal and state R&D credit carryforwards totaling $7.6 million and $0.7 million, respectively. The federal R&D credit carryforwards will begin to expire in 2040 unless previously utilized. The state R&D credit carryforward will begin to expire in 2042 unless previously utilized.

Under current law, U.S. federal net operating loss carryforwards generated in taxable periods beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such net operating loss carryforwards is limited to 80% of taxable income for taxable periods beginning after December 31, 2020. Many state jurisdictions conform to federal law for this purpose or have similar provisions that limit the deductibility of state net operating loss carryforwards in a taxable period. In addition, under Sections 382 and 383 of the Code, U.S. federal net operating loss carryforwards and other tax attributes may become subject to an annual limitation in the event of certain cumulative changes in ownership. An "ownership change" pursuant to Section 382 of the Code generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company's stock increase their ownership by more than 50 percentage points (by value) over their lowest ownership percentage within a rolling three-year period. During the year ended December 31, 2024, the Company completed a Section 382 analysis and determined that an ownership change more likely than not occurred on March 21, 2024 as a result of the Merger. The ownership change resulted in a limitation that will reduce the total amount of NOL carryforwards and tax credits disclosed that can be utilized to offset future taxable income. The Company adjusted the carryforward attributes accordingly, with an offsetting adjustment to the valuation allowance. Subsequent ownership changes may affect the limitation in future years. To the extent we have or will experience an ownership change(s), our ability to utilize our net operating loss carryforwards and other tax attributes to offset future taxable income or tax liabilities may be limited. If we earn taxable income, such limitations could result in increased future income tax liability to us, and our future cash flows could be adversely affected.

Unfavorable global economic conditions could adversely affect our business, financial condition, results of operations, or cash flows.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including

weakened demand for our product candidates and our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption, or cause our customers to delay making payments for our services. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Risk management and strategy

We have established policies and processes for assessing, identifying, and managing material risk from cybersecurity threats, and have integrated these processes into our overall risk management systems and processes. We routinely assess material risks from cybersecurity threats, including any potential unauthorized occurrence on or conducted through our information systems that may result in adverse effects on the confidentiality, integrity, or availability of our information systems or any information residing therein.

We conduct periodic risk assessments to identify cybersecurity threats, as well as assessments in the event of a material change in our business practices that may affect information systems that are vulnerable to such cybersecurity threats. These risk assessments include identification of reasonably foreseeable internal and external risks, the likelihood and potential damage that could result from such risks, and the sufficiency of existing policies, procedures, systems, and safeguards in place to manage such risks.

Following these risk assessments, as necessary, we re-design, implement, and maintain reasonable safeguards to minimize identified risks; reasonably address any identified gaps in existing safeguards; and regularly monitor the effectiveness of our safeguards. We devote significant resources and designate high-level personnel, including our Chief Financial Officer, to manage the risk assessment and mitigation processes.

As part of our overall risk management system, we monitor and test our safeguards and train our employees on these safeguards, in collaboration with human resources, IT, and management. Personnel at all levels and departments are made aware of our cybersecurity policies through trainings.

We engage an IT consultant in connection with our risk assessment processes. This consultant assists us to design and implement our cybersecurity policies and procedures, as well as to monitor and test our safeguards. Our oversight over our IT consultant allows us to ensure it has the ability to implement and maintain appropriate security measures, consistent with all applicable laws, to implement and maintain reasonable security measures in connection with its work with us, and to promptly report any suspected breach of its security measures that may affect the Company.

For additional information regarding whether any risks from cybersecurity threats, including as a result of any previous cybersecurity incidents, have materially affected or are reasonably likely to materially affect the Company, including our business strategy, results of operations, or financial condition, please refer to Item 1A, “Risk Factors,” in this annual report on Form 10-K, including the risk factors entitled “Our internal computer systems, or those of any of our CROs, manufacturers, other contractors or consultants or potential future collaborators, may fail or suffer actual or suspected security or privacy breaches or incidents or other unauthorized or improper access to, use of, or destruction of our proprietary or confidential data, employee data, or personal data, which could result in additional costs, loss of revenue, significant liabilities, harm to our brand and material disruption of our operations, and potentially significant delays in our delivery to market,” and “Restrictive laws and regulations govern the collection, use, transfer, and other processing of personal information.”

Governance

One of the key functions of our board of directors is informed oversight of our risk management process, including risks from cybersecurity threats. Our board of directors is responsible for monitoring and assessing strategic risk exposure, and our executive officers are responsible for the day-to-day management of the material risks we face. Our board of directors administers its cybersecurity risk oversight function directly as a whole, as well as through the audit committee.

Our Chief Financial Officer is primarily responsible for the assessment and management of our material risks from cybersecurity threats, and the oversight of our cybersecurity policies and processes, including those described in “Risk

Management and Strategy" above. Our Chief Financial Officer and our IT consultant collectively have significant prior work experience in various roles involving managing information security and implementing effective information and cybersecurity programs. They are informed about and monitor the prevention, mitigation, detection and remediation of cybersecurity incidents. Our information technology general controls are firmly established based on recognized industry standards and cover areas such as risk management, data backup, and disaster recovery. We have implemented processes to monitor security threats and vulnerabilities and respond to all cybersecurity incidents that could have an impact on our business operations, including prompt escalation and communication of major security incidents to senior leadership and our board of directors.

Our Chief Financial Officer provides annual briefings to the audit committee regarding the Company's cybersecurity risks and activities, including any recent cybersecurity incidents and related responses, cybersecurity systems testing, activities of third parties, and the like. The audit committee provides regular updates to the board of directors on such reports.

Item 2. Properties

Our corporate headquarters is located in Solana Beach, California, and consists of 9,795 square feet of office space pursuant to a lease that expires in September 2027.

We lease all of our facilities and do not own any real property. We believe that our existing facilities are adequate and suitable for our current needs and that, should it be needed, suitable additional or alternative space will be available as and when needed.

Item 3. Legal Proceedings

From time to time, we may be subject to legal proceedings and claims arising in the ordinary course of our business. We are not currently a party to or aware of any proceedings that we believe will have, individually or in the aggregate, a material adverse effect on our business, financial condition or results of operations.

Item 4. Mine Safety Disclosures

None.

Part II

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

Market Information for Common Stock

Our common stock has traded on The Nasdaq Global Select Market ("Nasdaq") under the symbol "LENZ" since the closing of the Merger on March 22, 2024 Prior to such date, the common stock of Graphite Bio, Inc. had traded on The Nasdaq Global Market under the symbol "GRPH" since June 25, 2021.

Holders

As of March 12, 2025, there were 53 registered stockholders of record of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial stockholders represented by these holders of record.

Dividend Policy

In connection with the consummation of the Merger, the Graphite board of directors declared a special cash dividend to its stockholders (the "Special Dividend"), which was paid on March 21, 2024. The Special Dividend was in the amount of $1.03 per share of Graphite's common stock and was payable in cash to the stockholders of record of Graphite as of March 18, 2024 that continued to hold their shares through the ex-dividend date of March 22, 2024. We currently intend to retain all available funds and any future earnings to fund the growth and development of our business. Other than the Special Dividend, we have never declared or paid any cash dividends on our capital stock. We do not intend to pay cash dividends to our stockholders in the foreseeable future. Investors should not purchase our common stock with the expectation of receiving cash dividends.

Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions, and other factors that our board of directors may deem relevant.

Securities Authorized for Issuance under Equity Compensation Plans

Our equity plan information required by this Item is incorporated by reference to the information in Part III, Item 12 of this Annual Report on Form 10-K.

Recent Sales of Unregistered Securities

None other than as previously reported in a Quarterly Report on Form 10-Q or Current Report on Form 8-K.

Purchases of Equity Securities by the Issuer and Affiliated Purchases

None.

Item 6. [Reserved]

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

The following discussion and analysis provides information that our management believes is relevant to an assessment and understanding of LENZ' consolidated results of operations and financial condition. The discussion should be read together with the audited consolidated financial statements and the accompanying notes to those statements that are included elsewhere in this Annual Report on Form 10-K. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. LENZ's actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Risk Factors" as set forth in Part I, Item 1A of this Annual Report on Form 10-K.

Unless otherwise indicated or the context otherwise requires, references in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" section to "LENZ OpCo," "LENZ," "the Company," "we," "us," "our" and other similar terms refer to the business and operations of LENZ OpCo prior to the Merger and to LENZ and its consolidated subsidiary following the Merger.

While the legal acquirer in the Merger was Graphite, for financial accounting and reporting purposes under U.S. GAAP, LENZ OpCo was the accounting acquirer and the Merger was accounted for as a "reverse recapitalization." A reverse recapitalization (i.e., a capital transaction involving the issuance of stock by Graphite for LENZ OpCo's stock) does not result in a new basis of accounting, and the consolidated financial statements of the combined entity represent the continuation of the consolidated financial statements of LENZ OpCo in many respects. Accordingly, the consolidated assets, liabilities and results of operations of LENZ OpCo became the historical consolidated financial statements of the combined company, and Graphite's assets, liabilities and results of operations were consolidated with those of LENZ OpCo beginning on the acquisition date. Operations prior to the Merger will be presented as those of LENZ OpCo in future reports. Graphite's assets and liabilities were measured and recognized at their fair values as of the closing of the Merger.

Overview

We are a pre-commercial biopharmaceutical company focused on the development and commercialization of innovative therapies to improve vision. Our initial focus is the treatment of presbyopia, the inevitable loss of near vision that impacts the daily lives of nearly all people over 45. In the United States, the estimated addressable population who suffer from this condition, known as presbyopes, is 128 million, almost four times the number of individuals suffering from dry eye disease and three times the number of individuals suffering from childhood myopia, macular degeneration, diabetic retinopathy and glaucoma combined. We believe that a once-daily pharmacological eye drop that can effectively and safely improve near vision throughout the full workday, without the need for reading glasses, could be a highly attractive commercial product with an estimated U.S. market opportunity in excess of $3 billion. It is our goal to develop and commercialize such a product, and we have assembled an executive team with extensive clinical and commercial experience to execute this goal and become the category leader.

Our lead product candidate LNZ100 is a preservative-free, single-use, once-daily eye drop containing aceclidine. We believe our product candidate is differentiated based on rapid onset, degree and duration of near vision improvement, its ability to be used across the full age range of presbyopes, from their mid-40s to well into their mid-70s, as well as a broad refractive range. Aceclidine's pupil-selective mechanism of action was demonstrated in our clinical trials where near vision improved while avoiding blurry distance vision. Our product candidate was well-tolerated in clinical trials, and its active ingredient aceclidine has a favorable tolerability profile that have been well-established empirically. LNZ100 has patent protection until 2039 in the United States, at a minimum, due to a robust intellectual property portfolio underpinned by issued patents.

In June 2024, LENZ hosted a Key Opinion Leader ("KOL") event, highlighting capstone data from the Phase 3 CLARITY study, featuring real-world perspectives from lead investigators and prominent KOLs on the current treatment landscape for presbyopia and their perspectives on LNZ100 data from the Phase 3 CLARITY study. The capstone data results from the CLARITY Phase 3 study highlighted:

- **Robust Product Profile:** Patients treated with LNZ100 achieved near universal response with rapid onset and long duration, highlighting a potential best-in-class product profile.
- **Rapid onset:** At 30 minutes, LNZ100 reported 71% and 91% of participants achieved three- and two-lines or greater improvement in CLARITY 2, respectively.
- **Primary Endpoint Achievement (3 Hours):** LNZ100 reported 71% and 91% of participants achieved three- and two-lines or greater improvement in CLARITY 2, respectively.

- **Long duration:** At 10 hours, LNZ100 reported 40% and 69% of participants achieved three-and two-lines or greater improvement in CLARITY 2, respectively.
- **Beyond 3-lines of improvement was observed:** LNZ100 reported 84% of participants achieving at least 4 lines and 52% at least 5 lines of near vision improvement.
- **Statistically significant improvement in distance vision:** 41% of participants achieved 1-line or more of distance vision improvement.
- **Safety profile:** LNZ100 was well-tolerated, with no serious treatment-related adverse events reported in over 30,000 patient treatment days.

Our other product candidate LNZ101, a preservative-free eye drop containing aceclidine and brimonidine, showed similar results, including achieving primary and secondary endpoints in both CLARITY 1 and 2, but did not show superiority to LNZ100. Based on these results, we selected LNZ100 as our lead product candidate, for which we submitted a New Drug Application ("NDA") to Food and Drug Administration ("FDA") in August 2024. In October 2024, the FDA assigned a Prescription Drug User Fee Act ("PDUFA") target action date of August 8, 2025, which, if approved, will be immediately followed by a commercial launch in the United States, with the product anticipated to be available in the market in the fourth quarter of 2025. We believe that LNZ100 could be the first and only aceclidine-based product approved by the FDA and would then be eligible for five years of new chemical entity ("NCE") exclusivity in the United States.

As of December 31, 2024, we had $209.1 million of cash, cash equivalents, restricted cash, and marketable securities. We believe that our existing cash, cash equivalents and marketable securities as of December 31, 2024 will allow us to continue to build infrastructure and commercialize LNZ100, subject to FDA approval, and will be sufficient to fund the Company to positive operating cash flow subsequent to such commercial launch. We do not expect to generate any revenue from product sales unless and until we successfully obtain regulatory approval for LNZ100. We have incurred net losses in each year since inception, and as of December 31, 2024, we had an accumulated deficit of $145.0 million. These losses have resulted principally from costs incurred in connection with research and development activities and selling, general and administrative costs associated with our operations. We expect to continue to incur significant expenses and operating losses as we seek FDA approval and begin commercialization. These costs include expenses associated with the regulatory approval process and, subject to such approval, preparation for the potential commercial launch of LNZ100, subject to FDA approval. Additionally, we anticipate incurring expenses related to product sales, marketing, manufacturing, and distribution, and additional costs associated with being a public company, including audit, legal, regulatory and tax-related services associated with maintaining compliance with an exchange listing and SEC requirements. As a result of these and other factors, while we believe that our existing cash, cash equivalents and marketable securities as of December 31, 2024 will fund the Company to positive operating cash flow subsequent to commercial launch, if LNZ100 is approved, it is possible that we may require additional financing to fund our operations and planned growth.

Through the completion of the Merger, LENZ OpCo financed its operations primarily through private placements of its common stock and convertible preferred stock. Concurrent with the closing of the Merger on March 21, 2024, we completed the March 2024 PIPE Financing of 3,559,565 shares of common stock for an aggregate gross purchase price of $53.5 million. Additionally, on July 17, 2024, we completed a private placement (the "July 2024 PIPE Financing") with Ridgeback Capital Investments, L.P. of 1,578,947 shares of common stock for an aggregate gross purchase price of $30.0 million.

If we are unsuccessful in generating sufficient revenue and operating cash flow from sales of LNZ100, if approved, we may be required to finance our cash needs 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. Our failure to raise capital or enter into such other arrangements if and when needed would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

CORXEL License and Collaboration Agreement

In April 2022, we entered into a License and Collaboration Agreement with CORXEL Pharmaceuticals (formerly known as Ji Xing Pharmaceuticals Hong Kong Limited) ("CORXEL") granting CORXEL an exclusive license (the "CORXEL License" formerly referred to as the "Ji Xing License") to certain of our intellectual property rights to develop, use, import, and sell products containing LNZ100 ("Products") for use in the treatment of presbyopia in humans in mainland China, Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan (collectively, "Greater

China"). We also granted CORXEL (i) the right to negotiate in good faith and enter into agreements to purchase Products from us for clinical and commercial uses at cost plus a negotiated percentage and (ii) the right of first negotiation to obtain a regional license from us on other products we might develop outside of the field of presbyopia for commercialization in Greater China.

We received nonrefundable, non-creditable upfront payments totaling $15.0 million as initial consideration under the CORXEL License during the year ended December 31, 2022. In addition, we are also eligible to receive (i) up to $95.0 million in regulatory and sales milestone payments, (ii) tiered, escalating royalties in the range of 5% to 15% on net sales of Products in Greater China by CORXEL, its affiliates and sublicensees, and (iii) tiered, deescalating royalties in the range of 15% to 5% of sublicensing income received by CORXEL prior to the regulatory approval of the first Product in Greater China.

The $15.0 million upfront payments allocated to that single performance obligation was recognized on execution of the CORXEL License during the year ended December 31, 2022. No contractual milestones were met under the CORXEL License during the years ended December 31, 2024 or 2023.

On October 27, 2024, CORXEL and the Company announced positive topline data from the Phase 3 JX07001 clinical trial of LNZ100 in patients with presbyopia in China. In this China Phase 3 safety and efficacy trial, LNZ100 achieved the primary endpoint and key secondary endpoints, with statistically significant three-lines or greater improvement in Best Corrected Distance Visual Acuity ("BCDVA") at near, without losing one-line or more in distance visual acuity.

Key Trends and Factors Affecting Comparability Between Periods

- Our research and development costs decreased during the year ended December 31, 2024, relative to the year ended December 31, 2023, primarily as a result of reduced clinical research expenses related to the substantial completion of our Phase 3 CLARITY trials in March 2024. We expect our research and development costs will continue to decrease in 2025, relative to 2024, given the completion of the CLARITY trials and subsequent wind-down of clinical activities over 2024.

- We expect that selling, general and administrative expenses will continue to increase in 2025, relative to 2024, as we have built a cross-functional commercial team consisting of marketing and commercial operations and will continue to strategically build our sales and commercial infrastructure with capabilities designed to scale when necessary to support a potential commercial launch of LNZ100, subject to FDA approval. These expenses increased during the year ended December 31, 2024, as compared to the year ended December 31, 2023, and we expect such expenses to continue to increase for the foreseeable future.

- As a result of the Merger, the Company's corporate general and administrative expenses have increased and will continue to increase from those that we incurred in prior years as a privately held company, including costs related to (i) compliance with the rules and regulations of the SEC and those of Nasdaq, (ii) legal, accounting and other professional services, (iii) insurance, (iv) investor relations activities, and (v) other administrative and professional services.

Recent Developments

NDA Filing and PDUFA Date

On October 21, 2024, we announced the FDA has assigned a PDUFA target action date of August 8, 2025 for LNZ100. The FDA notified the Company in its letter to notify its acceptance to review the NDA that they do not plan to hold an advisory committee meeting, which was reiterated during the mid-cycle review.

Basis of Presentation

The following discussion highlights our results of operations and the principal factors that have affected our financial condition as well as our liquidity and capital resources for the periods described and provides information that management believes is relevant for an assessment and understanding of the balance sheets and statements of operations and comprehensive loss presented herein. The following discussion and analysis are based on our audited financial statements and related notes thereto, which we have prepared in accordance with U.S. GAAP. You should read the discussion and analysis together with such audited financial statements and the related notes thereto.

Components of Statements of Operations and Comprehensive Loss

Operating Expenses

Research and Development

Research and development expenses, which consist primarily of costs associated with our product research and development efforts, are expensed as incurred. Research and development expenses consist primarily of: (i) employee related costs, including salaries, benefits and share-based compensation expense for employees engaged in research and development activities; (ii) third-party contract costs relating to research, formulation, manufacturing, nonclinical studies and clinical trial activities; (iii) external costs of outside consultants who assist with technology development, regulatory affairs, clinical development and quality assurance; and (iv) allocated facility-related costs.

Costs for certain activities, such as manufacturing, nonclinical studies and clinical trials are generally recognized based on the evaluation of the progress of completion of specific tasks using information and data provided by our vendors and collaborators. Research and development activities are central to our business.

Selling, General and Administrative

Selling, general and administrative expenses consist primarily of salaries and related benefits, including share-based compensation, related to our executive, finance, business development, sales and marketing, human resources, and other corporate functions. Other selling, general and administrative expenses include marketing and advertising costs, professional fees for legal, tax and business consulting services, public company related expenses such as audit fees and insurance costs, intellectual property and patent costs, facility costs and travel costs.

Other Income (Expense), Net

Other income (expense), net consists of the change in fair value of preferred stock warrants liability, interest income earned on cash, cash equivalents, and short-term investments, and changes in the fair value of long-term investments due to observable price changes in orderly transactions for an identical or similar investment. Upon completion of the Merger, the preferred stock warrants became exercisable into shares of common stock and will no longer continue to be remeasured at each reporting date.

Results of Operations

Comparison of the Years Ended December 31, 2024 and 2023

The following table presents the results of operations for the periods indicated (amounts in thousands, except percentages):

	Year Ended December 31,			
	2024	2023	$ Change	% Change
Research and development	$ 29,801	$ 59,504	$ (29,703)	(50)%
Selling, general and administrative	28,809	12,925	15,884	123 %
Other income (expense), net	8,842	2,282	6,560	287 %

Research and Development

Research and development expenses incurred for the year ended December 31, 2024 were primarily incurred to further refine the manufacturing process for LNZ100, while research and development expenses incurred for the year ended December 31, 2023 were substantially all related to the development of LNZ100 in our INSIGHT and CLARITY trials.

Research and development expenses decreased $29.7 million, or 50%, to $29.8 million for the year ended December 31, 2024 compared to $59.5 million for the year ended December 31, 2023. The change was driven by decreases of $33.3 million in contract research expense for our clinical trials, as our Phase 3 CLARITY trials were substantially completed in March 2024, and $2.2 million in contract manufacturing expenses as we incurred higher shipping and labeling costs during the year ended December 31, 2023 to support our Phase 3 CLARITY trials, partially offset by increases of $3.0 million in employee salaries and related expenses due to increased non-clinical regulatory and CMC headcount, $1.8 million in contract regulatory consulting expenses associated with the preparation and filing of our NDA for LNZ100, and $0.5 million in nonclinical research expense.

Selling, General and Administrative

Selling, general and administrative expenses increased $15.9 million, or 123%, to $28.8 million for the year ended December 31, 2024 compared to $12.9 million for the year ended December 31, 2023. Increases in the comparative period included $6.7 million in employee salaries and related expenses due to a rise in headcount, and $6.4 million in pre-commercial marketing, advertising and sales infrastructure expenses as we prepare for a potential commercial launch of LNZ100, subject to FDA approval.

Other Income (Expense), net

Other income, net for the year ended December 31, 2024, was $8.8 million, compared to $2.3 million for the year ended December 31, 2023. The increase was primarily driven by additional interest income earned on our cash, cash equivalents, and marketable securities of $6.4 million as a result of an overall increase in cash on-hand in 2024 over the comparative period, and an increase of $1.3 million in the fair value of the Company's equity investment without a readily determinable fair value, partially offset by a $1.2 million increase in the fair value of the preferred stock warrants liability, resulting in a non-recurring, non-cash charge at the close of the Merger.

Liquidity and Capital Resources

Sources of Liquidity

As of December 31, 2024, we had $209.1 million of cash, cash equivalents, restricted cash, and marketable securities. We have incurred net losses in each year since inception and as of December 31, 2024, we had an accumulated deficit of $145.0 million. Our net losses were $49.8 million and $70.0 million for the years ended December 31, 2024 and 2023, respectively. These losses have resulted principally from costs incurred in connection with research and development activities and selling, general and administrative costs associated with our operations. We expect to continue to incur significant expenses and operating losses as we seek approval and pursue the potential commercialization of LNZ100, if approved. These costs include expenses associated with the regulatory approval process for LNZ100, and the preparation for the potential commercial launch of our product, subject to FDA approval.

From inception through December 31, 2024, we received funding of $13.0 million from our initial seed financing, $47.0 million from the sale of Series A Convertible Preferred Stock, $10.0 million from the sale of Series A-1 Convertible Preferred Stock, gross proceeds of $83.5 million from the sale of Series B Convertible Preferred Stock, approximately $117.8 million in cash and cash equivalents from the Merger, approximately $53.5 million in gross cash proceeds from the March 2024 PIPE Financing, and $30.0 million in gross cash proceeds from the July 2024 PIPE Financing.

Funding Requirements

We believe that our cash, cash equivalents, and marketable securities as of December 31, 2024 will allow us to continue to build infrastructure and commercialize LNZ100, subject to FDA approval, and such funds are anticipated to fund the Company to positive operating cash flow subsequent to such commercial launch. This belief is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than expected. Changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than currently anticipated, and we may need to seek additional funds sooner than planned.

Our future capital requirements will depend on many factors, including but not limited to:

- the costs and timing of manufacturing for LNZ100 and commercial manufacturing if LNZ100 is approved;
- the results, costs, and timing of any additional clinical trials we are required to complete for LNZ100;
- costs associated with establishing a sales, marketing, and distribution infrastructure to commercialize LNZ100 if we obtain marketing approval;
- our ability to generate positive operating cash flow from sales of LNZ100 subsequent to commercial launch of LNZ100, if LNZ100 is approved;
- the costs, timing, and outcome of regulatory review of LNZ100;
- the legal costs of obtaining, maintaining, and enforcing our patents and other intellectual property rights;

- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company;
- the terms and timing of establishing and maintaining licenses and other similar arrangements;
- our ability to achieve sufficient market acceptance and adequate market share and revenue for LNZ100, if approved; and
- costs associated with any products or technologies that we may in-license or otherwise acquire or develop.

We intend to evaluate financing opportunities from time to time, and our ability to obtain financing will depend, among other things, on our development efforts, business plans, operating performance and the condition of the capital markets at the time we seek financing. We cannot be assured that additional financing will be available to us on favorable terms when required, or at all. If we raise additional funds through the issuance of equity or equity-linked securities, those securities may have rights, preferences or privileges senior to the rights of our common stock, and our stockholders may experience dilution. If we raise additional funds through the incurrence of indebtedness, then we may be subject to increased fixed payment obligations and could be subject to restrictive covenants, such as limitations on our ability to incur additional debt, and other operating restrictions that could adversely impact our ability to conduct our business.

Cash Flows

The following table summarizes our cash flows for the years presented (amounts in thousands):

	Year Ended December 31,	
	2024	2023
Net cash (used in) provided by:		
Operating activities	$ (59,391)	$ (60,380)
Investing activities	(154,479)	(29,621)
Financing activities	199,002	80,700
Net decrease in cash and cash equivalents	$ (14,868)	$ (9,301)

Net Cash Used in Operating Activities

Net cash used in operating activities primarily results from net loss adjusted for non-cash expenses, changes in working capital components, amounts due to contract research organizations to conduct our clinical programs, manufacturing of drug product and employee-related expenditures for research and development and selling, general and administrative activities. Cash flows from operating activities will continue to be impacted by spending to develop and pursue regulatory approval for LNZ100 and commercialization activities, if approval is obtained, and will also be impacted by any potential future revenue from commercialization activities. Cash flows will also continue to be affected by other operating and general administrative activities, including operating as a public company.

For the year ended December 31, 2024, cash used in operating activities was $59.4 million and resulted from a net loss of $49.8 million, in addition to a $11.7 million cash outflow from the payment of accounts payable and accrued liabilities associated with the Merger and accrued clinical activities, offset by $3.5 million in non-cash adjustments primarily driven by share-based compensation expense and the change in the fair value of preferred warrants.

For the year ended December 31, 2023, cash used in operating activities was $60.4 million primarily resulting from a net loss of $70.0 million and partially offset by a $8.6 million increase in accounts payable and accrued liabilities.

Net Cash Used in Investing Activities

Cash used in investing activities for the year ended December 31, 2024 was $154.5 million, primarily due to $241.9 million of purchases of marketable securities, and partially offset by $87.9 million in proceeds from maturities of marketable securities.

Cash used in investing activities for the year ended December 31, 2023 was $29.6 million, primarily due to $52.1 million of purchases of marketable securities, and partially offset by $22.5 million in proceeds from maturities of marketable securities.

Net Cash Provided by Financing Activities

For the year ended December 31, 2024, cash provided by financing activities was $199.0 million and includes $117.8 million in cash and cash equivalents acquired in the Merger, $53.5 million in gross cash proceeds from the March 2024 PIPE Financing, $30.0 million in gross cash proceeds from the July 2024 PIPE Financing, and approximately $4.0 million in net cash proceeds from exercises of stock options.

For the year ended December 31, 2023, cash provided by financing activities was $80.7 million, primarily due to $83.0 million in proceeds from the sale by LENZ OpCo of Series B Convertible Preferred Stock, offset by an increase in deferred offering costs of $2.5 million related to the Merger.

Material Cash Requirements from Contractual Obligations

In February 2022, we entered into a lease for 2,930 square feet of office space in Del Mar, California. In March 2023, we entered into a lease amendment for a 647 square feet expansion of our office space at the same facility. The term of the lease, as amended, is forty-eight months from the original commencement date, terminating March 31, 2026, unless terminated sooner. In April 2024, we entered into a lease for 9,795 square feet of office space in Solana Beach, California. The term of the lease is thirty-nine months from the commencement date of July 1, 2024, ending September 30, 2027. See Note 7 to our consolidated financial statements included in this Annual Report on Form 10-K for further details related to our office leases.

We also have contracts with various organizations to conduct research and development activities, including clinical trial organizations to manage regulatory and any remaining clinical trial activities, and manufacturing companies to manufacture the drug product used in the regulatory process and clinical trials. The scope of the services under these research and development contracts can be modified and the contracts cancelled by us upon written notice. In the event of a cancellation, the company would be liable for the cost and expenses incurred to date as well as any close out costs of the service arrangement.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of the financial condition and results of operations is based on our consolidated financial statements included in this Annual Report on Form 10-K, which have been prepared in accordance with U.S. GAAP. The preparation of our consolidated financial statements requires us to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities as of the date of the consolidated financial statements, as well as the reported amounts of expenses during the periods presented. We believe that the estimates, judgments and assumptions are reasonable based upon information available to us at the time that these estimates, judgments and assumptions are made. To the extent there are material differences between these estimates, judgments or assumptions and actual results, our consolidated financial statements will be affected. Historically, revisions to our estimates have not resulted in a material change to our consolidated financial statements.

While our significant accounting policies are described in more detail in the notes to our consolidated financial statements included in this Annual Report on Form 10-K, we believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Stock-Based Compensation Expense

Stock-based compensation expense represents the cost of the grant date fair value of equity awards recognized over the requisite service period of the awards (usually the vesting period) on a straight-line basis. We estimate the fair value of equity awards using the Black-Scholes option pricing model and recognize forfeitures as they occur. Estimating the fair value of equity awards as of the grant date using valuation models, such as the Black-Scholes option pricing model, is affected by assumptions regarding a number of variables, including the risk-free interest rate, the expected stock price volatility, the expected term of stock options, the expected dividend yield and the fair value of the underlying common stock on the date of grant. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. We determine the inputs and assumptions to the Black-Scholes option pricing model in the following manner:

Fair Value of Common Stock—Prior to the Merger, since there was no public market for our common stock, our board of directors, with input from management, determined the fair value of our common stock on each grant date by considering a number of objective and subjective factors, including input from management and valuations of our common stock by a third-party valuation firm. Following the Merger, the fair market value of our common stock is based on its closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded, adjusted for special dividends, if any.

Expected Term—The Company uses the simplified method as prescribed by the Securities and Exchange Commission Staff Accounting Bulletin No. 107, *Share-Based Payment*, to calculate the expected term for options granted to employees as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term.

Expected Volatility—Given our limited historical stock price volatility data, we derived the expected volatility from the average historical volatilities over a period approximately equal to the expected term of comparable publicly traded companies within our peer group that were deemed to be representative of future stock price trends as we have limited trading history for our common stock. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.

Risk-Free Interest Rate—The risk-free interest rate is based on a United States Treasury instrument whose term is consistent with the expected term of the stock options.

Expected Dividend Yield—The expected dividend yield is based on the Company's historical and expected dividend payouts. The Company has historically paid no dividends, other than the special dividend paid by Graphite immediately prior to the close of the Merger, and does not anticipate dividends to be paid in the future.

Other Company Information

Jumpstart Our Business Startups Act ("JOBS Act")

We are an emerging growth company, as defined in the JOBS Act, and we may remain an emerging growth company until the last day of the fiscal year following the fifth anniversary of the initial public offering of Graphite's common stock (i.e., December 31, 2026). For so long as we remain an emerging growth company, we are permitted and intend to rely on certain exemptions from various public company disclosure and reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) 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 a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. Accordingly, the information we disclose in our SEC filings may not be comparable with the information stockholders receive from other public companies in which they may hold stock.

Additionally, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Prior to the Merger, Graphite elected to use, and we intend to continue to use, this extended transition period for complying with certain or new or revised accounting standards until the earlier of (i) the last day of the fiscal year (a) following the fifth anniversary of the closing of Graphite's initial public offering (i.e., December 31, 2026), (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 means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, (ii) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period, or (iii) if we affirmatively and irrevocably opt out of the extended transition period provided by the JOBS Act.

We are also a "smaller reporting company" because the market value of our stock held by non-affiliates was less than $700 million as of June 30, 2024 and the Company's annual revenue was less than $100 million during the fiscal year ended December 31, 2023. We may continue to be a smaller reporting company in any given year if either (i) the market value of our stock held by non-affiliates is less than $250 million as of June 30 in the most recently completed fiscal year or (ii) our annual revenue is less than $100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million as of June 30 in the most recently completed fiscal year. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Recent Accounting Pronouncements

See Note 2 to our consolidated financial statements in this Annual Report on Form 10-K for a discussion of recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company as defined by Rule 12b-2 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are not required to provide the information required under this item.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of LENZ Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of LENZ Therapeutics, Inc. (the Company) as of December 31, 2024 and 2023, the related consolidated statements of operations and comprehensive loss, convertible preferred and common stock and stockholders' equity (deficit) 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 "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

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/ Ernst & Young LLP

We have served as the Company's auditor since 2022.

San Diego, California

March 19, 2025

LENZ THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except for shares and par value)

	December 31,	
	2024	2023
Assets		
Current assets:		
Cash and cash equivalents	$ 20,158	$ 35,140
Marketable securities	188,872	30,654
Prepaid expenses and other current assets	2,773	1,450
Restricted cash	114	—
Total current assets	211,917	67,244
Property and equipment, net	651	54
Operating lease right-of-use asset	1,338	318
Deferred offering costs	—	2,739
Other assets	1,398	21
Total assets	$ 215,304	$ 70,376
Liabilities, convertible preferred and common stock and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	$ 4,257	$ 5,711
Accrued liabilities	6,149	12,803
Total current liabilities	10,406	18,514
Operating lease liability, net	814	192
Other noncurrent liabilities	—	121
Preferred stock warrants liability	—	871
Total liabilities	11,220	19,698
Commitments and contingencies (Note 7)		
Convertible preferred and common stock:		
Series A convertible preferred stock, par value of $0.001 per share; no shares and 22,791,777 shares authorized at December 31, 2024 and 2023, respectively; no shares and 21,977,282 shares issued and outstanding at December 31, 2024 and 2023, respectively	—	44,621
Series A-1 convertible preferred stock, par value of $0.001 per share; no shares and 2,950,548 shares authorized at December 31, 2024 and 2023, respectively; no shares and 2,950,548 issued and outstanding at December 31, 2024 and 2023, respectively	—	9,893
Series B convertible preferred stock, par value of $0.001 per share; no shares and 28,019,181 shares authorized at December 31, 2024 and 2023, respectively; no shares and 28,019,181 issued and outstanding at December 31, 2024 and 2023, respectively	—	82,976
Class B convertible common stock, par value of $0.001 per share; no shares and 2,744,184 shares authorized at December 31, 2024 and 2023, respectively; no shares and 2,744,184 shares issued and outstanding at December 31, 2024 and 2023, respectively	—	5,900
Total convertible preferred and common stock	—	143,390
Stockholders' equity (deficit) [(1)]:		
Common stock, par value of $0.00001 per share; 300,000,000 and 16,017,929 shares authorized at December 31, 2024 and 2023, respectively; 27,531,490 and 2,004,783 shares issued at December 31, 2024 and 2023, respectively; and 27,518,439 and 1,969,360 shares outstanding at December 31, 2024 and 2023, respectively	1	10

Additional paid-in capital	348,901	2,517
Accumulated deficit	(145,014)	(95,245)
Accumulated other comprehensive income	196	6
Total stockholders' equity (deficit)	204,084	(92,712)
Total liabilities, convertible preferred and common stock and stockholders' equity (deficit)	$ 215,304	$ 70,376

See accompanying notes to consolidated financial statements.

(1) Retroactively recast for the reverse recapitalization as described in Note 3.

LENZ THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)

	Year Ended December 31,	
	2024	**2023**
Operating expenses:		
Research and development	$ 29,801	$ 59,504
Selling, general and administrative	28,809	12,925
Total operating expenses	58,610	72,429
Loss from operations	(58,610)	(72,429)
Other income:		
Other income	289	93
Interest income	8,553	2,189
Total other income, net	8,842	2,282
Net loss before income taxes	$ (49,768)	$ (70,147)
Income tax expense (benefit)	1	(179)
Net loss	(49,769)	(69,968)
Other comprehensive income (loss):		
Unrealized gain on marketable securities	190	6
Comprehensive loss	$ (49,579)	$ (69,962)
Net loss per share, basic and diluted	$ (2.34)	$ (35.71)
Weighted-average common shares outstanding, basic and diluted [(1)]	21,281,038	1,959,091

See accompanying notes to consolidated financial statements.

[(1)] Retroactively recast for the reverse recapitalization as described in Note 3. See Note 2 for further information on weighted-average common shares outstanding.

LENZ THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED AND COMMON STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share data)

	Convertible Preferred and Common Stock								Stockholders' Equity (Deficit)					
	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B Convertible Preferred Stock		Class B Convertible Common Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of December 31, 2023 (1)	21,977,282	$ 44,621	2,950,548	$ 9,893	28,019,181	$ 82,976	2,744,184	$ 5,900	1,969,360	$ 10	$ 2,517	$ (95,245)	$ 6	$ (92,712)
Conversion of convertible preferred stock and Class B convertible common stock to common stock as a result of the Merger and reset to par of $0.00001	(21,977,282)	(44,621)	(2,950,548)	(9,893)	(28,019,181)	(82,976)	(2,744,184)	(5,900)	11,260,672	(10)	143,400	—	—	143,390
Issuance of common stock to Graphite stockholders as a result of the Merger	—	—	—	—	—	—	—	—	8,320,485	—	116,145	—	—	116,145
Issuance of common stock from private placements, net	—	—	—	—	—	—	—	—	5,138,512	—	79,513	—	—	79,513
Reclassification of warrant liability to equity	—	—	—	—	—	—	—	—	—	—	1,918	—	—	1,918
Merger transaction costs	—	—	—	—	—	—	—	—	—	—	(5,070)	—	—	(5,070)
Unrealized gain on marketable securities	—	—	—	—	—	—	—	—	—	—	—	—	190	190
Exercise of stock options and common warrants	—	—	—	—	—	—	—	—	801,983	1	4,037	—	—	4,038
Vesting of early exercised stock options	—	—	—	—	—	—	—	—	27,427	—	76	—	—	76
Share-based compensation	—	—	—	—	—	—	—	—	—	—	6,365	—	—	6,365
Net loss	—	—	—	—	—	—	—	—	—	—	—	(49,769)	—	(49,769)
Balance as of December 31, 2024	—	$ —	—	$ —	—	$ —	—	$ —	27,518,439	$ 1	$ 348,901	$ (145,014)	$ 196	$ 204,084

See accompanying notes to consolidated financial statements.

(1) Retroactively recast for the reverse recapitalization as described in Note 3.

LENZ THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED AND COMMON STOCK AND STOCKHOLDERS' EQUITY (DEFICIT) [1]
(in thousands, except share data)

	Convertible Preferred and Common Stock								Stockholders' Deficit					
	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B Convertible Preferred Stock		Class B Convertible Common Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of December 31, 2022	21,977,282	$ 44,621	2,950,548	$ 9,893	—	$ —	2,744,184	$ 5,900	1,946,988	$ 10	$ 1,098	$ (25,277)	$ —	$ (24,169)
Issuance of Series B convertible preferred stock, net of issuance costs	—	—	—	—	28,019,181	82,976	—	—	—	—	—	—	—	—
Unrealized gain on marketable securities	—	—	—	—	—	—	—	—	—	—	—	—	6	6
Vesting of early exercised stock options	—	—	—	—	—	—	—	—	22,372	—	76	—	—	76
Share-based compensation	—	—	—	—	—	—	—	—	—	—	1,343	—	—	1,343
Net loss	—	—	—	—	—	—	—	—	—	—	—	(69,968)	—	(69,968)
Balance as of December 31, 2023	21,977,282	$ 44,621	2,950,548	$ 9,893	28,019,181	$ 82,976	2,744,184	$ 5,900	1,969,360	$ 10	$ 2,517	$ (95,245)	$ 6	$ (92,712)

See accompanying notes to consolidated financial statements.

[1] Retroactively recast for the reverse recapitalization as described in Note 3.

LENZ THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,	
	2024	**2023**
Cash flows from operating activities		
Net loss	$ (49,769)	$ (69,968)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	58	15
Loss on disposal of property and equipment	16	—
Accretion of discounts on marketable securities	(4,017)	(1,057)
Change in fair value of preferred stock warrants	1,047	(123)
Share-based compensation expense	6,365	1,343
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	25	761
Accounts payable	(4,279)	856
Accrued liabilities	(7,460)	7,783
Other assets	(1,377)	10
Net cash used in operating activities	(59,391)	(60,380)
Cash flows from investing activities		
Purchases of marketable securities	(241,911)	(52,091)
Proceeds from maturities of marketable securities	87,900	22,500
Purchases of property and equipment	(468)	(30)
Net cash used in investing activities	(154,479)	(29,621)
Cash flows from financing activities		
Proceeds from issuance of Series B convertible preferred stock, net of issuance costs	—	82,976
Deferred offering costs	—	(2,479)
Proceeds from issuance of common stock, net of issuance costs	79,513	—
Cash, cash equivalents, and restricted cash acquired in connection with the Merger	117,824	—
Merger transaction costs	(2,373)	—
Proceeds from exercises of stock options	4,038	203
Net cash provided by financing activities	199,002	80,700
Net decrease in cash, cash equivalents, and restricted cash	(14,868)	(9,301)
Cash and cash equivalents, beginning of the period	35,140	44,441
Cash, cash equivalents, and restricted cash, end of the period	$ 20,272	$ 35,140
Supplemental cash flow information		
Conversion of Series A, A-1, and B convertible preferred stock to common stock	$ 137,490	$ —
Conversion of Class B convertible common stock to common stock	$ 5,900	$ —
Reclassification of warrant liability to equity	$ 1,918	$ —
Prepaid expenses and other current assets assumed in the Merger	$ 1,313	$ —
Accounts payable and accrued liabilities assumed in the Merger	$ 2,950	$ —
Right-of-use assets assumed in the Merger in exchange for operating lease liabilities	$ 74	$ —
Right-of-use assets obtained in exchange for operating lease liabilities	$ 1,116	$ 190
Property and equipment included in accounts payable and accrued expenses	$ 203	$ —
Deferred offering costs included in accounts payable and accrued expenses	$ —	$ 260

See accompanying notes to consolidated financial statements.

1. Organization and Liquidity

Description of the Business

LENZ Therapeutics, Inc. ("LENZ" or the "Company"), formerly known as Graphite Bio, Inc. ("Graphite"), was incorporated in Ontario, Canada in June 2017 as Longbow Therapeutics Inc., and was reincorporated in the State of Delaware in October 2019. The Company has a wholly owned subsidiary, LENZ Therapeutics Operations, Inc. ("LENZ OpCo"), previously named Lenz Therapeutics, Inc., which became a corporation in Delaware on October 28, 2020 upon the filing of a Certificate of Conversion to convert Presbyopia Therapies, LLC, a Delaware limited liability company (formed in September 2013), to a Delaware corporation. The Company is a pre-commercial biopharmaceutical company focused on the development and commercialization of innovative therapies to improve vision.

Reverse Merger Transaction

On March 21, 2024, Graphite and LENZ OpCo completed a merger transaction in accordance with the terms and conditions of the Agreement and Plan of Merger (the "Merger Agreement") dated November 14, 2023, pursuant to which, among other matters, Generate Merger Sub, Inc., a wholly-owned subsidiary of Graphite, merged with and into LENZ OpCo, with LENZ OpCo surviving the merger as the surviving corporation and a wholly-owned subsidiary of Graphite (the "Merger"). In connection with the Merger, Graphite changed its name to "LENZ Therapeutics, Inc." The Merger was accounted for as a reverse recapitalization, with LENZ OpCo being treated as the acquirer for accounting purposes. See discussions of the transactions in connection with the Merger in Note 3.

Liquidity

As of December 31, 2024, the Company has devoted substantially all of its efforts to product development and has not realized product revenue from its planned principal operations. The Company has a limited operating history, and the sales and income potential of the Company's business and market are unproven. The Company has experienced net losses since its inception and, as of December 31, 2024, had an accumulated deficit of $145.0 million. The Company expects to incur additional losses in the future as it continues its research and development efforts, advances its product candidate through clinical development, seeks regulatory approval for LNZ100, prepares for commercialization, hires additional personnel, protects its intellectual property, and grows its business. The Company may need to raise additional capital to support its continuing operations and pursue its long-term business plan, including the development and commercialization of its product candidate, if approved. Such activities are subject to significant risks and uncertainties.

As of December 31, 2024, the Company had cash, cash equivalents, and marketable securities of $209.1 million, which is available to fund future operations. The Company believes that its existing cash, cash equivalents, and marketable securities as of December 31, 2024 will be sufficient to support operations for at least the next 12 months from the issuance date of these consolidated financial statements.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements were prepared based on the accrual method of accounting in accordance with U.S. generally accepted accounting principles ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB"). The consolidated financial statements include only normal recurring adjustments, necessary for the fair presentation of the Company's financial position and its results of operations and its cash flows for the periods presented. All intercompany accounts and transactions have been eliminated in consolidation.

Since LENZ OpCo was determined to be the accounting acquirer in connection with the Merger, for periods prior to the Merger, the consolidated financial statements were prepared on a stand-alone basis for LENZ OpCo and did not include the combined entities' activity or financial position. Subsequent to the Merger, the consolidated financial statements as of and for the year ended December 31, 2024 included Graphite's activity from March 21, 2024 through December 31, 2024, and assets and liabilities at their acquisition date fair value. Historical share and per share figures of LENZ OpCo have been retroactively recast based on the Merger exchange ratio of 0.2022.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting period. Estimates used in preparing the accompanying financial statements include, but are not limited to, estimates related to the research and development accruals, preferred stock warrants liability, and share-based compensation. Although actual results could differ from those estimates, management does not believe that such differences would be material.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments, which potentially subject the Company to a concentration of credit risk, consist primarily of cash and cash equivalents and marketable securities. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. The Company deposits its cash primarily in traditional checking and savings accounts and money market funds with a financial institution. Restricted cash of $0.1 million as of December 31, 2024 related to a security deposit in the form of a letter of credit issued in connection with one of the Company's leases, which expires in March 2025.

Marketable Securities

The Company classifies marketable securities as available-for-sale, as the sale of such investments may be required prior to maturity to implement management strategies, and therefore classified all marketable securities with maturity dates beyond three months at the date of purchase as current assets in the accompanying consolidated balance sheets. As of December 31, 2024, the Company had no intent to sell any marketable securities prior to maturity. Marketable securities classified as available-for-sale are carried at fair value with the unrealized gains and losses included in other comprehensive income as a component of stockholders’ deficit until realized. Any premium or discount arising at purchase is amortized and/or accreted to interest income as an adjustment to yield over the life of the instrument. Realized gains and losses were calculated using the specific identification method and recorded as interest income or expense. The Company invests in available-for-sale securities consisting of commercial paper, U.S. Treasury securities, U.S government. agency securities, and corporate debt securities. Available-for-sale securities are classified as marketable securities on the Company's consolidated balance sheets.

Management evaluates whether unrealized losses on available-for-sale marketable securities are the result of credit worthiness of the securities held or other non-credit related factors. If an unrealized loss is the result of credit quality factors, the Company recognizes an allowance reflective of the current estimate of credit losses expected to be incurred over the life of the financial instrument on a specific identification basis upon initial recognition and at each reporting period. If a reduction in value is a result of other factors, losses are recognized within comprehensive loss unless either the Company intends to sell the security or it is more likely than not the Company will be required to sell the security. Based on a review of these marketable securities, the Company concluded none of the unrealized loss is the result of a credit loss as of December 31, 2024, because the Company does not intend to sell these securities, and it is not more-likely-than-not that the Company will be required to sell these securities before the recovery of their amortized cost basis.

Long-term Investment

Long-term investments without a readily determinable fair value are accounted for using the cost method. The cost method is applied when there is no active market for the investment, thus the fair value cannot be reliably determined. The cost of long-term investments include the purchase price, and are adjusted to fair value based on any observable changes in market value or any impairment losses. The Company had one long-term equity investment which was classified as a non-current asset in the consolidated balance sheets, as the Company had no intent to sell or dispose of the long-term investment within one year of the balance sheet date.

Equity investments without a readily determinable fair value are remeasured from time to time based on observable price changes in orderly transactions for an identical or similar investment. Changes in fair value due to observable price changes

are recorded as other income (expense) in the consolidated statements of operations and comprehensive loss in the period in which they occur.

Impairment of long-term investments is assessed periodically or whenever there are indicators of potential impairment. An impairment loss is recognized if the carrying amount of the investment exceeds its recoverable amount. The recoverable amount is determined based on the higher of the investment's fair value less costs to sell or its value in use. Any impairment losses are recognized in the consolidated statements of operations and comprehensive loss as an expense in the period in which they occur.

Allowance for Credit Losses

For available-for-sale securities in an unrealized loss position, the Company first assesses whether it intends to sell, or if it is more likely than not that it will be required to sell, the security before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security's amortized cost basis is written down to fair value through earnings. For available-for-sale securities that do not meet the aforementioned criteria, the Company evaluates whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, the Company considers the severity of the impairment, any changes in interest rates, market conditions, changes to the underlying credit ratings and forecasted recovery, among other factors. The credit-related portion of unrealized losses, and any subsequent improvements, are recorded in interest income through an allowance account. Any impairment that has not been recorded through an allowance for credit losses is included in other comprehensive income (loss) on the consolidated balance sheets.

The Company excludes the applicable accrued interest from both the fair value and amortized cost basis of available-for-sale securities for purposes of identifying and measuring an impairment. Accrued interest receivable on available-for-sale securities is recorded within prepaid expenses and other current assets on the consolidated balance sheets. The Company's accounting policy is to not measure an allowance for credit loss for accrued interest receivable and to write-off any uncollectible accrued interest receivable as a reversal of interest income in a timely manner, which is considered to be in the period in which it's determined the accrued interest will not be collected.

Property and Equipment, Net

Property and equipment are recorded at cost and depreciated over their estimated useful lives using the straight-line method. Upon retirement or disposal, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is recognized within operating expenses based on the difference between the proceeds received and the net book value of the disposed asset. Routine expenditures for maintenance and repairs are expensed as incurred.

Estimated useful lives for property and equipment are as follows:

	Estimated Useful Life
Computer equipment	3 years
Furniture and fixtures	5 years
Computer software	3 years
Machinery and equipment	5 years
Leasehold improvements	Shorter of expected useful life or lease term

Leases

The Company determines if an arrangement is or contains a lease at inception by assessing whether it conveys the right to control the use of an identified asset in exchange for consideration. If a lease is identified, classification is determined at lease commencement. To date, all of the Company's leases have been determined to be operating leases. Operating lease liabilities are recognized at the present value of the future lease payments at the lease commencement date. The Company's leases do not provide an implicit interest rate and therefore the Company estimates its incremental borrowing rate to discount lease payments. The incremental borrowing rate reflects the estimated interest rate that the Company would have to pay to borrow on a collateralized basis, an amount equal to the lease payments in a similar economic environment over a similar term. Operating lease right-of-use ("ROU") assets are determined based on the corresponding lease liability adjusted for any lease payments made at or before commencement, initial direct costs, and lease incentives. The operating lease ROU asset also includes impairment charges if the Company determines the ROU asset is impaired. The Company considers a lease term to be the noncancelable period that it has the right to use the underlying asset, including any periods where it is reasonably assured the Company will exercise the option to extend the contract. Operating lease expenses are

recognized, and the ROU assets are amortized on a straight-line basis over the lease term. Sublease income, if any, is recognized on a straight-line basis over the sublease term as a reduction to the Company's operating lease cost within general and administrative expenses in our consolidated statements of operations and comprehensive loss. The Company has elected not to separate lease and non-lease components for its leased assets and accounts for all lease and non-lease components of its agreements as a single lease component. The Company has elected not to recognize leases with terms of one year or less on the consolidated balance sheets.

Deferred Offering Costs

The Company capitalizes costs that are directly associated with equity financings until such financings are consummated, at which time such costs are recorded against the gross proceeds of the offering. Should an in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the consolidated statements of operations and comprehensive loss. The Company capitalized deferred offering costs of $2.7 million as of December 31, 2023 related to the Merger. The Company had no capitalized deferred offering costs as of December 31, 2024.

Research and Development Expenses and Related Prepaid Assets and Accrued Liabilities

Research and development costs are expensed as incurred. Research and development expenses primarily consist of internal research and development expense, including personnel-related expenses (such as salaries, benefits and noncash stock-based compensation) and external research and development expenses incurred under arrangements with vendors conducting research and development services on the Company's behalf, such as contract research organizations ("CROs") and contract manufacturing organizations ("CMOs").

Payments made prior to the receipt of goods or services to be used in research and development are capitalized, evaluated for current or long-term classification, and included in prepaid expenses and other current assets or other assets in the consolidated balance sheets based on when the goods are received or the services are expected to be received or consumed, and recognized in research and development expenses when they are incurred.

The Company is required to estimate expenses resulting from its obligations under contracts with vendors, service providers and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary from contract to contract and may result in cash flows that do not match the periods over which materials or services are provided. The Company estimates and records accrued expenses for the related research and development activities based on the level of services performed but not yet invoiced pursuant to agreements established with its service providers, according to the progress of clinical trials or related activities, and discussions with applicable personnel and service providers as to the progress or state of consummation of goods and services.

During the course of a clinical trial, the rate of expense recognition is adjusted if actual results differ from the Company’s estimates. Management estimates accrued expenses as of each balance sheet date in its consolidated financial statements based on the facts and circumstances known at that time. The clinical trial accrual is dependent in part upon the timely and accurate reporting of CROs, CMOs and other third-party vendors. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its estimates may vary from the actual results. To date, the Company has not experienced material differences between its accrued expenses and actual expenses.

Preferred Stock Warrants Liability

The Company issued freestanding warrants to purchase shares of its Series A convertible preferred stock (Series A Convertible Preferred). Prior to the Merger, the Company revalued the warrants at each balance sheet date utilizing an option pricing method that back solved the fair value of the warrants based on recent financing transactions and also considered the enterprise value of the Company when considering potential exit events. Changes in fair value were recognized as increases or reductions to other income (expense), net in the consolidated statements of operations and comprehensive loss. The fair value of these warrants were classified as a non-current liability in the consolidated balance sheet since the underlying Series A Convertible Preferred stock was potentially redeemable. Pursuant to the Merger Agreement, the Series A Convertible preferred stock warrants became warrants to purchase shares of the Company's common stock. As a result of the Merger, the warrants no longer met the requirements for liability accounting and, as such, the Company adjusted the value of the warrants to the estimated fair value as of the Merger date and reclassified them to stockholders' equity.

Share-Based Compensation

The Company maintains equity incentive plans as a long-term incentive for employees, directors, and non-employee service providers. All share-based payments to employees and directors, including grants of incentive stock options, nonqualified stock options, restricted stock awards, unrestricted stock awards, or restricted stock units, are recognized as expense based on their grant date fair values. The Company recognizes expense on a straight-line basis over the requisite service period, which is generally the vesting period of the respective award. Stock-based compensation is classified in the consolidated statements of operations and comprehensive loss based on the function to which the related services are provided. The Company has elected to account for forfeitures as they occur.

Stock Options

The Company estimated the fair value of options granted using the Black-Scholes option pricing model for stock option grants to both employees and non-employees.

The Black-Scholes option pricing model requires inputs based on certain subjective assumptions. A discussion of management's methodology for developing the assumptions used in the valuation model follows:

Fair Value of Common Stock—Prior to the Merger, there was no public market for LENZ OpCo's common stock. The fair value of LENZ OpCo's common stock was determined by the board of directors with input from management and consideration of third-party valuation reports. In the absence of a public trading market, and as a clinical-stage company with no significant revenue, LENZ OpCo believed that it was appropriate to consider a range of factors to determine the fair market value of the common stock at each grant date, including input from management and valuations of LENZ OpCo's common stock by a third-party valuation firm. In determining the fair value of its common stock, LENZ OpCo used methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants' ("AICPA") Audit and Accounting Practice Aid Series: *Valuation of Privately Held Company Equity Securities Issued as Compensation*. In addition, LENZ OpCo considered various objective and subjective factors, including (1) the achievement of clinical and operational milestones by LENZ OpCo; (2) the significant risks associated with LENZ OpCo's stage of development; (3) capital market conditions for life science companies, particularly similarly situated, privately held, early-stage life science companies; (4) LENZ OpCo's available cash, financial condition, and results of operations; (5) the most recent sales of LENZ OpCo's convertible preferred stock; and (6) the preferential rights of LENZ OpCo's outstanding convertible preferred stock and Class B convertible common stock.

Subsequent to the Merger, the Company used the closing stock price on the grant date to determine the grant date fair value, adjusted for special dividends, if any.

Expected Dividend Yield—The expected dividend yield is based on the Company's historical and expected dividend payouts. The Company has historically paid no dividends, other than the special dividend paid by Graphite immediately prior to the close of the Merger, and does not anticipate dividends to be paid in the future.

Expected Equity Volatility—Due to the lack of a public market for LENZ OpCo's common stock and the lack of company-specific historical and implied volatility data, LENZ OpCo based its computation of expected volatility on the historical volatility of a representative group of public companies with similar characteristics (e.g., public entities of similar size, complexity, stage of development, and industry focus). The historical volatility is calculated based on a period of time commensurate with the expected term assumption.

Subsequent to the Merger, the Company used an average volatility for comparable publicly-traded biopharmaceutical companies over a period equal to the expected term of the stock award grant as the Company does not yet have sufficient historical trading history for its own stock.

Risk-Free Interest Rate—The risk-free interest rate is based on a United States Treasury instrument whose term is consistent with the expected term of the stock options.

Expected Term—The Company used the simplified method as prescribed by the Securities and Exchange Commission Staff Accounting Bulletin No. 107, *Share-Based Payment*, to calculate the expected term for options granted to employees as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax base. Deferred tax assets and liabilities are measured using effective tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Deferred tax expense or benefit is the result of changes in the deferred tax assets and liabilities. Valuation allowances are established when necessary to reduce deferred tax assets where, based upon the available evidence, the Company concludes that it is more-likely-than-not that some or all of the deferred tax assets will not be realized. In evaluating its ability to recover deferred tax assets, the Company considers all available positive and negative evidence, including its operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. Because of the uncertainty of the realization of deferred tax assets, the Company has recorded a valuation allowance against its net deferred tax assets.

Liabilities are provided for tax benefits for which realization is uncertain. Such benefits are only recognized when the underlying tax position is considered more-likely-than-not to be sustained on examination by a taxing authority, assuming they possess full knowledge of the position and facts. Interest and penalties related to uncertain tax positions are recognized in the provision of income taxes. As of December 31, 2024 and December 31, 2023, the Company had incurred no interest or penalties related to uncertain income tax benefits.

The Company’s policy is to include interest and penalties related to unrecognized income tax benefits as a component of income tax expense. The Company has no accruals for interest or penalties in the consolidated balance sheets as of December 31, 2024 and December 31, 2023 and has not recognized interest or penalties in the consolidated statements of operations for the years ended December 31, 2024 or 2023.

Net Loss Per Share

Basic net loss per share was calculated by dividing net loss attributed to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without consideration for common stock equivalents. Stock options, common stock warrants, and ESPP (as defined in Note 9) shares pending issuance were considered potentially dilutive to common stock. Prior to the Merger, the convertible preferred stock and Class B convertible common stock were not participating securities, because they did not participate in losses. Stock options, preferred stock warrants, Class A warrants, Class B convertible common stock, and convertible preferred stock were considered potentially dilutive common stock. The Company computed diluted net loss per share attributable to common stockholders after giving consideration to all potentially dilutive common stock outstanding during the period, determined using the treasury-stock and if-converted methods, except where the effect of including such securities was antidilutive. Prior to the Merger, the Company made adjustments to diluted net loss attributed to common stockholders to reflect the reversal of gains on the change in the value of preferred stock warrants liability, assuming conversion of warrants to acquire convertible preferred stock at the beginning of the period or at time of issuance, if later, to the extent that those preferred stock warrants are dilutive. Diluted net loss per share was the same as basic net loss per share, since the effects of potentially dilutive securities were antidilutive given the net loss for each period presented.

For the year ended December 31, 2024, net loss per share included the weighted-average shares outstanding as a result of the Merger, and shares issued in conjunction with both the March 2024 PIPE Financing (as defined in Note 3) and the July 2024 PIPE Financing (as defined in Note 8).

Other Comprehensive Income (Loss)

Other comprehensive income (loss) represents the change in the Company’s stockholders’ equity (deficit) from all sources other than investments by or distributions to stockholders. The Company’s other comprehensive income is the result of unrealized gains on marketable securities.

Segment Reporting

Operating segments are defined as components of an entity about which separate discrete information is available for evaluation by the chief operating decision maker ("CODM"), or decision-making group, in deciding how to allocate resources and in assessing performance. The Company’s Chief Executive Officer acts as the CODM. The CODM views the Company’s operations and manages its business as one operating segment operating exclusively in the United States. The Company’s singular focus is on the development and commercialization of innovative therapies to improve vision, and has generated limited revenue since inception. The CODM utilizes consolidated net loss to monitor budgeted versus actual results, and to assess the overall financial performance and operational efficiency of the business. The CODM manages and

allocates resources to the operations of the Company on an entity-wide basis using net loss as the primary performance measure. Asset information provided to the CODM is consistent with those reported on the consolidated balance sheets and are attributable to the United States.

The table below shows a reconciliation of the Company's net loss, including the significant expense categories regularly provided to and reviewed by the CODM, as computed under U.S. GAAP, to the Company's total consolidated net loss in the consolidated statements of operations:

	Year Ended December 31,	
	2024	2023
Operating expenses:		
Research and development expenses[(1)]	$ 27,907	$ 59,061
Selling, general, and administrative expenses[(1)]	24,338	12,025
Share-based compensation expense	6,365	1,343
Total operating expenses	58,610	72,429
Loss from operations	(58,610)	(72,429)
Other income:		
Other income	289	93
Interest income	8,553	2,189
Net loss before income taxes	(49,768)	(70,147)
Income tax expense (benefit)	1	(179)
Net loss	$ (49,769)	$ (69,968)

(1) Amounts exclude share-based compensation expense.

Recently Adopted Accounting Pronouncements

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*, to improve existing disclosure requirements for segment reporting, primarily through enhanced disclosures about significant segment expenses and new disclosures requirements applicable to entities with a single reportable segment. This guidance is effective for annual periods beginning after December 15, 2023 and interim periods beginning after December 15, 2024, on a retrospective basis. The Company adopted this guidance for the annual period ending December 31, 2024, and the adoption did not have a significant impact on the consolidated financial statements.

Recently Issued Accounting Pronouncements

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. The update requires a public business entity to disclose, on an annual basis, a tabular rate reconciliation using both percentages and currency amounts, broken out into specified categories with certain reconciling items further broken out by nature and jurisdiction to the extent those items exceed a specified threshold. In addition, all entities are required to disclose income taxes paid, net of refunds received disaggregated by federal, state/local, and foreign jurisdictions if the amount is at least 5% of total income tax payments, net of refunds received. Adoption of the ASU allows for either the prospective or retrospective application of the amendment and is effective for the Company for annual periods beginning after December 15, 2024, with early adoption permitted. The Company has not yet completed its assessment of the impact of ASU 2023-09 on the Company’s financial statements.

In November 2024, the FASB issued ASU 2024-03, *Income Statement-Reporting Comprehensive Income-Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses*, which requires additional disclosure about specific expense categories included in the income statement. This guidance is effective for annual periods beginning after December 15, 2026, and interim periods beginning after December 15, 2027, with early adoption permitted. The Company has not yet completed its assessment of the impact of ASU 2024-03 on the Company’s financial statements.

3. Merger and Related Transactions

As described in Note 1, LENZ OpCo merged with a wholly owned subsidiary of Graphite on March 21, 2024. The Merger was accounted for as a reverse recapitalization under GAAP. LENZ OpCo was considered the accounting acquirer for

financial reporting purposes. This determination was based on the facts that, immediately following the Merger: former LENZ OpCo stockholders owned a substantial majority of the voting rights of the combined company; LENZ OpCo designated a majority (five of seven) of the initial members of the board of directors of the combined company; and no members of Graphite's senior management held key positions in senior management of the combined company. The transaction was accounted for as a reverse recapitalization of Graphite by LENZ OpCo similar to the issuance of equity for the net assets of Graphite, which were primarily cash and cash equivalents and other non-operating assets. It was concluded that any in-process research and development assets that remained as of the Merger were immaterial.

Under reverse recapitalization accounting, the assets and liabilities of Graphite were recorded at their fair value, which approximated book value due to their short-term nature. The Company's consolidated financial statements reflect 8,670,653 shares and options held by the former stockholders and option holders of Graphite.

Graphite assumed each outstanding and unexercised option to purchase LENZ OpCo's common stock, whether vested or not vested, and assumed each outstanding and unexercised warrant to purchase LENZ OpCo's common stock or preferred stock, which became options and warrants to purchase shares of Graphite common stock. At the closing of the Merger, each outstanding share of LENZ OpCo's common stock and preferred stock, and options and warrants to purchase LENZ OpCo's common stock and preferred stock were converted into the right to receive or purchase 0.2022 shares of Graphite's common stock, which resulted in the issuance by Graphite of an aggregate of 15,409,102 shares of, and options and warrants to purchase, Graphite common stock to the stockholders, option holders, and warrant holders of LENZ OpCo.

In connection with the Merger Agreement, the Company concurrently entered into a subscription agreement (the "Subscription Agreement") with certain institutional investors (the "PIPE investors") pursuant to which, among other things, the Company agreed to issue to the PIPE investors shares of LENZ common stock immediately following the Merger in a private placement transaction for an aggregate purchase price of $53.5 million (the "March 2024 PIPE Financing"). Immediately following the consummation of the Merger and March 2024 PIPE Financing, LENZ OpCo, Graphite stockholders, and the PIPE investors collectively owned approximately 56%, 31%, and 13% of the Company, respectively, on a fully diluted basis.

As part of the reverse recapitalization, LENZ OpCo received $112.6 million of cash and cash equivalents, net of transaction costs. LENZ OpCo also acquired assets, primarily prepaid and other current assets, of approximately $1.5 million and assumed payables and accruals of approximately $3.2 million. LENZ OpCo also incurred transaction costs of approximately $5.1 million, which was recorded as a reduction to additional paid-in capital in the accompanying consolidated statements of convertible preferred and common stock and stockholders' equity. The Company also recorded a one-time charge of $0.3 million for the acceleration of the Graphite stock awards that is recorded in the consolidated statements of operations and comprehensive loss for the year ended December 31, 2024.

4. Financial Instruments

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or non-recurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1—Observable inputs such as quoted prices in active markets.

Level 2—Inputs, other than the quoted prices in active markets that are observable either directly or indirectly.

Level 3—Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

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 management 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 of the instrument. The carrying amounts of the Company's financial instruments, including cash equivalents classified within the Level 1 designation, prepaid and other current assets, accounts payable, and accrued liabilities approximate fair value due to their short maturities. Cash equivalents, marketable securities, and the preferred stock warrants liability are recorded at fair value on a

recurring basis. Equity investments without a readily determinable fair value are recorded at cost and adjusted to fair value based on observable price changes in orderly transactions for identical or similar investment of the same issuer.

None of the Company's non-financial assets or liabilities are recorded at fair value on a non-recurring basis.

Assets and liabilities measured at fair value on a recurring basis are as follows (in thousands):

	Fair Value Measurements at Reporting Date			
	Total	Level 1	Level 2	Level 3
At December 31, 2024:				
Cash equivalents				
Money market funds	$ 17,693	$ 17,693	$ —	$ —
U.S. government securities	999	—	999	—
U.S. treasury securities	997	997	—	—
Total cash equivalents measured at fair value	$ 19,689	$ 18,690	$ 999	$ —
Marketable securities				
Commercial paper	$ 58,823	$ —	$ 58,823	$ —
U.S. treasury securities	46,309	46,309	—	—
Corporate debt securities	43,669	—	43,669	—
U.S. government agency securities	40,071	—	40,071	—
Total marketable securities measured at fair value	$ 188,872	$ 46,309	$ 142,563	$ —
At December 31, 2023:				
Cash equivalents				
Money market funds	$ 7,962	$ 7,962	$ —	$ —
Total cash equivalents measured at fair value	$ 7,962	$ 7,962	$ —	$ —
Marketable securities				
Commercial paper	$ 18,751	$ —	$ 18,751	$ —
U.S. government agency securities	9,925	—	9,925	—
U.S. treasury securities	1,978	1,978	—	—
Total marketable securities measured at fair value	$ 30,654	$ 1,978	$ 28,676	$ —
Liabilities				
Convertible preferred stock warrants	$ 871	$ —	$ —	$ 871
Total liabilities measured at fair value	$ 871	$ —	$ —	$ 871

The following table presents the amortized cost and estimated fair market value of our cash equivalents and marketable securities as of the dates presented (in thousands):

	December 31, 2024			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Cash equivalents:				
Money market funds	$ 17,693	$ —	$ —	$ 17,693
U.S. government securities	999	—	—	999
U.S. treasury securities	997	—	—	997
Marketable securities:				
Commercial paper	$ 58,798	$ 56	$ (31)	$ 58,823
U.S. treasury securities	46,231	80	(2)	46,309
Corporate debt securities	43,634	49	(14)	43,669
U.S. government agency securities	40,013	60	(2)	40,071
Totals	$ 208,365	$ 245	$ (49)	$ 208,561

	December 31, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Marketable securities:				
Commercial paper	$ 18,742	$ 9	$ —	$ 18,751
U.S. government agency securities	9,927	1	(3)	9,925
U.S. treasury securities	1,977	1	—	1,978
Totals	$ 30,646	$ 11	$ (3)	$ 30,654

The following table presents available-for-sale securities by contractual maturity date as of December 31, 2024 (in thousands):

	December 31, 2024	
	Amortized Cost	Estimated Fair Value
Due in one year or less	$ 173,772	$ 173,959
Due after one year but within five years	14,904	14,913
Total	$ 188,676	$ 188,872

As of December 31, 2024, twenty-four of the Company's marketable securities with a fair market value of $36.7 million were in an immaterial aggregate gross unrealized loss position; these twenty-four marketable securities have all been in a gross unrealized loss position for less than one year. Based on a review of these marketable securities, the Company believes none of the unrealized loss is the result of a credit loss as of December 31, 2024, because the Company does not intend to sell these securities, and it is not more-likely-than-not that the Company will be required to sell these securities before the recovery of their amortized cost basis. Refer to Note 2 for further discussion on the Company's evaluation of unrealized losses on available-for-sale securities. Accrued interest receivable on marketable securities was $1.1 million and $0.1 million as of December 31, 2024 and December 31, 2023, respectively, and was recorded within prepaid expenses and other current assets in the consolidated balance sheets. We have not written off any accrued interest receivables for the years ended December 31, 2024 and 2023.

The Company did not transfer any assets measured at fair value on a recurring basis between levels during the years ended December 31, 2024 and 2023.

The following table presents activity for the preferred stock warrants liability during the year ended December 31, 2024 (in thousands):

	Preferred Stock Warrants Liability
Balance at December 31, 2023	$ 871
Change in fair value	1,047
Conversion of preferred stock warrants liability to equity	(1,918)
Balance at December 31, 2024	$ —

The warrants' estimated fair value as of the Merger date utilized the Black-Scholes model and the following input assumptions: risk free interest rate (4.3% - 4.4%), expected term (3.6 - 4.1 years), dividend yield (0%), volatility (103.0% - 104.0%) and exercise price ($10.64 per common share).

No fair value liabilities exist as of December 31, 2024. Upon completion of the Merger, the preferred stock warrants became exercisable into shares of common stock and will no longer continue to be remeasured at each reporting date. Refer to Note 2 for further discussion on the valuation of the preferred stock warrants liability.

Equity investment without a readily determinable fair value

In conjunction with the Merger, the Company obtained an investment in common stock of an unfunded privately held, pre-clinical life sciences company, which the Company initially carried at no value. In May 2024, the private company executed a seed funding round ("Seed Financing"), which triggered an anti-dilution provision under the License and Option Agreement ("Option Agreement"), resulting in the issuance of additional shares of common stock. The Company identified the Seed Financing as an observable price change under the measurement alternative, and adjusted the equity investment from zero to an estimated fair value of $1.3 million at the time of the Seed Financing. There were no other adjustments to the carrying value of the Company's investment without a readily determinable fair value on both a cumulative basis or for the year ended December 31, 2024.

5. Property and Equipment, net

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

	December 31,	
	2024	2023
Furniture and fixtures	$ 311	$ 64
Computer software	144	—
Machinery and equipment	112	5
Leasehold improvements	100	12
Computer equipment	52	—
Property and equipment, gross	719	81
Less: accumulated depreciation	(68)	(27)
Property and equipment, net	$ 651	$ 54

As of December 31, 2024, all the Company's property and equipment was located in the United States.

6. Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31,	
	2024	2023
Accrued payroll and related expenses	$ 3,564	$ 1,998
Sales, general, and administrative accrued expenses	1,109	376
Research and development accrued expenses	808	10,289
Operating lease liability, current portion	567	137
Other accrued liabilities	101	3
Total accrued liabilities	$ 6,149	$ 12,803

7. Commitments and Contingencies

Operating Leases

Commencing on April 1, 2022, LENZ OpCo entered into a lease agreement for office space in Del Mar, California, which was subsequently amended to expand the office space leased and extend the term (the "Del Mar lease"). In April 2024, the Company entered into a lease agreement for office space in Solana Beach, California (the "Lomas lease"). As of December 31, 2024 and December 31, 2023, the weighted average remaining lease term was 2.5 years and 2.3 years, respectively, and the weighted average discount rate used to determine the right-of-use assets and corresponding operating lease liabilities was 7.7% and 7.0%, respectively. Cash paid for operating leases approximated rent expense for the periods presented.

Maturities of the operating lease liabilities as of December 31, 2024 for the Del Mar and Lomas leases are as follows (in thousands):

2025	577
2026	511
2027	361
Total undiscounted lease payments	1,449
Less: present value adjustment	(141)
Operating lease liabilities	$ 1,308

Rent expense for the years ended December 31, 2024 and 2023 was $0.4 million and $0.1 million, respectively.

Legal Proceedings

From time to time, the Company may be subject to legal proceedings and claims arising in the ordinary course of business. The Company is not currently a party to or aware of any proceedings that it believes will have, individually or in the aggregate, a material adverse effect on it's business, financial condition or results of operations.

Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. Its exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at a request in such capacity. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of December 31, 2024 and December 31, 2023, the Company did not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

8. Stockholders' Equity

Convertible Preferred Stock

Immediately prior to the closing of the Merger and as of December 31, 2023, LENZ OpCo had authorized 53,761,506 shares of preferred stock with a par value of $0.001. Immediately prior to the closing of the Merger and as of December 31, 2023, there were 21,977,282 shares of Series A, 2,950,548 shares of Series A-1, and 28,019,181 shares of Series B Convertible Preferred Stock (Series B) issued and outstanding. Immediately prior to the closing of the Merger and as of December 31, 2023, the total liquidation preference of issued and outstanding Series A, Series A-1, and Series B was $47.3 million, $10.0 million, and $83.5 million, or $2.15 per share, $3.3892 per share, and $2.9801 per share, respectively.

At the closing of the Merger, the 52,947,011 shares of LENZ OpCo preferred stock were exchanged for 10,705,829 shares of Graphite's common stock.

Common Stock

As of December 31, 2023, LENZ OpCo had authorized two series of common stock, designated Class A common stock and Class B convertible common stock. Immediately prior to the closing of the Merger and as of December 31, 2023, there were 11,838,624 and 9,915,013 shares of Class A common stock issued, respectively, and 11,668,867 and 9,739,818 shares of Class A common stock outstanding, respectively. Immediately prior to the closing of the Merger and as of December 31, 2023, there were 2,744,184 shares of Class B convertible common stock issued and outstanding. At the closing of the Merger, 11,838,624 and 11,668,867 issued and outstanding shares of Class A common stock, respectively, were exchanged for 2,393,729 and 2,359,408 shares of issued and outstanding shares of Graphite's common stock, respectively. Additionally, at the closing of the Merger, 2,744,184 shares of Class B convertible common stock were exchanged for 554,843 shares of Graphite's common stock.

At the closing of the Merger on March 21, 2024, legacy Graphite stockholders held 8,320,485 shares of common stock.

Concurrent with the closing of the Merger on March 21, 2024, the Company completed the March 2024 PIPE Financing of 3,559,565 shares for an aggregate purchase price of $53.5 million.

On July 14, 2024, the Company entered into a Stock Purchase Agreement (the "Purchase Agreement") for a private placement with Ridgeback Capital Investments, L.P. ("July 2024 PIPE Financing"). Pursuant to the Purchase Agreement, the Company agreed to sell 1,578,947 shares of the Company's common stock, par value 0.00001 per share, at a purchase price of $19.00 per share. The gross proceeds of the July 2024 PIPE Financing were $30.0 million. The July 2024 PIPE Financing closed on July 17, 2024.

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Other than the special dividend paid by Graphite immediately prior to the close of the Merger, no dividends have been declared or paid by the Company through December 31, 2024, and any such dividends are not cumulative.

Common stock reserved for future issuance consist of the following:

	December 31, 2024
Common stock warrants	164,676
Common stock options granted and outstanding	2,989,927
Shares available for issuance under incentive plans	1,544,122
Shares available under the 2024 Employee Stock Purchase Plan	250,995
Total	4,949,720

Warrants

LENZ OpCo had issued warrants to acquire Class A common stock and Series A convertible preferred stock.

The warrants to purchase 470,000 shares of Class A common stock had an exercise price of $0.21 per share and were issued in December 2020 with an expiration date in February 2024. In February 2024, prior to expiration, the holder exercised 470,000 warrants, resulting in $0.1 million of proceeds. These shares were subsequently exchanged for 95,034 shares of common stock at the closing of the Merger.

The Series A preferred stock warrants had an exercise price of $2.15 per share and were issued in October 2020 with an expiration date in October 2027. There were no exercises of the Series A preferred stock warrants for any of the periods presented.

In connection with the Merger, the Series A preferred stock warrants were converted to 164,676 common stock warrants of the Company at an exercise price of $10.64, and were subsequently reclassified to stockholders' equity at their fair value of $1.9 million.

9. Share-Based Compensation

2020 Equity Incentive Plan and 2024 Equity Incentive Plan

LENZ OpCo adopted an equity incentive plan in 2020 (the "2020 Plan"), which provides for the granting of incentive stock options, non-statutory stock options, and other equity awards to LENZ OpCo's employees, officers, directors, and consultants. Pursuant to the Merger Agreement, Graphite assumed the 2020 Plan and all stock options issued and outstanding under the 2020 Plan.

The Company adopted the 2024 Equity Incentive Plan (the "2024 Plan") at the closing of the Merger. Upon adoption, there were 3,011,948 shares of the Company's common stock available for grant under the 2024 Plan. Additionally, the share reserve is subject to annual increases of an amount equal to the least of 4,517,922 shares, 5% of the Company's outstanding common stock on the last day of the preceding fiscal year, or a lesser amount determined by the Company's board of directors. As of December 31, 2024, 1,529,400 shares of the Company's common stock have been granted under the 2024 Plan.

As of December 31, 2024, the aggregate number of shares of common stock authorized under the 2020 Plan and the 2024 Plan, as amended, was 3,066,672 shares.

2024 Employee Stock Purchase Plan

The Company adopted the 2024 Employee Stock Purchase Plan (the "2024 ESPP") at the closing of the Merger. Upon adoption, there were 250,995 shares of the Company's common stock reserved for issuance under the 2024 ESPP. Additionally, the share reserve is subject to annual increases of an amount equal to the least of 376,493 shares, 1% of the Company's outstanding common stock on the last day of the preceding fiscal year, or an amount determined by the Company's board of directors. As of December 31, 2024, no shares of the Company's common stock have been issued under the 2024 ESPP.

Stock Options

Stock options granted under the 2020 Plan and the 2024 Plan generally vest over three or four years and expire after 10 years.

The per share exercise price for stock options granted by LENZ OpCo was set at the fair value per share of common stock as determined by the board of directors as of the date of grant. The board of directors of LENZ OpCo determined the value of LENZ OpCo's Class A common stock considering many factors, including third-party valuation of LENZ OpCo's Class A common shares, as well as additional factors, which may have changed since the date of the most recent contemporaneous valuation through the date of grant.

Post Merger, the Company uses the closing stock price on the grant date for fair value.

A summary of stock option activity for awards under the 2020 Plan and the 2024 Plan is presented below:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Lives (years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2023	1,883,938	$ 3.76	7.4	$ 18,691
Granted	1,529,400	$ 16.44		
Assumed in the Merger	322,557	$ 10.44		
Exercised	(712,004)	$ 5.53		
Forfeited	(33,964)	$ 7.86		
Outstanding as of December 31, 2024	2,989,927	$ 10.50	8.2	$ 55,531
Exercisable as of December 31, 2024	1,082,601	$ 4.04	7.3	$ 26,897
Vested and expected to vest	2,940,323	$ 10.49	8.4	$ 54,661

The weighted-average grant date fair value of options granted during the years ended December 31, 2024 and 2023 was $16.44 and $5.30 per share, respectively. As of December 31, 2024, there was $18.7 million of unrecognized compensation cost related to unvested share-based compensation arrangements granted under the 2020 Plan and 2024 Plan, which is expected to be recognized over a weighted average period of 2.9 years.

Share-based compensation expense was as follows (in thousands):

	Year Ended December 31,	
	2024	2023
Selling, general and administrative	$ 4,471	$ 900
Research and development	1,894	443
Total	$ 6,365	$ 1,343

The assumptions used in the Black-Scholes option pricing model for stock options granted were as follows:

	Year Ended December 31,	
	2024	2023
Expected term	5.8 - 6.1 years	6.0 years
Expected volatility	93.0% - 106.2%	92.0% - 92.7%
Risk free interest rate	3.8% - 4.5%	3.9% - 4.6%
Expected dividend yield	0.0%	0.0%

During the year ended December 31, 2024, the Company modified the vesting terms of outstanding stock options issued to a senior level employee upon their separation. This constituted an equity modification under ASC Topic 718 and resulted in the recognition of an additional $0.6 million of share-based compensation expense during the year ended December 31, 2024.

Liability for Early Exercise of Stock Options

Certain individuals were granted the ability to early exercise their stock options. The shares of common stock issued from the early exercise of unvested stock options are restricted and continue to vest in accordance with the original vesting schedule. The Company has the option to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination. The shares purchased by the employees and non-employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be outstanding until those shares vest. The cash received in exchange for exercised and unvested shares related to stock options granted is recorded as a liability for the early exercise of stock options on the accompanying consolidated balance sheets, and will be transferred into common stock and additional paid-in capital as the shares vest. As of December 31, 2024 and December 31, 2023, there were 13,052 and 35,424 unvested shares issued under early exercise provisions subject to repurchase by the Company, respectively. The

liability associated with early exercised stock options at December 31, 2024 was not material. At December 31, 2023, the Company recorded $0.1 million associated with early exercised stock options in other long-term liabilities.

10. Net Loss Per Share

The Company's potential dilutive securities have been excluded from the computation of diluted net loss per share as the effect would be anti-dilutive. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at period end, from the computation of diluted net loss per share attributable to common stockholders for the period indicated because including them would have had an anti-dilutive effect:

	December 31,	
	2024	2023
Convertible preferred stock	—	10,705,829
Class B convertible common stock	—	554,843
Preferred stock warrants	—	164,676
Common stock options granted and outstanding	2,989,927	1,883,938
Warrants to purchase common stock	164,676	95,034
2024 ESPP shares to be purchased	1,718	—
Total	3,156,321	13,404,320

11. Income Taxes

Net loss before income taxes for the years ended December 31, 2024 and 2023 was derived solely from U.S. sources. The Company has not reflected any benefit of such net operating loss carryforwards in the financial statements due to the full valuation allowance recorded against net deferred tax assets. The components of the income tax expense (benefit) were as follows (in thousands):

	Year Ended December 31,	
	2024	2023
Current		
Federal	$ —	$ (164)
State	1	(15)
Total current	1	(179)
Deferred		
Federal	—	—
State	—	—
Total deferred	—	—
Total income tax expense (benefit)	$ 1	$ (179)

A reconciliation of the Company's income tax expense (benefit) to the amount computed by applying the federal statutory income tax rate is summarized as follows (in thousands):

	Year Ended December 31,	
	2024	2023
Expected tax benefit computed at federal statutory rate	$ (10,452)	$ (14,731)
State income taxes, net of federal tax benefit	(2,117)	(1,153)
Research and development credit carryforwards	(2,119)	(5,472)
Reserve for uncertain tax positions	2,328	1,517
Prior year permanent differences	586	(699)
Current year permanent differences	377	120

Other	515	236
Change in valuation allowance	10,883	20,003
Income tax expense (benefit)	$ 1	$ (179)

Significant components of the Company's net deferred tax assets (liabilities) are summarized as follows (in thousands):

	Year Ended December 31,	
	2024	2023
Deferred tax assets		
Net operating loss carryforwards	$ 15,543	$ 3,975
Research and development credit carryforwards	8,162	6,269
Capitalized research and development	28,294	15,282
Other	1,795	1,284
Total deferred tax assets	53,794	26,810
Valuation allowance	(53,174)	(26,736)
Net deferred tax assets	620	74
Deferred tax liabilities		
Other	(620)	(74)
Total deferred tax liabilities	620	74
Net deferred tax assets	$ —	$ —

The Tax Cuts and Jobs Act (TCJA) requires taxpayers to capitalize and amortize research and development (R&D) expenditures under section 174 for tax years beginning after December 31, 2021. This rule became effective for the Company during the year ended December 31, 2022, resulting in the capitalization of R&D costs, net of amortization, of approximately $128.3 million and $66.0 million as of December 31, 2024 and December 31, 2023, respectively. The Company will continue to amortize these costs for tax purposes over 5 years for R&D performed in the U.S. and over 15 years for R&D performed outside the U.S.

Deferred income tax assets and liabilities are recorded for differences between the financial statement and tax basis of the assets and liabilities that will result in taxable or deductible amounts in the future based on enacted laws and rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company evaluated the available evidence supporting the realization of its gross deferred tax assets, including the amount and timing of future taxable income, and has determined it is more likely than not that the assets will not be realized. Due to uncertainties surrounding the realizability of the deferred tax assets, the Company maintains a full valuation allowance against its deferred tax assets at December 31, 2024 and 2023.

The Company had a valuation allowance of $53.2 million at December 31, 2024 to offset the net deferred tax assets as realization of such assets is uncertain. The valuation allowance increased by $26.5 million during the year ended December 31, 2024.

At December 31, 2024, the Company's federal and state net operating loss (NOL) and tax credit carryforwards were as follows:

	Amount	Expiration Years
Net operating losses, federal (starting from January 1, 2018)	$ 72,899	Do not expire
Net operating losses, state	3,908	2040 - 2044
Tax credits, federal	7,646	2040 - 2044
Tax credits, state	653	2042

Utilization of NOL carryforwards and other tax attributes, including those obtained through the Merger, may be subject to substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, as amended, due to ownership change limitations that have occurred previously or that could occur in the future. An ownership change occurs, generally,

if the percentage of stock of the loss corporation owned by one or more 5% shareholders has increased by more than 50 percentage points relative to the lowest percentage of stock of the loss corporation owned by the same 5% shareholders at any time during the testing period (generally, the three-year period preceding a testing date). These ownership changes may limit the amount of NOL carryforwards and tax credits that can be utilized annually to offset future taxable income. State NOL carryforwards and other state tax attributes may be similarly limited. During the year ended December 31, 2024, the Company completed a Section 382 analysis, and determined that an ownership change more likely than not occurred on March 21, 2024 as a result of the Merger. The ownership change resulted in a limitation that will reduce the total amount of NOL carryforwards and tax credits disclosed that can be utilized to offset future taxable income. The Company adjusted the carryforward attributes accordingly, with an offsetting adjustment to the valuation allowance. Subsequent ownership changes may affect the limitation in future years.

The Company recognizes a tax benefit from an uncertain tax position when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. Income tax positions must meet a more likely than not recognition at the effective date to be recognized. As of December 31, 2024 and 2023, the Company had no unrecognized tax benefits that, if recognized and realized, would affect the effective tax rate due to the valuation allowance against deferred tax assets.

The following table summarizes the changes to the Company's gross unrecognized tax benefits (in thousands):

	Year Ended December 31,	
	2024	2023
Balance at beginning of year	$ 1,953	$ 131
Increases (decreases) related to prior year tax positions	(5)	6
Increases related to current year tax positions	2,334	1,816
Balance at end of year	$ 4,282	$ 1,953

The Company's policy is to recognize interest and penalties related to income tax matters as income tax expense. The Company had no accrual for interest or penalties on the Company's balance sheets at December 31, 2024 or 2023, and has not recognized interest and/or penalties in the consolidated statements of operations and comprehensive loss for the years ended December 31, 2024 and 2023. As of December 31, 2024 and 2023, the Company had unrecognized tax benefits of $3.5 million and $1.7 million, respectively, which if recognized currently, should not impact the effective tax rate due to the Company maintaining a full valuation allowance. The Company does not expect that there will be a significant change in the unrecognized tax benefit over the next twelve months.

The Company is subject to taxation in the U.S. federal and various state jurisdictions. All of the Company's tax years are subject to examination by federal and state tax authorities due to the carryforward of unutilized net operating losses and R&D credits. Further the Company is not currently under examination by any federal, state or local tax authority.

12. License Agreements

In April 2022, the Company entered into a license and collaboration agreement providing an exclusive license (the "CORXEL License," formerly referred to as the "Ji Xing License") to certain of the Company's intellectual property ("IP") for use in the treatment of presbyopia in humans in mainland China, Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan (collectively, "Greater China"). The Company also agreed to negotiate a separate agreement for the purchase of clinical and commercial supply of products containing the IP for clinical and commercial requirements at cost plus a negotiated percentage and granted a right of first negotiation to obtain a regional license on other products the Company might develop outside the field of presbyopia for commercialization in Greater China.

The Company received nonrefundable, non-creditable upfront payments totaling $15.0 million as initial consideration under the CORXEL License, which represents the transaction price at inception. In addition, the Company is also eligible to receive up to $95.0 million of regulatory and sales milestones, as well as tiered mid single-digit to low double-digit royalties on net sales in Greater China. Additional consideration to be paid to the Company upon reaching regulatory and sales milestones is excluded from the transaction price. Future milestone payments are fully contingent as the risk of significant revenue reversal will only be resolved depending on future regulatory approval and sales level outcomes. The sales-based royalty fee qualifies for the royalty constraint exception and does not require an estimate of the future transaction price. The sales-based royalty fee is considered variable consideration and will be recognized as revenue as such sales occur, if any.

The Company assessed the promises made under the CORXEL License and concluded the CORXEL License comprises a single performance obligation providing the right to use functional intellectual property. The $15.0 million transaction price allocated to that single performance obligation was recognized on completion of the transfer of the CORXEL License during the year ended December 31, 2022. No contractual milestones were met under the CORXEL License during the years ended December 31, 2024 or 2023.

13. Employee Benefit Plan

The Company sponsors a 401(k) retirement plan to provide retirement benefits for all eligible employees. Participating employees may voluntarily contribute up to limits provided by Internal Revenue Service regulations. For the years ended December 31, 2024 and 2023, the Company made contributions to the plan of $0.3 million and $0.2 million, respectively.

14. Related Party Transactions

In March 2023, LENZ OpCo issued 22,146,905 shares of its Series B preferred stock for total cash proceeds of $66.0 million to investors, including to significant shareholders that had designated members on LENZ OpCo’s board of directors.

Through the Subscription Agreement and March 2024 PIPE Financing executed in conjunction with the Merger, the Company issued 3,343,330 shares to investors that had designated members on the Company's board of directors.

A member of the Company’s Board of Directors currently serves as a member of the board of directors of one of the Company’s vendors, and has served in that capacity since 2023. LENZ OpCo entered into a Master Services Agreement with this vendor in December 2023 to provide manufacturing services. Accordingly, the Company considers the vendor to be a related party. For the years ended December 31, 2024 and 2023, fees incurred for services performed by the vendor were $0.5 million and $0.3 million, respectively, and were charged to research and development expenses. The Company had $0.1 million due to the vendor within accounts payable as of December 31, 2024.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

As previously reported on our Current Report on Form 8-K filed with the SEC on March 22, 2024, on March 21, 2024, the audit committee of the Board of Directors approved a resolution appointing Ernst & Young LLP ("EY") as our independent registered public accounting firm for the fiscal year ending December 31, 2024. EY served as the independent registered public accounting firm of LENZ OpCo prior to the Merger. Accordingly, Deloitte & Touche LLP ("Deloitte"), Graphite's independent registered public accounting firm prior to the Merger, was informed on March 21, 2024 that it was dismissed as our independent registered public accounting firm.

The reports of Deloitte on Graphite's financial statements as of and for the most recent fiscal year ending December 31, 2023 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainties, audit scope or accounting principles.

During Graphite's fiscal year ending December 31, 2023 and the subsequent interim period through March 21, 2024, there were no disagreements between Graphite and Deloitte on any matter of accounting principles or practices, financial disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Deloitte, would have caused it to make reference to the subject matter of the disagreements in its reports on Graphite's financial statements for such year.

During Graphite's fiscal year ending December 31, 2023 and the subsequent interim period through March 21, 2024, there were no "reportable events" (as defined in Item 304(a)(1)(v) of Regulation S-K under the Exchange Act).

During the fiscal year ending December 31, 2023 and the subsequent interim period through March 21, 2024, neither the Company, nor any party on behalf of the Company, consulted with EY with respect to either (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of the audit opinion that might be rendered with respect to the Company's consolidated financial statements, and no written report or oral advice was provided to the Company by EY that was an important factor considered by the Company in reaching a decision as to any accounting, auditing or financial reporting issue, or (ii) any matter that was subject to any disagreement (as that term is defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) or a reportable event (as that term is defined in Item 304(a)(1)(v) of Regulation S-K).

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time period specified in the SEC's rules and forms, and that such information is accumulated and communicated to management including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, under the supervision and with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our principal executive officer and principal financial officer concluded that as of such date, our disclosure controls and procedures were, in design and operation, effective at a reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Under the supervision of and with the participation of our principal executive officer and principal financial officer, our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2024 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in "Internal Control-Integrated Framework" (2013). Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2024.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm on our internal control over financial reporting due to an exemption established by the JOBS Act for "emerging growth companies."

Changes in Internal Control Over Financial Reporting

We substantially completed the implementation of a new Enterprise Resource Planning ("ERP") system in October 2024. The implementation of the ERP system is expected to upgrade a number of business, operational and financial processes as well as decrease the number of manual processes. Except for the implementation of the new ERP system, there were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended December 31, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls

The effectiveness of any system of internal control over financial reporting, including ours, is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, in designing and evaluating the disclosure controls and procedures, management recognizes that any system of internal control over financial reporting, including ours, no matter how well designed and operated, can only provide reasonable, not absolute 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 its judgment in evaluating the benefits of possible controls and procedures relative to their costs. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business but cannot assure you that such improvements will be sufficient to provide us with effective internal control over financial reporting.

Item 9B. Other Information

Securities Trading Plans of Directors and Executive Officers

During our last fiscal quarter, none of our directors or officers, as defined in Rule 16a-1(f), adopted and/or terminated a "Rule 10b5-1 trading arrangement" or a "non-Rule 10b5-1 trading arrangement," as defined in Regulation S-K Item 408.

2025 Annual Stockholder Meeting

The Company will hold its 2025 Annual Meeting of Stockholders (the "Annual Meeting") on June 10, 2025. Pursuant to the provisions of the Company's Bylaws, for any stockholder to propose business (other than pursuant to and in compliance with Exchange Act Rule 14a-8) or make a nomination before the Annual Meeting, the stockholder must have given timely notice in writing to the secretary and any such nomination or proposed business must constitute a proper matter for stockholder action. Under the Company's Bylaws, to be timely, a stockholder's notice must be received by the secretary at the principal executive offices of the Company not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the one-year anniversary of the preceding year's annual meeting; provided, however, that in the event the Annual Meeting is first convened more than thirty (30) days before or more than sixty (60) days after such anniversary date, or if no annual meeting were held in the preceding year, notice by the stockholder to be timely must be received by the secretary of the Company not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. Because the Company did not hold an annual meeting last year, the Company has determined that the date by which stockholders must deliver such notice for the purposes of the Annual Meeting is March 29, 2025, which is ten (10) days after the filing of this Annual Report on Form 10-K. Pursuant to Rule 14a-8, for a stockholder to submit a proposal for inclusion in the Company's proxy materials for the Annual Meeting, the stockholder must comply with the requirements set forth in Rule 14a-8 including with respect to the subject matter of such proposal and must deliver the proposal and all required documentation to the Company a reasonable time before the Company begins to print and send its proxy materials for the meeting. For the purposes of the Annual Meeting, the Company has determined that March 29, 2025 is a reasonable time before the Company plans to begin printing and mailing its proxy materials. The public announcement of an adjournment or postponement of the Annual Meeting date will not commence a new time period (or extend any time period) for giving such notice under the Company's Bylaws or submitting a proposal pursuant to Rule 14a-8.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

Board of Directors

Our board of directors currently consists of seven directors, six of whom are independent under the listing standards of The Nasdaq Stock Market LLC, or Nasdaq. Our board of directors is divided into three classes with staggered three-year terms. Thus, at each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the class whose term is then expiring.

The following table sets forth the names, ages as of March 19, 2025, and certain other information for each of our current directors:

Name	Age	Position
Evert Schimmelpennink	53	Chief Executive Officer, President, Secretary, and Director
Jeff George[(1)]	51	Chairperson
Frederic Guerard[(2)(3)]	52	Director
James McCollum	70	Director
Kimberlee C. Drapkin[(1)(2)]	57	Director
Shelley Thunen[(2)(3)]	72	Director
Zach Scheiner[(1)(3)]	48	Director

(1) Member of the nominating and corporate governance committee.

(2) Member of the compensation committee.

(3) Member of the audit committee.

Evert Schimmelpennink has served as our President and Chief Executive Officer and a member of our board of directors since March 2024. Mr. Schimmelpennink served as LENZ OpCo's President and Chief Executive Officer and a member of its board of directors from March 2021 through the closing of the Merger. Previously, from August 2017 to October 2020, Mr. Schimmelpennink served as President and Chief Executive Officer and a member of the board of directors of publicly listed Pfenex, Inc., a biopharmaceutical company, until its acquisition by Ligand Pharmaceuticals Inc. (Nasdaq: LGND) in late 2020. From November 2019 until its sale, Mr. Schimmelpennink also served as the acting Principal Financial Officer and Principal Accounting Officer of Pfenex Inc. From October 2015 to August 2017, Mr. Schimmelpennink served as Chief Executive Officer of Alvotech, a biopharmaceutical company. Prior to that, Mr. Schimmelpennink held senior positions at Pfizer Inc. (NYSE: PFE) and Hospira, Inc. within their global specialty injectables businesses, as well as Synthon BV. Mr. Schimmelpennink currently serves on the board of directors of iBio, Inc. (NYSE: IBIO) and Pipeline Therapeutics. Mr. Schimmelpennink holds a M.Sc. in Bioprocess Engineering from the University of Wageningen in the Netherlands and a business degree from the Arnhem Business School.

We believe Mr. Schimmelpennink is qualified to serve on our board of directors because of his knowledge of our business and his extensive leadership and operational experience within the pharmaceutical and biotech industries.

Jeff George has served as a member of our board of directors and as Chair since March 2024. Since January 2017, Mr. George has served as the Managing Partner of Maytal Capital, a healthcare-focused private equity investment and advisory firm he founded. Between 2008 and 2016, Mr. George served on the Executive Committee of Novartis Group AG, a pharmaceutical company, first as Division Head and CEO of Sandoz, Novartis' generic pharmaceuticals and biosimilars subsidiary, and then as Division Head and CEO of Alcon, Novartis' then eye care subsidiary. Mr. George previously headed Emerging Markets for the Middle East, Africa, Southeast Asia and CIS at Novartis Pharmaceuticals and served as Vice President and Head of Western and Eastern Europe for Novartis Vaccines. Prior to this, Mr. George held leadership roles at Gap Inc. and McKinsey & Co. Mr. George serves on the boards of directors of Amneal Pharmaceuticals, Inc. (Nasdaq: AMRX), a generics and specialty pharmaceuticals company, 908 Devices (Nasdaq: MASS), a pioneer in life science diagnostics, Dorian Therapeutics, a cellular senescence biotech spun out of Stanford University, and MAPS PBC, a late-stage CNS-focused private biopharma company where he serves as chairman of the board. Mr. George also currently serves on several non-profit boards and previously served as the Chairman of Education Opens Doors. Mr. George has also served as an Operating Partner at Revival Healthcare Capital, a medical device-focused private equity firm. Mr. George holds an M.B.A. from Harvard Business School, an M.A. from Johns Hopkins University's School of Advanced International Studies, and a B.A. from Carleton College.

We believe Mr. George is qualified to serve on our board of directors because of his extensive industry background and experience in the life sciences industry.

Frederic Guerard, Pharm.D. has served as a member of our board of directors since March 2024 and served on the LENZ OpCo board of directors from September 2021 through the closing of the Merger. Since October 2023, Dr. Guerard has served as Chief Executive Officer of Opthea Limited (Nasdaq: OPT; ASX: OPT), a biopharmaceutical company. Dr. Guerard served as the President and Chief Executive Officer of Graybug Vision, Inc. from February 2019 until March 2023. From 1999 to February 2019, Dr. Guerard held key leadership roles at Novartis AG, a multinational pharmaceutical company, including Worldwide Business Franchise Head of Ophthalmology from April 2016 to February 2019, Global Franchise Head of Pharmaceuticals at Alcon Laboratories, a Novartis company, from May 2015 to April 2016, Managing Director of the United Kingdom and Ireland from July 2012 to April 2015, and Country President and Managing Director of Australia and New Zealand from April 2009 to July 2012, among others. Dr. Guerard currently serves on the board of directors of CalciMedica, Inc. (Nasdaq: CALC). Dr. Guerard holds a Pharm.D. and a Master of Biological and Medical Sciences from the University of Rouen, France and a Master of Marketing from HEC Paris.

We believe Dr. Guerard is qualified to serve on our board of directors because of his extensive drug development experience and his experience serving in various leadership positions in biotechnology companies.

James McCollum has served as a member of our board of directors since March 2024. Mr. McCollum co-founded LENZ OpCo and served on LENZ OpCo's board of directors from July 2013 through the closing of the Merger. From September 2016 to March 2021, Mr. McCollum served as LENZ's President and Chief Executive Officer. From September 2014 to September 2016, Mr. McCollum served as President and Chief Executive Officer of Eye Therapies, LLC, an ocular pharmaceutical company co-founded by Mr. McCollum. Previously, Mr. McCollum served as the President and Chief Executive Officer of Restoration Robotics, a medical robotics company, President and Chief Executive Officer of Vision Membrane Technologies, an intraocular lens medical device company, and President and Chief Executive Officer of Argus Biomedical, an artificial cornea medical device company. Earlier in his career, Mr. McCollum held the position of Senior Vice President of Worldwide Marketing and Sales at VISX, Incorporated, a developer of technology and systems for laser vision correction. Mr. McCollum holds a B.A. in Business from North Carolina State University.

We believe Mr. McCollum is qualified to serve on our board of directors because of his deep knowledge of our business and strategy, his extensive executive leadership and operational experience.

Kimberlee C. Drapkin has served a member of our board of directors since July 2023. Ms. Drapkin served as president and chief executive officer of Graphite Bio, Inc. from August 2023 through the closing of the Merger. Ms. Drapkin has over 25 years of experience working with private and publicly traded biotechnology and pharmaceutical companies, including building and leading finance functions, raising capital, and leading strategic financial planning. Most recently, Ms. Drapkin was the Chief Financial Officer at Jounce Therapeutics, Inc., a position she held from August 2015 until the company's acquisition by Concentra Biosciences, LLC in May 2023, playing a key role in building Jounce's financial infrastructure. Prior to joining Jounce, Ms. Drapkin owned a financial consulting firm where she served as the interim chief financial officer for numerous early-stage biotechnology companies. Previously, she was the Chief Financial Officer at EPIX Pharmaceuticals, Inc. and also spent ten years in roles of increasing responsibility within the finance organization at Millennium Pharmaceuticals, Inc. Her career began in the technology and life sciences practice at PriceWaterhouseCoopers LLP. Ms. Drapkin served as a member of the board of directors of Proteostasis Therapeutics, Inc. until the completion of the merger of Proteostasis and Yumanity Therapeutics, Inc., at which point she became a member of the Yumanity board of directors. Ms. Drapkin then served on the board of directors of Yumanity through the completion of its reverse merger with Kineta, Inc. She currently serves on the board of directors of Acumen Pharmaceuticals, Inc. (Nasdaq: ABOS), Imugene Limited (ASX: IMU) and Kineta, Inc. (Nasdaq: KA), where she is a member of audit committee at all three companies. Ms. Drapkin holds a B.S. in accounting from Babson College.

We believe Ms. Drapkin is qualified to serve on our board of directors because of her role as the chief executive officer of Graphite Bio, Inc. prior to the Merger and extensive experience in the life sciences industry.

Shelley Thunen has served as a member of our board of directors since March 2024. Ms. Thunen served as a member of LENZ OpCo's board of directors from November 2023 through the closing of the Merger. Since February 2017, Ms. Thunen has served as Chief Financial Officer of RxSight, Inc. (Nasdaq: RXST), an ophthalmic medical technology company, and served as RxSight's Chief Administrative Officer from January 2016 to February 2017. From January 2013 to October 2015, Ms. Thunen served as the Chief Financial Officer of Endologix, Inc. (Nasdaq: ELGX), a medical device company. From August 2010 to December 2012, Ms. Thunen served as Associate General Manager of Alcon LenSx, Inc., a medical device company. Prior to Alcon's (NYSE: ALC) acquisition of LenSx, Inc. in August 2010, Ms. Thunen served as a board member and chair of the audit committee from April 2008 to August 2010, as well as Chief Financial Officer

and Vice President, Operations from November 2009 to August 2010. Ms. Thunen joined IntraLase Corp. (Nasdaq: ILSE), a laser technology company, in May 2001 and was its Chief Financial Officer and later Executive Vice President & Chief Financial Officer until its acquisition by Advanced Medical Optics, Inc. (NYSE: EYE) in April 2007. Ms. Thunen serves on the board of directors and as audit committee chair of AEON Biopharma, Inc. (NYSE: AEON). Ms. Thunen holds a B.A. in economics and an M.B.A. from the University of California, Irvine.

We believe Ms. Thunen is qualified to serve on our board of directors because of her extensive experience in the biotechnology industry and her leadership experience as a senior financial executive.

Zach Scheiner, Ph.D. has served as a member of our board of directors since March 2024. Dr. Scheiner served as a member of LENZ OpCo's board of directors from October 2020 through the closing of the Merger. Dr. Scheiner joined RA Capital Management, L.P., an investment manager, in April 2015 as an associate, became an analyst in April 2017, and has been a principal since December 2017. Prior to joining RA Capital, Dr. Scheiner was a Science Officer at the California Institute for Regenerative Medicine (CIRM), where he worked from September 2008 to March 2015. Dr. Scheiner currently serves on the board of directors of Nkarta Therapeutics, Inc. (Nasdaq: NKTX) and several private biotechnology companies. Dr. Scheiner holds a B.S. in Molecular Biophysics and Biochemistry from Yale University and a Ph.D. in Neurobiology and Behavior from the University of Washington.

We believe Dr. Scheiner is qualified to serve on our board of directors because of his experience in the life sciences industry and his investing experience.

Executive Officers

The following table sets forth certain information about our executive officers as of March 19, 2025.

Name	Age	Position
Evert Schimmelpennink	53	Chief Executive Officer, President, Secretary, and Director
Shawn Olsson	42	Chief Commercial Officer
Marc Odrich	66	Chief Medical Officer
Daniel Chevallard	45	Chief Financial Officer

For the biography of Mr. Schimmelpennink, please see "*Directors, Executive Officers and Corporate Governance – Board of Directors*."

Shawn Olsson has served as our Chief Commercial Officer since March 2024. Mr. Olsson served as LENZ OpCo's Chief Commercial Officer from April 2021 through the closing of the Merger. Previously, from March 2018 to April 2021, Mr. Olsson served as Vice President of North American Marketing and Global Portfolio and Vice President of North American Marketing at Xellia Pharmaceuticals, a pharmaceuticals and life sciences company. From September 2015 to March 2018, Mr. Olsson served as Director, Global Sterile Injectables on Market Strategy Lead and Commercial Lead, Opioids and Syringe Technology Portfolio at Pfizer (NYSE: PFE), a multinational pharmaceutical and biotechnology company. Mr. Olsson holds a B.S. in Mechanical Engineering from Purdue University, a M.S. in Mechanical Engineering from University of Michigan and an M.B.A. in Strategic Management and Finance from University of Chicago.

Marc Odrich, M.D. has served as our Chief Medical Officer since March 2024. Dr. Odrich served as LENZ OpCo's Chief Medical Officer from July 2021 through the closing of the Merger and provided consulting services to LENZ OpCo from March 2018 to July 2021. Since June 2017, Dr. Odrich has served as an Associate Professor of Ophthalmology at the University of Virginia, where he specializes in Refractive Surgery and Ocular Surface Disease. Since March 2016, Dr. Odrich has served as a consultant to TearSolutions, Inc., an early stage clinical ophthalmology company specializing in Ocular Surface Disease. Dr. Odrich is also a consultant to Johnson & Johnson Vision Care and is a member of the board of directors of Epion Therapeutics. Dr. Odrich previously served as the Medical Director for Visx Incorporated, a developer of technology and systems for laser vision correction, where he led the clinical team in bringing the excimer laser into commercialization worldwide. Dr. Odrich has been involved with group, private and academic ophthalmic practices since 1990. Dr. Odrich holds a B.A. in Ancient History from Columbia University in the City of New York and an M.D. from Columbia University's College of Physicians and Surgeons. Dr. Odrich completed an internship in internal medicine at Yale's Danbury Hospital before pursuing his residency at Columbia University's Harkness Eye Institute. Dr. Odrich then completed a two-year fellowship focused on cornea and external disease at Harvard's Massachusetts Eye and Ear Infirmary.

Daniel Chevallard has served as our Chief Financial Officer since March 2024. From July 2019 to March 2024, Mr. Chevallard served as Chief Financial Officer, Treasurer and Secretary of Viracta Therapeutics, Inc. (NASDAQ: VIRX), a

biotechnology company, and served as its Chief Operating Officer from March 2021 to March 2024. Previously, Mr. Chevallard served as the Chief Financial Officer and principal financial officer at Regulus Therapeutics (NASDAQ: RGLS) from May 2017 to July 2019. Mr. Chevallard joined Regulus Therapeutics in December 2012 as Vice President, Accounting and Financial Reporting and served as Vice President, Finance from May 2013 to April 2017. Prior to joining Regulus Therapeutics, Mr. Chevallard held various senior roles in corporate finance, accounting and financial reporting including Controller and Senior Director, Finance of Prometheus Laboratories Inc. (acquired by Nestlé Health Science in July 2011). Prior to joining Prometheus, Mr. Chevallard spent approximately five years in public accounting at Ernst & Young, LLP in their assurance services practice. Mr. Chevallard received his Bachelor of Accountancy from the University of San Diego and is a Certified Public Accountant (inactive) in the state of California.

Family Relationships

There are no family relationships among any of our directors or executive officers.

Composition of the Board of Directors

Our business and affairs are organized under the direction of the board of directors. Our board of directors currently consists of seven (7) members. Mr. George serves as Chair of our board of directors. The primary responsibilities of the board of directors are to provide oversight, strategic guidance, counseling and direction to our management. The board of directors meet on a regular basis and additionally as required.

In accordance with the terms of our Certificate of Incorporation and our Bylaws, our board of directors is divided into three staggered classes of directors, Class I, Class II and Class III, with members of each class serving staggered three-year terms. Our board of directors is divided into the following classes:

- Class I, which consists of Frederic Guerard and James McCollum, whose terms expire at our annual meeting of stockholders in 2025;
- Class II, which consists of Jeff George, Shelley Thunen, and Evert Schimmelpennink, whose terms expire at our annual meeting of stockholders in 2026;
- Class III, which consists of Kimberlee C. Drapkin and Zach Scheiner, whose terms expire at our annual meeting of stockholders in 2025 since no annual meeting of stockholders was held in 2024.

At each annual meeting of stockholders to be held after the initial classification, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following their election and until their successors are duly elected and qualified. This classification of the board of directors may have the effect of delaying or preventing changes in our control or management.

Director Independence

Our board of directors has undertaken a review of the independence of each of our directors. Our board of directors has determined that none of Ms. Thunen, Dr. Guerard, Dr. Scheiner, Ms. Drapkin, Mr. George and Mr. McCollum, representing six of our seven directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is an "independent director" as defined under the listing standards of Nasdaq. Evert Schimmelpennink is not considered an independent director because of his position as our Chief Executive Officer, President, and Secretary.

In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the transactions involving them described in the section titled "*Certain Relationships and Related Transactions, and Director Independence*."

Role of Board in Risk Oversight Process

One of the key functions of our board of directors is informed oversight of the risk management process. Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through our board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular our board of directors is responsible for monitoring and assessing strategic risk exposure and our audit committee has the responsibility to consider and discuss major financial risk exposures as well as risks and exposures associated with cybersecurity, information security and privacy matters, and the steps our management takes to monitor and control such exposures, including guidelines and

policies to govern the process by which risk assessment and management is undertaken. The audit committee also monitors compliance with legal and regulatory requirements. Our compensation committee is responsible for overseeing the management of risks relating to executive compensation plans and arrangements. The compensation committee also assesses and monitors whether compensation plans, policies and programs comply with applicable legal and regulatory requirements.

Committees of the Board of Directors

Our board of directors has three standing committees: an audit committee, a compensation committee, and a nominating and corporate governance committee.

Audit Committee

The current members of our audit committee are Shelley Thunen, Frederic Guerard and Zach Scheiner, and Ms. Thunen serves as the chairperson of the audit committee. Under the Nasdaq listing rules and applicable SEC rules, we are required to have at least three members of the audit committee. The rules of Nasdaq and Rule 10A-3 of the Exchange Act require that the audit committee of a listed company be composed solely of independent directors for audit committee purposes, and each member must qualify as an independent director for audit committee purposes under applicable rules. Shelley Thunen, Zach Scheiner and Frederic Guerard are each financially literate and Shelley Thunen qualifies as an "audit committee financial expert" as defined in applicable SEC rules.

The functions of our audit committee include, among other things:

- select, retain, compensate, evaluate, oversee and, where appropriate, terminate our independent registered public accounting firm;
- review and approve the scope and plans for the audits and the audit fees and approve all non-audit and tax services to be performed by the independent auditor;
- evaluate the independence and qualifications of our independent registered public accounting firm;
- review our financial statements, and discuss with management and our independent registered public accounting firm the results of the annual audit and the quarterly reviews;
- review and discuss with management and our independent registered public accounting firm the quality and adequacy of our internal controls and our disclosure controls and procedures;
- discuss with management our procedures regarding the presentation of our financial information, and review earnings press releases and guidance;
- oversee the design, implementation and performance of our internal audit function, if any;
- set hiring policies with regard to the hiring of employees and former employees of our independent auditor and oversee compliance with such policies;
- review, approve and monitor related party transactions;
- adopt and oversee procedures to address complaints regarding accounting, internal accounting controls and auditing matters, including confidential, anonymous submissions by our employees of concerns regarding questionable accounting or auditing matters;
- review and discuss with management and our independent auditor the adequacy and effectiveness of our legal, regulatory and ethical compliance programs; and
- review and discuss with management and our independent auditor our guidelines and policies to identify, monitor and address enterprise risks, including major financial risks exposures and risks and exposures associated with cybersecurity, information security and privacy matters.

Our audit committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing standards of Nasdaq.

Compensation Committee

The members of our compensation committee are Frederic Guerard, Kimberlee C. Drapkin and Shelley Thunen, and Dr. Guerard serves as the chairperson of the compensation committee. Our board of directors has determined that each of the members of the compensation committee is a non-employee director, as defined in Rule 16b-3 promulgated under the Exchange Act and satisfies the independence requirements of Nasdaq.

The functions of our compensation committee include, among other things:

- review, approve or make recommendations to our board of directors regarding the compensation for our executive officers, including our chief executive officer;
- review, approve and administer our employee benefit and equity incentive plans;
- establish and review the compensation plans and programs of our employees, and ensure that they are consistent with our general compensation strategy;
- make recommendations to our board of directors regarding non-employee director compensation;
- monitor compliance with any stock ownership guidelines; and
- approve or make recommendations to our board of directors regarding the creation or revision of any clawback policy.

Our compensation committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing standards of Nasdaq.

Nominating and Corporate Governance Committee

The current members of our nominating and corporate governance committee are Jeff George, Kimberlee C. Drapkin, and Zach Scheiner, and Mr. George serves as the chair of the nominating and corporate governance committee. Our board of directors has determined that each of the members of our nominating and corporate governance committee satisfy the independence requirements of Nasdaq.

The functions of our nominating and corporate governance committee include, among other things:

- review and assess and make recommendations to our board of directors regarding desired qualifications, expertise and characteristics sought of board members;
- identify, evaluate, select or make recommendations to our board of directors regarding nominees for election to our board of directors;
- develop policies and procedures for considering stockholder nominees for election to our board of directors;
- review our succession planning process for our chief executive officer and any other members of our executive management team;
- review and make recommendations to our board of directors regarding the composition, organization and governance of our board of directors and its committees;
- review and make recommendations to our board of directors regarding our corporate governance guidelines and corporate governance framework;
- oversee director orientation for new directors and continuing education for our directors;
- oversee the evaluation of the performance of our board of directors and its committees;
- review and monitor compliance with our code of business conduct and ethics, and review conflicts of interest of our board members and officers other than related party transactions reviewed by our audit committee; and
- administer policies and procedures for communications with the non-management members of our board of directors. Our nominating and corporate governance committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing standards of Nasdaq.

Attendance at Board and Stockholder Meetings

Following the Merger through December 31, 2024, our board of directors held six meetings (including regularly scheduled and special meetings), and each director attended at least 75% of the aggregate of (1) the total number of meetings of the board of directors held during the period for which he or she was a director and (2) the total number of meetings held by all committees on which he or she served during the periods that he or she served as a director.

Although we do not have a formal policy regarding attendance by members of our board of directors at the annual meetings of stockholders, we encourage, but do not require, directors to attend.

Executive Sessions of Non-Employee Directors

To encourage and enhance communication among non-employee directors, and as required under applicable Nasdaq rules, our corporate governance guidelines provide that the non-employee directors will meet in executive sessions without management directors or management present on a periodic basis but no less than two times a year. In addition, if any of our non-employee directors are not independent directors, then our independent directors will also meet in executive session on a periodic basis but no less than two times a year.

Compensation Committee Interlocks and Insider Participation

Following the Merger, the members of our compensation committee were Frederic Guerard, Kimberlee C. Drapkin and Shelley Thunen. None of the members of our compensation committee has ever been an executive officer or employee of the Company, other than Ms. Drapkin who served as interim President and Chief Executive Officer of Graphite, and an employee of Graphite, until immediately prior to the consummation of the Merger. None of our executive officers currently serve, or has served during the last completed fiscal year, on the compensation committee or board of directors of any other entity that has one or more executive officers that serves as a member of the board of directors or our compensation committee.

Considerations in Evaluating Director Nominees

Our nominating and governance committee uses a variety of methods for identifying and evaluating potential director nominees. In its evaluation of director candidates, including the current directors eligible for re-election, our nominating and governance committee will consider the current size and composition of our board of directors and the needs of our board of directors and the respective committees of our board of directors and other director qualifications. While our board has not established minimum qualifications for board members, some of the factors that our nominating and governance committee considers in assessing director nominee qualifications include, without limitation, issues of character, professional ethics and integrity, judgment, business experience and diversity, and with respect to diversity, such factors as race, ethnicity, gender, differences in professional background, age and geography, as well as other individual qualities and attributes that contribute to the total mix of viewpoints and experience represented on our board. Although our board of directors does not maintain a specific policy with respect to board diversity, our board of directors believes that the board should be a diverse body, and the nominating and governance committee considers a broad range of perspectives, backgrounds and experiences.

If our nominating and governance committee determines that an additional or replacement director is required, then the committee may take such measures as it considers appropriate in connection with its evaluation of a director candidate, including candidate interviews, inquiry of the person or persons making the recommendation or nomination, engagement of an outside search firm to gather additional information, or reliance on the knowledge of the members of the committee, board or management.

After completing its review and evaluation of director candidates, our nominating and governance committee recommends to our full board of directors the director nominees for selection. Our nominating and governance committee has discretion to decide which individuals to recommend for nomination as directors and our board of directors has the final authority in determining the selection of director candidates for nomination to our board.

Stockholder Recommendations and Nominations to our Board of Directors

Our nominating and governance committee will consider recommendations and nominations for candidates to our board of directors from stockholders in the same manner as candidates recommended to the committee from other sources, so long as such recommendations and nominations comply with our amended and restated certificate of incorporation and amended and restated bylaws, all applicable company policies and all applicable laws, rules and regulations, including those

promulgated by the SEC. Our nominating and governance committee will evaluate such recommendations in accordance with its charter, our bylaws and corporate governance guidelines and the director nominee criteria described above.

A stockholder that wants to recommend a candidate to our board of directors should direct the recommendation in writing by letter to our corporate secretary at LENZ Therapeutics, Inc., 201 Lomas Santa Fe Drive Suite 300, Solana Beach, California 92075, Attention: Corporate Secretary. Such recommendation must include the candidate's name, home and business contact information, detailed biographical data, relevant qualifications, a signed letter from the candidate confirming willingness to serve, information regarding any relationships between the candidate and us and evidence of the recommending stockholder's ownership of our common stock. Such recommendation must also include a statement from the recommending stockholder in support of the candidate. Our nominating and corporate governance committee has discretion to decide which individuals to recommend for nomination as directors.

Under our amended and restated bylaws, stockholders may also directly nominate persons for our board of directors. Any nomination must comply with the requirements set forth in our amended and restated bylaws and the rules and regulations of the SEC, including but not limited to Rule 14a-8 and Rule 14a-19 under the Exchange Act, and should be sent in writing to our corporate secretary at the address above.

Communications with the Board of Directors

Stockholders and other interested parties wishing to communicate directly with our non-management directors, may do so by writing and sending the correspondence to our Chief Financial Officer by mail to our principal executive offices at LENZ Therapeutics, Inc., 201 Lomas Santa Fe Drive Suite 300, Solana Beach, California 92075. Our Chief Financial Officer, in consultation with appropriate directors as necessary, will review all incoming communications and screen for communications that (1) are solicitations for products and services, (2) relate to matters of a personal nature not relevant for our stockholders to act on or for our board to consider and (3) matters that are of a type that are improper or irrelevant to the functioning of our board or our business, for example, mass mailings, job inquiries and business solicitations. If appropriate, our Chief Financial Officer will route such communications to the appropriate director(s) or, if none is specified, then to the chairperson of the board or the lead independent director (if one is appointed). These policies and procedures do not apply to communications to non-management directors from our officers or directors who are stockholders or stockholder proposals submitted pursuant to Rule 14a-8 under the Exchange Act.

Policy Prohibiting Hedging or Pledging of Securities

Under our insider trading policy, our employees, including our executive officers, and the members of our board of directors are prohibited from, directly or indirectly, among other things, (1) engaging in short sales, (2) trading in publicly-traded options, such as puts and calls, and other derivative securities with respect to our securities (other than stock options, restricted stock units and other compensatory awards issued to such individuals by us), (3) purchasing financial instruments (including prepaid variable forward contracts, equity swaps, collars and exchange funds), or otherwise engaging in transactions that hedge or offset, or are designed to hedge or offset, any decrease in the market value of equity securities granted to them by us as part of their compensation or held, directly or indirectly, by them, (4) pledging any of our securities as collateral for any loans and (5) holding our securities in a margin account.

Corporate Governance Guidelines and Code of Business Conduct and Ethics

Our board of directors has adopted corporate governance guidelines. These guidelines address, among other items, the qualifications and responsibilities of our directors and director candidates, the structure and composition of our board of directors and corporate governance policies and standards applicable to us in general. In addition, our board of directors has adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including our principal executive officer, principal financial officer, principal accounting officer and other executive and senior financial officers. The full text of our corporate governance guidelines and code of business conduct and ethics are available on our website at https://ir.lenz-tx.com/corporate-governance/governance-documents. We will post amendments to our code of business conduct and ethics or any waivers of our code of business conduct and ethics for directors and executive officers on the same website.

Director Compensation

Director Compensation Policy

Our board of directors expects to review director compensation periodically to ensure that director compensation remains competitive such that we are able to recruit and retain qualified directors. In 2023, the compensation committee of the LENZ OpCo board of directors retained Aon, a third-party compensation consultant, to provide the LENZ OpCo board of

directors and its compensation committee with an analysis of publicly available market data regarding practices and compensation levels at comparable companies and assistance in determining compensation to be provided to LENZ Therapeutics' non-employee directors. Based on the discussions with and assistance from the compensation consultant, in connection with the Merger, our board of directors adopted an Outside Director Compensation Policy that provides for certain compensation to our non-employee directors. The Outside Director Compensation Policy became effective as of the closing of the Merger.

Cash Compensation

The Outside Director Compensation Policy provides for the following cash compensation program for our non-employee directors:

- $40,000 per year for service as a non-employee director;
- $30,000 per year for service as non-employee chair of our board of directors;
- $15,000 per year for service as chair of our audit committee;
- $7,500 per year for service as a member of our audit committee;
- $12,000 per year for service as chair of our compensation committee;
- $6,000 per year for service as a member of our compensation committee;
- $10,000 per year for service as chair of our nominating and corporate governance committee; and
- $5,000 per year for service as a member of our nominating and corporate governance committee.

Each non-employee director who serves as a committee chair of our board of directors receives the cash retainer fee as the chair of the committee but not the cash retainer fee as a member of that committee, provided that the non-employee director who serves as the non-employee chair of our board of directors receives the annual retainer fees for such role as well as the annual retainer fee for service as a non-employee director. These fees to our non-employee directors are paid quarterly in arrears on a prorated basis. The above-listed fees for service as non-employee chair of our board of directors or a chair or member of any committee are payable in addition to the non-employee director retainer. Under our Outside Director Compensation Policy, we also reimburse our non-employee directors for reasonable travel expenses to attend meetings of our board of directors and its committees.

Equity Compensation

Initial Award. Pursuant to our Outside Director Compensation Policy, each person who first becomes a non-employee director after the effective date of such policy will receive, on the first trading day on or after the date that the person first becomes a non-employee director (the first date as a non-employee director, the "Initial Start Date"), an initial award of stock options to purchase 27,000 shares of our common stock (the "Initial Award"). Each Initial Award will be scheduled to vest in equal monthly installments over thirty-six (36) months on the same day of each relevant month as the applicable vesting date, in each case subject to the outside director continuing to be an outside director through the applicable vesting date. If the person was a member of our board of directors and also an employee, then becoming a non-employee director due to termination of employment will not entitle the person to an Initial Award.

Annual Award. On the first trading day immediately following each annual meeting of the Company's stockholders (an "Annual Meeting") following the effective date of the Merger, each non-employee director automatically will be granted an award of stock options (an "Annual Award") to purchase 13,500 shares of our common stock, with such number of shares subject to equitable adjustment by the Board in the event of a capitalization adjustment; provided that the first Annual Award granted to an individual who first becomes a non-employee director following the effective date of the Outside Director Compensation Policy will cover a number of shares equal to the product of (A) 13,500 multiplied by (B) a fraction, (i) the numerator of which is the number of fully completed months between the applicable Initial Start Date and the date of the first Annual Meeting to occur after such individual first becomes a non-employee director, and (ii) the denominator of which is twelve (12), subject to equitable adjustment by the Board in the event of a capitalization adjustment. Each Annual Award will be scheduled to vest in full on the first anniversary of the date on which the Annual Award is granted, in each case subject to the non-employee director continuing to be a non-employee director through the applicable vesting date.

Other Compensation and Benefits. Non-employee directors also may be eligible to receive other compensation and benefits, as may be determined by the Board or a designated committee, as applicable, from time to time.

Change in Control. In the event of a change in control, as defined in the 2024 Equity Incentive Plan ("2024 Plan"), each non-employee director will fully vest in his or her outstanding Company equity awards as of immediately prior to a change in control, provided that the non-employee director continues to be a non-employee director through the date of the change in control.

Director Compensation Limits. Our Outside Director Compensation Policy provides that no non-employee director may be provided cash retainers or fees and granted awards with values with amounts that, in any fiscal year, in the aggregate, exceed $750,000, provided that, in the fiscal year containing a non-employee director's Initial Start Date, such limit will be increased to $1,000,000. Any awards or other compensation provided to an individual (a) for his or her services as an employee, or for his or her services as an advisor or consultant other than as a non-employee director, or (b) prior to the closing of the Merger, will be excluded for purposes of the foregoing limit.

Director Compensation for Fiscal Year 2024

The following table sets forth information regarding the compensation earned for service on our board of directors during the year ended December 31, 2024 by non-employee directors. Mr. Schimmelpennink did not receive any additional compensation for his service as a director in 2024. Mr. Schimmelpennink's compensation as a named executive officer, and Ms Drapkin's compensation received as a non-employee director since the closing of the Merger, is set forth below under "— Summary Compensation Table."

Name	Fees earned or paid in cash ($)	Option awards ($)[1]	All other compensation ($)	Total ($)
Jeff George[2]	62,418	333,804	—	396,222
Frederic Guerard[3]	46,423	333,804	—	380,227
James McCollum[4]	31,209	333,804	—	365,013
Shelley Thunen[5]	47,593	333,804	—	381,397
Zach Scheiner[6]	40,962	333,804	—	374,766
Abraham Bassan[7]	11,250	—	—	11,250
Jerel Davis[7]	11,625	—	—	11,625
Kristin M. Hege[7]	11,250	—	—	11,250
Joseph Jimenez[7]	11,625	—	—	11,625
Perry Karsen[7]	19,500	—	—	19,500
Matthew Porteus[7]	10,000	—	17,500 [8]	27,500
Carlo Rizzuto[7]	11,250	—	—	11,250
Smital Shah[7]	12,500	—	—	12,500
Jo Viney[7]	11,250	—	—	11,250

(1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the stock option awards granted during 2024, computed in accordance with FASB ASC Topic 718, Compensation—Stock Compensation. These amounts do not reflect the actual economic value that will be realized by the director upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

(2) As of December 31, 2024, Mr. George holds outstanding options to purchase 27,000 shares.

(3) As of December 31, 2024, Dr. Guerard holds outstanding options to purchase 81,468 shares.

(4) As of December 31, 2024, Mr. McCollum holds outstanding options to purchase 27,000 shares.

(5) As of December 31, 2024, Ms. Thunen holds outstanding options to purchase 27,000 shares.

(6) As of December 31, 2024, Dr. Scheiner holds outstanding options to purchase 27,000 shares.

(7) Resigned from the board of directors on March 21, 2024, effective as of the effective time of the Merger.

(8) Dr. Porteus received compensation from Graphite under a consulting agreement.

Insider Trading Policy

We have adopted an insider trading policy governing the purchase, sale, and/or other dispositions of our securities and those of public companies in which we have a business relationship by our directors, executive officers, employees and independent contractors, contingent workers and consultants, that we believe is reasonably designed to promote compliance

with insider trading laws, rules and regulations, and the exchange listing standards applicable to us. It is our policy that any transactions in LENZ securities by the company itself shall be in full compliance with insider trading laws, rules and regulations. A copy of our insider trading policy, including any amendments thereto, is filed as Exhibit 19.1 to this Annual Report on Form 10-K.

Item 11. Executive Compensation

To achieve our goals, we have designed, and intend to modify as necessary, our compensation and benefits program to attract, retain, incentivize and reward deeply talented and qualified executives who share our philosophy and desire to work towards achieving these goals.

We believe our compensation program should promote the success of the company and align executive incentives with the long-term interests of our stockholders. As our needs evolve, we intend to continue to evaluate our philosophy and compensation programs as circumstances require.

This section provides an overview of our and LENZ OpCo's executive compensation programs, including a narrative description of the material factors necessary to understand the information disclosed in the summary compensation table below. Unless otherwise indicated, as used in this section, "LENZ," the "Company," "we," "us" and "our" refer to LENZ OpCo prior to the closing of the Merger and the Company after the closing of the Merger. Upon the closing of the Merger, the executive officers of LENZ OpCo became executive officers of the Company.

Our named executive officers for the year ended December 31, 2024 were:

- Evert Schimmelpennink, Chief Executive Officer, President, and Secretary since the closing of the Merger
- Kimberlee C. Drapkin, former interim President and Chief Executive Officer
- Marc Odrich, Chief Medical Officer
- Daniel Chevallard, Chief Financial Officer

Summary Compensation Table for the Fiscal Year Ended December 31, 2024

The following table shows the compensation earned by our named executive officers for the fiscal years ended December 31, 2024 and 2023.

Name and principal position	Year	Salary ($)	Bonus ($)[1]	Non-equity incentive plan compensation ($)[2]	Option awards ($)[3]	All other compensation ($)	Total ($)
Evert Schimmelpennink							
President and Chief Executive Officer	2024	607,125 [4]	—	450,450	5,912,135	13,800 [5]	6,983,510
	2023	537,438 [6]	335,898	—	1,630,871	13,200 [5]	2,517,407
Kimberlee C. Drapkin[7]							
Former Interim President and Chief Executive Officer, and Director	2024	163,541 [8]	200,000 [9]	—	333,804 [10]	400,000 [9]	1,097,345
	2023	200,521 [8]	—	—	71,148	—	271,669
Daniel Chevallard[11]							
Chief Financial Officer	2024	376,808	—	196,923	2,489,320	—	3,063,051
Marc Odrich							
Chief Medical Officer	2024	466,250 [12]	—	252,200	1,306,893	13,800 [5]	2,039,143
	2023	410,000	153,750	—	343,213	13,200 [5]	920,163

(1) The amounts reported represent discretionary bonuses paid in 2024 based upon the achievement of our goals for the year ended December 31, 2023, as determined by our board of directors.

(2) These amounts represent performance-based cash bonuses paid under the Incentive Compensation Plan (as defined below) for the year ended December 31, 2024, each of which was paid in the subsequent fiscal year. The Incentive Compensation Plan is more fully described below under the section titled "—Non-Equity Incentive Plan Compensation."

(3) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the stock option awards granted during 2023 and 2024, computed in accordance with FASB ASC Topic 718, Compensation—Stock Compensation. The assumptions used in calculating the grant date fair value of the awards disclosed in this column are set forth in Note 9 to LENZ's consolidated financial statements included elsewhere in this Form 10-K. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

(4) The amount reported reflects the total salary earned by Mr. Schimmelpennink in 2024. Mr. Schimmelpennink's annual base salary was $538,500 from January 1, 2024 until March 20, 2024 and was increased to an annual base salary of $630,000 on March 21, 2024.

(5) The amounts reported represent matching contributions under LENZ's 401(k) plan.

(6) The amount reported reflects the total salary earned by Mr. Schimmelpennink in 2023. Mr. Schimmelpennink's annual base salary was $513,000 from January 1, 2023 until January 31, 2023 and was increased to an annual base salary of $538,500 on February 1, 2023.

(7) Ms. Drapkin commenced employment with Graphite on August 21, 2023, and served as Graphite's interim President and Chief Executive Officer from August 21, 2023 through the closing of the Merger.

(8) Ms. Drapkin's 2023 salary is pro-rated for the portion of the year in which she was employed by Graphite. Ms. Drapkin's 2024 salary represents $123,750 paid as salary to Ms. Drapkin for her services as our former Interim President and Chief Executive Officer until the closing of the Merger, and $39,791 as fees for her services as a non-employee director since the closing of the Merger pursuant to the Director Compensation Policy.

(9) Ms. Drapkin was entitled to a cash severance payment in the amount of (i) $400,000 in the event of a termination of her employment other than for cause or death upon or within 12 months after the closing of a Strategic Transaction (as defined in Ms. Drapkin's offer letter and which included the Merger), plus an additional bonus in the amount of $200,000 if the definitive agreement for such Strategic Transaction was executed within three (3) months after August 21, 2023.

(10) This amount relates to Ms. Drapkin's option award granted for her service as a non-employee director following the closing of the Merger pursuant to our Outside Director Compensation Policy.

(11) Mr. Chevallard commenced employment with the Company on March 21, 2024. His 2024 annual base salary and bonus are pro-rated based on his employment commencement date.

(12) The amount reported reflects the total salary earned by Dr. Odrich in 2024. Dr. Odrich's annual base salary was $410,000 from January 1, 2024 until March 20, 2024 and was increased to an annual base salary of $485,000 on March 21, 2024.

Non-Equity Incentive Plan Compensation

We maintain the Employee Incentive Compensation Plan (the "Incentive Compensation Plan"), which allows our board of directors or compensation committee to grant incentive awards, generally payable in cash, to employees selected by our compensation committee, including our executive officers, based upon performance goals established by our board of directors or compensation committee. In April 2024, our board of directors approved performance goals under the Incentive Plan for 2024 (the "2024 Bonus Plan").

The performance goals under the 2024 Bonus Plan applied to each of our named executive officers. Each corporate performance goal was provided a specific weighting, and the extent of achievement of each such goal was expressed as a percentage (with 100% representing target achievement, provided that achievement could be higher or lower depending on actual performance) and determined the payout with respect to the portion of the cash incentive opportunity allocated to such goal. Each of Mr. Schimmelpennink, Mr. Chevallard and Dr. Odrich's cash incentive opportunities for 2024 were based 100% on achievement of the corporate performance goals.

In January 2025, our board of directors completed a review of the Company's performance against the corporate performance goals under the 2024 Bonus Plan. In its review, our board of directors evaluated the Company's progress against these corporate performance goals, determining that the goals were exceeded. Based upon this evaluation and application of the weightings, our compensation committee approved payment of a cash bonus to each of Mr. Schimmelpennink, Mr. Chevallard and Dr. Odrich in amounts that resulted from 130% achievement of the corporate performance goals under the 2024 Bonus Plan. Each cash bonus was paid to Mr. Schimmelpennink, Mr. Chevallard and Dr. Odrich in early 2025.

The amounts in the Summary Compensation Table under the column titled "Non-equity incentive plan compensation" for 2024, for each of Mr. Schimmelpennink, Mr. Chevallard and Dr. Odrich are equal to 100% of his respective target bonus opportunity, multiplied by 130% for the achievement of the corporate performance goals.

Narrative Disclosure to Summary Compensation Table for the Fiscal Year Ended December 31, 2024

Base Salary

See the footnotes to the Summary Compensation Table for the Fiscal Year Ended December 31, 2024 above for information on the base salaries of our named executive officers in effect during fiscal years ended 2024 and 2023.

2024 Annual Cash Bonuses

Each of our named executive officers is eligible to participate in an annual cash incentive compensation program which provides participants with an opportunity to earn variable cash incentive compensation based on individual and company performance. For 2024, Mr. Schimmelpennink's target bonus was 55% of his base salary, and Mr. Olsson's, Dr. Odrich's, and Mr. Chevallard's target bonus was 40% of each of his base salary.

The determination of the 2024 bonus amount was discretionary based on our board of directors assessment of company performance against corporate goals.

The actual annual cash bonuses awarded to each named executive officer for 2024 performance are set forth above in the "Bonus" column of the Summary Compensation Table for the Fiscal Year Ended December 31, 2024.

Outstanding Equity Awards at Fiscal Year-End December 31, 2024

The following table sets forth certain information regarding equity awards granted to our named executive officers that remained outstanding as of December 31, 2024. The number of shares subject to each award and, where applicable, the exercise price per share, reflect all changes as a result of our capitalization adjustments in connection with the Merger.

	Option Awards					Stock Awards	
Name	Grant Date	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price ($)[1]	Option expiration date	Number of shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested
Evert Schimmelpennink	3/8/2021 [2]	317,911	24,195 [3]	1.04	3/7/2031	—	—
	11/24/2022 [2]	77,552	5,171 [3]	5.05	11/23/2032	—	—
	6/20/2023 [2]	138,190	177,674 [4]	6.04	6/19/2033	—	—
	3/21/2024 [5]	—	475,000 [6]	15.05	3/20/2034	—	—
Kimberlee C. Drapkin	7/28/2023 [7]	8,438	— [7]	11.94	7/27/2033	—	—
Daniel Chevallard	3/21/2024 [5]	—	200,000 [6]	15.05	3/20/2034	—	—
Marc Odrich	8/19/2021 [2]	—	—	—	—	7,210 [8]	208,153 [9]
	11/24/2022 [2]	—	—	—	—	5,842 [10]	168,659 [9]
	6/20/2023 [2]	29,081	37,391 [4]	6.04	6/19/2033	—	—
	3/21/2024 [5]	—	105,000 [6]	15.05	3/20/2034	—	—

(1) The stock option awards that were granted by LENZ OpCo prior to the closing of the Merger were granted with a per share exercise price equal to the fair market value of one share of LENZ OpCo common stock on the date of grant, as determined in good faith by its board of directors based on third party valuations of its common stock. The stock option awards granted by Graphite prior to the closing of the Merger and all option awards granted following the closing of the Merger were granted with a per share exercise price equal to the closing price of the Company's common stock in trading on Nasdaq on the date of grant.

(2) Stock option award was granted under and subject to the terms of the LENZ OpCo 2020 Equity Incentive Plan (the "2020 Plan").

(3) Twenty-five percent of the shares subject to the option vested on March 8, 2022, and 1/36th of the remaining shares subject to the award shall vest each month thereafter on the same day of the month, subject to Mr. Schimmelpennink continuing to be a service provider to LENZ through each such date. All of the shares underlying the option are subject to an early exercise provision pursuant to which Mr. Schimmelpennink may exercise the option for shares of restricted stock subject to LENZ's right to repurchase such shares that lapses on the same vesting schedule as would have applied to such shares under the option. Additionally, the option is subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this prospectus below titled "Potential Payments Upon Termination or Change of Control."

(4) Twenty-five percent of the shares subject to the option vested on March 6, 2024, and 1/36th of the remaining shares subject to the award shall vest each month thereafter on the same day of the month, subject to the named executive officer continuing to be a service provider to LENZ through each such date. All of the shares underlying the option are subject to an early exercise provision pursuant to which such named executive officer may exercise the option for shares of restricted stock subject to LENZ's right to repurchase such shares that lapses on the same vesting schedule as would have applied to such shares under the option. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this prospectus below titled "Potential Payments Upon Termination or Change of Control."

(5) Stock option award was granted under and subject to the terms of the 2024 Equity Incentive Plan.

(6) Twenty-five percent of the shares subject to the option shall vest on March 21, 2025, and 1/36th of the remaining shares subject to the award shall vest each month thereafter on the same day of the month, subject to the named executive officer continuing to be a service provider to LENZ through each such date. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this prospectus below titled "Potential Payments Upon Termination or Change of Control."

(7) Equity award is subject to the terms of Graphite's 2021 Stock Option and Incentive Plan, as amended (the "2021 Graphite Plan"). The shares of common stock underlying the option vested in 36 equal monthly installments following the vesting commencement date of July 28, 2023, subject to the named executive officer's continuous service relationship with Graphite through each applicable vesting date. Notwithstanding the foregoing, in connection with the consummation of the Merger, all unvested shares immediately vested and became exercisable.

(8) Represents restricted stock obtained on January 28, 2022 upon exercise of an early exercise option. Twenty-five percent of the shares subject to the option vested on July 1, 2022, and 1/36th of the remaining shares subject to the award shall vest monthly in equal installments on the 1st of each month, through July 1, 2025. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this prospectus below titled "Potential Payments Upon Termination or Change of Control."

(9) This amount reflects the closing price of the Company's common stock in trading on the Nasdaq Global Select Market on December 31, 2024, multiplied by the amount shown in the column for the number of shares or units of stock that have not vested.

(10) Represents restricted stock obtained on December 30, 2022 upon exercise of an early exercise option. Twenty-five percent of the shares subject to the option vested on July 1, 2022, and 1/36th of the remaining shares subject to the award shall vest monthly in equal installments on the 1st of each month, through July 1, 2025. Additionally, the option is expected to be subject to certain equity acceleration benefits provided for in the Severance Policy. For a summary of the material terms of the Severance Policy, please see the section of this prospectus below titled "Potential Payments Upon Termination or Change of Control.

Employment Arrangements with Named Executive Officers

Evert Schimmelpennink

In connection with the closing of the Merger, LENZ entered into a confirmatory employment letter with Mr. Schimmelpennink, its Chief Executive Officer. The confirmatory employment letter has no specific term and provides that Mr. Schimmelpennink is an at-will employee. The confirmatory employment letter supersedes all pre-existing agreements and understandings that Mr. Schimmelpennink may have entered into concerning his employment relationship with LENZ. Prior to the closing of the Merger, Mr. Schimmelpennink's annual base salary was $538,500 and he was eligible for an annual target cash bonus opportunity equal to 50% of his base salary. As of the closing of the Merger, pursuant to the confirmatory employment letter, Mr. Schimmelpennink's annual base salary was increased to $630,000 and he was eligible for a target annual cash bonus opportunity equal to 55% of his annual base salary. On January 9, 2025, the compensation committee approved an increase in Mr. Schimmelpennink's annual base salary to $690,000, and an increase in Mr. Schimmelpennink's target annual cash bonus opportunity for 2025 to 60% of his annual base salary, both effective retroactive to January 1, 2025.

Kimberlee C. Drapkin

On August 21, 2023, Graphite entered into an offer letter with Ms. Drapkin (the "Drapkin Letter"), for the position of interim Chief Executive Officer. The Drapkin Letter provided for Ms. Drapkin's at-will employment. Ms. Drapkin's annual base salary was $550,000, which was subject to periodic review and adjustment. Ms. Drapkin was eligible to participate in the employee benefit plans generally available to Graphite's employees. The Drapkin Letter also provided that Ms. Drapkin was entitled to cash severance payments in the amount of (i) $400,000 in the event of a termination of her employment other than for cause or death upon or within 12 months after the closing of a Strategic Transaction (as defined in the Drapkin Letter and which included the Merger), plus an additional $200,000 if the definitive agreement for such Strategic Transaction was executed within three (3) months after her start date or (ii) $350,000 in the event of a termination of her employment other than for cause or death upon or within 12 months after the Graphite board of directors' approval of a plan of dissolution of Graphite under Delaware law, in each case subject to Ms. Drapkin's execution and non-revocation of a separation agreement and release, as further provided in the Drapkin Letter.

In addition, in connection with Ms. Drapkin's appointment as a member of the Graphite board of directors, on July 28, 2023, Ms. Drapkin received an initial equity grant in the amount of 40,000 shares of Graphite common stock, prior to adjustment for the reverse stock split, which vested in substantially equal monthly installments over a period of three years, subject to Ms. Drapkin's continued services to Graphite. Such initial grant was subject to full accelerated vesting upon a sale of Graphite, including the Merger. Ms. Drapkin did not receive any additional compensation, including cash retainers, for her services as a director.

Ms. Drapkin's employment was terminated without cause, effective as of the effective time of the Merger.

Daniel Chevallard

Effective as of March 21, 2024, LENZ entered into an employment agreement with Mr. Chevallard, who was appointed Chief Financial Officer of LENZ effective as of March 21, 2024. The employment agreement has no specific term and provides that Mr. Chevallard is an at-will employee. For 2024, Mr. Chevallard's annual base salary was $485,000 and he was eligible for a target annual cash bonus opportunity equal to 40% of his annual base salary. In addition, pursuant to the employment agreement with Mr. Chevallard, on March 21, 2024 the Board granted Mr. Chevallard an option to purchase 200,000 shares of Common Stock. On January 9, 2025, the compensation committee approved an increase in Mr. Chevallard's annual base salary to $510,000, effective retroactive to January 1, 2025, and his target annual cash bonus opportunity for 2025 is 40% of his annual base salary.

Marc Odrich

In connection with the closing of the Merger, LENZ entered into a confirmatory employment letter with Dr. Odrich, its Chief Medical Officer. The confirmatory employment letter has no specific term and provides that Dr. Odrich is an at-will employee. The confirmatory employment letter supersedes all pre-existing agreements and understandings that Dr. Odrich may have entered into concerning his employment relationship with LENZ. Prior to the closing of the Merger, Dr. Odrich's

annual base salary was $410,000 and he was eligible for an annual target cash bonus opportunity equal to 30% of his base salary. As of the closing of the Merger, pursuant to the confirmatory employment letter, Dr. Odrich's annual base salary was increased to $485,000 and he was eligible for a target annual cash bonus opportunity equal to 40% of his annual base salary. On January 9, 2025, the compensation committee approved an increase in Dr. Odrich's annual base salary to $500,000, effective retroactive to January 1, 2025, and his target annual cash bonus opportunity for 2025 is 40% of his annual base salary.

Equity Based Incentive Awards

Our equity-based incentive awards are designed to more closely align our interests and those of our stockholders with those of our employees and consultants, including our named executive officers. Our board of directors is responsible for approving equity grants to our employees and consultants, including our named executive officers. In 2024, stock option awards were the only form of equity awards the Company granted to its named executive officers. The Company granted equity incentive awards under the terms of its 2024 Equity Incentive Plan (the "2024 Plan"). The terms of the 2024 Plan are described below under "LENZ OpCo 2024 Equity Incentive Plan."

All options under the 2024 Plan were granted with a per share exercise price equal to the closing price of a share of the Company's common stock trading on the Nasdaq Global Select Market on the date of grant. Our stock option awards generally vest over a four-year period and may be subject to acceleration of vesting and exercisability under certain termination and change in control events. See "—Outstanding Equity Awards at Fiscal Year-End December 31, 2024."

Recent Grants

On January 9, 2025, the Company's board of directors granted (i) Mr. Schimmelpennink an option to purchase 279,100 shares of Common Stock, (ii) Mr. Chevallard an option to purchase 70,444 shares of Common Stock, and (iii) Dr. Odrich an option to purchase 80,100 shares of Common Stock. Each of the options were granted under the 2024 Plan and the form of option agreement thereunder and has a per share exercise price of $26.34. Twenty-five percent (25%) of the shares subject to the option shall vest on January 9, 2026, and one thirty-sixth (1/36th) of the remaining shares subject to the option shall vest each month thereafter, subject to such individual continuing to be a service provider to us through each such date.

Potential Payments Upon Termination or Change of Control

Regardless of the manner in which an officer's service terminates, that officer is entitled to receive amounts earned during his or her term of service, including unpaid salary and unused vacation, as applicable. Mr. Schimmelpennink and Dr. Odrich holds stock options granted subject to the general terms of the 2020 Plan and the 2024 Plan and Mr. Chevallard holds stock options granted subject to the general terms of the 2024 Plan. A description of the termination and change in control provisions in the 2020 Plan and applicable to the stock options granted to such officers under the 2020 Plan is provided below in the section titled "LENZ OpCo 2020 Equity Incentive Plan" and a description of such provisions applicable to the 2024 Plan and stock options granted under such plan are provided below in the section titled "2024 Equity Incentive Plan".

In connection with the closing of the Merger, the Company adopted an executive change in control and severance policy (the "Severance Policy") for eligible employees of the Company including the executive officers and other key employees, effective as of the closing of the Merger. The Severance Policy is designed to be an "employee welfare benefit plan" (as defined in Section 3(1) of the Employee Retirement Income Security Act of 1974, as amended). The compensation committee of the board of directors administers the Severance Policy, and designates individuals as eligible to participate in the Severance Policy, whether individually or by position or category of position. Each participant in the Severance Policy must execute a participation agreement (each an "Eligible Employee").

Pursuant to the Severance Policy, upon a termination of an Eligible Employee's employment (x) by the Company without Cause (as such term is defined in the Severance Policy) (excluding by reason of the Eligible Employee's death or disability) or (y) by the Eligible Employee for Good Reason (as such term is defined in the Severance Policy) (such termination, a "Qualified Termination"), in either case, outside of the period beginning 3 months prior to a Change in Control (as such term is defined in the Severance Policy) and ending 12 months following a Change in Control (the "Change in Control Period"), (the "Non-CIC Qualified Termination"), Eligible Employees will be eligible to receive (i) a lump sum payment equal to (A) 12 months of annualized base salary with respect to the Company's Chief Executive Officer, (B) 9 months of annualized base salary with respect to the Company's Senior Vice Presidents and Executive Officers other than the Company's Chief Executive Officer, and (C) 3 months plus 2 weeks per year of continuous service of annualized base salary with respect to the Company's Vice Presidents, and (ii) subject to a valid election under the

Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the cost of such continuation coverage for the Eligible Employee and any of the Eligible Employee's eligible dependents that were covered under the Company's health care plans immediately prior to the date of his or her Non-CIC Qualified Termination until the earliest of the date which the Eligible Employee or their eligible dependents become covered under similar plans, the date which the Eligible Employee ceases to be eligible for coverage under COBRA, or (A) 12 months following the Non-CIC Qualified Termination with respect to the Company's Chief Executive Officer, (B) 9 months following the Non-CIC Qualified Termination with respect to the Company's Senior Vice Presidents and Executive Officers other than the Company's Chief Executive Officer, and (C) 3 months plus 2 weeks per year of continuous service following the Non-CIC Qualified Termination with respect to the Company's Vice Presidents. Any unvested portion of the Eligible Employee's then-outstanding equity awards will remain outstanding until the earlier of (A) 3 months following the Non-CIC Qualified Termination or (B) the occurrence of a Change in Control, provided that, if no Change in Control occurs within the 3 months following a Non-CIC Qualified Termination, any unvested portion of the Eligible Employee's equity awards automatically and permanently will be forfeited on the 3-month anniversary following such termination date without having vested.

If a Qualified Termination occurs during a Change in Control Period (the "CIC Qualified Termination"), the Eligible Employee will be entitled to receive (i) a lump sum payment equal to (A) 18 months of annualized base salary with respect to the Company's Chief Executive Officer, (B) 12 months of annualized base salary with respect to the Company's Senior Vice Presidents and Executive Officers other than the Company's Chief Executive Officer, and (C) 6 months of annualized base salary with respect to the Company's Vice Presidents, (ii) subject to a valid election under COBRA, the cost of such continuation coverage for the Eligible Employee and any of the Eligible Employee's eligible dependents that were covered under the Company's health care plans immediately prior to the date of his or her CIC Qualified Termination until the earliest of the date which the Eligible Employee or their eligible dependents become covered under similar plans, the date which the Eligible Employee ceases to be eligible for coverage under COBRA, or (A) 18 months following the CIC Qualified Termination with respect to the Company's Chief Executive Officer, (B) 12 months following the CIC Qualified Termination with respect to the Company's Senior Vice Presidents and Executive Officers other than the Company's Chief Executive Officer, and (C) 6 months following the CIC Qualified Termination with respect to the Company's Vice Presidents, (iii) a lump-sum payment equal to a percentage of the Eligible Employee's target bonus in effect for the fiscal year which the CIC Qualified Termination occurs in, which such percentage is (A) 150% with respect to the Company's Chief Executive Officer, (B) 100% with respect to the Company's Senior Vice Presidents and Executive Officers other than the Company's Chief Executive Officer, and (C) 50% with respect to the Company's Vice Presidents, and (iv) acceleration of vesting as to 100% of the then-unvested shares or rights subject to all of the Eligible Employee's equity awards. In the case of an equity award subject to performance-based vesting conditions, unless otherwise specified in the applicable equity award agreement governing the award, all performance goals and other vesting criteria will be deemed achieved at target.

The Severance Policy further provides that if any payment or benefit that an Eligible Employee would receive from the Company or any other party (the "Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Payment will be equal to the Best Results Amount. The "Best Results Amount" will be either (x) the full amount of such Payment or (y) such lesser amount as would result in no portion of the Payment being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local employment taxes, income taxes and the Excise Tax, results in the Eligible Employee's receipt, on an after-tax basis, of the greater amount notwithstanding that all or some portion of the Payment may be subject to the Excise Tax.

The receipt of payments and benefits under the Severance Policy is subject to the Eligible Employee signing and not revoking a separation agreement and release of claims no later than the sixtieth (60th) day following the Eligible Employee's termination.

For purposes of the Severance Policy, for the avoidance of doubt, Mr. Schimmelpennink will participate at the level of benefits provided to the Company's Chief Executive officer, and Mr. Chevallard and Dr. Odrich will participate at the level of benefits provided to the Company's Senior Vice Presidents and Executive Officers other than the Company's Chief Executive Officer.

Executive Incentive Compensation Plan

Our Board approved the Incentive Compensation Plan to provide periodic incentive bonus opportunities to our employees, effective upon the closing of the Merger.

The Incentive Compensation Plan allows the plan's administrator to grant incentive awards, generally payable in cash, to employees selected by the compensation committee, including the executive officers of the Company, based upon performance goals established by the compensation committee.

Under the Incentive Compensation Plan, the plan's administrator will determine the performance goals, if any, applicable to any award, which goals may include, without limitation, goals related to: attainment of research and development milestones; sales bookings; business divestitures and acquisitions; capital raising; cash flow; cash position; contract awards or backlog; corporate transactions; customer renewals; customer retention rates from an acquired company, subsidiary, business unit or division; earnings (which may include any calculation of earnings, including but not limited to earnings before interest and taxes, earnings before taxes, earnings before interest, taxes, depreciation and amortization and net taxes); earnings per share; expenses; financial milestones; gross margin; growth in stockholder value relative to the moving average of the S&P 500 Index or another index; internal rate of return; leadership development or succession planning; license or research collaboration arrangements; market share; net income; net profit; net sales; new product or business development; new product invention or innovation; number of customers; operating cash flow; operating expenses; operating income; operating margin; overhead or other expense reduction; patents; procurement; product defect measures; product release timelines; productivity; profit; regulatory milestones or regulatory-related goals; retained earnings; return on assets; return on capital; return on equity; return on investment; return on sales; revenue; revenue growth; sales results; sales growth; savings; stock price; time to market; total stockholder return; working capital; unadjusted or adjusted actual contract value; unadjusted or adjusted total contract value; and individual objectives such as peer reviews or other subjective or objective criteria. As determined by the administrator, the performance goals may be based on U.S. generally accepted accounting principles ("GAAP") or non GAAP results and any actual results may be adjusted by the administrator for one-time items or unbudgeted or unexpected items and/or payments of actual awards under the Incentive Compensation Plan when determining whether the performance goals have been met. The performance goals may be based on any factors the administrator determines relevant, including without limitation on an individual, divisional, portfolio, project, business unit, segment or company-wide basis. Any criteria used may be measured on such basis as the administrator determines, including without limitation: (a) in absolute terms, (b) in combination with another performance goal or goals (for example, but not by way of limitation, as a ratio or matrix), (c) in relative terms (including, but not limited to, results for other periods, passage of time and/or against another company or companies or an index or indices), (d) on a per-share basis, (e) against the performance of the Company as a whole or a segment of the Company and/or (f) on a pre-tax or after-tax basis. The performance goals may differ from participant to participant and from award to award. The administrator also may determine that a target award (or portion thereof) will not have a performance goal associated with it but instead will be granted (if at all) as determined by the administrator.

The compensation committee of the board of directors will administer the Incentive Compensation Plan and may, in its sole discretion and at any time prior to payment of an actual award, increase, reduce or eliminate a participant's actual award, and/or increase, reduce or eliminate the amount allocated to the bonus pool for a particular performance period. The actual award may be below, at or above a participant's target award, as determined by the administrator. The administrator may determine the amount of any increase, reduction or elimination on the basis of such factors as it deems relevant, and it will not be required to establish any allocation or weighting with respect to the factors it considers.

Actual awards generally will be paid in cash (or its equivalent) in a single lump sum only after they are earned, and, unless otherwise determined by the administrator, to earn an actual award a participant must be employed by us through the date the actual award is paid. The administrator of the Incentive Compensation Plan may reserve the right to settle an actual award with a grant of an equity award, which equity award may have such terms and conditions, including vesting, as the administrator determines. Payment of awards will occur as soon as practicable after the end of the performance period to which the award relates and after the actual award is approved by the administrator, but no later than the dates set forth in the Incentive Compensation Plan.

Awards under the Incentive Compensation Plan will be subject to the clawback policy of the Company. The administrator also may impose such other clawback, recovery or recoupment provisions with respect an award under the Incentive Compensation Plan as the administrator determines necessary or appropriate, including, without limitation, a reacquisition right in respect of previously acquired cash, stock or other property provided with respect to an award. Certain participants may be required to reimburse us for certain amounts paid under an award under the Incentive Compensation Plan in connection with certain accounting restatements we may be required to prepare due to our material noncompliance with any financial reporting requirements under applicable securities laws, as a result of misconduct.

The administrator will have the authority to amend, suspend or terminate the Incentive Compensation Plan, provided such action does not alter or impair the existing rights of any participant with respect to any earned awards.

Benefits and Perquisites

We provide benefits to our executive officers on the same basis as provided to all of our employees, including health, dental and vision insurance; life insurance; accidental death and dismemberment insurance; short-and long-term disability insurance; a flexible spending account; and a tax-qualified Section 401(k) plan. We do not maintain any executive-specific benefit or perquisite programs.

Retirement Benefits

We maintain a 401(k) retirement savings plan, which is intended to be a tax qualified defined contribution plan under Section 401(k) of the Internal Revenue Code of 1986, as amended (the "Code"), for the benefit of our employees, including certain of our named executive officers, who satisfy certain eligibility requirements. Under the 401(k) plan, eligible employees may elect to defer a portion of their compensation, within the limits prescribed by the Code, on a pre-tax (traditional) or post-tax (Roth) basis, through contributions to the 401(k) plan. As a tax-qualified retirement plan, pre-tax contributions to the 401(k) plan and earnings on those pre-tax contributions are not taxable to the employees until distributed from the 401(k) plan, and earnings on Roth contributions are not taxable when distributed from the 401(k) plan.

The 401(k) plan authorizes employer safe harbor matching contributions and discretionary profit-sharing contributions. We make matching contributions under the 401(k) plan on behalf of our employees who are eligible to participate in the 401(k) plan. Matching contributions follow certain safe harbor provisions, pursuant to which we make a matching contribution equal to 100% of an eligible employee's contributions which do not exceed 3% of such employee's compensation, plus 50% of an eligible employee's contributions which exceed 3% but not 5% of such employee's compensation. We also may choose to make profit-sharing contributions to our employees who are eligible to participate in the 401(k) plan. Profit-sharing contributions may be provided at our sole discretion, and may be allocated so that each participant receives a different amount of profit-sharing as long as the contributions comply with IRS nondiscrimination requirements. Participants are always 100% immediately vested in safe harbor matching and profit sharing contributions under the 401(k) plan. the Company did not make any profit sharing contributions under the 401(k) plan during 2024. The matching contributions made to our named executive officers in 2024 are set forth in the "All Other Compensation" column of the Summary Compensation Table for the Fiscal Year Ended December 31, 2024.

LENZ OpCo 2020 Equity Incentive Plan

The 2020 Plan allowed LENZ OpCo to provide incentive stock options, within the meaning of Section 422 of the Code, nonstatutory stock options, stock appreciation rights, restricted stock awards and restricted stock units (each, an "award" and the recipient of such award, a "participant") to any of LENZ OpCo's eligible employees, directors, and consultants of and any parent or subsidiary of LENZ OpCo. The 2020 Plan was terminated in connection with the closing of the Merger and we will not grant any additional awards under the 2020 Plan. However, the 2020 Plan will continue to govern the terms and conditions of the outstanding awards previously granted under the 2020 Plan and assumed by us at the closing of the Merger.

As of December 31, 2024, stock options covering 1,458,939 shares of Common Stock were outstanding under the 2020 Plan.

Authorized Shares. Subject to the adjustment provisions in the 2020 Plan, the maximum aggregate number of shares of LENZ OpCo Common Stock that could have been granted under the 2020 Plan prior to the consummation of the Merger was 11,385,409 shares of LENZ OpCo Common Stock (prior to giving effect to the Merger or the impact of the exchange ratio). The shares eligible for grant could have been authorized, but unissued, or reacquired Common Stock.

Plan Administration. The 2020 Plan is administered by the board of directors or a committee of the board of directors, or a combination thereof, as determined by the board of directors. Any committee appointed by the board of directors to administer the 2020 Plan may, from time to time, be increased by the board of directors, which may appoint additional members or remove members of the committee with or without cause, including removing all members and directly administering the 2020 Plan.

Subject to the provisions of the 2020 Plan, the administrator will have the power to administer the 2020 Plan, including but not limited to: the power to determine the fair market value of the Common Stock in accordance with the provisions of the 2020 Plan; select the employees and consultants (including directors) to whom awards may from time to time be granted; determine whether and to what extent awards are granted; determine the number of shares of Common Stock covered by each award; approve forms of award agreements for use under the 2020 Plan; determine the terms and conditions not inconsistent with the terms of the 2020 Plan of any award granted, which terms and conditions include but are not limited to the exercise or purchase price, the time or times when awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, any pro rata adjustment to vesting as a result of a

holder of an award's transitioning from full-to part-time service (or vice versa), and any restriction or limitation regarding any stock option, optioned stock, stock right or restricted stock, based in each case on such factors as the administrator determines; determine whether and under what circumstances a stock option may be settled in cash under the provisions of the 2020 Plan instead of Common Stock; implement a program approved by the administrator of the 2020 Plan where outstanding stock options can be exchanged for stock options with a lower exercise price or amended to decrease the exercise price on such terms and conditions as the administrator in its discretion deems appropriate, provided that no amendment or adjustment to a stock option that would materially and adversely affect the rights of a holder of a stock option shall be made without the prior written consent of the holder of that stock option; adjust the vesting of a stock option held by an employee, director or consultant as a result of a change in the terms or conditions under which such person is providing services to LENZ; construe and interpret the terms of the 2020 Plan and awards granted under it; without amending the 2020 Plan, modify grants of stock options or stock rights to any holder of stock options or stock rights who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies, or customs. The administrator's constructions, interpretations, and decisions will be final and binding on all participants.

Stock Options. The 2020 permitted the grant of stock options. Incentive stock options may be granted only to employees, including employees who are also directors. Each stock option shall be designated in an option agreement as either an incentive stock option or a nonstatutory stock option. Prior to the consummation of the Merger, the maximum number of shares of Common Stock with respect to which incentive stock options could have been granted under the 2020 Plan was 11,385,409.

The term of each stock option shall be the term stated in the applicable option agreement; provided that the term shall be no more than ten years from the date of grant, or such shorter term as may be provided in the option agreement. In the case of an incentive stock option granted to a person who at the time of such grant owns more than ten percent of the voting power of all classes of LENZ's outstanding stock, the term of the stock option shall be five years from the date of grant or such shorter term as may be provided in the applicable option agreement.

The per share exercise price of options granted under the 2020 Plan will be a price determined by the administrator that is set forth in the applicable option agreement. In the case of incentive stock options granted to an employee who at the time of grant, owns more than ten percent of the voting power of all classes of LENZ's outstanding stock, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price must equal at least one-hundred ten percent of the fair market value of Common Stock on the grant date. In the case of nonstatutory stock options granted on any date on which its Common Stock is not a security of LENZ's that is listed or approved for listing on a national securities exchange or designated or approved for designation as a national market system security on an interdealer quotation system by the Financial Industry Regulatory Authority, Inc. (a "Listed Security"), the per share exercise price will be the price determined by the Administrator; or granted on any date on which the Common Stock is a Listed Security to any eligible person, the per share exercise price shall be a price determined by the administrator based on the closing price of LENZ's Common Stock for the applicable date. No nonstatutory stock option will be granted with a per share exercise price less than one-hundred percent of the fair market value on the date of grant unless the administrator explicitly designates such as a discounted option with terms intended to avoid additional taxes under Section 409A of the Code.

The administrator determines the consideration to be paid for shares issued upon exercise of a stock option, including the methods of payment (in the case of incentive stock options this will be determined at the time of grant), which may include cash, check, delivery of a promissory note having recourse, interest, security and redemption provisions determined by the administrator, other shares that have a fair market value on the date of surrender equal to the aggregate exercise price of the shares to which the stock option is exercised (provided that in the case of shares provided directly or indirectly by LENZ, the shares must have been owned for more than six months on the date of surrender (or such period as may be required for securities law purposes to avoid LENZ incurring an adverse accounting charge); by net exercise or by a cashless exercise method, including a broker-assisted cashless exercise; any combination thereof; or any other consideration or method of payment acceptable to the administrator, to the extent permitted by applicable law.

The administrator will establish in the applicable option agreement the terms and conditions in which a stock option will remain exercisable, if at all, following termination of a participant. Unless the administrator provides in the applicable option agreement, if an option holder does not exercise their stock option to the extent they are entitled to do so within the time specified in their option agreement, the stock option will terminate and the optioned stock underlying the unexercised portion of the stock option will revert to the 2020 Plan. If an employee, director or consultant is terminated other than for death, disability or for cause, the option holder may exercise their option for ninety days following their termination to the extent they are vested in the optioned stock (they may exercise their stock option for twelve months in the event of

termination due to disability or death). If terminated for cause, a participant's stock options will immediately terminate in their entirety.

Stock Rights. The 2020 Plan permitted the grant of stock rights. A stock right is the right to acquire Common Stock pursuant to the 2020 Plan. The administrator will advise a participant in writing of the terms, conditions and restrictions related to the stock right, including the number of shares that the participant will be entitled to acquire, the price to be paid, and the time within which the participant must accept such offer. The offer to purchase shares subject to a stock right will be accepted by execution of a restricted stock agreement in the form determined by the administrator. The restricted stock agreement will grant LENZ a repurchase option exercisable upon the voluntary or involuntary termination of the participant's employment or other service arrangement with LENZ for any reason (including death or disability), unless determined otherwise by the administrator.

If the participant is terminated for cause, LENZ will have the right to repurchase from the participant any vested shares derived from a stock right prior to the date, if any, upon which LENZ's Common Stock becomes a Listed Security. LENZ's right to repurchase such shares upon termination of such participant's service for cause shall be made at the lower of (A) the participant's original cost for the shares and (B) the fair market value of the shares as of the date of termination, and shall be effected pursuant to such terms and conditions, and at such time, as the administrator shall determine.

Non-Transferability of Awards. The 2020 Plan generally does not allow stock options, stock rights or shares issued upon the exercise of either to be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will, or by the laws of descent or distribution, except as set forth in the 2020 Plan. The administrator may, in its discretion, grant nonstatutory stock options that may be transferred by instrument to an inter vivos or testamentary trust in which the stock options are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift or pursuant to domestic relations orders to immediate family members of the holder of the stock option.

Certain Adjustments. Subject to any action required under applicable law, in the event of a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of LENZ's Common Stock, or any other increase or decrease in the number of issued shares without receipt of consideration by LENZ, a proportionate adjustment will be made in the number of shares covered by each outstanding award, and the number of shares that have been authorized for issuance under the 2020 Plan but as to which no awards have yet been granted or that have been returned to the 2020 Plan upon cancellation or expiration of an award, as well as the price per share covered by each such outstanding award. The adjustment will be made by the administrator, whose determination will be final, binding and conclusive.

Dissolution or Liquidation. In the event of LENZ's liquidation or dissolution, each stock option or stock right will terminate immediately prior to the consummation of such event, unless determined otherwise by the administrator.

Change of Control. The 2020 Plan provides that in the event of a change of control, as defined under the plan, the LENZ board of directors or a committee appointed by its board of directors may provide for: (1) the acceleration in part or whole of the right to exercise a stock option or the vesting of any award; (2) the assumption or substitution of, or adjustment to, each outstanding stock option by the successor corporation or a parent or subsidiary of the successor corporation; (3) the termination of any stock option not exercised within a specified period of notice of such termination; and/or (4) termination of stock options as a result of the change of control on such other terms and conditions as it deems appropriate, including providing for the cancellation of stock options for a cash payment to the participant. The plan's administrator does not have to provide for identical treatment of each outstanding award in connection with a merger or change in control.

In the event of any distribution to LENZ stockholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the company) without receipt of consideration by LENZ, the administrator may, in its discretion, adjust the price per share of LENZ's Common Stock covered by each outstanding stock option or stock right to reflect the effect of such distribution.

Amendment and Termination. As noted above, in connection with the closing of the Merger, the 2020 Plan terminated and we will not grant any additional awards under the 2020 Plan.

2024 Equity Incentive Plan

The following paragraphs summarize the key features of the 2024 Plan and its operation. However, this summary is not a complete description of all of the provisions of the 2024 Plan and is qualified in its entirety by the specific language of the 2024 Plan.

As of December 31, 2024, stock options covering 1,522,550 shares of Common Stock were outstanding under the 2024 Plan.

Purposes of the 2024 Plan. The purposes of the 2024 Plan are to attract and retain personnel for positions with the combined company; to provide additional incentive to employees, directors, and consultants; and to promote the success of the combined company's business. These incentives are provided through the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, or performance awards.

Eligibility. The 2024 Plan will provide for the grant of incentive stock options, within the meaning of Section 422 of the Code, to employees of LENZ and any member of the company group, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance awards to the combined company's employees, directors and consultants and any member of the company group.

Authorized Shares. Subject to adjustment upon certain changes in the Company's capitalization as described in the 2024 Plan, the maximum number of shares of common stock that will be available for issuance under the 2024 Plan will be 3,011,948 shares of common stock, plus (i) any shares subject to awards granted under the 2020 Plan (including, but not limited to, awards granted under the 2020 Plan that were assumed in the Merger), Graphite's 2021 Stock Option and Incentive Plan and Graphite's 2020 Stock Option and Grant Plan) that, on or after the effective date of the merger, expire or terminate without having been exercised in full, are tendered to or withheld for payment of an exercise price or for tax withholding obligations, are forfeited or repurchased due to failure to vest, with a maximum number of shares that may be added to the 2024 Plan equal to 1,607,930 shares, plus (ii) any shares that become available for issuance due to the automatic share reserve increase or share reserve return (as described below) will be reserved for issuance under the 2024 Plan.

The number of shares available for issuance under the 2024 Plan will include an annual increase on the first day of each fiscal year beginning with the 2025 fiscal year, equal to the least of:

- 4,517,922 shares.
- 5% of the outstanding shares of common stock as of the last day of the immediately preceding fiscal year; or
- a number of lesser shares as determined by the 2024 Plan's administrator.

The automatic share reserve increase will operate only until the tenth anniversary of the earlier of the board or stockholder approval of the 2024 Plan.

If an award of options or stock appreciation rights expire or become unexercisable without having been exercised in full, is surrendered pursuant to an exchange program, or, with respect to restricted stock, restricted stock units, or stock-settled performance awards, are reacquired by the combined company due to failure to vest or forfeited to the combined company, the unpurchased or unissued shares will become available for future issuance under the 2024 Plan (unless the 2024 Plan has terminated). With respect to stock appreciation rights, only the net shares actually issued will cease to be available under the 2024 Plan and all remaining shares of common stock subject to the stock appreciation right will remain available for future issuance under the 2024 Plan (unless the 2024 Plan has terminated). Shares that have actually been issued under the 2024 Plan will not be returned to the 2024 Plan. Shares used to pay the exercise price of an award or satisfy the tax withholding obligations related to an award will become available for future issuance under the 2024 Plan. To the extent an award is paid out in cash rather than shares, such cash payment will not result in a reduction in the number of shares available for issuance under the 2024 Plan.

Plan Administration. The combined company's board of directors or a committee appointed by the board of directors will administer the 2024 Plan. The combined company's board of directors or the committee appointed by them may delegate to one or more subcommittees or officers of the combined company, the authority to grant awards to employees of the combined company, if this delegation complies with applicable laws this delegation can be revoked by the combined company's board of directors or the committee they appointed. Different administrators may administer the 2024 Plan with respect to different groups of employees, directors, and consultants. The combined company's board of directors may retain the authority to administer the 2024 Plan along with a committee and may revoke delegation of some or all of the authority delegated to that committee. The combined company's compensation committee will initially administer the 2024 Plan. Subject to the provisions of the 2024 Plan, the administrator has the power to administer the 2024 Plan and make all determinations deemed necessary or advisable for administering the 2024 Plan, including but not limited to, the power to determine the fair market value of the combined company's common stock, select the service providers to whom awards may be granted, determine the number of shares covered by each award, approve forms of award agreements for use under the 2024 Plan, determine the terms and conditions of awards (including, but not limited to, the exercise price, the time or times at which awards may be exercised, any vesting acceleration or waiver or forfeiture restrictions and any restriction or limitation regarding any award or the shares relating thereto), construe and interpret the terms of the 2024 Plan and awards

granted under it, establish, amend and rescind rules relating to the 2024 Plan, including adopting sub-plans, interpret, modify or amend each award, including but not limited to the discretionary authority to extend the post-termination exercisability period of awards, and allow a participant to defer the receipt of payment of cash or the delivery of shares that would otherwise be due to such participant under an award. The administrator also has the authority to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator and to institute an exchange program by which outstanding awards may be surrendered or cancelled in exchange for awards of the same type, which may have a higher or lower exercise price and/or different terms, awards of a different type, and/or cash or by which the exercise price of an outstanding award is increased or reduced. The administrator's decisions, determinations, and interpretations are final and binding on all participants.

Stock Options. Stock options may be granted under the 2024 Plan. The exercise price of options granted under the 2024 Plan must generally be at least equal to the fair market value of the combined company's common stock on the date of grant. The term of an option may not exceed ten years. With respect to any participant who owns more than 10% of the voting power of all classes of the combined company's (or any parent or subsidiary of the combined company's) outstanding stock, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director, or consultant (except for termination as a result of death or disability), he or she may exercise his or her option for a period of thirty days or such longer period of time stated in his or her option agreement. If termination is due to death or disability, the option will remain exercisable for six months following the termination of service or such longer period of time as specified in the participant's award agreement. Subject to the provisions of the 2024 Plan, the administrator determines the other terms of options.

Stock Appreciation Rights. Stock appreciation rights may be granted under the 2024 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of the combined company's common stock between the exercise date and the date of grant. The administrator of the 2024 Plan will determine the number of shares of common stock subject to a stock appreciation right, its exercise price a, the expiration date of a stock appreciation right, and other terms and conditions, which will be set forth in an award agreement. The per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock. Restricted stock may be granted under the 2024 Plan. Restricted stock awards are grants of shares of the combined company's common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares subject an award of restricted stock and will determine the terms and conditions of such awards. Unless determined otherwise by the administer, shares of restricted stock will be held in escrow while unvested. Recipients of restricted stock awards generally may exercise full voting rights with respect to such shares while unvested, unless the administrator provides otherwise. An award recipient of restricted stock will not be entitled to receive dividends or other distributions paid with respect to the shares underlying the restricted stock award while those shares are unvested, unless the administrator provides otherwise. If the administrator provides that dividends and distributions will be received and any such dividends or distributions are paid in cash they will be subject to the same provisions regarding forfeitability as the shares of common stock underlining the restricted stock award with respect to which they were paid and if dividends or distributions are paid in shares, the shares will be subject to the same restrictions on transferability and forfeitability as the shares with respect to which they were paid and, unless the administrator determines otherwise, the Company will hold such dividends until the restrictions on the shares with respect to which they were paid have lapsed. The administrator may impose (prior to grant) or remove (at any time) any restrictions on shares covered by an award of restricted stock.

Restricted Stock Units. Restricted stock units may be granted under the 2024 Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of the combined company's common stock. Subject to the provisions of the 2024 Plan, the administrator determines the terms and conditions of restricted stock units, including the vesting criteria (if any), the number of restricted stock units paid out and the form and timing of payment, which will be set out in the applicable award agreement. The administrator may set vesting criteria based upon the achievement of company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the administrator in its sole discretion. The administrator may settle earned restricted stock units in the form of cash, in shares or in some combination thereof. In addition, the administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

Performance Awards. Performance awards may be granted under the 2024 Plan. Performance awards are awards that will result in a payment to a participant only if performance objectives established by the administrator are achieved or the awards otherwise vest. The administrator will specify any time period during which any performance objectives or other vesting provisions, if any, will be measured, and such other terms, as specified in the applicable award agreement. The administrator may set performance objectives based on the achievement of company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the administrator in its discretion. After the grant of a performance award, the administrator, may reduce or waive any performance objectives or other vesting provisions for such performance awards. Performance awards will have an initial value established by the administrator on or prior to the grant date. The administrator, in its sole discretion, may pay out earned performance awards in cash, shares, or in some combination thereof.

Outside Directors. All outside (non-employee) directors will be eligible to receive all types of awards (except for incentive stock options) under the 2024 Plan. To provide a maximum limit on the cash retainer fees and equity awards that can be made to outside directors, the 2024 Plan provides that in any given fiscal year, an outside director will not be granted cash retainer fees and equity awards with an aggregate value greater than $750,000 (increased to $1,000,000 in the fiscal year in connection with his or her initial service as an outside director), with the value of each equity award based on its grant date fair value as determined according to GAAP for purposes of this limit. Any cash compensation paid, or awards granted to an individual for his or her services as an employee or consultant (other than as an outside director) will not count toward this limit.

Non-Transferability of Awards. Unless the administrator provides otherwise, or otherwise required by applicable laws, an award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the participant, only by the participant. If the administrator makes an award transferable, the award will be limited by any additional terms and conditions imposed by the administrator. Any unauthorized transfer of an award will be void.

Certain Adjustments. If any extraordinary dividend or other extraordinary distribution (whether in cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares or other securities of the combined company, other change in the corporate structure of the combined company affecting the shares of common stock, or any similar equity restructuring transaction, as that term is used in Statement of FASB ASC 718 (or any of its successors) affecting the shares of common stock occurs, to prevent diminution or enlargement of the benefits or potential benefits available under the 2024 Plan, the administrator will adjust the number and class of shares that may be delivered under the 2024 Plan and/or the number, class and price of shares covered by each outstanding award and the numerical share limits set forth in the 2024 Plan.

Dissolution or Liquidation. In the event of the combined company's proposed liquidation or dissolution, the administrator will notify participants prior to the effective date of the proposed transaction and, to the extent not previously exercised, all awards will terminate immediately prior to the consummation of such proposed action.

Merger or Change in Control. The 2024 Plan provides that in the event of a merger or change in control, as defined under the 2024 Plan, each outstanding award will be treated as the administrator determines, without a participant's consent, including providing that awards be continued by the successor corporation or a parent or subsidiary of the successor corporation (or an affiliate thereof) or that the vesting of any such awards may accelerate automatically upon consummation of a transaction. The administrator is not required to treat all awards, all awards held by a participant or all awards of the same type similarly. The administrator may take different actions with respect to the vested and unvested portions of an award. The administrator has the authority to modify awards in connection with a change in control or merger in a manner that causes the awards to lose their tax-preferred status, to terminate any right a participant has to exercise an option prior to vesting in the shares of common stock subject to the option, so that following the closing of the transaction the option may only be exercised to the extent it is vested; to reduce the exercise price subject to the award in a manner that is disproportionate to the increase in the number of shares of common stock subject to the award, as long as the amount that would be received upon exercise of the award immediately before and immediately following the closing of the transaction is equivalent and the adjustment complies with applicable laws; and to suspend a participant's right to exercise an option during a limited period of time preceding and or following the closing of the transaction without participant's consent if such suspension is administratively necessary or advisable to permit the closing of the transaction.

If a successor corporation does not continue an award, or some portion of such award, then the participant will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, all restrictions on restricted stock and restricted stock units will lapse, and for awards with performance-based vesting, unless specifically provided for

otherwise under the applicable award agreement or other agreement or policy applicable to the participant, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met. If an option or stock appreciation right is not assumed or substituted in the event of a change in control, the administrator will notify the participant in writing or electronically that such option or stock appreciation right will be exercisable for a period of time determined by the administrator in its sole discretion and the option or stock appreciation right will terminate upon the expiration of such period. For awards granted to an outside director, in the event of a change in control, the outside director will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, all restrictions on restricted stock and restricted stock units will lapse and, for awards with performance-based vesting, unless specifically provided for otherwise under the applicable award agreement or other agreement or policy applicable to the participant, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met.

Clawback. All awards under the 2024 Plan will be subject to recoupment under any clawback policy that the combined company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the combined company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable laws. The administrator may impose other clawback, recovery or recoupment provisions in an award agreement as the administrator determines necessary or appropriate, including without limitation to any reacquisition right regarding previously acquired shares of the combined company's common stock or other cash or property. The administrator may specify in an award agreement that a participant's rights, payments, and benefits with respect to an award will be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an award.

Effective Date; Amendment; Termination. The 2024 Plan became effective date on March 21, 2024. The administrator, in its sole discretion, has the authority to amend, alter, suspend or terminate the 2024 Plan, or any part thereof, at any time and for any reason, provided that a participant's rights will not be materially impaired without signed, written agreement authorized by the administrator between the participant and the Company. The Company will obtain stockholder approval of any plan amendment to the extent necessary or desirable to comply with applicable laws. Termination of the 2024 Plan will not affect the administrator's ability to exercise the powers granted to it regarding awards granted under the 2024 Plan prior to such termination. The 2024 Plan will continue in effect until terminated pursuant its terms, but (i) no incentive stock options may be granted after 10 years from the earlier of the Graphite board or stockholder approval of the 2024 Plan and (ii) the automatic share reserve increase will operate only until the tenth anniversary of the earlier of the Graphite board or stockholder approval of the 2024 Plan.

2024 Employee Stock Purchase Plan

The following is a summary of the principal features of our 2024 Employee Stock Purchase Plan (the "2024 ESPP") and its operation.

Purpose. The purpose of the 2024 ESPP is to provide eligible employees with an opportunity to purchase shares of the combined company's common stock through accumulated contributions, which generally will be made through payroll deductions. The 2024 ESPP permits the administrator (as discussed below) to grant purchase rights that qualify for preferential tax treatment under Section 423 of the Code. In addition, the 2024 ESPP authorizes the grant of purchase rights that do not qualify under Code Section 423 pursuant to rules, procedures or sub-plans adopted by the administrator that are designed to achieve desired tax or other objectives.

Authorized Shares. Subject to adjustment upon certain changes in the Company's capitalization as described in the 2024 ESPP, the maximum number of shares of common stock that will be available for issuance under the 2024 ESPP will be 250,995 shares. The shares may be authorized, but unissued, or reacquired common stock. The number of shares of common stock available for issuance under the 2024 ESPP will be increased on the first day of each fiscal year beginning for the fiscal year following the fiscal year in which the first enrollment date under the 2024 ESPP (if any) occurs, in an amount equal to the least of (i) 376,493 shares, (ii) one percent (1%) of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the administrator.

We currently are unable to determine how long this share reserve may last because the number of shares that will be issued in any year or offering period depends on a variety of factors that cannot be predicted with certainty, including, for example, the number of employees who elect to participate in the 2024 ESPP, the level of contributions made by participants and the future price of shares of common stock.

Plan Administration. The board of directors or a committee appointed by the board of directors will administer the 2024 ESPP. The compensation committee will initially administer the 2024 ESPP. Subject to the terms of the 2024 ESPP, the

administrator will have full and exclusive discretionary authority to construe, interpret and apply the terms of the 2024 ESPP, to delegate ministerial duties to any of the combined company's employees, to designate separate offerings under the 2024 ESPP, to designate subsidiaries and affiliates as participating in the Section 423 Component and the Non-Section 423 Component, to determine eligibility, to adjudicate all disputed claims filed under the 2024 ESPP and to establish such procedures that it deems necessary or advisable for the administration of the 2024 ESPP. The administrator is authorized to adopt rules and procedures in order to: determine eligibility to participate, determine the definition of compensation for the purposes of contributions to the 2024 ESPP, handle contributions to the 2024 ESPP, coordinate the making of contributions to the 2024 ESPP, establish bank or trust accounts to hold contributions to the 2024 ESPP, effect the payment of interest, effect the conversion of local currency, satisfy obligations to pay payroll tax, determine beneficiary designation requirements, implement and determine withholding procedures and determine procedures for the handling of stock certificates that vary with applicable local requirements. The administrator will also be authorized to determine that, to the extent permitted by applicable law, the terms of a purchase right granted under the 2024 ESPP or an offering to citizens or residents of a non-U.S. jurisdiction will be less favorable than the terms of options granted under the 2024 ESPP or the same offering to employees that reside solely in the United States. Every finding, decision and determination made by the administrator will, to the full extent permitted by law, be final and binding upon all parties.

Eligibility. Generally, all of the combined company's employees will be eligible to participate if they are customarily employed by us, or any participating subsidiary or affiliate, for at least 20 hours per week and more than five months in any calendar year, or any lesser number of hours per week and/or number of months in any calendar year established by the administrator (if required under applicable local law) for purposes of any separate offering or the Non-Section 423 component. The administrator, in its discretion, on a uniform and nondiscriminatory basis, may, prior to an enrollment date, for all options to be granted on such enrollment date in an offering, determine that an employee who (i) has not completed at least two years of service (or a lesser period of time determined by the administrator) since his or her last hire date, (ii) customarily works not more than 20 hours per week (or a lesser period of time determined by the administrator), (iii) customarily works not more than five months per calendar year (or a lesser period of time determined by the administrator), (iv) is a highly compensated employee within the meaning of Section 414(q) of the Code, or (v) is a highly compensated employee within the meaning of Section 414(q) of the Code with compensation above a certain level or is an officer or subject to disclosure requirements under Section 16(a) of the Exchange Act, is or is not eligible to participate in such offering period.

However, an employee may not be granted rights to purchase shares of the combined company's common stock under the 2024 ESPP if such employee:

- immediately after the grant would own capital stock and/or hold outstanding options to purchase such stock possessing 5% or more of the total combined voting power or value of all classes of capital stock of ours or of any parent or subsidiary of ours; or
- holds rights to purchase shares of the combined company's common stock under all employee stock purchase plans of ours or any parent or subsidiary of ours that accrue at a rate that exceeds $25,000 worth of shares of the combined company's common stock for each calendar year in which such rights are outstanding at any time.

Offering Periods. The 2024 ESPP will include a component that allows the Company to make offerings intended to qualify under Section 423 of the Code and a component that allows the Company to make offerings not intended to qualify under Section 423 of the Code to designated companies, as described in the 2024 ESPP. Offering periods will begin and end on such dates as established by the administrator (including the commencement and termination dates thereof) without stockholder approval if such change is announced prior to an enrollment date for all purchase rights to be granted on such enrollment date. No offering period may last more than 27 months.

Contributions. The 2024 ESPP will permit participants to purchase shares of the combined company's common stock through contributions (in the form of payroll deductions or otherwise to the extent permitted by the administrator) of up to 15% of their eligible compensation, a measure to be determined by the administrator, or such other limit established by the administrator from time to time in its discretion and on a uniform and nondiscretionary basis for all options to be granted on an enrollment date in an offering.

Exercise of Purchase Right. A participant's option for the purchase of shares of common stock will be exercised automatically on each exercise date, unless a participant withdraws from the 2024 ESPP (or participant's participation is terminated), and the maximum number of full shares of the combined company's common stock subject to the option will be purchased for such participant at the applicable purchase price with the accumulated contributions from his or her account. No fractional shares of common stock will be purchased. Any contributions accumulated in a participant's account, which are not sufficient to purchase a full share will be retained in the participant's account for the next purchase

period or offering period and will be subject to earlier withdrawal by the participant. Any other funds left over in a participant's account after the exercise date will be returned to the participant. The Administrator may, for future offering periods, increase or decrease, in its absolute discretion, the maximum number of shares of common stock that an eligible employee may purchase during each purchase period and/or offering period, as applicable.

Termination of Participation. Participation in the 2024 ESPP generally will terminate when a participating employee's employment with the combined company or a designated company ceases for any reason, the employee withdraws from the 2024 ESPP or the combined company's board terminates or amends the 2024 ESPP such that the employee no longer is eligible to participate. An employee may withdraw his or her participation in the 2024 ESPP at any time in accordance with procedures, and prior to any applicable deadline, specified by the administrator. Upon withdrawal from the 2024 ESPP, in general the employee will receive all amounts credited to his or her account without interest (unless otherwise required under applicable law) and his or her payroll withholdings or contributions under the 2024 ESPP will cease.

Non-Transferability. Neither contributions credited to a participant's account nor rights to purchase shares of common stock and any other rights and interests under the 2024 ESPP may be assigned, transferred, pledged or otherwise disposed of (other than by will, the laws of descent and distribution or beneficiary designation in the event of death). Any attempt at such prohibited disposition will be without effect, except that the combined company may treat such act as an election to withdraw participation.

Certain Transactions. In the event that any extraordinary dividend or other extraordinary distribution (whether in cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares of common stock or other securities, or other change in the combined company's corporate structure affecting the common stock or any similar equity restructuring transaction, as that term is used in Statement of FASB ASC Topic 718 (or any of its successors) affecting the shares of common stock occurs, the administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the 2024 ESPP in such manner it may deem equitable, will adjust the number and class of common stock that may be delivered under the 2024 ESPP, the purchase price per share, the number of shares of common stock covered by each purchase right under the 2024 ESPP that has not yet been exercised, and the numerical limits of the 2024 ESPP.

In the event of the Company's proposed dissolution or liquidation, any ongoing offering periods will be shortened and will terminate immediately before consummation of the proposed dissolution or liquidation following the purchase of shares of common stock under the shortened offering periods, unless provided otherwise by the administrator. Prior to the new exercise date, the administrator will notify participants regarding the new exercise date and the exercise to occur on such date.

In the event of a merger or "change in control" (as defined in the 2024 ESPP), each outstanding option under the 2024 ESPP will be assumed or substituted for by the successor corporation or its parent or subsidiary. In the event that options are not assumed or substituted for, the offering period will be shortened by setting a new exercise date on which the offering period will end, which will occur prior to the closing of the merger or change in control. Prior to the new exercise date, the administrator will notify participants regarding the new exercise date and the exercise to occur on such date.

Amendment; Termination. The administrator will have the authority to amend, suspend or terminate the 2024 ESPP. The 2024 ESPP will continue in effect for a term of 20 years, unless terminated sooner. If the administrator determines that the ongoing operation of the 2024 ESPP may result in unfavorable financial accounting consequences, the administrator may modify, amend or terminate the 2024 ESPP to reduce or eliminate such accounting consequence. If the 2024 ESPP is terminated, the administrator in its discretion may terminate all outstanding offering periods either immediately or after consummation of the purchase of shares of common stock under the 2024 ESPP (which may be adjusted to occur sooner than originally scheduled), or in accordance with their terms. If options are terminated prior to their expiration, then all amounts credited to participants that have not been used to purchase shares of common stock will be returned, without interest (unless otherwise required under applicable law), as soon as administratively practicable.

Equity Compensation Plan Information

The following table provides information as of December 31, 2024 with respect to shares of our common stock that may be issued under our existing equity compensation plans.

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of oustanding options, warrants and rights($)	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders			
2020 Plan[(1)]	1,458,939	4.28	—
2021 Graphite Plan[(2)]	8,438	11.94	—
2024 Plan[(3)]	1,522,550	16.45	1,544,122
2024 ESPP[(4)]	—	—	250,995
Equity compensation plans not approved by security holders	—	—	—
Total	2,981,489	10.50	1,795,117

(1) The LENZ OpCo board of directors adopted, and LENZ OpCo stockholders approved, the 2020 Plan. The 2020 Plan was terminated as of the closing of the Merger and we will not grant any additional awards under the 2020 Plan. However, the 2020 Plan will continue to govern the terms and conditions of the outstanding awards previously granted under the 2020 Plan and assumed by us at the closing of the Merger.

(2) Our board of directors adopted, and our stockholders approved, the 2021 Graphite Plan. The 2021 Graphite Plan was terminated as of the closing of the Merger and we will not grant any additional awards under the 2021 Graphite Plan. However, the 2021 Graphite Plan will continue to govern the terms and conditions of the outstanding awards previously granted under the 2021 Graphite Plan and assumed by us at the closing of the Merger.

(3) Our board of directors adopted, and our stockholders approved, the 2024 Plan. The 2024 Plan provides that the number of shares available for issuance under the 2024 Plan will be increased on the first day of each fiscal year beginning with the 2025 fiscal year, in an amount equal to the least of (i) 4,517,922 shares, (ii) five percent (5%) of the outstanding shares of common stock on the last day of the immediately preceding fiscal year or (iii) a number of lesser shares as determined by the 2024 Plan's administrator. On January 1, 2025, the number of shares available under the 2024 Plan increased by 1,376,574 shares pursuant to this feature. In addition, the shares reserved for issuance under the 2024 Plan include any shares of our Common Stock subject to awards of stock options or other awards that were assumed in the Merger (or "assumed awards") that, on or after the effective date of the Merger, are terminated, canceled, expire or otherwise terminate without having been exercised in full, are tendered to or withheld by us for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by us due to failure to vest (provided that the maximum number of shares that may be added to the 2024 Plan pursuant to this provision is 1,607,930 shares).

(4) Our board of directors adopted, and our shareholders approved, the 2024 ESPP. The 2024 ESPP provides that the number of shares available for issuance under the 2024 ESPP will be increased on the first day of each fiscal year beginning with the 2025 fiscal year, in an amount equal to the least of (i) 376,493 shares, (ii) one percent (1%) of the outstanding shares of common stock on the last day of the immediately preceding fiscal year or (iii) an amount determined by the administrator. On January 1, 2025, the number of shares available under the 2024 ESPP increased by 275,314 shares pursuant to this feature.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table sets forth information regarding the beneficial ownership of Common Stock as of March 12, 2025 by:

- each person known by us to be the beneficial owner of more than 5% of our outstanding Common Stock;
- each of our named executive officers and our directors; and
- all of our executive officers and directors as a group.

Beneficial ownership is determined according to the rules of the SEC, which generally provide that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power over that security. Under those rules, beneficial ownership includes securities that the individual or entity has the right to acquire, such as through the exercise of stock options, within 60 days of March 12, 2025. Shares subject to options that are currently exercisable or exercisable within 60 days of March 12, 2025 are considered outstanding and beneficially owned by the person holding such options for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Except as noted by footnote, and subject to community property laws where applicable, based on the information provided to us, we believe that the persons and entities named in the table below have sole voting and investment power with respect to all shares shown as beneficially owned by them. Unless otherwise noted, the business address of each of the Company's directors and executive officers is 201 Lomas Santa Fe Drive Suite 300, Solana Beach, California 92075. The percentage of beneficial ownership of LENZ Therapeutics, Inc. is calculated based on 27,542,874 shares of Common Stock outstanding as of March 12, 2025.

Name of Beneficial Owners	Number of Shares	%
Greater than 5% Stockholders		
Alpha Wave Ventures II, LP[1]	3,612,211	13.1 %
Entities affiliated with Point72 Asset Management[2]	1,882,693	6.8 %
Entities affiliated with RA Capital Management[3]	4,259,106	15.5 %
Entities affiliated with Versant Management[4]	4,612,684	16.7 %
Ridgeback Capital Investments L.P.[5]	1,951,875	7.1 %
Executive Officers and Directors		
Evert Schimmelpennink[6]	769,567	2.8 %
Shawn Olsson[7]	154,456	*
Marc Odrich[8]	160,312	*
Daniel Chevallard[9]	57,354	*
Frederic Guerard[10]	50,195	*
James McCollum[11]	636,924	2.3 %
Zach Scheiner[12]	9,750	*
Shelley Thunen[13]	9,750	*
Jeff George[14]	9,750	*
Kimberlee C. Drapkin[15]	18,188	*
All directors and executive officers as a group (10 persons)[16]	1,876,246	6.8 %

* Less than 1%

(1) Consists of (i) 2,714,002 shares of Common Stock received by Alpha Wave Ventures II, LP in the Merger as an equityholder of record of LENZ OpCo, and (ii) 898,209 shares of Common Stock purchased by Alpha Wave Ventures II, LP in the March 2024 PIPE Financing. Alpha Wave Ventures GP, Ltd is the general partner of Alpha Wave Ventures II, LP and therefore may be deemed to have beneficial ownership over these shares. The address of Alpha Wave Ventures GP, Ltd is 667 Madison Ave, 19th Floor, New York, New York 10065.

(2) Consists of (i) 1,017,751 shares of Common Stock received by Point72 Biotech Private Investments, LLC – Series LT ("Point72 Biotech") in the Merger as an equityholder of LENZ OpCo, and (ii) 864,942 shares of Common Stock purchased by Point72 Associates, LLC ("Point72 Associates") in the March 2024 PIPE Financing. Differentiated Ventures Investments, LLC ("Differentiated Ventures"), a Delaware limited liability company, is the managing member of Point72 Biotech and may be deemed to share beneficial ownership of the shares held by Point72 Biotech. 72 Investment Holdings, LLC ("72 Investment Holdings"), a Delaware limited liability company, is the sole member of Differentiated Ventures and may be deemed to share beneficial ownership of the shares of which Differentiated Ventures may be deemed to share beneficial ownership. Steven A. Cohen ("Mr. Cohen") is the sole member of 72 Investment Holdings and may be deemed to share beneficial ownership of the shares of which 72 Investment Holdings may be deemed to share beneficial ownership. Each of Differentiated Ventures, 72 Investment Holdings, and Mr. Cohen disclaims beneficial ownership of the shares held by Point72 Biotech. Pursuant to an investment management agreement, Point72 Asset Management, L.P. ("Point72 Asset Management"), a Delaware limited partnership, maintains investment and voting power with respect to the shares held by Point72 Associates and therefore may be deemed to share beneficial ownership of such shares. Point72 Capital Advisors, Inc. ("Point72 Capital Advisors") a Delaware corporation, is the general partner of Point72 Asset Management and may be deemed to share beneficial ownership of the shares of which Point72 Asset Management may be deemed to share beneficial ownership. Mr. Cohen is the sole member of Point72 Capital Advisors and may be deemed to share beneficial ownership of the shares of which Point72 Capital Advisors may be deemed to share beneficial ownership. Each of Point72 Asset Management, Point72 Capital Advisors and Mr. Cohen disclaims beneficial ownership of the shares held by Point72 Associates. The address for these entities and individuals is c/o Point72, L.P., 72 Cummings Point Road, Stamford, CT 06902.

(3) Consists of (i) 2,386,301 shares of Common Stock received by RA Capital Healthcare Fund, L.P. ("RACHF") in the Merger as an equityholder of LENZ OpCo, (ii) 629,784 shares of Common Stock received by RA Capital Nexus Fund II, L.P. ("Nexus II") in the Merger as an equityholder of LENZ OpCo, (iii) 164,729 shares of Common Stock received by a separately managed account (the "Account," and together with RACHF and Nexus II, the "RA Funds") in the Merger as an equityholder of LENZ OpCo, (iv) 54,582 shares of Common Stock subject to warrants to purchase shares of Common Stock held by RACHF as an equityholder of LENZ OpCo, (v) 10,580 shares of Common Stock subject to warrants to purchase shares of Common Stock held by Nexus II as an equityholder of LENZ OpCo, (vi) 5,371 shares of Common Stock subject to warrants to purchase shares of Common Stock held by the Account as an equityholder of LENZ OpCo, (vii) 933,038 shares of Common Stock purchased by RACHF in the March 2024 PIPE Financing, (viii) 64,971 shares of Common Stock purchased by Nexus II in the March 2024 PIPE Financing, and (ix) 9,750 shares of Common Stock subject to options held by Dr. Scheiner exercisable within 60 days of March 12, 2025. RA Capital Management, L.P. is the investment manager for the RA Funds. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky, Ph.D. and Rajeev Shah are the managing members. Each of RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the securities held by the RA Funds. RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah disclaim beneficial ownership of such securities, except to the extent of any pecuniary interest therein. The principal business address of the persons and entities listed above is 200 Berkeley Street, 18th Floor, Boston, MA 02116.

(4) Consists of (i) 598,203 shares of Common Stock received by Versant Vantage II, L.P. ("Versant Vantage II") in the Merger as an equityholder of LENZ OpCo, (ii) 1,598,789 shares of Common Stock received by Versant Venture Capital VII, L.P. ("Versant VII") in the Merger as an equityholder of LENZ OpCo, (iii) 70,534 shares of Common Stock subject to warrants to purchase shares of Common Stock held by Versant VII as

an equityholder of LENZ OpCo, (iv) 2,101,199 shares of Common Stock held by Versant Venture Capital VI, LP ("Versant Capital VI"), and (v) 243,959 shares of Common Stock held by Versant Vantage II. Versant Vantage II GP-GP is the general partner of Versant Vantage II GP, which is the general partner of Versant Vantage II. Each of Versant Vantage II GP and Versant Vantage II GP-GP share voting and dispositive power with respect to the shares held by Versant Vantage II. Versant Ventures VI GP-GP, LLC ("Versant Ventures VI GP-GP") is the general partner of Versant Ventures VI GP, L.P. ("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 Ventures VII GP-GP is the general partner of Versant Ventures VII GP, which is the general partner of Versant VII. Each of Versant Ventures VII GP and Versant Ventures VII GP-GP share voting and dispositive power with respect to the securities held by Versant VII. The address for each of the entities mentioned in this footnote is One Sansome Street, Suite 1650, San Francisco, CA 94104.

(5) Consists of (i) 1,578,947 shares of common stock purchased in the July 2024 PIPE Financing and (ii) an additional 372,928 shares of common stock. Ridgeback Capital Investments, LLC, or RCI, is the general partner of Ridgeback Capital Investments L.P., or RCILP. Pursuant to an investment management agreement, Ridgeback Capital Management LLC, or RCM, maintains investment and voting power with respect to the securities held or controlled by RCI. Wayne Holman, an individual, controls RCM. By reason of the provisions of Rule 13d-3 of the Securities Exchange Act of 1934, as amended, RCM and RCI may be deemed to own beneficially all of shares owned directly by RCILP. Each of RCM and RCI disclaim beneficial ownership of any of our company's securities referenced above. The address for RCILP, RCI, RCM and Mr. Holman 348 W. 14th St., Fl. 4, New York, NY 10014.

(6) Consists of (i) 49,200 shares of Common Stock held by Mr. Schimmelpennink and (ii) 720,367 shares of Common Stock subject to options held by Mr. Schimmelpennink exercisable within 60 days of March 12, 2025.

(7) Consists of (i) 3,333 shares of Common Stock held by Mr. Olsson and (ii) 151,123 shares of Common Stock subject to options held by Mr. Olsson exercisable within 60 days of March 12, 2025.

(8) Consists of (i) 99,599 shares of Common Stock received by Dr. Odrich in the Merger as an equityholder of LENZ OpCo, and (ii) 60,713 shares of Common Stock subject to options held by Dr. Odrich exercisable within 60 days of March 12, 2025.

(9) Consists of shares of (i) 3,188 shares of Common Stock held by Mr. Chevallard and (ii) 54,166 shares of Common Stock subject to options held by Mr. Chevallard exercisable within 60 days of March 12, 2025.

(10) Consists of shares of Common Stock subject to options held by Dr. Guerard exercisable within 60 days of March 12, 2025.

(11) Consists of (i) 95,034 shares of Common Stock received by James McCollum in the Merger as an equityholder of LENZ OpCo, which have been transferred to the McCollum Living Trust (ii) 477,600 shares of Common Stock received by the McCollum Living Trust in the Merger as an equityholder of LENZ OpCo, (iii) 6,575 shares of Common Stock subject to warrants to purchase shares of Common Stock held by the McCollum Living Trust as an equityholder of LENZ OpCo, (iv) 16,633 shares of common stock purchased by the McCollum Living Trust in the March 2024 PIPE Financing, (v) 31,332 purchased by the McCollum Living Trust in the open market, and (vi) 9,750 shares of Common Stock subject to options held by Mr. McCollum exercisable within 60 days of March 12, 2025. Mr. McCollum is a trustee of the McCollum Living Trust and as such has voting and investment control over the shares held by the McCollum Living Trust.

(12) Consists of shares of Common Stock subject to options held by Dr. Scheiner exercisable within 60 days of March 12, 2025. Dr. Scheiner is employed as a principal at RA Capital Management, L.P. Dr. Scheiner does not have voting or dispositive control over the shares held by the entities affiliated with RA Capital Management referenced in footnote 3 above.

(13) Consists of shares of Common Stock subject to options held by Ms. Thunen exercisable within 60 days of March 12, 2025.

(14) Consists of shares of Common Stock subject to options held by Mr. George exercisable within 60 days of March 12, 2025.

(15) Consists of shares of Common Stock subject to options held by Ms. Drapkin exercisable within 60 days of March 12, 2025.

(16) Consists of (i) 775,919 shares of Common Stock beneficially owned by our executive officers and directors, (ii) 1,093,752 shares of Common Stock subject to options held our executive officers and directors and exercisable within 60 days of March 12, 2025, and (iii) 6,575 shares of Common Stock subject to warrants beneficially owned by our executive officers and directors.

Please see the sections titled "*Executive Compensation*" and "*Certain Relationships and Related Transactions, and Director Independence*" appearing elsewhere in this Annual Report on Form 10-K for information regarding material relationships with our principal securityholders within the past two years.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Described below are any transactions occurring since January 1, 2023 and any currently proposed transactions to which we or either of Graphite or LENZ OpCo was a party and in which:

- the amounts involved exceeded or will exceed the lesser of $120,000 or 1% of the average of our, Graphite or LENZ OpCo's total assets, as applicable, at year-end for the last two completed fiscal years; and
- a director, executive officer, holder of more than 5% of the outstanding capital stock of us, Graphite or LENZ OpCo, or any member of such person's immediate family had or will have a direct or indirect material interest.

Certain Relationships and Related Person Transactions—Graphite

License and Option to Acquire Nula-Cel Assets

On August 4, 2023, Graphite entered into a license and option agreement ("LOA") with Kamau Therapeutics, Inc. ("Kamau") pursuant to which it exclusively licensed to Kamau, and granted Kamau, an option to acquire certain intellectual property and materials related to its nula-cel program and related pre-clinical platform assets. The option included rights to assume the exclusive license agreement and the option agreement with The Board of Trustees of the

Leland Stanford Junior University, as well as the license agreement with Integrated DNA Technologies, Inc., among other agreements. Exercise of the option was contingent on Kamau raising a minimum of $10 million in funds no later than August 4, 2024 (the "Financing Milestone"), which contingency could be waived by Graphite. In return for this license and option, Graphite received an equity interest in Kamau representing 20% of all outstanding shares on a fully diluted basis subject to dilution protection until the Financing Milestone. The LOA includes customary representations and warranties, limitations of liability and indemnification obligations for a transaction of this nature. The LOA automatically expires upon the first to occur of: (1) Kamau's exercise of the option, (2) Kamau's failure to exercise the option within a specified exercise period following achievement of the financing milestone, or (3) Kamau's failure to achieve the financing milestone by a pre-agreed deadline. In addition, either party has the right to terminate the LOA for the uncured material breach or insolvency of the other party, and Graphite has the right to terminate the LOA if Kamau challenges any of the patent rights that are subject to the option. As a result of the 20% equity interest, Graphite has the ability to exert significant influence over Kamau and accounts for the interest as an equity method investment. Graphite records its proportionate share of investee's equity in earnings or losses based on the most recently available financial information. Dr. Porteus, a director of Graphite prior to the closing of the Merger and stockholder of Graphite, is the founder and chief executive officer of Kamau. The 20% equity interest in the counterparty had minimal value upon execution of the LOA and Graphite did not record any amount in the financial statements related to the equity interest in the counterparty.

On September 12, 2023, Graphite and Kamau entered into an amendment to the LOA, under which Graphite agreed to assign certain contracts to Kamau prior to exercise of the option. On March 20, 2024, Kamau and Graphite executed a Patent and Trademark Assignment agreement reflecting Kamau's exercise of the option.

Sale of Non-Genotoxic Targeted Conditioning Technology Assets

On August 1, 2023, Graphite entered into an asset purchase agreement ("APA") with Maro Bio Inc. ("Maro") pursuant to which Graphite sold to Maro, concurrently with the execution of the APA, certain assets related to its non-genotoxic conditioning technology in exchange for upfront consideration of $0.5 million. Maro was formed by Samsara BioCapital and funds affiliated with Versant Ventures, both of which were greater than 5% stockholders of Graphite. Additional consideration included certain contingent milestone payments totaling up to approximately $1.0 million in the aggregate, and potential fees upon the completion of certain transactions by the acquirer. The APA also provided for reimbursement of certain research and development amounts incurred prior to closing of approximately $0.6 million as well as certain transition services to be provided by Graphite to Maro. Under the APA, Maro will also pay us a sub single digit percentage cash royalty of worldwide net sales of certain products incorporating the acquired technology. The royalty term will terminate on a product-by-product and country-by-country basis on the latest of (i) the ten (10) year anniversary of the first commercial sale of such product in such country, (ii) the expiration of the last-to-expire valid claim of a transferred patent that covers such product in such country, and (iii) the expiration of regulatory exclusivity with respect to such product in such country. The APA also includes customary representations and warranties, covenants and indemnification obligations for a transaction of this nature.

The disposal of certain assets sold pursuant to the APA was accounted for as a deconsolidation of a subsidiary or group of assets in accordance with ASC 810. During the year ended December 31, 2023, Graphite recognized a loss on disposal of $0.1 million, which was recorded in other income. We will record amounts related to the contingent milestone payments, royalties, and potential transaction fees when contingencies are resolved and amounts are due in accordance with ASC 450. No contingencies were resolved and recorded as of December 31, 2024.

March 2024 PIPE Financing

On November 14, 2023, in connection with the execution of the Merger Agreement, Graphite entered into a subscription agreement with investors. Pursuant to the subscription agreement, on the closing date of the Merger and immediately prior to the effective time of the Merger, the investors subscribed for and purchased an aggregate of 3,559,565 shares of Common Stock at a price of $15.0299 per share for aggregate gross proceeds of approximately $53.5 million. The table below sets forth the number of shares of Common Stock purchased by related party holders in the March 2024 PIPE Financing:

Participant	Shares of Common Stock	Total Purchase Price ($)
Entities affiliated with RA Capital[(1)]	998,009	$ 14,999,975
Alpha Wave Ventures II, LP[(2)]	898,209	$ 13,499,991
Sectoral Asset Management Inc.[(3)]	332,670	$ 4,999,997
McCollum Living Trust[(4)]	16,633	$ 249,992

(1) Zach Scheiner, a member of the LENZ board of directors, is an affiliate of RA Capital.

(2) Chris Dimitropoulos, a member of LENZ OpCo's board of directors until immediately prior to the effective time of the Merger, is an affiliate of Alpha Wave Ventures II, LP.

(3) Stefan Larson, a member of LENZ OpCo's board of directors until immediately prior to the effective time of the Merger, is a partner at Sectoral Asset Management Inc.

(4) James McCollum, a member of the LENZ board of directors, is the trustee of the McCollum Living Trust.

In connection with the subscription agreement, Graphite entered into a registration rights agreement, contemporaneously with the sale of shares pursuant to the March 2024 PIPE Financing, with the investors pursuant to which Graphite agreed to prepare and file a registration statement with the SEC within 10 days after the closing of the March 2024 PIPE Financing for the purposes of registering the resale of the shares. LENZ filed a registration statement on Form S-1 on March 29, 2024 and amended such registration statement on April 9, 2024, and such registration statement was declared effective by the SEC on April 10, 2024. Graphite also agreed, among other things, to indemnify the investors, their officers, directors, members, employees and agents, successors and assigns under the registration statement from certain liabilities and pay all fees and expenses (excluding any legal fees of the selling holder(s), and any underwriting discounts and selling commissions) incidents to Graphite's obligations under the registration rights agreement.

Support Agreements Under the Merger

Concurrently with the execution of the Merger Agreement, (i) certain Graphite stockholders entered into the Graphite Support Agreements with Graphite and LENZ to vote all of their shares of Graphite common stock in favor of the proposals relating to the Merger and related transactions, and (ii) certain LENZ OpCo stockholders entered into the LENZ OpCo Support Agreements with LENZ OpCo and to vote all of their shares of LENZ OpCo capital stock in favor of the Merger Agreement and the related contemplated transactions and against any alternative acquisition proposals.

Lock-Up Agreements

Concurrently with the execution of the Merger Agreement, certain executive officers, directors and stockholders of Graphite and LENZ OpCo entered into the Lock-Up Agreements with Graphite, pursuant to which such parties agreed not to, except in limited circumstances, sell or transfer their shares of Graphite common stock, for the 90-day period following the closing.

Graphite Indemnification Agreements

Graphite has entered into agreements, and in the future plan to enter into agreements, to indemnify its directors and executive officers. These agreements, among other things, require Graphite to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in Graphite's right, on account of any services undertaken by such person on behalf of Graphite or that person's status as a member of the Graphite board of directors to the maximum extent allowed under Delaware law.

Certain Relationships and Related Person Transactions—LENZ OpCo

Private Placements of Securities

Series B Preferred Stock Financing. In March 2023, LENZ OpCo issued and sold an aggregate of 28,019,181 shares of its Series B Preferred Stock at a purchase price of $2.9801 per share for an aggregate purchase price of approximately $83.5 million.

Purchasers of LENZ OpCo's Series B Preferred Stock included certain of its directors and holders of more than 5% of its capital stock at the time of the financing. The following table presents the number of shares and the total purchase price paid by these entities:

Investor	Shares of Series B Preferred Stock	Total Purchase Price
Alpha Wave Ventures II, LP[(1)]	13,422,368	$ 39,999,999
Point72 Biotech Private Investments, LLC-Series LT	5,033,388	$ 15,000,000
Entities affiliated with RA Capital[(2)]	5,033,388	$ 15,000,000
Entities affiliated with Versant Ventures[(3)]	167,779	$ 499,998
McCollum Living Trust[(4)]	167,779	$ 499,998
Entities affiliated with RTW	167,779	$ 499,998

(1) Chris Dimitropoulos, a member of the LENZ OpCo board of directors until immediately prior to the effective time of the Merger, is an affiliate of Alpha Wave Ventures II, LP.

(2) Zach Scheiner, a member of the LENZ board of directors, is an affiliate of RA Capital.

(3) Clare Ozawa, a member of the LENZ OpCo board of directors until immediately prior to the effective time of the Merger, is an affiliate of Versant Ventures.

(4) James McCollum, a member of the LENZ board of directors, is the trustee of the McCollum Living Trust.

The number of shares and purchase price per share set forth above are prior to giving effect to the exchange in accordance with the Merger Agreement.

Investors' Rights Agreement

LENZ OpCo was a party to an amended and restated investors' rights agreement with certain holders of its capital stock, including Alpha Wave Ventures II, LP, Point72 Biotech Private Investments, LLC-Series LT, entities affiliated with Versant Ventures and entities affiliated with RA Capital. Under LENZ OpCo's amended and restated investors' rights agreement, certain holders of its capital stock had the right to demand that LENZ OpCo file a registration statement or request that their shares of LENZ OpCo capital stock be covered by a registration statement that LENZ OpCo was otherwise filing. LENZ OpCo's amended and restated investors' rights agreement terminated in connection with the closing.

Voting Agreement

LENZ OpCo was a party to an amended and restated voting agreement, as amended, with certain holders of its capital stock, including, among others, Evert Schimmelpennink, its President, Chief Executive Officer and a member of its board of directors, Shawn Olsson, its Chief Commercial Officer, James McCollum, a member of its board of directors, Marc Odrich, its Chief Medical Officer, Alpha Wave Ventures II, LP, Point72 Biotech Private Investments, LLC-Series LT, entities affiliated with Versant Ventures and entities affiliated with RA Capital. The parties to the voting agreement agreed, subject to certain conditions, to vote the shares of LENZ OpCo capital stock held by them so as to maintain the size of the board of directors at eight (8) and to elect certain nominees to the board of directors.

Upon the closing of the Merger, the obligations of the parties to the voting agreement to vote their shares so as to elect these nominees, as well as the other rights and obligations under this agreement, terminated and none of the LENZ OpCo stockholders have any special rights regarding the nomination, election or designation of members of the board of directors of LENZ Therapeutics pursuant to such agreement.

LENZ OpCo Indemnification Agreements and Insurance

LENZ OpCo has entered, and intends to continue to enter, into separate indemnification agreements with each of its directors and executive officers, in addition to the indemnification provided for in its certificate of incorporation and

bylaws. The indemnification agreements and its certificate of incorporation and bylaws generally require LENZ to indemnify its directors, executive officers and certain controlling persons to the fullest extent permitted by Delaware law.

LENZ OpCo Policies for Approval of Related Party Transactions

LENZ OpCo did not have a written policy regarding the review and approval of related person transactions. Nevertheless, with respect to such transactions, it had been the practice of the LENZ OpCo board of directors to consider the nature of and business reasons for such transactions, how the terms of such transactions compared to those which might be obtained from unaffiliated third parties and whether such transactions were otherwise fair to and in the best interests of, or not contrary to, LENZ OpCo's best interests.

Our Policies and Procedures for Related Party Transactions

Our board of directors has adopted a written Related Person Transactions Policy that sets forth our policies and procedures regarding the identification, review, consideration and oversight of "related person transactions." For purposes of our policy only, a "related person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we or any of our subsidiaries are participants involving an amount that exceeds $120,000, in which any "related person" has a material interest.

Transactions involving compensation for services provided to us as an employee, consultant or director will not be considered related person transactions under this policy. A related person is any executive officer, director, nominee to become a director or a holder of more than 5% of any class of our voting securities (including our Common Stock), including any of their immediate family members and affiliates, including entities owned or controlled by such persons.

Under the policy, the related person in question or, in the case of transactions with a holder of more than 5% of any class of our voting securities, an officer with knowledge of a proposed transaction, must present information regarding the proposed related person transaction to our audit committee (or, where review by our audit committee would be inappropriate, to another independent body of our board of directors) for review. To identify related person transactions in advance, we will rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related person transactions, our audit committee will take into account the relevant available facts and circumstances, which may include, but are not limited to:

- the risks, costs, and benefits to us;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties.

Our audit committee will approve only those transactions that it determines are fair to us and in our best interests. All of the transactions described above were entered into prior to the adoption of such policy.

Item 14. Principal Accountant Fees and Services

The following table presents fees for professional audit services and other services rendered by Ernst & Young LLP to us for the years ended December 31, 2024 and 2023.

	2024	2023
Audit Fees[(1)]	$ 1,127,084	$ 1,532,008
Audit-Related Fees[(2)]	—	—
Tax Fees[(3)]	—	76,735
All Other Fees[(4)]	—	—
Total Fees	$ 1,127,084	$ 1,608,743

(1) "Audit Fees" consist of fees billed for professional services rendered in connection with the audit of our consolidated financial statements, reviews of our quarterly condensed consolidated financial statements and related accounting consultations and services that are normally provided by the

independent registered public accountants in connection with regulatory filings or engagements for those fiscal years. These fees included the issuance of consents in connection with registration statement filings with the SEC.

(2) "Audit-Related Fees" consist of fees for other audit-related professional services.

(3) "Tax Fees" consist of fees billed for professional services rendered by Ernst & Young LLP for tax compliance, tax advice and tax planning.

(4) "All Other Fees" any fees billed that are not audit, audit-related or tax fees.

Auditor Independence

In 2024, there were no other professional services provided by Ernst & Young LLP, other than those listed above, that would have required our audit committee to consider their compatibility with maintaining the independence of Ernst & Young LLP.

Audit Committee Policy on Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

Effective upon the closing of the Merger, our audit committee established a policy governing our use of the services of our independent registered public accounting firm. Under this policy, our audit committee is required to pre-approve all services performed by our independent registered public accounting firm in order to ensure that the provision of such services does not impair such accounting firm's independence. Since the adoption of this policy, all services provided by Ernst & Young LLP have been pre-approved by our audit committee.

Part IV

Item 15. Exhibits and Financial Statement Schedules

(a) *1. Financial Statements*. See Index to consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K, which is incorporated herein by reference.

2. Financial Statement Schedules. All financial statement schedules have been omitted because they are either not applicable or the required information is shown in the consolidated financial statements or notes thereto.

3. Exhibits. See the Exhibit Index which precedes the signature page of this Annual Report on Form 10-K, which is incorporated herein by reference.

(b) *Exhibits*

See Item 15(a)(3) above.

(c) *Financial Statement Schedules*

See Item 15(a)(2) above.

EXHIBITS

Exhibit Number	Description
2.1†	Agreement and Plan of Merger, dated as of November 14, 2023, by and among Graphite Bio, Inc., Generate Merger Sub, Inc. and LENZ Therapeutics, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on November 15, 2023).
3.1	Amended and Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the SEC on June 30, 2021).
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to Amendment No. 1 to the Company's Registration Statement on Form S-1 filed with the SEC on June 11, 2021).
4.2	Form of Warrant to Purchase Shares of Series A Preferred Stock (incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-4 filed with the SEC on December 6, 2023).
4.3	Amended and Restated Investors' Rights Agreement by and among Graphite Bio, Inc. and certain of its stockholders, dated March 11, 2021 (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1 filed with the SEC on June 4, 2021).
4.4*	Description of Securities
10.1+	2020 Stock Option and Grant Plan and forms of award agreements thereunder (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1 filed with the SEC on June 4, 2021).
10.2+	2021 Stock Option and Incentive Plan and forms of award agreements thereunder (incorporated by reference to Exhibit 10.2 to Amendment No. 2 to the Company's Registration Statement on Form S-1 filed with the SEC on June 21, 2021).
10.3+	2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.3 to Amendment No. 2 to the Company's Registration Statement on Form S-1 filed with the SEC on June 21, 2021).
10.4+	2020 Equity Incentive Plan and related form agreements (incorporated by reference to Exhibit 10.31 to the Company's Registration Statement on Form S-4 filed with the SEC on February 9, 2024).
10.5	Subscription Agreement, dated November 14, 2023, by and among Graphite Bio, Inc. and certain parties thereto (incorporated by reference to Exhibit 10.4 to the Company's Form 8-K filed with the SEC on November 15, 2023).
10.6+	2024 Equity Incentive Plan and related form agreements (incorporated by reference to Exhibit 10.9 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).

Exhibit Number	Description
10.7+	2024 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.10 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
10.8+	Employment Offer Letter between LENZ Therapeutics, Inc. and Evert Schimmelpennink dated March 21, 2024 (incorporated by reference to Exhibit 10.11 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
10.9+	Employment Offer Letter between LENZ Therapeutics, Inc. and Marc Odrich dated March 21, 2024 (incorporated by reference to Exhibit 10.12 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
10.10+	Employment Offer Letter between LENZ Therapeutics, Inc. and Shawn Olsson dated March 21, 2024 (incorporated by reference to Exhibit 10.13 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
10.11+	Employment Offer Letter between LENZ Therapeutics, Inc. and Dan Chevallard dated March 21, 2024 (incorporated by reference to Exhibit 10.14 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
10.12+	Executive Change in Control and Severance Policy and form of participation agreement (incorporated by reference to Exhibit 10.41 to the Company's Registration Statement on Form S-4 filed with the SEC on December 6, 2023).
10.13+	Outside Director Compensation Policy (incorporated by reference to Exhibit 10.16 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
10.14+	Employee Incentive Compensation Plan (incorporated by reference to Exhibit 10.43 to the Company's Registration Statement on Form S-4 filed with the SEC on February 9, 2024).
10.15	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.44 to the Company's Registration Statement on Form S-4 filed with the SEC on February 9, 2024).
10.16#	License and Collaboration Agreement by and between LENZ and Ji Xing Pharmaceuticals Hong Kong Limited, dated April 12, 2022 (incorporated by reference to Exhibit 10.30 to the Company's Registration Statement on Form S-4 filed with the SEC on January 18, 2024).
10.18	Registration Rights Agreement, dated March 21, 2024, by and among LENZ Therapeutics, Inc. and certain parties thereto (incorporated by reference to Exhibit 10.21 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
10.19	Stock Purchase Agreement, dated July 14, 2024, by and among LENZ Therapeutics, Inc. and Ridgeback Capital Investment, L.P. (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed with the SEC on August 14, 2024).
16.1	Letter from Deloitte & Touche LLP to the SEC, dated March 21, 2024 (incorporated by reference to Exhibit 16.1 to the Company's Current Report on Form 8-K filed with the SEC on March 22, 2024).
19.1*	Insider Trading Policy.
21.1	List of Subsidiaries of the Registrant (incorporated by reference to Exhibit 21.1 to the Company's Registration Statement on Form S-1 filed with the SEC on March 29, 2024)
23.1*	Consent of Independent Registered Public Accounting Firm.
31.1*	Certification of Principal Executive 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.
31.2*	Certification of 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 Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*^	Certification of 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*	Compensation Recovery Policy.
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document

Exhibit Number	Description
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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* Filed herewith.

+ Indicates management contract or compensatory plan.

† Schedules and exhibits to this Exhibit omitted pursuant to Regulation S-K Item 601(b)(2). The Registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

Portions of the exhibit were omitted pursuant to Regulation S-K Item 601(b)(10). The Registrant agrees to furnish to the SEC a copy of any omitted portions of the exhibit upon request.

^ The certifications attached as Exhibit 32.1 and 32.2 that accompany this Annual Report on Form 10-K are deemed furnished and not filed with the SEC and are not to be incorporated by reference into any filing of LENZ Therapeutics, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

LENZ THERAPEUTICS, INC.

Dated: March 19, 2025

By:	/s/ Evert Schimmelpennink
Name:	Evert Schimmelpennink
Title:	Chief Executive Officer
	(Principal Executive Officer)

Dated: March 19, 2025

By:	/s/ Daniel Chevallard
Name:	Daniel Chevallard
Title:	Chief Financial Officer
	(Principal Financial and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Evert Schimmelpennink and Daniel Chevallard, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact, proxy and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact, proxy and agent, or his or her substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Evert Schimmelpennink Evert Schimmelpennink	Chief Executive Officer, President and Director (Principal Executive Officer)	March 19, 2025
/s/ Daniel Chevallard Daniel Chevallard	Chief Financial Officer (Principal Financial and Accounting Officer)	March 19, 2025
/s/ Jeff George Jeff George	Director	March 19, 2025
/s/ Frederic Guerard Frederic Guerard	Director	March 19, 2025
/s/ James McCollum James McCollum	Director	March 19, 2025
/s/ Zach Scheiner Zach Scheiner	Director	March 19, 2025
/s/ Shelley Thunen Shelley Thunen	Director	March 19, 2025

/s/ Kimberlee C. Drapkin Kimberlee C. Drapkin	Director	March 19, 2025