Risk Factors Comparison 2024-02-29 to 2023-03-29 Form: 10-K

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This Annual Report on Form 10- K contains forward- looking statements that are based on our management' s ~~belief~~ **beliefs** and assumptions and on information currently available to our management. These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward- looking statements. Forward- looking statements include, but are not limited to, statements about: • Our **ability to successfully commercialize** ~~reliance on a single lead product candidate,~~ LUMRYZ **(sodium oxybate) in the U. S. for the treatment of cataplexy or excessive daytime sleepiness (" EDS ") in adults with narcolepsy; • Our plans with respect to our commercial infrastructure and marketing** ~~, also known as FT218~~ **market access and commercial activities** ; • Our ability to ~~obtain final~~ **maintain and receive additional regulatory** ~~approval~~ **approvals for** ~~from the FDA to commercialize~~ LUMRYZ **in** ~~, including~~ any ~~delays~~ **other jurisdictions outside the U. S., and any related restrictions, limitations, and / or warnings** in **the label of LUMRYZ** ~~a final approval to launch~~ ; • **Our expectations regarding** ~~The ability of LUMRYZ, if granted final approval by~~ the **rate** ~~FDA, to be successfully commercialized~~ and ~~gain~~ **degree of** market acceptance **for LUMRYZ** ; • Our ability to enter into strategic partnerships for the commercialization, manufacturing and distribution of LUMRYZ **in** ~~, if granted final approval by~~ the ~~FDA~~ **U. S.; • Our reliance on a single product, LUMRYZ** ; • Our dependence on a limited number of suppliers for the manufacturing of LUMRYZ and certain raw materials used in LUMRYZ and any failure of such suppliers to deliver sufficient quantities of these raw materials, which could have a material adverse effect on our business **, including commercialization of LUMRYZ in the U. S.** ; • Our ability to finance our operations on acceptable terms, either through the raising of capital, the incurrence of convertible or other indebtedness, issuance of equity, royalty- based financings, or through strategic financing or commercialization partnerships; • Our expectations **regarding the pricing and reimbursement of, and the extent to which patient financial assistance programs are utilized for, LUMRYZ; • Our expectations** about the potential market size and market participation for LUMRYZ ~~, if granted final approval by the FDA~~ ; • Our expectations regarding litigation related to LUMRYZ; • Our expectations regarding ~~the timing and results of our cost structure optimization efforts, including the estimated charges and costs expected to be incurred and projected cost savings in connection with such cost structure optimization efforts; • Our expectations regarding~~ our cash runway ~~lasting~~ to **support the commercialization** ~~a potential final FDA approval~~ of ~~our NDA for~~ LUMRYZ ~~; • Our ability to continue to service our Notes, including making the ongoing interest payments on the Notes, settling exchanges of the Notes~~ in ~~cash or completing any required repurchases of~~ the ~~Notes~~ **U. S.** ; • The potential impacts of ~~COVID- 19,~~ inflation and rising interest rates on our business and future operating results; • Our ability to hire and retain key members of our leadership team and other personnel; **• The potential impacts due to global political instability and conflicts, such as terrorism, civil unrest, war and natural disasters in foreign countries on our business, financial condition and results of operations;** and • Competition existing today or that may arise in the future. These forward- looking statements are neither promises nor guarantees of future performance due to a variety of risks and uncertainties and other factors more fully discussed in the " Risk Factors " section in Part I, Item 1A of this Annual Report on Form 10- K and the risk factors and cautionary statements described in other documents that we file from time to time with the SEC. Given these uncertainties, readers should not place undue reliance on our forward- looking statements. These forward- looking statements speak only as of the date on which the statements were made and are not guarantees of future performance. Except as may be required by applicable law, we do not undertake to update any forward- looking statements after the date of this Annual Report or the respective dates of documents incorporated by reference herein or therein that include forward- looking statements, even if new information becomes available in the future. **- 5-** NOTE REGARDING TRADEMARKS We own various trademark registrations and applications, and unregistered trademarks, including **, but not limited to,** AVADELTM, LUMRYZTM ~~, MICROPUMPTM, LIQUITIMETM,~~ and ~~MEDUSATM~~ **RYZUPTM** . ~~All other trade~~ **Trade** names, trademarks and service marks of other companies appearing in this Annual Report are the property of their respective holders. Solely for convenience, the trademarks and trade ~~- 6-~~ names in this Annual Report may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend to use or display other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies. From time to time, we may use our website, LinkedIn or our **X, formerly known as** Twitter **,** account (@ AvadelPharma) to distribute material information. Our financial and other material information is routinely posted to and accessible on the Investors section of our website, available at www. avadel. com. Investors are encouraged to review the Investors section of our website because we may post material information on that site that is not otherwise disseminated by us. Information that is contained in and can be accessed through our website, our LinkedIn posts or our Twitter posts are not incorporated into, and does not form a part of, this Annual Report.- ~~7~~ **6** - PART I Item 1. Business. (Dollar amounts in thousands, except per- share amounts and as otherwise noted) General Overview Avadel Pharmaceuticals plc (Nasdaq: AVDL) (" Avadel, " the " Company, " " we, " " our, " or " us ") is a biopharmaceutical company. ~~Our lead product candidate,~~ LUMRYZ ~~, also known as FT218,~~ is an ~~investigational once- at- bedtime,~~ extended- release formulation of sodium oxybate **indicated to be taken once at bedtime** for the treatment of cataplexy or ~~excessive daytime sleepiness (" EDS ")~~ in adults with narcolepsy. ~~We are primarily focused on obtaining final U. S. FDA approval of LUMRYZ and the launch of LUMRYZ, if approved. Outside of our lead product candidate, we continue to evaluate opportunities to~~

expand our product portfolio. As of the date of this Annual Report, we do not have any commercialized products in our portfolio. LUMRYZ is **the only commercialized product in** an investigational once- at- bedtime formulation of sodium oxybate that uses our proprietary drug- delivery technology **portfolio. We continue to evaluate opportunities to expand our product portfolio. LUMRYZ was approved by the FDA on May 1, 2023** for the treatment of cataplexy or EDS in adults with narcolepsy. Sodium **In approving LUMRYZ, the FDA required a REMS for LUMRYZ to help ensure that the benefits of the drug in the treatment of cataplexy and EDS in adults with narcolepsy outweigh the risks of serious adverse outcomes resulting from inappropriate prescribing, misuse, abuse, and diversion of the drug. Under this REMS, healthcare providers who prescribe the drug must be specially certified; pharmacies that dispense the drug must be specially certified; and the drug must be dispensed only to patients who have enrolled in the LUMRYZ REMS and completed all REMS requirements including documentation of safe use conditions, among other requirements. Additionally, with its approval, the FDA also granted seven years of orphan drug exclusivity to LUMRYZ for the treatment of cataplexy or EDS in adults with narcolepsy due to a finding of clinical superiority of LUMRYZ relative to currently marketed** oxybate **treatments** is the sodium salt of gamma hydroxybutyrate, an endogenous compound and metabolite of the neurotransmitter gamma- aminobutyric acid . Immediate release sodium **In particular, the FDA found that LUMRYZ makes a major contribution to patient care over currently marketed, twice- nightly** oxybate is approved in **treatments by providing a once- nightly dosing regimen that avoids nocturnal arousal to take a second dose. The orphan exclusivity will continue until May 1, 2030. In June 2023, we announced** the U. S. **commercial launch of LUMRYZ** for the treatment of cataplexy **or EDS** in **adults living with** narcolepsy **. Numerous LUMRYZ- related U. S. patents have been issued having expiration dates spanning from mid- 2037 to early- 2042, and there are additional patent applications currently in development and / or pending at the U. S. Patent and Trademark Office (" USPTO "),** as well as **foreign patent offices** EDS in narcolepsy and is approved in Europe for the treatment of cataplexy in narcolepsy . **We currently have numerous** Since 2002, sodium oxybate has only been available as an immediate- release formulation that must be taken twice nightly, first at bedtime, and then again 2. 5 to 4 hours later. On July 18, 2022, the FDA granted tentative approval to LUMRYZ for the treatment of cataplexy or EDS in adults with narcolepsy. Tentative approval indicates that LUMRYZ has met all required quality, safety, and efficacy standards necessary for approval in the U. S. as of the date that the tentative approval was granted, but that the drug cannot receive final FDA approval until expiry or other disposition of a third- party exclusivity period. That tentative approval was granted based on the FDA's determination that the LUMRYZ label implicated the use code listed in FDA's Orange Book **listed** for U. S. Patent **patents** No . 8731963 **We submitted a Supplemental New Drug Application** (the " **sNDA** REMS Patent ") **for LUMRYZ in the pediatric narcolepsy population in November 2023** . The owner of **sNDA was accepted by** the **FDA in January** REMS Patent subsequently requested delisting of that patent from the Orange Book on February 28, 2023 **2024** , and we subsequently submitted an amendment to the FDA on March 1, 2023, requesting final FDA approval of the LUMRYZ NDA. The Company is currently awaiting a final approval decision from the FDA. Based on typical target turnarounds for the FDA and information provided in the tentative approval letter with respect to minor amendments, the Company anticipates timing for a final approval decision to be around early May of 2023. There can be no guarantee that the FDA will act within the anticipated timing. The FDA's tentative approval can be subject to change based on new information that may come to the FDA's attention between such time as the tentative approval and potential final approval. We cannot legally market LUMRYZ in the U. S. until final approval is granted by the FDA. In addition, if the FDA concludes that LUMRYZ is the same drug product as a previously approved product having unexpired orphan drug exclusivity (e. g., Xywav), we would need to demonstrate that LUMRYZ is clinically superior to that previously approved product before the FDA grants final approval to our NDA. If the FDA determines the previously approved product is not the same drug product for purposes of orphan drug exclusivity, then any unexpired orphan drug exclusivity would not be relevant to a final approval decision for LUMRYZ. In an effort to expedite the time between a potential final approval of LUMRYZ and product availability, we are advancing our preparations for the commercial launch of LUMRYZ, which we expect **expected** to occur late in **September** the second quarter or sometime in the third quarter of 2023 **2024** , subject to receiving final approval by the FDA. For example, on March 15, 2023, we were notified by the FDA that we are permitted to conduct certain pre- launch activities including the importation of foreign manufactured product under the Pre- launch Activities Importation Request (" PLAIR ") Program . With respect to clinical data generated for LUMRYZ, we conducted a Phase 3 clinical trial of LUMRYZ (the " REST- ON trial "), which was a randomized, double- blind, placebo- controlled study that enrolled 212 patients who received at least one dose of LUMRYZ or placebo, and was conducted in clinical sites in the U. S., Canada, Western Europe and Australia. The last patient's last visit was completed at the end of the first quarter of 2020, and positive **Positive** top line data from the REST- ON trial was **were** announced on April 27, 2020. Patients who received 9 g of once- at- bedtime LUMRYZ, the highest dose administered in the trial, demonstrated statistically significant and clinically meaningful improvement compared to placebo across the three co- primary endpoints of the trial: maintenance of wakefulness test (" MWT "), clinical global impression- improvement (" CGI- I "), and mean weekly cataplexy attacks. The lower doses assessed, 6 g and 7. 5 g, also demonstrated statistically significant and clinically meaningful improvement on all three co- primary endpoints compared to placebo. We observed the 9 g dose of once- at- bedtime LUMRYZ to be generally well- tolerated. Adverse reactions commonly associated with sodium oxybate were- 8- observed in a small number of patients (nausea 1. 3 %, vomiting 5. 2 %, decreased appetite 2. 6 %, dizziness 5. 2 %, somnolence 3. 9 %, tremor 1. 3 % and enuresis 9 %), and 3. 9 % of the patients who received 9 g of LUMRYZ discontinued the trial due to adverse reactions. In January 2018, the FDA granted LUMRYZ orphan drug designation for the treatment of narcolepsy, which makes LUMRYZ potentially eligible for certain development and commercial incentives, including potential U. S. market exclusivity for up to seven years. Additionally, thirteen LUMRYZ- related U. S. patents have been issued, and there are additional patent applications currently in development and / or pending at the U. S. Patent and Trademark Office (" USPTO "), as well as foreign patent offices. In July 2020, we announced that the first patient was dosed in our open- label extension (" OLE

”) / switch study of LUMRYZ as a potential treatment for cataplexy or EDS in patients with narcolepsy (“ RESTORE ”) examined . The RESTORE study is examining the long- term safety and maintenance of efficacy of LUMRYZ in patients with narcolepsy who participated in the REST- ON study trial , as well as dosing and preference data for patients switching who switched from twice- nightly sodium oxybate to once- at- bedtime LUMRYZ, regardless of whether they participated in the REST- ON trial . In May 2021, inclusion criteria were expanded to allow for oxybate naïve patients to enter the study. New secondary endpoints An interim safety analysis from the ongoing RESTORE study REST- ON trial were presented at the American Academy of Neurology, beginning April 17, 2021. The first poster described LUMRYZ improvements in disturbed nocturnal sleep (“ DNS ”), defined in REST- ON as the number of shifts from stages N1, N2, N3, and rapid eye movement (“ REM ”) sleep to wake and from stages N2, N3, and REM sleep to stage N1. LUMRYZ also decreased the number of nocturnal arousals as measured on polysomnography. Improvements in DNS were further supported by post- hoc analyses demonstrating increased time in deep sleep (N3, also known as slow wave sleep), and less time in N1. A second poster described the statistically significant improvements in the Epworth Sleepiness Scale (“ ESS ”), both the quality of sleep and the refreshing nature of sleep, and a decrease in sleep paralysis. These clinically relevant improvements were observed for all doses, beginning at week 3, for the lowest 6 g dose, compared to placebo. LUMRYZ did not demonstrate significant improvement for hypnagogic hallucinations compared to placebo. Additional data supportive of the efficacy findings in REST- ON were presented at the 35th Annual Meeting of the Associated Professional Sleep Societies, a joint meeting of the American Academy of Sleep Medicine and the Sleep Research Society, also known as SLEEP 2021, beginning June 10, 2021. New data included post- hoc analyses demonstrating endpoints improvements, regardless of concomitant stimulant use, in both narcolepsy Type 1 (“ NT1 ”) or Type 2 (“ NT2 ”). Additionally, a post- hoc analysis showed that LUMRYZ was associated has generally been well- tolerated, with some decreased body mass index compared to placebo, which may be relevant as people with narcolepsy often have co- morbid obesity. In August 2021, the primary results from the REST- ON trial were published by Kushida et al. in the journal SLEEP. New data was presented at the American College of Chest Physicians annual meeting (“ CHEST ”), beginning October 17, 2021, including additional post- hoc analyses from the REST- ON trial, demonstrating a greater proportion of patients receiving therapy for more LUMRYZ experienced reductions in weekly cataplexy attacks and improvement in mean sleep latency compared to placebo, as well as the results of a discrete choice experiment, indicating that than 18 months the overall driver of patient preference between sodium oxybate treatments is a once- at- bedtime, versus twice- nightly, formulation . New In addition, interim data from RESTORE was presented at World Sleep 2022 Congress in March 2022, in Rome, Italy. A total of eight posters were presented , including five new post- hoc analyses demonstrating that a high proportion of patients switching from twice the REST- ON trial. Most notably, nightly oxybate formulations had difficulty in taking the post second dose, with a high proportion (92. 5 %) stating a preference for the once - hoc analyses showed at- bedtime dosing regimen and that most participants switching from twice- nightly oxybate formulations had a stable dose equal to LUMRYZ demonstrated improvement in subjective measures of daytime sleepiness, sleep quality and refreshing nature of sleep as early as week 1 with the their 4. 5 g starting dose , with even greater improvement . Subsequent interim data showed a preference (94. 0 %) for the once- at - bedtime dosing regimen hoc analyses, stratified by narcolepsy type, as well as concomitant stimulant use, or without stimulants, demonstrated positive results that are generally consistent with previously reported positive endpoints from REST- ON and add to the existing body of evidence for LUMRYZ . In addition, the results of a The last patient visit occurred in October 2023. A discrete choice experiment (“ DCE ”) were presented, which showed that once- at- bedtime dosing, when compared to twice- nightly dosing, was the most important attribute driving both patient and clinician preference for overall oxybate product choice, as well as patient quality of life and reduction of patient anxiety / stress; dosing frequency (twice- nightly versus once- at- bedtime) was also viewed as a more important attribute as compared to other attributes assessed, including sodium content. Accompanying the DCE was a - 7- background survey for both patients and clinicians, which showed that dosing frequency was noted as a significant stressor by both patients and clinicians. The World Sleep 2022 presentations also included the first presentation of an interim safety analysis from the ongoing RESTORE study, which showed that LUMRYZ has generally been well- tolerated, with some patients receiving therapy for more than 18 months. Additional peer- reviewed publications have included data on improvement on disturbed nocturnal sleep (“ DNS ”) , the first DCE and a Plain Language Summary reviewing sodium oxybate and cardiovascular health, which did not identify a signal of cardiovascular disease in the over - 9- twenty years that sodium oxybate has been available. At the annual 2023 SLEEP meeting Congress in June 2022 , additional LUMRYZ data nine posters were presented , including five post- hoc analyses from the pivotal REST- ON trial which support the following: • A low number- needed- to- treat to achieve effectiveness across all three evaluated doses, as well as effect sizes, showing a moderate- to- high effect for improving MWT, ESS, and number of cataplexy attacks; • Confirmation via various statistical methods to handle missing data that LUMRYZ improved cataplexy and EDS symptoms versus placebo; • Confirmation of benefit for NT1 and NT2 for DNS and ESS; • Confirmation of benefit for subgroups taking stimulants and those without stimulants for DNS and ESS; and • Early efficacy (Week 1 and Week 2) for ESS, refreshing nature of sleep and quality of sleep. In addition , interim data from the open- label RESTORE study and real- world evidence regarding sodium oxybate utilization and co- morbidities were presented demonstrating that a high proportion of patients switching . At the World Sleep meeting in October 2023, these data were presented as encores, along with new post- hoc analyses from twice- nightly sodium oxybate formulations had difficulty in taking the REST- ON trial showing additional clinical efficacy data for LUMRYZ. A second dose DCE among clinicians was published in May 2023 , showing with a high proportion (92. 5 %) stating a preference for the once- at- bedtime dosing regimen and that was the most important driver of choice, with once participants (62 %) switching from twice - nightly preferred sodium oxybate formulations had a stable dose equal to their starting dose; participants not currently taking sodium oxybate formulations or oxybate naive reached a stable dose with 2 – 4 dose titrations within four weeks . Post Additional peer - hoc analyses of narcolepsy Type 1 review

~~publications have included a relative bioavailability pharmacokinetics~~ (“ ~~PK~~ **NT1** ”) ~~study~~ and ~~a~~ **Type 2 (“ NT2 ”) were also published, demonstrating consistent improvements regardless of narcolepsy type. A third** ~~Plain~~ **plain** ~~Language~~ **language** ~~Summary~~ **summary** ~~of~~ **has been published; most recently evaluated** the **improvements of LUMRYZ on DNS** ~~primary REST- ON trial results~~. We believe LUMRYZ has the potential to demonstrate improved dosing compliance, safety **,** and patient satisfaction over ~~the~~ **other treatment options** ~~current standards of care~~ for cataplexy or EDS in patients with narcolepsy. Our Drug Delivery Technologies We own drug delivery technologies that address formulation challenges, potentially allowing the development of differentiated drug products for administration in various forms (e. g., capsules, tablets, sachets or liquid suspensions for oral use; or injectables for subcutaneous administration) that could be applied to a broad range of drugs ~~(novel, already- marketed, or off- patent)~~. A brief discussion of each of our drug delivery technologies is set forth below. • MICROPUMP. Our MICROPUMP technology allows for the development of modified release solid, oral dosage formulations of drugs. **A** ~~MICROPUMP- carvedilol and MICROPUMP- aspirin formulations have been approved in the U. S. Further, a~~ version of our MICROPUMP technology is being employed in ~~our investigational~~ LUMRYZ ~~product~~. • LIQUITIME. Our LIQUITIME technology allows for development of modified release oral products in a liquid suspension formulation, which may make such formulations particularly well suited for children and / or patients having issues swallowing tablets or capsules. Although we own this technology, we are currently not pursuing any commercial pharmaceutical drug development opportunities using it. • MEDUSA. Our MEDUSA technology allows for the development of modified- release injectable dosage formulations of drugs (e. g., peptides, polypeptides, proteins, and small molecules). Although we own this technology, we are currently not pursuing any commercial pharmaceutical drug development opportunities using it. Competition in the pharmaceutical and biotechnology industry ~~is~~ **continues to be** intense and is expected to increase. We compete with **academic laboratories, research institutions, universities, joint ventures, and** other pharmaceutical and biotechnology companies **, including** ~~. Some of these competitors may also be our business partners. There can be no assurance that our competitors will not obtain patent protection or~~ other **companies who have approved,** ~~intellectual property rights that would make it difficult or impossible for~~ **or** ~~us to compete with their~~ **who are developing, niche branded or generic specialty pharmaceutical** products **or drug delivery platforms** . Furthermore, major technological changes can happen quickly in the pharmaceutical and biotechnology industries. Such rapid technological change, or the development by our competitors of technologically improved or differentiated products, could render our products, product candidates, or drug delivery platforms ~~,~~ obsolete or noncompetitive. ~~- 10- The pharmaceutical industry has dramatically changed in recent years, largely as a function of the growing importance of generic drugs. The growth of generics (typically small molecules) and of large molecules (biosimilars) has been accelerated by the demand for less expensive pharmaceutical products. As a result, the pricing power of pharmaceutical companies will be more tightly controlled in the future. In addition, consolidation has reduced our pool of potential partners and acquisition opportunities within the biopharmaceutical space. Potential competition for~~ LUMRYZ ~~If LUMRYZ is granted final FDA approval, it will compete~~ **competes** with ~~the currently approved~~ twice- nightly oxybate formulations, as well as a number of daytime wake promoting agents including lisdexamfetamine, detroamphetamine, methylphenidate, amphetamine, modafinil, and armodafinil, which are widely prescribed, as well as solriamfetol and pitolisant. ~~If granted final approval, we anticipate~~ **Generic pharmaceutical products will continue to play a large role in the U. S. healthcare system.** LUMRYZ may face competition from manufacturers of generic twice- nightly ~~sodium~~ oxybate formulations ~~, who have reached settlement agreements with the current marketer, which allows for entry of an authorized generic in 2023~~. ~~On~~ **In** January ~~3,~~ 2023, Hikma Pharmaceuticals plc, announced that it launched an authorized generic version of Jazz Pharmaceuticals plc’ s (“ Jazz ”) Xyrem (sodium oxybate). ~~Hikma will have 180 days of marketing exclusivity for~~ **In July 2023, Amneal Pharmaceuticals, Inc. announced that** ~~its~~ **it launched an** authorized generic **version of** ~~product in the U. S. and will distribute through the same specialty pharmacy that~~ Jazz **’ s** ~~uses to dispense~~ Xyrem **(sodium oxybate)** . **-** ~~8-~~ In addition, there are other products in development that may be approved in the future that could have an impact on the narcolepsy treatment market, including, for example, reboxetine, orexin 2 receptor agonists, flecainide / modafinil combination, histamine H3 antagonists / inverse agonists, or GABAB agonists. Corporate Information The Company was incorporated on December 1, 2015 as an Irish private limited company, and re- registered as an Irish public limited company, or plc, on November 21, 2016 ~~. We are an Irish public limited company~~. Our registered address is at 10 Earlsfort Terrace, Dublin 2, Ireland and our phone number is 353- 1- 901- 5201. We file annual, quarterly and current reports, proxy statements and other documents with the SEC under the Securities Exchange Act of 1934, as amended (the “ Exchange Act ”). Our website is www. avadel. com, where we make available free of charge our reports (and any exhibits and amendments thereto) on Forms 10- K, 10- Q and 8- K as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. These filings are also available to the public at www. sec. gov. We do not incorporate the information on or accessible through our website into this Annual Report on Form 10- K. We currently have five direct wholly- owned subsidiaries: (a) Avadel US Holdings, Inc., (b) Flamel Ireland Limited, which conducts business under the name Avadel Ireland, (c) Avadel Investment Company Limited, (d) Avadel Finance Ireland Designated Activity Company and (e) Avadel France Holding SAS. Avadel US Holdings, Inc., a Delaware corporation, is the holding entity of (i) Avadel Legacy Pharmaceuticals, LLC, (ii) Avadel Management Corporation, and (iii) Avadel CNS Pharmaceuticals, LLC. Avadel Finance Ireland Designated Activity Company is the holding entity of Avadel Finance Cayman Limited. Avadel France Holding SAS is the holding entity of Avadel Research SAS. A complete list of our subsidiaries can be found in Exhibit 21. 1 to this Annual Report on Form 10- K. Intellectual Property Parts of our product pipeline and strategic alliances utilize our drug delivery platforms and related products of which certain features are the subject of patents or patent applications. **We** ~~As a matter of policy, we~~ seek patent protection ~~of~~ **for** our inventions and also rely upon trade secrets, know- how, continuing technological innovations and licensing opportunities to maintain and develop competitive positions. • **Numerous** LUMRYZ **-related U. S.** ~~Patents~~ **patents** ~~. We~~ have been **issued** ~~awarded thirteen LUMRYZ- related U. S. patents~~ having ~~expiry~~ **expiration** dates **spanning** from mid- 2037 to early- 2042 **, and there are** ~~. We have a number of~~ additional ~~LUMRYZ- related~~

patent applications **currently in development and / or** pending at the USPTO **,** as well as **foreign** ~~at non- U. S.~~ patent offices. The patent positions of biopharmaceutical companies like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and patent scope can be reinterpreted by the courts after issuance. Moreover, many jurisdictions permit third parties to challenge issued patents in administrative proceedings, which may result in further narrowing or even cancellation of patent claims. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any of our licensed or owned patents will provide sufficient protection from competitors. ~~- 11 -~~ Any of our licensed or owned patents may be challenged, circumvented, or invalidated by third parties. For more information, please see the information set forth under the caption " Risks Related to Our Intellectual Property – If we cannot adequately protect our intellectual property and proprietary information, we may be unable to effectively compete " in the " Risk Factors " included in Part I, Item 1A of this Annual Report on Form 10- K. Supplies and Manufacturing We attempt to maintain multiple suppliers in order to mitigate the risk of shortfall and inability to supply market demand. **For** ~~Nevertheless, for~~ LUMRYZ, we currently rely on ~~one~~ **two** ~~supplier~~ **suppliers** for sourcing **our** active pharmaceutical ~~ingredients~~ **ingredient** (" API "). The API in LUMRYZ, sodium oxybate, is a Schedule I controlled substance in the U. S., and **the finished FDA- approved formulation of** LUMRYZ ~~, if granted final approval by the FDA,~~ is ~~anticipated to be~~ a Schedule III controlled substance in the U. S. per current federal regulations. As a result, LUMRYZ is subject to regulation by the U. S. Drug Enforcement Administration (" DEA ") under the Controlled Substances Act (" CSA "), and its manufacturing and distribution are highly restricted. Quotas from the DEA are required in order to manufacture **both** ~~and primary package~~ sodium oxybate and LUMRYZ in the U. S. Similar rules, restrictions and controls **would** apply to LUMRYZ in ~~relevant jurisdictions~~ **the event LUMRYZ is marketed** outside of the U. S. The API for LUMRYZ is currently manufactured by **two** ~~a single~~ source contract **development and** manufacturing ~~organization~~ **organizations** (" ~~CMO~~ **CDMOs** ") in the U. S. The **LUMRYZ** drug product for commercial lots is manufactured **by one source CDMO in the U. S. and- 9- one source CDMO** outside of the U. S. ~~by a single source CMO.~~ We ~~will~~ **expect to** continue to outsource the production of **sodium oxybate and drug product for** LUMRYZ to current good manufacturing practices (" cGMP ")- compliant, DEA **-** and FDA- audited ~~CMOs~~ **CDMOs** pursuant to supply agreements ~~and have no present plans to acquire manufacturing facilities~~ . We ~~are establishing, and~~ may ~~continue to~~ establish ~~,~~ **supply relationships with** additional ~~CMOs~~ **CDMOs to** ~~for the~~ manufacture **API and / or** LUMRYZ ~~, including drug product manufacturing in the U. S~~ . Government Regulation Government authorities in the U. S. at the federal, state, and local level and in other countries extensively regulate, among other things, the research and clinical development, testing, manufacture, quality control, approval, labeling, packaging, storage, record- keeping, promotion, advertising, distribution, post- approval monitoring and reporting, marketing, pricing, and export and import of drug products, such as those we are developing. Generally, before a new drug can be marketed, considerable data demonstrating its quality, safety, and efficacy must be obtained, organized into a format specific to each regulatory authority, submitted for review, and approved by the regulatory authority. Drugs are also 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 require the expenditure of substantial time and financial resources. 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 to administrative or judicial sanctions. These sanctions could include, among other actions, the regulatory authority' s refusal to approve pending applications, withdrawal of an approval, clinical holds, untitled or warning letters, voluntary product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution, injunctions, debarment, fines, refusals of government contracts, restitution, disgorgement, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. U. S. Drug Development In the U. S., the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act (" FDCA ") and its implementing regulations. Drugs are also subject to other federal, state, and local statutes and regulations. ~~Our drug~~ **Drug** candidates must be approved by the FDA through the **New Drug Application (" "** NDA **")** process before they may be legally marketed in the U. S. The process required by the FDA before a drug may be marketed in the U. S. generally involves the following: • completion of extensive preclinical, sometimes referred to as nonclinical, laboratory tests, animal studies, and formulation studies all performed in accordance with applicable regulations, including the FDA' s good laboratory practice (" GLP ") regulations; • submission to the FDA of an Investigational New Drug Application (" IND "), which must become effective before human clinical trials may begin and must be updated annually; • performance of adequate and well- controlled human clinical trials in accordance with applicable IND and other clinical trial- related regulations, sometimes referred to as good clinical practices (" GCPs ") to establish the safety and efficacy of the proposed drug for its proposed indication; ~~- 12 -~~ • submission to the FDA of an NDA for a new drug; • a determination by the FDA ~~within 60 days of its receipt of an NDA~~ to file the NDA for review; • satisfactory completion of an FDA pre- approval inspection of the manufacturing facility or facilities at which the API and finished drug product are produced to assess compliance with the FDA' s cGMP requirements; • potential FDA audit of the clinical trial sites that generated the data in support of the NDA; • payment of user fees for FDA review of the NDA; and • FDA review and approval of the NDA prior to any commercial marketing or sale of the drug in the U. S. The data required to support an NDA are generated in two distinct development stages: preclinical and clinical. The preclinical development stage generally involves synthesizing the active component, developing the formulation, and determining the manufacturing process, as well as carrying out non- human toxicology, pharmacology, and drug metabolism studies in the laboratory, which support subsequent clinical testing. The conduct of the preclinical tests must comply with federal regulations, including GLPs. The sponsor must submit the results of the preclinical tests, together with manufacturing information, **- 10-** analytical data, any available clinical data or literature, and a proposed clinical protocol, to the FDA as part of the IND. An IND is a request for authorization from the FDA to administer an investigational drug product to humans. The central focus of an IND submission is on patient safety and the general investigational plan and the protocol (s) for human trials.

The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions regarding the proposed clinical trials and places the IND on clinical hold within that 30- day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. The FDA also may impose a partial clinical hold that would limit a trial, for example, to certain doses ~~or~~ **,** for a certain length of time or to a certain number of subjects. The FDA may also impose clinical holds on a drug candidate at any time before or during clinical trials due to safety concerns or non- compliance. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that could cause the trial to be suspended or terminated. The clinical stage of development involves the administration of the drug candidate to human subjects under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor' s control, in accordance with GCPs, 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. Further, each clinical trial must be reviewed and approved by an independent institutional review board (“ IRB ”) at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether 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 are also requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Clinical trials are generally conducted in three sequential phases that may overlap or be combined, known as Phase 1, Phase 2, and Phase 3 trials. Phase 1 trials generally involve a small number of healthy volunteers who are initially exposed to a single dose and then multiple doses of the drug candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, side effects, tolerability, and safety of the drug. Phase 2 clinical trials typically involve studies in disease- affected patients to determine the dose required to produce the desired benefits. At the same time, safety and further ~~PK~~ **pharmacokinetics** and pharmacodynamics ~~(“ PD ”)~~ information is collected, as well as identification of possible adverse effects and safety risks and preliminary evaluation of efficacy. Phase 3 trials generally involve large numbers of patients at multiple sites (from several hundred to several thousand subjects) and are designed to provide the data necessary to demonstrate the efficacy of the drug for its intended use, its safety in use, and to establish the overall benefit / risk relationship of the drug and provide an adequate basis for physician labeling. The duration of treatment is often extended to mimic the actual use of a drug during marketing. Generally, two adequate and well- controlled Phase 3 trials are required by the FDA for approval of an NDA. Post- approval trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials. ~~- 13 -~~ Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA ~~and~~ **. Additionally,** written IND safety reports must be submitted to **both** the FDA and the **qualified** investigators for serious and unexpected adverse reactions, any ~~finding~~ **findings** from other clinical studies, tests in laboratory animals, ~~or~~ in vitro testing that suggests a significant risk for human subjects, or 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 trials may not be completed successfully within any specified period, if at all. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Information about certain clinical trials, including clinical trial results, must be submitted within specific timeframes for publication on the www. clinicaltrials. gov website. The FDA, the IRB, or the clinical trial 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 or not a trial may move forward at designated check points based on access to certain data from the trial. We may also suspend or terminate a clinical trial based on evolving business objectives and / or competitive climate. Concurrent with clinical trials, companies usually complete additional animal **- 11-** studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the drug in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, cGMPs impose extensive procedural, substantive, and recordkeeping requirements to ensure and preserve the long- term stability and quality of the final drug product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life. NDA and the FDA Review Process Following trial completion, trial data are analyzed to assess safety and efficacy. The results of preclinical studies and clinical trials are then submitted to the FDA as part of an NDA, along with proposed labeling for the drug and information about the manufacturing process and facilities that will be used to ensure drug quality, results of analytical testing conducted on the chemistry of the drug, and other relevant information. The NDA is a request for approval to market the drug and must contain adequate evidence of safety and efficacy, which is demonstrated by extensive preclinical and clinical testing. Data may come from company- sponsored clinical trials intended to test the safety and efficacy of a use of a drug, 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 drug product for a particular indication or indications to the satisfaction of the FDA. FDA approval of an NDA must be obtained before a drug may be offered for sale in the U. S. Under the Prescription Drug User Fee Act (" PDUFA "), as amended, each NDA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual prescription drug product program fee for human drugs. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs for products designated as orphan drugs, unless the product also includes a non- orphan indication. Within 60 days following submission of an original NDA, the FDA reviews the application to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any NDA that it deems incomplete or not properly reviewable at the time of submission, including for failure to pay required fees, and may request additional information. In this event, the application must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. The FDA typically makes a decision on whether to accept 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 the performance goals established under the PDUFA, the FDA has agreed to review 90 % of standard NDAs for new molecular entities (" NMEs ") in ten months from the filing date and 90 % of priority NME NDAs in six months from the filing date. The goals for reviewing standard and priority non- NME NDAs are ten months and six months, respectively, measured from the receipt date of the application. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs, and the review process is often significantly extended by FDA requests for additional information or clarification. ~~- 14 -~~ After the NDA submission is accepted for filing, the FDA reviews the NDA to determine, among other things, whether the proposed drug is safe and effective for its intended use, and whether the drug is being manufactured in accordance with cGMP to assure and preserve the drug' s identity, strength, quality, and purity. The FDA may refer applications for novel drugs or drug candidates that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation, and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. In the course of its review, the FDA may re- analyze the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. The review and evaluation of an NDA by the FDA is extensive and time consuming and may take longer than originally planned to complete ~~, and we may not receive a timely approval, if at all~~. Before approving an NDA, the FDA typically conducts a pre- approval inspection of the manufacturing facilities for the new drug to determine whether they comply with cGMPs. The FDA will not approve the drug unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the drug within required specifications. In addition, before approving an NDA, the FDA may also audit data from clinical trials to ensure compliance with GCP requirements. After the FDA evaluates the application, manufacturing process, and manufacturing facilities where the drug product and / or its API will be produced, it may 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 is not ready for approval. 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 and / or ~~an~~ additional pivotal clinical trial (s), and / or other significant, expensive and time- consuming requirements related to clinical trials, preclinical studies, or **- 12-** manufacturing. If a Complete Response Letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, challenge the determination set forth in the letter by requesting a hearing, or withdraw the application. Even if such data and information are submitted, the FDA may ultimately 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 **the same** data differently than ~~we interpret~~ the **applicant** ~~same data~~. There is no assurance that the FDA will ultimately approve a drug product for marketing in the U. S. If a drug receives marketing approval, the approval may be significantly limited to specific diseases, dosages, or patient subgroups, or the indications for use may otherwise be limited, which could restrict the commercial value of the drug. Further, the FDA may require that certain contraindications, warnings, precautions, or adverse events be included in the drug labeling or may condition the approval of the NDA on other changes to the proposed labeling, development of adequate controls and specifications, or a commitment to conduct post- marketing testing or clinical trials, and surveillance to monitor the effects of approved drugs. For example, the FDA may require Phase 4 testing which involves clinical trials designed to further assess a drug' s safety and may require testing and surveillance programs to monitor the safety of approved drugs that have been commercialized. The FDA may also place other conditions on approvals including the requirement for a REMS to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS. The FDA will not approve the NDA 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 drugs. Drug approvals may be withdrawn for non- compliance with regulatory standards or if problems occur following initial marketing. Pediatric Information and Exclusivity Under the Pediatric Research Equity Act (" PREA "), as amended, an NDA or supplement to an NDA for a drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen, or new route of administration must contain data to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. A sponsor who is planning to submit a marketing

application for a drug subject to PREA must submit an initial Pediatric Study Plan (“ PSP ”) within 60 days of an end- of- Phase 2 meeting or as may be agreed between the sponsor and the FDA. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints, and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach agreement on the PSP. A sponsor can ~~- 15 -~~ submit amendments to an agreed- upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials, and / or other clinical development programs. A drug product can also obtain pediatric exclusivity in the U. S. **, which** is another type of regulatory market exclusivity in the U. S. Pediatric exclusivity, if granted, adds **an additional** six months to existing exclusivity periods and patent terms. This six- month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial in accordance with ~~a~~ **an** FDA- issued ~~" Written~~ **written** ~~Request~~ **request** ~~"~~ for such a trial. Orphan Drug Designation The FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition that affects fewer than 200, 000 individuals in the U. S., or if it affects 200, 000 or more individuals in the U. S., there is no reasonable expectation that the cost of developing and marketing the drug for this type of disease or condition will be recovered from sales in the U. S. Orphan drug designation entitles a party to potential financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user- fee waivers. In addition, if a product receives the first FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity. Orphan drug exclusivity may be lost if the FDA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition. Orphan drug designation must be requested before submitting an application for marketing approval. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. **- 13 -** 505 (b) (2) New Drug Applications As an alternative path to FDA approval for modifications to formulations or uses of products previously approved by the FDA pursuant to an NDA, an applicant may submit an NDA under Section 505 (b) (2) of the FDCA. Section 505 (b) (2) was enacted as part of the Hatch- Waxman Amendments and permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by, or for, the applicant, and for which the applicant has not obtained a right of reference. In addition, if the 505 (b) (2) applicant can establish that reliance on the FDA’ s previous findings of safety and effectiveness is scientifically and legally appropriate, it may eliminate the need to conduct certain preclinical studies or clinical trials of the new product. The FDA may also require companies to perform additional bridging studies or measurements, including clinical trials, to support the change from the previously approved reference drug. The FDA may then approve the new drug candidate for all, or some, of the label indications for which the reference drug has been approved, as well as for any new indication sought by the 505 (b) (2) applicant. Post- Marketing Requirements Following approval of a new drug, a pharmaceutical company and the approved drug are subject to continuing regulation by the FDA, including, among other things, establishment registration and drug listing, monitoring and recordkeeping activities, reporting to the applicable regulatory authorities of adverse ~~experiences~~ **events** with the drug, providing the regulatory authorities with updated safety and efficacy information, drug sampling and distribution requirements, and complying with promotion and advertising requirements, which include, among others, standards for direct- to- consumer advertising, restrictions on promoting drugs for uses or in patient populations that are not described in the drug ~~'~~ **’** s approved labeling (known as off- label promotion), limitations on industry- sponsored scientific and educational activities, and requirements for promotional activities involving the internet. Although physicians may prescribe legally available drugs for off- label uses, the FDA takes the position that manufacturers may not market or promote such off- label uses. Modifications or enhancements to the drug or its labeling or changes of the site or process of manufacture are often subject to the approval of the FDA and other regulators, which may or may not be received or may result in a lengthy review process. Prescription drug advertising is subject to federal, state, and foreign regulations. In the U. S., the FDA regulates prescription drug promotion, including direct- to- consumer advertising. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use. Any distribution of prescription drugs and pharmaceutical samples must comply with the U. S. Prescription Drug Marketing Act (“ PDMA ”), a part of the FDCA. The Drug Supply Chain Security Act (“ DSCSA ”) was enacted in 2013 with the aim of building an electronic system to identify and trace certain prescription drugs distributed in the U. S. The DSCSA mandates phased- in and resource- intensive obligations for pharmaceutical manufacturers, wholesale distributors, and dispensers over a 10- year period that ~~is expected to culminate~~ **culminated** in November 2023 **. The FDA established a one- year stabilization period from November 2023 to November 2024 for trading partners to continue to build and validate interoperable systems and processes to meet certain requirements of the DSCSA** . The law’ s requirements include the quarantine and prompt investigation of a suspect product to determine if it is illegitimate, and notifying trading ~~- 16 -~~ partners and the FDA of any illegitimate product. Drug manufacturers and other parties involved in the supply chain for prescription drug products must also comply with product tracking and tracking requirements, such as placing a unique product identifier on prescription drug packages. This identifier consists of the National Drug Code, serial number, lot number, and expiration date, in the form of a 2- dimensional data matrix barcode that can be read by humans and machines. In the U. S., once a drug is approved, its manufacture is subject to comprehensive and continuing regulation by the FDA. FDA regulations require that drugs be manufactured in specific facilities per the NDA approval and in accordance with cGMP. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our approved drug and drug candidates in accordance with cGMP regulations. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation and the obligation to investigate and correct

any deviations from cGMP. Drug 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 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. These regulations also impose certain organizational, procedural, and documentation requirements with respect to manufacturing and quality assurance activities. NDA holders using contract manufacturers, laboratories, or packagers are responsible for the selection and monitoring of qualified firms, and, in certain circumstances, qualified suppliers to these firms. These firms and, where applicable, their suppliers are subject to inspections by the FDA at any time, and the discovery of violative conditions, including failure to conform to cGMP, could result in enforcement actions that interrupt the operation of any such facilities or the ability to distribute drugs manufactured, processed, or tested by them. ~~The FDA also may require post-~~ **14** ~~approval testing, sometimes referred to as Phase 4 testing, risk minimization action plans, and post- marketing surveillance to monitor the effects of an approved drug or place conditions on an approval that could restrict the distribution or use of the drug.~~ The FDA may issue enforcement letters or withdraw the approval of the product if compliance with regulatory requirements and standards is not maintained or if problems occur after the drug or biologic reaches the market. Corrective action could delay drug or biologic distribution and require significant time and financial expenditures. Later discovery of previously unknown problems with a drug or biologic, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may require revisions to the approved labeling to add new safety information, including the addition of new warning and contraindications; imposition of post- market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things: • mandated corrective advertising or communications with doctors; • restrictions on the marketing or manufacturing of the drug or biologic, suspension of the approval, complete withdrawal of the drug from the market or product recalls; • fines, warning letters or holds on post- approval clinical trials; • refusal of the FDA to approve applications or supplements to approved applications, or suspension or revocation of drug or biologic approvals; • drug or biologic seizure or detention, or refusal to permit the import or export of drugs; or • injunctions or the imposition of civil or criminal penalties. U. S. Marketing Exclusivity Marketing exclusivity provisions under the FDCA can delay the submission or the approval of certain marketing applications for competing products. The FDCA provides a five- year period of non- patent marketing exclusivity within the U. S. to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application (" ANDA ") or a 505 (b) (2) NDA submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovator drug or for another indication. However, an application may be submitted after four years if it contains a certification of patent invalidity or non- infringement ~~- 17 -~~ to one of the patents listed with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA, if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages, or strengths of an existing drug. This three- year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505 (b) (2) applications for drugs containing the active agent for the original indication or condition of use. Five- year and three- year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well- controlled clinical trials necessary to demonstrate safety and effectiveness. Other Regulatory Matters Manufacturing, sales, promotion, and other activities following drug approval are also subject to regulation by numerous regulatory authorities in addition to the FDA, including, in the U. S., the Centers for Medicare & Medicaid Services (" CMS "), other divisions of the U. S. Department of Health and Human Services (" HHS "), the DEA for controlled substances, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency, and state and local governments. In the U. S., sales, marketing, and scientific / educational programs must also comply with state and federal fraud and abuse laws. Pricing and rebate programs must comply with the Medicaid rebate requirements of the U. S. Omnibus Budget Reconciliation Act of 1990 and more recent requirements in the Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act of 2010 (or collectively, the " ACA "). If drugs are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. The handling of any controlled substances must comply with the U. S. Controlled Substances Act and Controlled Substances Import and Export Act. Drugs must meet applicable child- resistant packaging requirements under the U. S. Poison Prevention Packaging Act. Manufacturing, sales, promotion, and other activities are also potentially subject to federal and state consumer protection and unfair competition laws. **- 15-** We are subject to numerous foreign, federal, state, and local 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. In addition, our leasing and operation of real property may subject us to liability pursuant to certain U. S. environmental laws and regulations, under which current or previous owners or operators of real property and entities that disposed or arranged for the disposal of hazardous substances may be held strictly, jointly, and severally liable for the cost of investigating or remediating contamination caused by hazardous substance releases, even if they did not know of and were not responsible for the releases. The distribution of pharmaceutical drugs is subject to additional requirements and regulations, including extensive record- keeping, licensing, storage, and security requirements intended to prevent the unauthorized sale of pharmaceutical drugs. The failure to comply with regulatory requirements subjects firms to possible legal or regulatory action.

Depending on the circumstances, failure to meet applicable regulatory requirements can result in criminal prosecution, fines, or other penalties, injunctions, voluntary recall or seizure of drugs, 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. In addition, even if a firm complies with **the** FDA and other requirements, new information regarding the safety or efficacy of a product could lead the FDA to modify or withdraw product approval. Prohibitions or restrictions on sales or withdrawal of our approved drug or any future products marketed by us could materially affect our business in an adverse way. Changes in regulations, statutes, or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our product; or (iv) additional record- keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business. Other Regulation Controlled Substances Regulations Narcotics and other APIs, such as sodium oxybate, are " controlled substances " under the CSA. The CSA Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, regulates the manufacture and distribution of narcotics and other controlled substances, including stimulants, depressants and hallucinogens in the U. S. The CSA is administered by the DEA, a division of the U. S. Department of Justice, and is intended to prevent the abuse or diversion of controlled substances into illicit channels of commerce. The DEA classifies controlled substances into five schedules. Schedule I substances by ~~- 18-~~ definition have a high potential for abuse, have no currently " accepted medical use " in the U. S., lack accepted safety for use under medical supervision, and may not be prescribed, marketed or sold in the U. S. Pharmaceutical products approved for use in the U. S. may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest potential for abuse or dependence and Schedule V substances the lowest relative risk of abuse. The API in LUMRYZ, sodium oxybate, is a Schedule I controlled substance in the U. S., and **the FDA- approved** LUMRYZ **product is** ~~, if granted final FDA approval, will be~~ a Schedule III controlled substance in the U. S. For drugs manufactured in the U. S., the DEA establishes annually an aggregate quota for the amount of substances within Schedules I and II that may be manufactured or produced in the U. S. based on the DEA' s estimate of the quantity needed to meet legitimate medical, scientific, research and industrial needs. The quotas apply equally to the manufacturing of the API and production of dosage forms. The DEA may adjust aggregate production quotas a few times per year, and individual manufacturing or procurement quotas from time to time during the year, although the DEA has substantial discretion in whether ~~or not~~ to make such adjustments for individual companies. The DEA limits the quantity of certain Schedule I controlled substances that may be manufactured and procured in the U. S. in any given calendar year through a quota system and, as a result, quotas from the DEA are required in order to manufacture sodium oxybate ~~and~~ **in the U. S. The FDA-approved** LUMRYZ **product** ~~in the U. S. Accordingly, we require DEA quotas for sodium oxybate and LUMRYZ, until approved, if ever, by the FDA. If granted final FDA approval, LUMRYZ~~ is ~~anticipated to be~~ classified as a Schedule III controlled substance and subject to DEA ~~import volume limits and~~ **quota requirements as well as** state **and federal** regulations relating to manufacturing, storage, distribution and physician prescription procedures, including limitations on prescription refills. In addition, the third parties who perform our clinical and commercial manufacturing, distribution, dispensing and clinical studies for LUMRYZ are required to maintain necessary DEA registrations and state licenses. The DEA periodically inspects facilities for compliance with its rules and regulations. Any person or firm that manufactures, distributes, dispenses, imports, or exports any controlled substance (or proposes to do so) must register with the DEA. The applicant must register for a specific business activity related to controlled substances, including manufacturing or distributing, and may engage in only the activity or activities for which it is registered. The DEA **- 16-** conducts periodic inspections of registered establishments that handle controlled substances. Failure to comply with relevant DEA regulations, particularly as manifested in the loss or diversion of controlled substances, can result in regulatory action including civil penalties, refusal to renew necessary registrations, or proceedings to revoke those registrations. In certain circumstances, violations can lead to criminal prosecution. In addition to these federal statutory and regulatory obligations, there may be state and local laws and regulations relevant to the handling of controlled substances or listed chemicals. Governments outside of the U. S. have similar controlled substance laws, regulations and requirements in their respective jurisdictions. Healthcare Laws Healthcare providers and third- party payors in the ~~United States~~ **U. S.** and elsewhere play a primary role in the recommendation and prescription of pharmaceutical products. Arrangements with third- party payors and customers can expose pharmaceutical manufactures to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti- Kickback Statute and the federal False Claims Act (" FCA "), which may constrain the business or financial arrangements and relationships through which companies research, sell, market and distribute pharmaceutical products. In addition, transparency laws and patient privacy laws can apply to the activities of pharmaceutical manufactures. The applicable federal, state and foreign healthcare laws and regulations that can affect a pharmaceutical company' s operations include without limitation: • The federal Anti- Kickback Statute, which prohibits, among other things, 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 the Medicare and Medicaid programs, or other federal healthcare programs. A person or entity can be found guilty of violating the statute without actual knowledge of the statute or specific intent to violate it. 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. **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. 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 federal False Claims Act or federal civil monetary penalties.** The Anti- Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and

formulary managers on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but such exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection; ~~- 19 -~~ • The federal civil and criminal false claims laws, including the FCA, and civil monetary penalty laws, which prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the federal government or knowingly making, using or causing to be made or used a false record or statement, including providing inaccurate billing or coding information to customers or promoting a product off- label, material to a false or fraudulent claim to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes " any request or demand " for money or property presented to the federal government. In addition, 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. 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; • The federal Health Insurance Portability and Accountability Act of 1996 (" HIPAA "), which created federal criminal statutes that prohibit, among other things, 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, among other things, specified **- 17-** requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities and their business associates as well as their covered subcontractors. 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 **U. S.** federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions; • The federal legislation commonly referred to as the Physician Payments Sunshine Act, created under the ACA, and its implementing regulations, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children' s Health Insurance Program (with certain exceptions) to report annually to CMS, information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) **, certain other licensed health care practitioners** and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members ~~. Effective January 1, 2022, covered manufacturers also are required to report information regarding their payments and other transfers of value to physician assistants, and nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives during the previous year~~ ; • Federal government price reporting laws, which require us to calculate and report complex pricing metrics in an accurate and timely manner to government programs; • Federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and • Analogous state laws and regulations, including: state anti- kickback and false claims laws, which may apply to our business practices, including, but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by any third- party payor, including private 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 U. S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state and local laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; state laws that require the reporting of information related to drug pricing; state and local laws requiring the registration of pharmaceutical sales representatives; and state laws governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. ~~- 20 -~~ The distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive record- keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products **. In the U. S., to help patients afford our approved product, we may utilize programs to assist them, including patient assistance programs and co- pay coupon programs for eligible patients. Government enforcement agencies have shown increased interest in pharmaceutical companies' product and patient assistance programs, including reimbursement support services, and a number of investigations into these programs have resulted in significant civil and criminal settlements. In addition, at least one insurer has directed its network pharmacies to no longer accept co- pay coupons for certain specialty drugs the insurer identified. Our co- pay coupon programs could become the target of similar insurer actions. In addition, in November 2013, the CMS issued guidance to the issuers of qualified health plans sold through the ACA' s marketplaces encouraging such plans to reject patient cost- sharing support from third parties and indicating that the CMS intends to monitor the provision of such support and may take regulatory action to limit it in the future. The CMS subsequently issued a rule requiring individual market qualified health plans to accept third- party premium and cost- sharing payments from certain government- related entities. In September 2014, the Office of Inspector General (" OIG ") of the HHS issued a Special Advisory Bulletin warning manufacturers that they may be subject to sanctions under the federal anti- kickback statute and / or civil monetary penalty laws if they do not take appropriate steps to exclude Part D beneficiaries from using co- pay coupons. Accordingly, companies exclude these Part D beneficiaries from using co- pay coupons. It is possible that**

changes in insurer policies regarding co- pay coupons and / or the introduction and enactment of new legislation or regulatory action could restrict or otherwise negatively affect these patient support programs, which could result in fewer patients using affected products, and therefore could have a material adverse effect on our sales, business, and financial condition. Third party patient assistance programs that receive financial support from companies have become the subject of enhanced government and regulatory scrutiny. The OIG has established guidelines that suggest that it is lawful for pharmaceutical manufacturers to make donations to charitable organizations who provide co- pay assistance to Medicare patients, provided that such organizations, among other things, are bona fide charities, are entirely independent of and not controlled by the manufacturer, provide aid to applicants on a first- come basis according to consistent financial criteria and do not link aid to use- 18- of a donor' s product. However, donations to patient assistance programs have received some negative publicity and have been the subject of multiple government enforcement actions, related to allegations regarding their use to promote branded pharmaceutical products over other less costly alternatives. Specifically, in recent years, there have been multiple settlements resulting out of government claims challenging the legality of their patient assistance programs under a variety of federal and state laws. It is possible that we may make grants to independent charitable foundations that help financially needy patients with their premium, co- pay, and co- insurance obligations. If we choose to do so, and if we or our vendors or donation recipients are deemed to fail to comply with relevant laws, regulations or evolving government guidance in the operation of these programs, we could be subject to damages, fines, penalties, or other criminal, civil, or administrative sanctions or enforcement actions. We cannot ensure that our compliance controls, policies, and procedures will be sufficient to protect against acts of our employees, business partners, or vendors that may violate the laws or regulations of the jurisdictions in which we operate. Regardless of whether we have complied with the law, a government investigation could impact our business practices, harm our reputation, divert the attention of management, increase our expenses, and reduce the availability of foundation support for our patients who need assistance . Coverage and Reimbursement Sales of any product depend, in part, on the extent to which such product will be covered by third- party payors, such as federal, state, and foreign government healthcare programs, commercial insurance and managed healthcare organizations, and the level of reimbursement for such product by third- party payors. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan- by- plan basis. These third- party payors are increasingly reducing coverage and reimbursement for medical products, drugs and services. For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. Additionally, separate reimbursement for the product itself or the treatment or procedure in which the product is used may not be available, which may impact physician utilization. In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost- effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. Additionally, companies may also need to provide discounts to purchasers, private health plans or government healthcare programs. Nonetheless, product candidates may not be considered medically necessary or cost effective. A decision by a third- party payor not to cover a product could reduce physician utilization once the product is approved and have a material adverse effect on sales, ~~our~~ operations and financial condition. Factors that payors consider in determining reimbursement are based on whether the product is (i) a covered benefit under its health plan; (ii) safe, effective, and medically necessary; (iii) appropriate for the specific patient; (iv) cost- effective; and (v) neither experimental nor investigational. Additionally, a third- party payor' s decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor' s determination to provide coverage for a product does not assure that other payors will also provide coverage and reimbursement for the product and the level of coverage and reimbursement can differ significantly from payor to payor. The containment of healthcare costs has become a priority of federal, state and foreign governments and the prices of products have been a focus in this effort. Governments have shown significant interest in implementing cost- containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost- containment measures and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company' s revenue generated from the sale of any approved products. Coverage policies and third- party payor reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. Decreases in third- party reimbursement for any product or a decision by a third- party payor not to cover a product could reduce physician usage and patient demand for the product and also have a material adverse effect on sales. Healthcare Reform In both the ~~United States~~ **U. S.** and certain foreign jurisdictions, there have been, and continue to be, a number of legislative and regulatory changes to the health care system. Among policy makers and payors in the ~~United States~~ **U. S.** and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and / or expanding access. In the ~~United States~~ **U. S.** , the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. In particular, in 2010, the ACA was enacted, which, among other things, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected **- 19-** manufacturers to new annual fees and taxes for certain branded prescription drugs, and provided incentives to programs that increase the federal government' s comparative effectiveness research. ~~Since its enactment, there have been numerous judicial, administrative, executive, and legislative efforts to expand, repeal, replace or modify the ACA, some of which have been successful, in part, in modifying the law, as well as court challenges to the constitutionality of the law. On June 17, 2021, the U. S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states~~

~~without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court' s decision, President Biden issued an executive order to initiate a special enrollment period from February 15, 2021, through August 15, 2021, for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work- 21- requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is unclear how other healthcare reform measures of the Biden administration or other efforts, if any, to challenge, repeal or replace the ACA will impact our business. Prior to the Biden administration, on October 13, 2017, former President Trump signed an Executive Order terminating the cost- sharing subsidies that reimburse insurers under the ACA. The former Trump administration concluded that cost- sharing reduction (" CSR "), payments to insurance companies required under the ACA have not received necessary appropriations from Congress and announced that it will discontinue these payments immediately until those appropriations are made. Several state attorneys general filed suit to stop the administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. On August 14, 2020, the U. S. Court of Appeals for the Federal Circuit ruled in two separate cases that the federal government is liable for the full amount of unpaid CSRs for the years preceding and including 2017. For CSR claims made by health insurance companies for years 2018 and later, further litigation will be required to determine the amounts due, if any. Further, on June 14, 2018, the U. S. Court of Appeals for the Federal Circuit ruled that the federal government was not required to pay more than $ 12 billion in ACA risk corridor payments to third- party payors who argued the payments were owed to them. On April 27, 2020, the United States Supreme Court reversed the U. S. Court of Appeals for the Federal Circuit' s decision and remanded the case to the U. S. Court of Federal Claims, concluding the government has an obligation to pay these risk corridor payments under the relevant formula. It is unclear what impact these rulings will have on our business.~~ In addition, other legislative and regulatory changes have been proposed and adopted in the ~~United States~~ **U. S.** since the ACA was enacted: • **The** ~~On August 2, 2011, the~~ U. S. Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers of 2 % per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through ~~2030~~ **2031** ~~, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022 due to the COVID- 19 pandemic. Following the temporary suspension, a 1 % payment reduction will occur beginning April 1, 2022 through June 30, 2022, and the 2 % payment reduction will resume on July 1, 2022~~ . • On January 2, 2013, the U. S. American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers **and increased the statute of limitations period for the government to recover overpayments to providers from three to five years** . • On April 13, 2017, CMS published a final rule that gives states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces. • On May 30, 2018, the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act. • On May 23, 2019, CMS published a final rule to allow Medicare Advantage Plans the option of using step therapy for Part B drugs beginning January 1, 2020. • On ~~December 20~~ **March 11** , ~~2019~~ **2021** , ~~former~~ President ~~Trump~~ **Biden** signed **the American Rescue Plan Act of 2021** into law **, which eliminates** the ~~Further Consolidated Appropriations~~ **statutory drug rebate cap, currently set at 100 % of a drug' s average manufacturer price, for single source and innovator multiple source drugs, beginning January 1, 2024. Due to the Statutory Pay- As- You- Go** Act **of 2010** ~~(" H. R. 1865 ")~~ , **estimated budget deficit increases resulting from the American Rescue Plan Act of 2021, and subsequent legislation, Medicare payments to providers will be further reduced starting in 2025 absent further legislation. These laws and regulations may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for our product and any of our product candidates for** which ~~repealed~~ **we may obtain regulatory approval or** the **frequency with which any such product or product candidate** ~~Cadillac tax, the health insurance provider tax, and the medical device excise tax. It~~ is **prescribed or used** ~~impossible to determine whether similar taxes could be instated in the future~~ . There has been heightened governmental scrutiny in the U. S. of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. **In August 2022, the Inflation Reduction** ~~At~~ **Act of 2022, or the IRA, was signed into law. The IRA includes several provisions that may impact our business, depending on how various aspects of the IRA are implemented. Provisions that may impact our business include** a ~~federal level~~ **$ 2, 000 out- of- pocket cap for Medicare Part D beneficiaries, the imposition of new manufacturer financial liability on most drugs in Medicare Part D, permitting the U. S. government to negotiate Medicare Part B and Part D pricing for certain high- cost drugs and biologics without generic or biosimilar competition, requiring companies to pay rebates to Medicare for drug prices that increase faster than inflation, and delay until January 1, 2032 the implementation of the HHS rebate rule that would have limited the fees that pharmacy benefit managers can charge. Further, under the IRA, orphan drugs are exempted from the Medicare drug price negotiation program, but only if they have one orphan designation and for which the only approved indication is for that disease or condition. If a product receives multiple orphan designations or has multiple approved indications, it may not qualify for the orphan drug exemption. The implementation of the IRA is currently subject to ongoing litigation challenging the constitutionality of the IRA' s Medicare drug price negotiation program. The effects of the IRA on our business and the healthcare industry in general is not yet known. In addition** , President Biden ~~signed an~~ **has issued multiple** ~~Executive~~ **executive orders** ~~Order on July 9, 2021 affirming the administration' s policy to (i) support legislative reforms~~ that **have sought**

to reduce ~~would lower the prices of~~ prescription drug **costs. In February 2023, HHS also issued a proposal in response to** ~~and~~ **an** ~~biologies, including by allowing~~ **October 2022 executive order from President Biden that includes a proposed prescription drug pricing model that will test whether targeted** Medicare **payment adjustments will sufficiently incentivize manufacturers** to **complete confirmatory trials for** ~~negotiate drug prices, by imposing inflation caps, and, by supporting the development and market entry of lower- cost generic~~ drugs **approved through** ~~and biosimilars; and (ii) support the enactment of a public health insurance option. Among other things, the Executive Order also directs HHS to provide a report on actions to combat excessive pricing of prescription drugs, enhance the domestic drug supply chain, reduce the price that the Federal government pays for drugs, and address price gouging in the industry; and directs the FDA to work with states and Indian Tribes that propose to develop section- 22- 804 Importation Programs in accordance with the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, and~~ the FDA' s **accelerated approval pathway** ~~implementing regulations. FDA released such implementing regulations on September 24, 2020, which went into effect on November 30, 2020, providing guidance for states to build and submit importation plans for drugs from Canada. On September 25, 2020, CMS stated drugs imported by states under this rule will not be eligible for federal rebates under Section 1927 of the Social Security Act and manufacturers would not report these drugs for " best price " or Average Manufacturer Price purposes. Since these drugs are not considered covered outpatient drugs, CMS further stated it will not publish a National Average Drug Acquisition Cost for these drugs. If implemented, importation of drugs from Canada may materially and adversely affect the price we receive for any of our product candidates. Further, on November 20, 2020 CMS issued an Interim Final Rule implementing the Most Favored Nation (" MFN ") Model under which Medicare Part B reimbursement rates would have been be calculated for certain drugs and biologicals based on the lowest price drug manufacturers receive in Organization for Economic Cooperation and Development countries with a similar gross domestic product per capita. However, on December 29, 2021, CMS rescinded the Most Favored Nations rule. Additionally, on November 30, 2020, HHS published a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The rule also creates a new safe harbor for price reductions reflected at the point- of- sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers. Pursuant to court order, the removal and addition of the aforementioned safe harbors were delayed and recent legislation imposed a moratorium on implementation of the rule until January 1, 2026~~ . Although a number of these and other proposed measures may require authorization through additional legislation to become effective, and the Biden administration may reverse or otherwise change these measures, both the Biden administration and Congress have indicated that they will continue to seek new legislative measures to control drug costs. ~~There have been several changes to the 340B drug pricing program, which imposes ceilings on prices that drug manufacturers can charge for medications sold to certain health care facilities. On December 27, 2018, the District Court for the District of Columbia invalidated a reimbursement formula change under the 340B drug pricing program, and CMS subsequently altered the fiscal years 2019 and 2018 reimbursement formula on specified covered outpatient drugs (" SCODs "). The court ruled this change was not an " adjustment " which was within the secretary of HHS' s discretion to make but was instead a fundamental change in the reimbursement calculation. However, most recently, on July 31, 2020, the U. S. Court of Appeals for the District of Columbia Circuit overturned the district court' s decision and found that the changes were within the Secretary' s authority. On September 14, 2020, the plaintiffs~~ **20** ~~appellees filed a Petition for Rehearing En Banc (i. e., before the full court), but was denied on October 16, 2020. Plaintiffs~~ ~~appellees filed a petition for a writ of certiorari at the Supreme Court on February 10, 2021. On July 2, 2021, the Supreme Court granted the petition. It is unclear how these developments could affect covered hospitals who might purchase our future products and affect the rates we may charge such facilities for our approved products in the future, if any.~~ Individual states in the U. S. have also increasingly passed legislation and implemented regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Human Capital Resources At Avadel, the way we work is as important as the results we achieve. Our global organization fosters an entrepreneurial environment, where purpose, innovation, integrity, and collaboration come together to transform medicines to transform lives. Our organization fosters our culture based on being relentless for patients, having confidence with humility, being courageous, taking insight to impact and togetherness (the " Avadel Values "). In everything we do, we live the Avadel Values so we can be the best for our patients, our community, and each other. Success for us is defined through how we improve the lives of patients and how we achieve our objectives as one team. We are committed to offering employees a rewarding and entrepreneurial work experience where patients are at the center of everything we do. Our people are our greatest competitive advantage, and our values serve as the foundation of our culture. We consider our relations with our employees to be good and are focused on maintaining a highly engaged and motivated workforce. Employee Demographics As of December 31, ~~2022~~ **2023** , we had **154** ~~approximately 41~~ full- time employees. None of our employees are subject to a union or other collective bargaining agreement. In addition to our employees, we contract with third parties in certain areas of the business ~~- 23 -~~ such as clinical, regulatory, and manufacturing. We expect to continue to build and grow our organizational capabilities with a focus on talent attraction, development, engagement, and retention. Diversity, Equity, and Inclusion Avadel is committed to fostering a diverse workforce and a culture of inclusion. Avadel pursues fair employment practices in every aspect of its business and is committed to a productive work environment for its employees. We strive to create a level of connectivity that goes beyond working together. Rooted in the trust we earn every day, our team is inclusive, valuing diverse perspectives and work every day to lift each other up in pursuit of improving the lives of the patients we serve. Avadel is committed to facilitating an open, honest, inclusive, transparent, and productive work environment where we work together as ONE team and ONE culture to be our best for patients, customers, and each other. Avadel is committed to equal employment opportunities and non- discrimination in employment. We believe that all employees and applicants should be treated with courtesy, dignity, and

respect. Avadel does not discriminate in employment on the basis of race, color, religion, sex, sexual orientation, national origin, age, disability, genetic information, marital status, ancestry, gender, gender identity, pregnancy, status as a covered veteran, or any other characteristic protected by federal, state, and / or local law. It is our intent to comply with federal, state, and local laws, regulations, and guidelines in our employment practices and in our service to our clients. This policy applies to all terms and conditions of employment including, but not limited to, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation, and training. Compensation and Benefits At Avadel, we prioritize the well- being of our employees by offering a comprehensive benefits package. We know that benefits play an important role in helping to ensure the health and financial security of our employees. Our commitment to our employees includes benefit and compensation programs that value the contributions our employees make. We strive to provide pay, benefits, and services that are competitive and create incentives to attract and retain employees. In addition to competitive pay, we offer bonus and share- based compensation packages for all levels of employees within the organization as well as a company match for employee retirement programs. Health and Wellness Our healthcare plans allow employees to choose what works best for them and their families. We offer competitive health, dental, vision and life insurance for all employees as well as competitive vacation packages along with time off for holidays and other forms of leave for all employees. Further, we offer a variety of tools allowing employees to prioritize wellness, including retirement planning, employee stock purchase program, legal services, employee assistance programs, and more. **- 21-** Career Growth and Development We are invested in the development of each of our employees. We provide opportunities to lead and participate in cross- functional teams, coaching, leadership development, and more. We provide reimbursement to our employees for seminars, conferences and educational and professional training. In alignment with our business strategy, it is our goal to empower all employees to take full advantage of their professional growth opportunities, to lead them to long- term job satisfaction and organizational success. Through professional development, our employees can broaden their skills for their current and future roles.- ~~24~~ **22** - Item 1A. Risk Factors. An investment in Avadel involves a high degree of risk. You should carefully consider the risks described below, as well as the other information included or incorporated by reference in this Annual Report on Form 10- K, before making an investment decision. Avadel' s business, financial condition, results of operations and cash flows could be materially adversely affected by any of these risks. The market or trading price of Avadel' s securities could decline due to any of these risks. In addition, please read " Cautionary Disclosure Regarding Forward- Looking Statements " in this Annual Report on Form 10- K, where we describe additional uncertainties associated with Avadel' s business and with the forward- looking statements included or incorporated by reference in this Annual Report on Form 10- K. Please note that additional risks not presently known to us or that we currently deem immaterial may also impair Avadel' s business and operations. Risks Related to **the Commercialization of** Our Lead Product **Our business depends heavily on** ~~Candidate, Future Product Candidates Clinical Development and Commercialization We cannot be certain that our lead product candidate or~~ **our** ~~future product candidates will receive marketing approval~~ **ability to successfully commercialize LUMRYZ in the U** . ~~Without marketing approval,~~ **S. and in other jurisdictions where** we ~~will not be able to commercialize our lead product candidate or future product candidates. We have devoted significant financial resources and business efforts to the development of our lead product candidate. We cannot be certain that our lead product candidate or future product candidates will receive marketing approval. The development of a product candidate and issues relating to its approval and marketing are subject to extensive regulation by the FDA in the U. S. and by comparable regulatory authorities in other countries. We are not permitted to market our lead product candidate or future product candidates in the U. S. until we receive approval of an NDA by the FDA. The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many~~ - **may** years following the commencement of clinical trials..... the submission of an NDA or to obtain marketing approval ~~in the U~~ . **There is no assurance** ~~S., including any findings~~ that ~~the clinical and other benefits of~~ our **commercialization efforts** ~~product candidate outweigh their safety risks; • may disagree~~ with ~~our trial design or our interpretation of data from preclinical studies, bioequivalence studies and / or clinical trials, or may change the requirements for approval even after it has reviewed and commented on the design for our trials; • may determine that we have identified the wrong listed drug or drugs or that approval of our Section 505 (b) (2) application for our product candidate is blocked by patent or non- patent exclusivity of the listed drug or drugs or of other previously approved drugs with the same conditions of approval as our product candidate, as applicable; • may identify deficiencies in the manufacturing processes or facilities of third- party manufacturers with which we enter into agreements for the manufacturing of our product candidate; • may audit some or all of our clinical research study sites to determine the integrity of our data and may reject~~ **respect** ~~any or all of such data; • may approve our product candidate for fewer or more limited indications than we request, or may grant approval contingent on the performance of costly post- approval clinical trials; • may not determine that our product candidate is clinically superior~~ to ~~any previously approved same drug; • may change its approval policies or adopt new regulations; or • may not approve the labeling claims that we believe are necessary or desirable for the successful commercialization of our product candidate. Even if a product is approved, the FDA may limit the indications for which the product may be marketed, require extensive warnings on the product labeling or require expensive and time- consuming clinical trials and / or reporting as conditions of approval. Regulators of other countries and jurisdictions have their own procedures for the approval of product candidates with which we must comply prior to marketing in those countries or jurisdictions. We have submitted an NDA for~~ LUMRYZ ~~in the U. S. and will evaluate filing potentially elsewhere. We have determined, following FDA consultation, that the 505 (b) (2) approval pathway, which permits an NDA applicant to rely on the FDA' s previous findings of safety or effectiveness and data from studies that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference, is the appropriate pathway for a LUMRYZ NDA. There can be no assurances, however, that the 505 (b) (2) approval pathway in the U. S., or similar approval pathways outside of the U. S.,~~ will be ~~available~~ **successful** ~~for~~ - **or** ~~our product candidate or that the FDA or other regulatory authorities will approve our product candidate through an application based on such pathways. Obtaining regulatory approval for marketing of a product candidate in one~~

~~country does not ensure~~ that we will be able to **generate revenues at** ~~obtain regulatory approval in any other~~ -- **the** ~~country~~ **levels or on the timing we expect, or at levels or on the timing necessary to support our goals** . In ~~addition~~ **May 2023** , ~~delays in approvals or rejections of marketing applications in the U. S. or other countries may be based upon many factors, including regulatory requests for additional analyses, reports, data,- 26- preclinical studies and clinical trials, regulatory questions regarding different interpretations of data and results, changes in regulatory policy during the period of product development and the emergence of new information regarding our product candidate. Our business is significantly dependent on the successful development, regulatory approval and commercialization of~~ LUMRYZ **was** ~~, our only product candidate. We have invested substantially all of our efforts and financial resources in the development of LUMRYZ, which has not yet been~~ approved **by** ~~for sale or commercial use. Currently, LUMRYZ is our only product candidate and we have not licensed, acquired, or invented any other product candidates for preclinical or clinical evaluation. This may make an investment in our company riskier than similar companies that have multiple product candidates in active development and that therefore may be able to better sustain a failure of a lead candidate. The success of our business, including our ability to finance our company and generate any revenue in the future, will, at this point, depend entirely on the regulatory approval and commercialization of LUMRYZ, which may never occur. Any failure to obtain regulatory approval of LUMRYZ would have a material and adverse impact on our business. Even if we successfully obtain regulatory approvals to market LUMRYZ, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval. If the markets or patient subsets that we are targeting are not as significant as we estimate, we may not generate significant revenues from sales of LUMRYZ, even if approved. The commercial success of LUMRYZ will depend on a number of factors, including the following: • the timely receipt of necessary marketing approvals from~~ the FDA ~~and similar foreign regulatory authorities; • our ability to raise any additional required capital to support the commercialization on acceptable terms, or~~ **for** ~~at all; • our ability to consistently manufacture LUMRYZ on a timely basis; • our ability to secure and maintain from the U. S. DEA our annual quota for LUMRYZ API; • our ability to successfully to develop and implement a REMS for the safe use of LUMRYZ; • the prevalence, duration and severity of potential side effects or other safety issues that patients may experience with LUMRYZ; • achieving and maintaining, and, where applicable, ensuring that our third- party contractors achieve and maintain, compliance with our contractual obligations and with all regulatory requirements applicable to LUMRYZ; • the differentiation of LUMRYZ from other available approved, or investigational, drugs and treatments -~~ **treatment** of cataplexy or EDS in adults with narcolepsy , and the willingness of physicians,..... the timing necessary to support our goals . Our business currently depends heavily on our ability to successfully commercialize LUMRYZ for the treatment of cataplexy or EDS in adults with narcolepsy in the U. S. and in other jurisdictions where we may obtain marketing approval. **We** ~~Even if we obtain marketing approval for LUMRYZ, we~~ may never be able to successfully commercialize our product or meet our expectations with respect to revenues. There is no guarantee that the infrastructure, systems, processes, policies, relationships, and materials we ~~are building~~ **have built** for the commercialization of LUMRYZ in the U. S., or that we may build for other jurisdictions where we may obtain marketing approval, will be sufficient for us to achieve success at the levels we expect. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, or if we are unable to do so on commercially reasonable terms, our business, results of operations, financial condition and prospects will be materially adversely affected. We may encounter issues **and** ~~, delays or other~~ challenges in ~~launching or commercializing LUMRYZ, if granted final approval by the FDA. For example, our results may be negatively impacted if we have not adequately sized our field teams or if our targeting strategy is inadequate or if we encounter deficiencies or inefficiencies in our infrastructure or processes. We may encounter issues and challenges in commercializing LUMRYZ, if granted final approval by the FDA, and~~ generating sufficient revenues to result in a profit. We may also encounter challenges related to reimbursement of LUMRYZ, including potential limitations in the scope, breadth, availability, or amount of reimbursement covering LUMRYZ. Similarly, healthcare settings or patients may determine that the financial burdens of treatment are not acceptable. We may face other limitations or issues related to the price of LUMRYZ. Our results may also be negatively impacted if we have not adequately sized our field teams or our physician segmentation and targeting strategy is inadequate or if we encounter deficiencies or inefficiencies in our infrastructure or processes. Other factors that may hinder our ability to successfully commercialize LUMRYZ ~~, if granted final approval by the FDA,~~ and generate sufficient revenues to result in a profit, include: • the acceptance of LUMRYZ by patients and the medical community **; • the differentiation of LUMRYZ from other available approved or investigational drugs and treatments for cataplexy or EDS in adults with narcolepsy; • the availability of coverage and adequate reimbursement from managed care plans, private insurers, government payors (such as Medicare and Medicaid and similar foreign authorities) and other third- party payors for LUMRYZ; • patients' ability and willingness to pay out- of- pocket for LUMRYZ in the absence of coverage and / or adequate reimbursement from third- party payors** ; • the ability of our third- party manufacturer (s) to manufacture commercial supplies of LUMRYZ in sufficient quantities at acceptable costs, to remain in good standing with regulatory agencies, **to** maintain applicable registrations and licenses, and to maintain commercially viable manufacturing processes that are, to the extent required, compliant with cGMP regulations; • our ability to remain compliant with laws and regulations that apply to us and our commercial activities; • FDA- or other foreign regulatory agency- mandated package insert requirements and successful completion of any related FDA or other foreign regulatory agency post- marketing requirements, including a REMS **; • the prevalence, duration and severity of potential side effects or other safety issues that patients may experience with LUMRYZ** ; • the actual market size for LUMRYZ, which may be different than expected; • the length of time that patients who are prescribed our drug remain on treatment; • the sufficiency of our drug supply to meet commercial demand which could be negatively impacted if our projections regarding the potential number of patients are inaccurate, we are subject to unanticipated regulatory requirements, or our current drug supply is destroyed, or negatively impacted at our manufacturing sites, storage sites, or in transit; ~~• our ability to effectively complete with other therapies;~~ and • our ability to maintain, enforce, and defend third party challenges to our

intellectual property rights in and to LUMRYZ. - 23- Any of these issues could impair our ability to ~~successfully commercialize our product, if approved, or to~~ generate sufficient revenues to result in a profit or to meet our expectations with respect to the amount or timing of revenues or profits. Any issues or hurdles related to our commercialization efforts may materially adversely affect our business, results of operations, financial condition, and prospects. ~~Even if granted final approval, there~~ **There** is no guarantee that we will be successful in our commercialization efforts with respect to LUMRYZ. We may also experience significant fluctuations in sales of LUMRYZ ~~- 29-~~ from period to period and, ultimately, we may never generate sufficient revenues from LUMRYZ to reach or maintain profitability or sustain our anticipated levels of operations. On March 29, 2023, we ~~executed~~ **entered into** a royalty purchase agreement **(" RPA ")** with RTW Investments, L. P. (" RTW ") that could provide us up to $ 75, 000 of royalty financing ~~(~~**in two tranches. The first tranche of $ 30, 000 became available upon satisfaction of certain conditions which included our first shipment of LUMRYZ. The second tranche is available to use, at our election, if we achieve quarterly net revenue of $ 25, 000 by** the ~~"~~ **quarter ending June 30, 2024. The second tranche expires if we do not elect to use it by August 31, 2024. On August 1, 2023, we received the first tranche of $ 30, 000. As a result of receiving the first tranche, we are required to make quarterly** ~~Royalty~~ **royalty** ~~Purchase Agreement ")~~ **payments calculated as 3. 75 % of worldwide net product revenue of LUMRYZ, up to a total payback of $ 75, 000** . Even if we are able to successfully commercialize LUMRYZ, certain obligations we have to third parties, including, without limitation, our obligation to pay RTW royalties on certain LUMRYZ revenues under the **RPA** ~~Royalty Purchase Agreement,~~ may reduce ~~the~~ **our** profitability. Any inability on our part to successfully commercialize LUMRYZ in the U. S. and any other international markets where it may be approved or any significant delay, could have a material adverse impact on our ability to execute upon our business strategy. ~~be limited,which could adversely affect our ability to achieve or sustain profitability and we could be subject to substantial penalties.As a result,the cost of compliance with post- approval regulations may have a negative effect on our operating results and financial condition.If our competitors develop and market technologies or products that are safer,more effective or less costly than ours,or obtain regulatory approval and market such products before we do,our commercial opportunity may be diminished or eliminated.Competition in the pharmaceutical and biotechnology industry is intense and is expected to increase.We compete with other pharmaceutical and biotechnology companies.The introduction of new products in the U.S.market that compete with,or otherwise disrupt the market for,LUMRYZ or any future product candidates we may develop,if approved,would adversely affect sales of our products.For example,we expect LUMRYZ to face competition from manufacturers of generic twice- nightly sodium oxybate formulations who have reached settlement agreements with the current brand product marketer.In January 2023,Hikma Pharmaceuticals plc,announced that they~~ launched an authorized generic version of Jazz' s Xyrem (sodium oxybate). **Hikma will have 180 days of marketing exclusivity for** ~~In July 2023,Amneal Pharmaceuticals,Inc.announced that it~~ **its** ~~launched an~~ authorized generic ~~version of~~ **product in the U.S.and will distribute through the same specialty pharmacy that** Jazz ~~' s~~ **uses to dispense** Xyrem ~~(sodium oxybate)~~ .There are other potential future competitive products that could impact the marketplace.For example,there are some potential competitors who have reached settlement agreements with the current brand product marketer,which allows for entry of other authorized generics in 2023 and other generic products in 2026,or earlier for both under certain circumstances.Beyond generics,there are other potential future competitive products that could impact the narcolepsy treatment marketplace. ~~- 26-~~ If the FDA approves a competitor' s application for a product candidate before our application for a similar product candidate,and grants such competitor a period of exclusivity,the FDA may take the position that it cannot approve our 505 (b) (2) application for a similar product candidate until the exclusivity period expires.Additionally,even if our 505 (b) (2) application for a product candidate is approved first,and we receive a period of statutory marketing exclusivity,we may still be subject to competition from other companies with approved products or approved 505 (b) (2) NDAs for different conditions of use that would not be restricted by a grant of exclusivity to us. - 51- Many of our competitors have substantially greater financial,technological,manufacturing,marketing,managerial and research and development resources and experience than we do.Furthermore,acquisitions of competing companies by large pharmaceutical companies could enhance our competitors' resources.Accordingly,our competitors may be able to develop,obtain regulatory approval and gain market share for their products more rapidly than us.If the FDA or other applicable regulatory authorities approve generic products that compete with ~~LUMRYZ or~~ any ~~future~~ **of our** product candidates,the sales of **our** ~~LUMRYZ and any future~~ product candidates,if approved,could be adversely affected.Once an NDA,including a 505 (b) (2) NDA,is approved,the product covered becomes a " listed drug " which can be cited by potential competitors in support of approval of an ANDA or subsequent 505 (b) (2) application.FDA regulations and other applicable regulations and policies provide incentives to manufacturers to create modified versions of a drug to facilitate the approval of an ANDA or other application for similar substitutes.If these manufacturers demonstrate that their product has the same active ingredient (s),dosage form,strength,route of administration,and conditions of use,or labeling,as our ~~product~~ **products** or ~~any future~~ product candidates,they might only be required to conduct a relatively inexpensive study to show that their generic product is absorbed in the body at the same rate and to the same extent as,or is bioequivalent to,our ~~product~~ **products** or ~~any future~~ product candidates.In some cases,even this limited bioequivalence testing can be waived by the FDA.Laws have also been enacted to facilitate the development of generic drugs based off recently approved NDAs. **The Creating and Restoring Equal Access to Equivalent Samples Act (" CREATES Act ") was enacted in 2019 requiring sponsors of approved NDAs to provide sufficient quantities of product samples on commercially reasonable,market- based terms to entities developing generic drugs.The law establishes a private right of action allowing developers to sue listed drug holders that refuse to sell them product samples needed to support their applications.If we are required to provide product samples or allocate additional resources to responding to such requests or any legal challenges under this law,our business could be adversely impacted.** Competition from generic equivalents to our ~~product~~ **products** or ~~any future~~ product candidates could substantially limit our ability to generate revenues and therefore to obtain a return on the investments we have made in our ~~product~~ **products or product candidates.If we cannot keep pace with the rapid technological change in** ~~or~~ **our** ~~any~~

industry,we may lose business,and our product candidates,if granted final approval by the FDA,and technologies could become obsolete or noncompetitive.Our success also depends,in part,on maintaining a competitive position in the development of products and technologies in a rapidly evolving field.Major technological changes can happen quickly in the biotechnology and pharmaceutical industries.If we cannot maintain competitive products and technologies,our competitors may succeed in developing competing technologies or obtaining regulatory approval for products before us,and the products of our competitors may gain market acceptance more rapidly than our product candidate and future product candidates. **Such rapid technological change** ~~With the passage of the CREATES Act~~ , **or the development** ~~we are exposed to possible litigation and damages~~ by **our** competitors ~~who~~ **of technologically improved or different products,could render our product candidate and future product candidates or technologies obsolete or noncompetitive.Risks Related to Our Business and Industry COVID- 19** may **materially** ~~claim that we are not providing sufficient quantities of our approved products on commercially reasonable,market- based terms for testing in support of their ANDAs~~ and **adversely affect our business** ~~505 (b) (2) applications.In December 2019,former President Trump signed legislation intended to facilitate the development of generic~~ and ~~biosimilar products~~ **our financial results** .The ~~bill,previously known~~ Clinical development of drugs is costly and time- consuming, and the outcomes are uncertain. A failure to prove that LUMRYZ ~~is~~ **or any future product candidates are** safe and effective in clinical trials could materially and adversely affect our business, financial condition, results of operations and growth prospects. Clinical trials are expensive and can take many years to complete, and the outcome is uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of product candidates may not be predictive of the results of later- stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical testing. ~~For example, we are currently conducting the RESTORE study to examine the long- term safety and maintenance of efficacy of LUMRYZ in patients with narcolepsy who participated in our REST- ON trial, as well as dosing and preference data for patients switching from twice- nightly sodium oxybate to once- at- bedtime LUMRYZ regardless if they participated in REST- ON or not. In May 2021, inclusion criteria were expanded to allow for oxybate naïve patients to enter the study. If any participants in the RESTORE study report any serious adverse events that are deemed to be related to LUMRYZ or if LUMRYZ is not observed to have long- term efficacy, our business, financial condition, results of operations and growth prospects could be material and adversely affected.~~ In addition to issues relating to the results generated in clinical trials, clinical trials can be delayed or halted for a variety of reasons, including delay or failure in: **- 33-** • obtaining regulatory approval to commence a trial; • reaching agreement on acceptable terms with prospective contract research organizations (" CROs ") and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites; • obtaining institutional review board or ethics committee approval at each site; • recruiting suitable patients to participate in a trial; • having patients complete a trial or return for post- treatment follow- up; • clinical sites dropping out of a trial; • adding new sites; or • obtaining clinical materials or manufacturing sufficient quantities of ~~LUMRYZ~~ **our candidates** for use in clinical trials. We ~~have limited experience as~~ **cannot be certain that** a **product candidate will receive marketing approval. Without marketing approval, we will not be able to** ~~commercial~~ **commercialize** ~~drug company~~ **a product candidate. We may devote significant financial resources and business efforts to the development of product candidates. We cannot be certain that any current or future product candidates will receive** ~~targeting~~ **marketing approval. The development of a product candidate and issues relating to its approval and marketing are subject to extensive regulation by the FDA in the U. S. and by comparable regulatory authorities in other countries. We are not permitted to market a product candidate in the U. S. until we receive approval of** an ~~orphan drug disease~~ **NDA by the FDA.The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes** years following the commencement of clinical trials and depends upon numerous factors,including the substantial discretion of regulatory authorities.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.An NDA must include extensive preclinical and clinical data and supporting information to establish ~~the~~ **a** product candidate' s safety and effectiveness for each desired indication.An NDA must also include significant information regarding the chemistry,manufacturing and controls for the product **candidate** .Obtaining approval of ~~an NDA is a lengthy,expensive and uncertain process,and we may not be successful in obtaining approval.For example, and~~ **an NDA is a lengthy** ~~the marketing and sale of LUMRYZ~~ , ~~if granted~~ **expensive and uncertain process, and we may not be successful in obtaining approval. Any delay or setback in obtaining** final approval ~~by~~ **or** the **commercialization of a product candidate may adversely affect our business. The** FDA **has substantial discretion in the drug approval process** , **including the ability to delay, limit or deny approval of a product candidate for** ~~may~~ **many** ~~be unsuccessful~~ **reasons.** ~~or~~ **For** ~~less successful~~ **example, the FDA: • could determine** ~~than~~ **that** ~~anticipated. We have limited experience~~ **we cannot rely on the Section 505 (b) (2) regulatory pathway or other pathways we may select,** as **applicable, for** a ~~commercial drug company targeting~~ **product candidate; • could determine that the information provided was inadequate, contained clinical deficiencies or otherwise failed to demonstrate the safety and effectiveness of a product candidate for any indication; • may not find the data from bioequivalence studies and / or clinical trials sufficient to support the submission of** an **NDA** ~~orphan disease and there is limited information about our~~ **or** ~~ability~~ to ~~successfully overcome many of the risks and uncertainties encountered by companies commercializing drugs in the biopharmaceutical industry. To execute our business plan, in addition to successfully obtaining~~ --- **obtain** marketing approval ~~and marketing and selling LUMRYZ~~ **in the U. S.** , **including any findings that the clinical and other benefits of a product candidate outweigh their safety risks; • may disagree with our trial design or our interpretation of data from preclinical studies, bioequivalence studies and / or clinical trials, or may change the requirements for approval even after it has reviewed and commented on the design for our trials; • may determine that** we ~~will need to successfully:~~ **have identified the wrong listed drug or drugs or that approval of our Section 505 (b) (2)**

application for a product candidate is blocked by patent or non- patent exclusivity of the listed drug or drugs or of other previously approved drugs with the same conditions of approval as our product candidate, as applicable; • ~~establish and maintain~~ **may identify deficiencies in the manufacturing processes** ~~our~~ - **or** ~~relationships~~ **facilities of third- party manufacturers** with ~~healthcare providers who will be treating~~ **which we enter into agreements for** the ~~patients who~~ **manufacturing of a product candidate; •** may ~~receive~~ **audit some** ~~our~~ - **or all of our clinical research study sites to determine the integrity of our data and may reject any or all of such data; • may approve a product candidate for fewer or more limited indications than we request, or may grant approval contingent on the performance of costly post-approval clinical trials; • may not determine that a product candidate is clinically superior to any previously approved same** drug; • ~~obtain adequate pricing and reimbursement~~ **may change its approval policies** ~~for~~ - **or** ~~LUMRYZ~~ **adopt new regulations** ; **or** • ~~develop and maintain~~ **may not approve the labeling claims that we believe are necessary or desirable for the** successful ~~strategic alliances; and • manage~~ **commercialization of a product candidate.- 34- Even if a product is approved, the FDA may limit the indications for which the product may be marketed, require extensive warnings on the product labeling** ~~our~~ - **or** ~~spending~~ **require expensive and time- consuming clinical trials and / or reporting** as **conditions of** ~~costs and expenses increase due to marketing approvals~~ - **approval. Regulators of other countries** and ~~commercialization in multiple~~ jurisdictions ~~, if granted final~~ **have their own procedures for the** approval by the FDA. If we are..... primary role in the recommendation and prescription of ~~biotechnology and biopharmaceutical products. Arrangements with third- party payors and customers can expose biotechnology and biopharmaceutical manufacturers to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti- Kickback Statute (" AKS "), and the federal False Claims Act (" FCA "), which may constrain the business or financial arrangements and relationships through which such companies sell, market and distribute biotechnology and biopharmaceutical products. In particular, the research of our~~ product candidates **with which we must comply prior to** ~~, as well as the promotion, sales and~~ marketing ~~of healthcare items and services, as well as certain business arrangements~~ in ~~the~~ **those countries** ~~healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self- dealing and other abusive practices. These laws and regulations may restrict~~ or **jurisdictions. We have received** ~~prohibit a wide range of pricing, discounting,~~ marketing **approval from the FDA for LUMRYZ in the U. S.** and ~~promotion~~ **will evaluate filing potentially elsewhere. We determined** , ~~structuring and commission~~ **following FDA consultation, that the 505** (~~s~~ **b**) **(2) approval pathway** , certain customer incentive programs and other..... interactions between healthcare companies and healthcare providers , which **permits** ~~has led to a number of investigations, prosecutions, convictions and~~ - **an NDA applicant** ~~settlements in the healthcare industry. Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found~~ to be in violation of any of the..... provided medical treatment for their conditions generally rely on ~~third- party payors to reimburse all or part of the costs associated with their~~ -- **the** ~~treatment. Coverage~~ **FDA' s previous findings of safety or effectiveness** and **data** ~~adequate reimbursement~~ from **studies that were not conducted by or for** ~~governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance. Government authorities and other~~ -- **the applicant** ~~third- party payors, such as private health insurers~~ and **for** ~~health maintenance organizations, decide~~ which ~~drugs and treatments they~~ - **the applicant has** ~~will cover and the amount of reimbursement. Coverage and reimbursement by a third- party depend upon a number of factors.- 31- In the United States, no~~ **not** ~~uniform policy of coverage and reimbursement for products exists among third- party payors. As a result, obtaining coverage and reimbursement approval of a product from a government or other third- party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost- effectiveness data for the use of our products on a payor- by- payor basis, with no assurance that coverage and adequate reimbursement will be~~ obtained ~~. In the United States, the principal decisions about reimbursement for new medicines are typically made by the CMS. CMS decides whether and to what extent~~ a ~~new medicine will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree. Even if we obtain coverage for a given product, the resulting reimbursement payment rates might~~ **right** ~~not be adequate for us to achieve or sustain profitability or may require co- payments that patients find unacceptably high. Additionally, third- party payors may not cover, or provide adequate reimbursement for, long- term follow- up evaluations required following the use~~ of **reference** ~~product candidates~~ . **was** once approved. Patients are unlikely to..... imports of drugs from countries where they - **the appropriate pathway for** ~~may be sold at lower prices than in the United States. Increasingly, third- party payors are requiring that drug companies provide them~~ - **the LUMRYZ NDA** with predetermined discounts from list prices and..... placing the medicinal product on the market . There can be no ~~assurance~~ **assurances , however,** that **similar approval pathways outside of the U. S., will be available for LUMRYZ or that the FDA or other regulatory authorities will approve** any **future product candidates through an application based on such pathways. We have also submitted a sNDA for LUMRYZ in the pediatric narcolepsy population in November 2023. The sNDA was accepted by the FDA in January 2024 and an approval decision is expected in September 2024. We cannot be certain this sNDA will be approved by the FDA. Obtaining regulatory approval for marketing of a product candidate in one** country **does not ensure** that ~~has price controls or reimbursement limitations~~ **we will be able to obtain regulatory approval in any other country. In addition, delays in approvals** ~~for~~ - **or rejections of marketing applications in the U. S. or other countries may be based upon many factors, including regulatory requests for additional analysis, reports, data, preclinical studies and clinical trials, regulatory questions regarding different interpretations of data and results, changes in regulatory policy during the period of product development and the emergence of new information regarding a product candidate. Our current and future product candidates may not reach the commercial market for a number of reasons. Drug development is an inherently uncertain process with a high risk of failure at every stage of development.**

Successful research and development of pharmaceutical products ~~will allow favorable reimbursement~~ **is difficult, expensive** and ~~pricing arrangements for~~ **time consuming.** ~~any~~ **Many** ~~of our~~ product candidates **fail to reach the market** . ~~Historically,~~ **Our success will depend on the development and successful commercialization of new drugs and** products ~~launched in~~ **that utilize our drug delivery technologies. Even if product candidates and drug delivery technologies appear promising during development, there may not be successful commercial applications developed for** ~~the~~ **them for a number of reasons, including: • the FDA, the European Medicines Agency (" EMA "), the competent authority of a** European Union ~~do~~ **(“** EU ") Member State or an IRB,or an Ethics Committee (EU equivalent to IRB),or our partners may delay or halt applicable clinical trials;• we or our partners may face slower than expected rate of patient recruitment and enrollment in clinical trials,or may devote insufficient funding to the clinical trials;• ~~our~~ drug delivery technologies and drug products may be found to be ineffective or to cause harmful side effects,or may fail during any stage of pre- clinical testing or clinical trials;• we or our partners may find that certain products cannot be manufactured on a commercial scale and,therefore,may ~~not~~ not ~~follow price structures~~ **be economical or feasible to produce; • we or our partners may face delays in completing our clinical trials due to circumstances outside of our control, including natural disasters, labor or civil unrest, global health concerns or pandemics or acts of war or terrorism; or • product candidates could fail to obtain regulatory approval or, if approved, could fail to achieve market acceptance, could fail to be included within the pricing and reimbursement schemes** of the U. S. ~~and generally prices tend to~~ **or EU Member States, or could** be **precluded from commercialization** ~~significantly lower. Ongoing healthcare legislative and regulatory reform measures may have a material adverse effect on our business and results of operations. 32 Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future~~ by **proprietary rights** ~~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~~ **third parties. Risks Related to Our Financial Position and Capital** ~~requirements~~ **Requirements We incurred a net loss** ~~. If any such changes were to be imposed, they could adversely affect the operation of our business. If we are slow or unable to adapt to changes~~ in **2023 and may incur a net loss in 2024** ~~existing requirements or the adoption of new requirements or policies~~ , ~~or~~ **and** 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 ~~. See the section entitled, " Business — Government Regulation — Healthcare Reform ". Moreover, increasing efforts by governmental and third- party payors~~ in ~~the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they~~ - **the** may not cover or provide adequate payment..... and prospects. These laws, and future ~~state and federal healthcare reform measures may be adopted in the future~~ , ~~any of which may result in additional reductions in Medicare and other~~ -- **the** healthcare funding and otherwise affect the prices..... authorizing payment, or offering anything of value **of** ~~, directly or~~ **our shares** indirectly, to any foreign official,..... pharmaceutical industry, because, in many - **may** countries, hospitals are operated by the..... misuse and exploitation. If we fail - **fall** ~~to comply with HIPAA, GDPR or other similar laws, we will face significant fines and penalties that could adversely affect our business, financial condition and results of operations~~ . ~~Risks Related to Our Financial Position and Capital Requirements~~ We incurred a net loss ~~in 2022 and we will likely incur a net loss in 2023, and if we are not able to achieve profitability in the future, the value of our shares may fall. We incurred a net loss~~ of $ ~~137~~ **160** , ~~464~~ **276** for the year ended December 31, ~~2022~~ **2023** . We ~~do~~ **may** not ~~expect to~~ become profitable in the near future and may never achieve profitability. The amount of our future net losses or net profitability will depend, in part, on the rate of our future expenditures and our ability to recognize revenues from the commercialization of LUMRYZ **in** ~~, if granted final approval by~~ the ~~FDA~~ **U. S** . We have devoted significant financial resources to research and development, including our clinical development activities, ~~and~~ the pursuit of regulatory approval **and commercial launch** for LUMRYZ. **Our** ~~If we obtain marketing approval, our~~ future revenues will depend upon the size of any markets in which LUMRYZ and any future products ~~have received~~ - **receive** approval, and our ability to achieve sufficient market acceptance, ~~- 35-~~ reimbursement from third- party payors and adequate market share for our ~~- 35-~~ product and any future products in those markets. In addition, we **have significantly increased our** ~~are in the process of building a~~ sales organization and supporting commercial infrastructure **to support the commercial launch of LUMRYZ** and, accordingly, we will **continue to** incur significant expenses ~~in advance~~ **related to the commercialization** of **LUMRYZ** ~~generating any commercial product sales~~ . Because of the numerous risks and uncertainties associated with ~~developing~~ **the commercialization of** pharmaceutical products, we are unable to predict the extent of any future losses or when we will become profitable, if at all. Our ability to operate profitably depends upon a number of factors, many of which are beyond our direct control. These factors include: ~~• the timely receipt of approval from the FDA for the commercialization of LUMRYZ;~~ • our ability to obtain, build and expand manufacturing capacity, including capacity at third- party manufacturers; • the effectiveness of our sales and marketing strategy; • the demand and market size for LUMRYZ; • the level of product and price competition for LUMRYZ; • our ability to develop new partnerships and additional commercial applications for LUMRYZ and any future product candidates; • **the timely receipt of approval for the commercialization of LUMRYZ outside the U. S.; • the potential expansion of LUMRYZ into other populations; •** our ability to control our costs; • the initiation of additional research, preclinical, clinical or other programs as we seek to identify and validate additional product candidates; • our ability to acquire or in- license other product candidates and technologies; • our ability to maintain, protect and expand our intellectual property portfolio; **and** • general economic conditions. Even ~~if though~~ the FDA ~~grants~~ **granted** final approval of our NDA for LUMRYZ **in May 2023 for the treatment of cataplexy or EDS in adults with narcolepsy** , we may never recognize revenue in amounts sufficient to achieve and maintain profitability. The net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period- to- period comparison of our results of operations may not be a good indication of our future performance. In any particular quarter or quarters, our operating results could be below the expectations of securities analysts or investors, which could cause our stock price to decline. We ~~will~~ **may** require additional financing to **successfully** ~~repay the outstanding $ 21, 187 aggregate principal~~

~~amount of our October 2023 Notes and to develop and~~ commercialize **LUMRYZ** ~~our product candidate~~ and implement our operating plans, which may not be available on favorable terms or at all, and which may result in dilution of the equity interest of the holders of ADSs. We **may** ~~do not currently have sufficient available liquidity to repay the outstanding $ 21, 187 aggregate principal amount of our October 2023 Notes, and we are evaluating various financing strategies to obtain sufficient additional liquidity to meet our operating, debt service and capital requirements for the next twelve months following the date of this Annual Report. The potential sources of financing that we are evaluating include one or any combination of royalty financing, secured or unsecured debt, convertible debt and equity. In addition, our financing strategy could include refinancing or negotiating new terms for the October 2023 Notes. We also currently have authorized and available for use our at- the- market (" ATM ") offering program. We also expect to~~ require additional financing to fund the **commercialization of LUMRYZ and possible** development **or** ~~and commercialization of LUMRYZ, if granted final approval by the FDA, and possible~~ acquisition of new products and businesses. We may consume available resources more rapidly than currently anticipated, resulting in the need for additional funding. Any additional fundraising efforts may divert our management from their day- to- day activities, which may adversely affect our ability to ~~develop and~~ commercialize LUMRYZ ~~, if granted final approval by the FDA~~ . If we cannot obtain financing when needed, or obtain it on favorable terms, we may be required to curtail our plans to continue to develop drug delivery technologies, develop new products, or acquire additional products and businesses. Other factors that will affect future capital requirements and may require us to seek additional financing include: • the development and acquisition of new products and drug delivery technologies; • the progress of our research and product development programs; and • the timing of, and amounts received from, future product sales, product development fees and licensing revenue and royalties. If adequate funds are not available, we may be required to significantly reduce or refocus our product development efforts, resulting in loss of sales, increased costs and reduced revenues. Alternatively, to obtain needed funds for acquisitions or operations, we may seek to issue additional ADSs representing our ordinary shares, or issue equity- linked debt, or we may choose to issue preferred shares, in either case through public or private financings. Additional funds may not be available on terms that are favorable to us and, in the case of such equity or equity- linked financings, may result in dilution to the holders of ADSs. We could also be required to seek funds through arrangements with collaborative partners **,** and we may be required to relinquish rights to ~~some of~~ **our product** ~~our~~ **or future** product candidates or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects. ~~- 36-~~ We may be required to or choose to obtain further funding through public equity or equity linked offerings, debt financings, royalty- based financing arrangements, collaborations and licensing arrangements or other sources. To the extent that we raise additional capital through the sale of equity, convertible debt securities or other equity- based derivative securities, investors will **- 36-** be diluted **,** and new investors could gain rights, preferences and privileges senior to the holders of our ADSs. Furthermore, the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our ADSs to decline and existing shareholders may not agree with our financing plans or the terms of such financings. If we raise additional funds through collaborations or marketing, distribution or licensing, or royalty- based financing arrangements with third parties, we may have to relinquish valuable rights to future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. Our ability to obtain additional financing may be limited by the terms of our financing arrangements and the provisions of Irish law. Restrictions in our existing and future financing arrangements and mandatory provisions of Irish law may adversely affect our ability to obtain additional financing. For example, ~~the indenture~~ **future debt agreements** ~~for~~ **or** ~~our Notes contains~~ **other financing arrangements may include** covenants that limit our ability to engage in specified transactions, including prohibiting us from incurring additional secured or unsecured debt, paying dividends or redeeming equity securities ~~. Future debt agreements~~ or ~~other financing arrangements may include~~ similar or more restrictive terms that limit our ability to raise additional financing when needed. In addition, Irish law requires that our directors must have specific authority from shareholders to allot and issue new shares generally, or to issue new shares for cash to new shareholders without offering such shares to existing shareholders pro- rata to their existing holdings (including, in each case, rights to subscribe for or otherwise acquire any shares), even where such shares form part of our authorized but unissued share capital. At our 2021 annual general meeting of shareholders, our shareholders renewed such authorizations, subject to certain parameters, for a period expiring December 20, 2026 **. If we are unable to obtain renewal of such authorization from our shareholders, our ability to use our authorized but unissued share capital to effect or to obtain additional financing, could be adversely affected** . Irish law also provides that, in the event of an actual or potential takeover offer being made for us, various actions, including issuing shares, options or convertible securities, material acquisitions or disposals, entering into contracts other than in the ordinary course of business or any action, other than seeking alternative offers, may be prohibited unless approved by our shareholders or the Irish Takeover Panel. These restrictions may prevent or delay us from taking actions that we believe are in our best interest or from obtaining financing on favorable terms, in adequate amounts or at all, which may adversely impact our results of operations and financial condition. Our net loss and use of cash in operating activities may limit our ability to fully pursue our business strategy. We reported net loss of $ ~~137~~ **160** , ~~464~~ **276** in ~~2022~~ **2023** . We reported cash used in operating activities of $ ~~70~~ **128** , ~~304~~ **511** . Cash and marketable securities as of December 31, ~~2022~~ **2023** totaled $ ~~96~~ **105** , ~~499~~ **111** . Our business strategy is to primarily focus on the **commercialization** ~~development and potential final FDA approval~~ of LUMRYZ for the treatment of cataplexy or EDS in adults with narcolepsy **in the U. S** . The successful pursuit of all components of our strategy will require substantial financial resources, and there can be no assurance that our existing cash and marketable securities assets and the cash generated by our operations will be adequate for these purposes. ~~We will likely incur a net loss in 2023 and, if we use existing cash and marketable securities, there is no guarantee that we would be able to generate additional cash through our operations or through financing.~~ Failure to implement any component of our strategy may prevent us from achieving profitability in the future or may otherwise have a material adverse effect on our financial condition and results of operation. ~~Uncertainties relating to our ability to procure additional debt, equity or other financing prior to the maturity of our outstanding~~

~~exchangeable senior notes raises substantial doubt about our ability to continue as a going concern. As of December 31, 2022, we had an accumulated shareholders' deficit of approximately $ 21, 145 and approximately $ 73, 981 of cash and cash equivalents and $ 22, 518 of marketable securities available for use to fund our operations and capital requirements. Within twelve months of the date of this Annual Report, our interest and principal payments of $ 21, 187 aggregate principal amount of our October 2023 Notes that was not exchanged and maintains a maturity date of October 2, 2023 will fall due. We do not currently have sufficient available liquidity to repay the outstanding balance of the $ 21, 187 aggregate principal amount of our October 2023 Notes. Consequently, absent further actions by the Company, these matters raise substantial doubt about our ability to continue as a going concern within one year after the date that the financial statements in this Annual Report on Form 10- K are issued. We are evaluating various financing strategies to obtain sufficient additional liquidity to meet our operating, debt service and capital requirements for the next twelve months following the date of this Annual Report. The potential sources of financing that we are evaluating include one or any combination of royalty financing, secured or unsecured debt, convertible debt and equity. We also currently have authorized and available the use of ATM offering program- 37- We have a recent history of generating losses and negative cash flows from operations. Our ability to generate revenue is expected to start following the launch of LUMRYZ, which is dependent, in part, on final approval of LUMRYZ by the FDA. Our audited financial statements have been prepared under the assumption that we will continue as a going concern for the next twelve months. Our ability to continue as a going concern is dependent upon our ability to obtain additional debt, equity or other financing or otherwise address the upcoming maturities of our outstanding exchangeable senior notes. Based on our ability to raise funds through the ATM offering program and its cash, cash equivalents and marketable securities as of December 31, 2022, we have concluded that it is probable that such proceeds would provide sufficient additional capital to meet our operating, debt service and capital requirements for the next twelve months following the date of this Annual Report. As a result, we have concluded that management' s plans are probable of being achieved to alleviate the substantial doubt about our ability to continue as a going concern. Our potential inability to continue as a going concern in future years could materially adversely affect our share price and our ability to raise new capital or enter into strategic alliances. Furthermore, we also could be required to seek funds through arrangements with collaborative partners or otherwise that may require us to relinquish rights to some of our intellectual property or product candidates or otherwise agree to terms unfavorable to us.~~ Risks Related to Regulation The distribution and sale of LUMRYZ **are** ~~, if granted final approval by the FDA, will be~~ subject to significant regulatory restrictions, including the requirements of a REMS and safety reporting requirements, and these regulatory requirements ~~will~~ subject us to risks and uncertainties, any of which could negatively impact sales of LUMRYZ. The API of LUMRYZ is **sodium oxybate** ~~a form of gamma- hydroxybutyric acid, (" GHB ")~~, a central nervous system depressant known to be associated with facilitated sexual assault as well as with respiratory depression and other serious side effects. As a result, the FDA requires that sponsors of sodium oxybate products, such as LUMRYZ, ~~if granted final approval by the FDA,~~ maintain a REMS to help ensure that the benefits of the drug outweigh the serious risks of the drug. ~~If granted~~ **As a part of the** final approval **granted** by the FDA **for LUMRYZ**, the **FDA** ~~agency will require~~ **required** a REMS for LUMRYZ, which, among other requirements, ~~will impose~~ **imposes** controls and restrictions on the distribution of the product **in the U. S**. Any failure to demonstrate our substantial compliance with such REMS obligations, including as a result of business or other interruptions ~~resulting from the evolving effects of the COVID- 19 pandemic~~, or a determination by the FDA that the REMS is not meeting its goals, could result in enforcement action by the FDA, lead to changes in our REMS obligations, negatively affect sales of LUMRYZ, result in additional costs and expenses for us or require us to invest a significant amount of resources, any of which could materially and adversely affect our business, financial condition, results of operations and growth prospects. We cannot predict whether the FDA will request, seek to require or ultimately require modifications to, or impose additional requirements on, the REMS for LUMRYZ **in** ~~, if granted final approval by~~ the ~~FDA~~ **future**. Any modifications approved, required or rejected by the FDA could change the safety profile of LUMRYZ, and have a significant negative impact in terms of product liability, public acceptance of LUMRYZ for treatment of cataplexy or EDS in adults with narcolepsy, and prescribers' willingness to prescribe, and patients' **- 37-** willingness to take, LUMRYZ, any of which could have a material adverse effect on our business. Modifications approved, required or rejected by the FDA could also make it more difficult or expensive for us to distribute LUMRYZ, make distribution easier for sodium oxybate competitors, disrupt continuity of care for LUMRYZ patients or negatively affect sales of LUMRYZ **in the U. S**. Pharmaceutical companies, including their agents and employees, are required to monitor adverse events occurring during the use of their products and report them to the FDA. As required by the FDA, and similarly for other regulatory agencies, the adverse event information that we collect for LUMRYZ ~~, if granted final approval by the FDA,~~ must be regularly reported to the FDA and could result in the FDA requiring changes to LUMRYZ' s labeling, including additional warnings or boxed warnings, or requiring us to take other actions that could have an adverse effect on patient and prescriber acceptance of LUMRYZ. Any failure to demonstrate our substantial compliance with a REMS required for LUMRYZ ~~, if granted final approval by the FDA,~~ or any other applicable regulatory requirements to the satisfaction of the FDA or another regulatory authority could result in such regulatory authorities taking actions in the future which could have a material adverse effect on sodium oxybate product sales and therefore on our business, financial condition, results of operations and growth prospects. Disruptions at the FDA, the DEA 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, prevent new products and services from being developed or commercialized in a timely manner 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. ~~- 38-~~ The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes. 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, DEA and other agencies may also increase the time necessary for new product candidates to be reviewed or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years the U. S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, 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 could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations. **LUMRYZ may** ~~Since March 2020 when foreign and domestic inspections of facilities were largely placed on hold, the FDA has been working to resume pre- pandemic levels of inspection activities, including routine surveillance, bioresearch monitoring and pre- approval inspections. Should the FDA determine that an inspection is necessary for approval and an inspection cannot be completed during the review cycle due to restrictions on travel, and the FDA does~~ not **maintain** ~~determine a remote interactive evaluation to be adequate, the agency has stated that it generally intends to issue, depending on the circumstances, a complete response letter or defer action on the application until an inspection can be completed. During the COVID- 19 public health emergency, a number of companies announced receipt of complete response letters due to the FDA' s inability to complete required inspections for their applications. Regulatory authorities outside the U. S. may adopt similar restrictions or other policy measures in response to the COVID- 19 pandemic and may experience delays in their regulatory activities. We cannot guarantee that the FDA, DEA and other agencies, as applicable, will be able to complete any required inspections or take other necessary actions in respect to our product candidate or future product candidates. LUMRYZ, if granted final approval by the FDA, may not obtain desired~~ regulatory exclusivities, including orphan drug exclusivity **, or the benefits of such exclusivities, which may adversely affect the sales of the product** . Under the Orphan Drug Act, as amended, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is defined as a patient population of fewer than 200, 000 individuals in the U. S., or a patient population of 200, 000 or more where there is no reasonable expectation that the cost of developing the drug for the rare disease or condition will be recovered from sales of the drug in the U. S. Generally, if a drug with orphan drug designation subsequently receives the first marketing approval for the disease or condition for which it has such designation, the drug is entitled to a period of marketing exclusivity, which precludes the FDA from approving another marketing application for the same drug for the same disease or condition for seven years, except in limited circumstances, such as if the FDA concludes that a subsequent same drug is clinically superior to the first approved orphan drug through greater safety, greater effectiveness, or a major contribution to patient care. ~~Although~~ LUMRYZ obtained orphan drug designation for the treatment of narcolepsy from the FDA in January 2018 ~~,~~ **. Upon** ~~there --~~ **the** ~~is no guarantee that we will obtain~~ approval **of LUMRYZ in May 2023 by the FDA** ~~or~~ **for the treatment of cataplexy or EDS in adults with narcolepsy and a finding of clinical superiority of LUMRYZ relative to marketed oxybate products, the FDA granted LUMRYZ seven years of** orphan drug exclusivity ~~for LUMRYZ~~ . **Accordingly** ~~Orphan drug designation does not give a product candidate any advantage in, or shorten the timeline for~~ , the FDA **cannot** ~~regulatory review and approval process. In addition, because LUMRYZ would not be the first sodium oxybate product to be approved --~~ **approve a subsequent sponsor' s** ~~for the treatment of narcolepsy, we must demonstrate that LUMRYZ is clinically superior to any previously approved~~ same drug **as** ~~in order to obtain orphan drug exclusivity for~~ LUMRYZ **for the same indication until May 2030** , ~~and~~ **subject to certain exceptions. Even though** we **have** ~~may be required to demonstrate clinical superiority for the approval and exclusivity of other product candidates in the future. However, such a demonstration may be difficult to establish, and there can be no assurance that we will be successful in these efforts. Even if we obtain~~ **obtained** orphan drug exclusivity for LUMRYZ, that exclusivity may not effectively protect LUMRYZ from competition because different drugs can be approved for the same condition. Moreover, ~~even if we are granted final approval by the FDA,~~ there can be no assurance that third parties will not attempt to **disrupt the commercialization** ~~delay or prevent commercial launch~~ of LUMRYZ through litigation. Any orphan drug exclusive marketing rights may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantity of LUMRYZ to meet the needs of patients with the particular rare disease or condition. The FDA may reevaluate its regulations and policies under the Orphan Drug Act. We do not know if, when or how the FDA may change the orphan drug regulations and policies in the future, and it is uncertain how **- 38-** any changes might affect our business. Depending on what changes, the FDA may make to its orphan drug regulations and policies, our business could be adversely impacted. The API in LUMRYZ, sodium oxybate, is a controlled substance subject to U. S. federal and state controlled substance laws and regulations and applicable controlled substance legislation in other countries, and our failure, or the failure of third- parties on whom we rely, to comply with these laws and regulations, or the cost of compliance with these laws and ~~- 39-~~ regulations, could materially and adversely affect our business, results of operations, financial condition and growth prospects. LUMRYZ contains a controlled substance as defined in the CSA. Controlled substances are subject to a number of requirements and restrictions under the CSA and implementing regulations, including certain registration, security, recordkeeping, reporting, manufacturing and procurement quotas, import, export and other requirements administered by the DEA. The DEA classifies controlled substances into five schedules: Schedule I, II, III, IV or V. Schedule I substances by definition have a high potential for abuse, no currently " accepted medical use " in the U. S., lack accepted safety for use under medical supervision, and may not be prescribed, marketed or sold in the U. S. Pharmaceutical products approved for use in the U. S. which contain a controlled substance are listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest potential for abuse or dependence and Schedule V substances the lowest relative risk of abuse among such substances. Schedule I and II drugs are subject to the strictest controls under the CSA, including manufacturing and procurement quotas, heightened security requirements and additional criteria for importation. The API of LUMRYZ, **sodium** oxybate ~~salts~~ , ~~are~~ **is** regulated by the DEA as **a** Schedule I controlled ~~substances~~ **substance** , and FDA- approved products containing ~~oxybate salts, including~~ sodium

oxybate **, including LUMRYX** , are currently Schedule III. Individual states have also established controlled substance laws and regulations. Although state- controlled substances laws often mirror federal law, they may separately schedule our product **or future product** ~~candidates~~ **candidate (s)** . We or our partners may also be required to obtain separate state registrations, permits or licenses in order to be able to manufacture, research, distribute, import, export, administer or prescribe controlled substances for clinical trials or commercial sale, and failure to meet applicable regulatory requirements could lead to enforcement and sanctions by the states in addition to those from the DEA or otherwise arising under federal law. U. S. facilities conducting research, manufacturing, distributing, importing or exporting, or dispensing of controlled substances must be registered (licensed) to perform these activities and must comply with the security, control, recordkeeping and reporting obligations under the CSA, DEA regulations and corresponding state requirements. DEA and state regulatory bodies conduct periodic inspections of certain registered establishments that handle controlled substances. Obtaining and maintaining the necessary registrations, obtaining and maintaining quotas and complying with the regulatory obligations may result in delay of the importation, export, manufacturing, distribution or research of our ~~lead~~ product ~~candidate and our commercial product, if approved,~~ and any future ~~products~~ **product** candidates or products. Furthermore, failure to maintain compliance with the CSA and DEA and state regulations by us or any of our contractors, distributors or pharmacies can result in regulatory action that could have a material adverse effect on our business, financial condition and results of operations. In addition, if we change any third- party upon whom we rely to conduct our research, manufacturing, distributing, importing, exporting, or dispensing activities, doing so will result in additional costs and expenses and may take a significant amount of time, and we may be unsuccessful in identifying a new, satisfactory third- party, any of which could materially and adversely affect our business, financial condition, and results of operations. DEA and state regulatory bodies may seek civil penalties, refuse to renew necessary registrations, or initiate proceedings to restrict, suspend or revoke those registrations. In certain circumstances, violations could lead to criminal penalties. Because LUMRYZ contains sodium oxybate, to conduct clinical trials with LUMRYZ in the U. S. ~~prior to~~ **for additional indications beyond what the FDA has already** ~~approval~~ **approved** , each of our research sites must submit a research protocol to the DEA and obtain and maintain a DEA researcher registration that allows those sites to handle and dispense LUMRYZ and to obtain the product candidate. If the DEA delays or denies the grant of a researcher registration to one or more research sites, the clinical trial could be significantly delayed, and we could lose clinical trial sites. In the event the product candidate would be made outside the U. S., the importer for the clinical trials must also obtain a Schedule I importer registration and an import permit for each import. We and our manufacturing partners in the U. S. are subject to the DEA' s annual manufacturing and procurement quota requirements. ~~Additionally, even though LUMRYZ, if granted final approval by the FDA, is anticipated to be classified as Schedule III based on current applicable regulations, the active ingredient in the final dosage form, sodium oxybate, is a Schedule I controlled substance and will continue be subject to such quotas as long as it remains classified as Schedule I.~~ The annual quota allocated to us or our U. S. manufacturing partners for sodium oxybate may not be sufficient to ~~complete clinical trials or~~ meet commercial demand of LUMRYZ ~~, if granted final approval by the FDA~~ . Consequently, any delay or refusal by the DEA in establishing our, or U. S. manufacturing partner' s, procurement and / or production quota for controlled substances could delay or stop our ~~clinical trials or~~ commercial activities ~~,~~ ~~if approved~~ **and future development / clinical activities** , which could have a material adverse effect on our business, financial position and results of operations. **- 39-** ~~If granted final approval by the FDA,~~ LUMRYZ is ~~anticipated to be~~ classified as a Schedule III substance based on current applicable regulations, which ~~would allow~~ **allows** an importer to import it for commercial purposes if it obtains the appropriate ~~- 40-~~ registrations and licenses from the DEA, including an importer registration and files an application for an import permit for each import. The DEA provides annual assessments / estimates to the International Narcotics Control Board, which guides the DEA in the amounts of controlled substances that the DEA authorizes to be imported. To the extent an importer is utilized for commercial purposes, failure by any current importer or future importer that we identify as an importer, if any are available, to obtain and maintain the necessary import authority from the DEA and other applicable regulatory authorities, including specific quantities, could affect the availability of LUMRYZ and have a material adverse effect on our business, results of operations and financial condition. Governments outside of the U. S. have similar controlled substance laws, regulations and requirements in their respective jurisdictions, and our failure, or the failure of third parties upon whom we rely, to comply with applicable controlled substance laws, regulations and requirements or secure necessary authorizations would result in similar risks to those described above. We ~~will need~~ **are required** to obtain regulatory approval of any proposed product names for our product candidates, and any failure or delay associated with such approval may adversely impact our business. Any name we intend to use for our product candidates will require approval from the FDA or other regulatory authorities in jurisdictions where we may seek approval regardless of whether we have secured a trademark registration from the USPTO or similar protection in other jurisdictions. The FDA and other regulatory authorities each typically ~~conducts~~ **conduct** a review of proposed product names, including an evaluation of potential for confusion with other product names. The FDA or other regulatory authorities in jurisdictions where we may seek approval may object to any product name we submit if **, for example,** it believes the name inappropriately implies medical claims. If the FDA or other regulatory authorities in jurisdictions where we may seek approval objects to any of our proposed product names, we may be required to adopt an alternative name for our product candidates. There is no guarantee ~~that~~ we will be able to use the same proprietary name for ~~our~~ **a** product ~~candidates~~ in each jurisdiction where we market ~~our~~ **that** ~~products~~ **product** ~~, if approved~~ . If we adopt an alternative name, we would lose the benefit of any existing trademark applications for such product ~~candidate~~ and may be required to expend significant additional resources in an effort to identify a suitable product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA or other regulatory authorities. ~~The FDA has tentatively accepted our proprietary name for our lead product candidate, LUMRYZ.~~ Final acceptance of a proposed proprietary name occurs as part of the final approval of ~~the~~ **a** drug product. We may be unable to build a successful brand identity for a new proprietary name or trademark in a timely manner or at all, which would limit our ability to

commercialize ~~our~~ **a** product ~~candidates~~. Risks Related to our Reliance on Third Parties We rely, and intend to continue to rely on ~~single source~~ **a limited number of** providers for the development, manufacture and supply of LUMRYZ, and if we experience problems with these suppliers, or they fail to comply with applicable regulatory requirements or to supply sufficient quantities at acceptable quality levels or prices, or at all, our business would be materially and adversely affected. Currently, we use ~~single source~~ **a limited number of** providers for the development, supply of clinical materials and supply of commercial batches for our ~~lead~~ product ~~candidate~~, LUMRYZ. We do not own or operate manufacturing facilities for clinical or commercial manufacture of LUMRYZ. We have limited personnel with experience in drug manufacturing **,** and we lack the capabilities to manufacture LUMRYZ **on a** clinical or commercial scale. There can be no assurance that our clinical development or commercial product supplies will not be limited, interrupted, or of satisfactory quality or continue to be available at acceptable quantities or prices to meet ~~commercial~~ demand ~~, if LUMRYZ is granted final approval by the FDA~~. If the supplies of these products or materials were interrupted for any reason ~~,~~ **(** including but not limited to, natural disasters, labor or civil unrest, global health concerns or pandemics or acts of war or terrorism, delays at the manufacturer, delays related to quality control, **and** delays related to the supply chain **)** ~~and the manufacturing and supply of certain products could be delayed. If the supplies of these products or materials were interrupted for any reason~~, our manufacturing, clinical development or commercial activities ~~, if approved,~~ of LUMRYZ **(or any future product or product candidate)** could be delayed. These delays could be extensive and expensive, especially in situations where a substitution was not readily available or required variations of existing regulatory approvals and certifications or additional regulatory approval ~~For example, an alternative supplier may be required to pass an inspection by the FDA, EMA or the competent authorities of EU Member States for compliance with current cGMP requirements before supplying us with product or before we may incorporate that supplier' s ingredients into the manufacturing of LUMRYZ by our contract development and manufacturing organizations (" CDMOs ")~~. Additionally, our third- party suppliers may not be required to, or may be unable to, provide us with any guaranteed minimum production levels or have sufficient dedicated capacity for our drug. Failure to obtain adequate supplies in a timely manner could have a material adverse effect on our business, financial condition and results of operations.- ~~41~~ **40** - We contract with third parties for the manufacture of LUMRYZ for clinical testing and **commercialization, and** expect to continue to do so ~~throughout commercialization~~ **for any future products and product candidates** . This reliance on third parties increases the risk that we will not have sufficient quantities of **LUMRYZ** ~~our~~ **or any future products or** product ~~candidate~~ **candidates ,** ~~or product~~ or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts. We do not currently own or operate, nor do we have any plans to establish in the future, any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of LUMRYZ for clinical testing ~~,~~ **and commercial manufacture of LUMRYZ** as well as ~~for~~ **any** ~~the~~ **other future products and** ~~commercial manufacture of our~~ product **candidates we develop** ~~if LUMRYZ receives marketing approval~~. This reliance on third parties increases the risk that we will not have sufficient quantities of our product ~~candidate~~ **candidates** or ~~product~~ **products ,** or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development ~~or~~ **and** commercialization efforts. The facilities used by CDMOs generally must be inspected by the FDA pursuant to pre- approval inspections conducted as a part of the FDA' s review of an NDA. We do not control the manufacturing process of, and will be completely dependent on, our CDMOs for compliance with cGMPs in connection with the manufacture of ~~our~~ **LUMRYZ and any future products and** product ~~candidate~~ **candidates** . If our CDMOs cannot successfully manufacture ~~material~~ **materials** that ~~conforms~~ **conform** to our specifications and the strict regulatory requirements of the FDA ~~or~~ **and any** ~~others~~ **other applicable regulatory authorities** , they will not be able to pass regulatory inspections and / or maintain regulatory compliance for their manufacturing facilities. In addition, we have no control over the ability of our CDMOs to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority finds deficiencies with or does not approve these facilities for the manufacture of **LUMRYZ** ~~our~~ **or any future products or** product ~~candidate~~ **candidates ,** or if it finds deficiencies or withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to **market LUMRYZ or any future product or** develop ~~,~~ **and** obtain regulatory approval for **any future** ~~or market our~~ product ~~candidate~~ **candidates** , if granted final approval by the FDA **or other applicable regulatory authority** . CDMOs upon whom we rely are also required to comply with the CSA, DEA regulations and other applicable controlled substance laws, regulations and requirements in other countries, where applicable, including ~~and~~ those relating to licensing and registration requirements. The inability of our CDMOs to maintain compliance with applicable controlled substance laws, regulations and requirements and obtain and maintain the necessary licenses and registrations could have a material adverse effect on our business, including our clinical trials, commercial activities ~~, if approved~~, financial position and results of operations. If any CDMO with whom we contract fails to perform its obligations, we may be forced to enter into an agreement with a different CDMO, which we may not be able to do on reasonable terms, if at all. In such scenario, our clinical trials or commercial supply could be delayed significantly as we establish alternative supply sources. In some cases, the technical skills required to manufacture **a product** ~~our~~ **or** product candidate ~~or product, if approved,~~ may be unique or proprietary to the original CDMO and we may have difficulty, or there may be contractual restrictions prohibiting us from, transferring such skills to a back- up or alternate supplier, or we may be unable to transfer such skills at all. In addition, if we are required to change CDMOs for any reason, we will be required to verify that the new CDMO maintains facilities and procedures that comply with quality standards and with all applicable regulations, including those relating to controlled substances. We will also need to verify, such as through a manufacturing comparability study, that any new manufacturing process will produce **a product** ~~our~~ **or** product candidate ~~or product~~ according to the specifications previously submitted to or approved by the FDA or ~~another~~ **other** regulatory authority. The delays associated with the verification of a new CDMO could negatively affect our ability to **commercialize a product or** develop **a** ~~LUMRYZ or commercialize our~~ product **candidate** ~~, if granted final approval by the FDA,~~ in a timely manner or within budget. Furthermore, a CDMO may possess technology related to the manufacture of **a product** ~~our~~ **or** product

candidate ~~or product~~ that such CDMO owns independently. This would increase our reliance on such CDMO ~~or~~ **and may** require us to obtain a license from such CDMO in order to have another CDMO manufacture **the product** ~~our~~ **or** product candidate ~~or product~~. In addition, in the case of CDMOs that supply **a product** ~~our~~ **or** product candidate, changes in manufacturers often involve changes in manufacturing procedures and processes, which could require that we conduct bridging studies between our **supply from the** prior **CDMO** ~~clinical supply used in our clinical trials~~ and that of any new manufacturer ~~. We may be unsuccessful in demonstrating the comparability of clinical supplies which could require the conduct of additional clinical trials~~. Further, our failure, or the failure of our third party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, ~~if approved,~~ operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business and supplies of **a product** ~~our~~ **or** product candidates. We may be unable to establish ~~any~~ 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:- ~~42~~ **41** - • reliance on the third party for regulatory compliance and quality assurance; • the possible breach of the manufacturing agreement by the third party; • the possible misappropriation of our proprietary information, including our trade secrets and know- how; and • the possible termination or **non-** ~~nonrenewal~~ --- **renewal** of the agreement by the third party at a time that is costly or inconvenient for us. ~~Our~~ **A** product **or product** ~~candidates~~ - **candidate** ~~and any products that~~ we ~~may~~ develop may compete with other product candidates and approved products **of other parties** for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us. Any performance failure on the part of our existing or future manufacturers could delay clinical development ~~or~~ **,** marketing approval **or commercialization efforts**. If our current CDMOs cannot perform as agreed, we may be required to replace such manufacturers. We may incur added costs and delays in identifying and qualifying any such replacement. Our current and anticipated future dependence upon others for the manufacture of ~~our product candidates or~~ **LUMRYZ and any future** products may adversely affect our future profit margins and our ability to commercialize ~~any~~ **such** products ~~that receive marketing approval~~ on a timely and competitive basis. We outsource important activities to consultants, advisors and outside contractors. We outsource many key functions of our business and therefore rely on a substantial number of consultants, advisors and outside contractors. If we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by such third parties is compromised for any reason, our development activities may be extended, delayed or terminated which would have an adverse effect on our development program and our business. We depend on key personnel to execute our business plan. If we cannot attract and retain key personnel, we may not be able to successfully implement our business plan. We are highly dependent on the expertise of Gregory Divis, our Chief Executive Officer, Thomas ~~S.~~ McHugh, our Chief Financial Officer, and Richard Kim, our Chief Commercial Officer, as well as the other key members of our management, legal, scientific, clinical and commercial team. Although we have entered into employment letter agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain " key person " insurance for any of our executives or other employees. Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize drugs. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. ~~Failure~~ **We have substantially increased our number of employees over the last year, and we expect** to ~~obtain final FDA approval for~~ **expand our organization as a result of the commercialization of** LUMRYZ ~~may make it more challenging to recruit and retain qualified personnel~~. **As a result** ~~The commercialization of LUMRYZ~~, ~~if granted final approval by the FDA, will require us to expand our organization and~~ we may experience difficulties in managing this growth, which could disrupt our operations. ~~We currently employ approximately 41~~ **As of December 31, 2023, we had 154** full- time employees. **Our** ~~If LUMRYZ is granted final approval by the FDA, we expect to expand our~~ full- time employee base **increased substantially in 2023** to advance the commercialization of LUMRYZ in the U. S. Our management may need to divert a disproportionate amount of its attention away from our day- to- day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our ~~expected~~ growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to recognize and / or grow revenues could be reduced and we may not be able to ~~implement~~ **execute** our business strategy. Our future financial performance and our ability to commercialize LUMRYZ ~~, if granted final approval by the FDA,~~ and compete effectively will depend, in part, on our ability to effectively manage any future growth.- ~~43~~ **42** - We rely on third parties to conduct our clinical trials, and if they do not properly and successfully perform their contractual, legal and regulatory duties, we may not be able to obtain regulatory approvals for or commercialize **any** ~~LUMRYZ and~~ future product candidates. We rely on CROs and other third parties to assist us in designing, managing, monitoring and otherwise carrying out our clinical trials, including with respect to site selection, contract negotiation and data management. We do not control these third parties and, as a result, they may not treat our clinical ~~studies~~ **trials** as a high priority, which could result in delays. We are

responsible for confirming that each of our clinical trials is conducted in accordance with its general investigational plan and protocol, as well as the FDA' s and foreign regulatory agencies' requirements, commonly referred to as good clinical practices, for conducting, recording and reporting the results of clinical trials to ensure that the data and results are credible and accurate and that the trial participants are adequately protected. The FDA and foreign ~~.~~ regulatory agencies enforce good clinical practices through periodic inspections of trial sponsors, principal investigators and trial sites. If we, CROs or other third parties assisting us or our ~~study~~ **trial** sites fail to comply with applicable good clinical practices, the clinical data generated in our clinical trials may be deemed unreliable **,** and the FDA or its non- U. S. counterparts may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA or foreign regulatory agencies will determine that any of our clinical trials comply with good clinical practices. If third parties do not successfully carry out their duties under their agreements with us, if the quality or accuracy of the data they obtain is compromised due to failure to adhere to our clinical protocols, including dosing requirements, or regulatory requirements, or if they otherwise fail to comply with clinical trial protocols or meet expected deadlines, our clinical trials may not meet regulatory requirements. If our clinical trials do not meet regulatory requirements or if these third parties need to be replaced, our clinical trials may be extended, delayed, suspended or terminated. If any of these events occur, we may not be able to obtain regulatory approval of **any** ~~our product candidate and~~ future product candidates or succeed in our efforts to create approved line extensions for certain of our existing products or generate additional useful clinical data in support of these products. If we or our partners fail to comply with these laws and regulations, the FDA, or other foreign regulatory agencies, may take actions that could significantly restrict or prohibit commercial distribution of LUMRYZ **or the clinical development of any future product candidates** . If the FDA or other foreign regulatory authorities determine ~~that~~ we are not in compliance with these laws and regulations, they could, among other things: • issue warning letters; • impose fines; • seize products or request or order recalls; • issue injunctions to stop future sales of products; • refuse to permit products to be imported into, or exported out of a particular country; • suspend or limit our production; • withdraw or vary approval of marketing applications; • withdraw approval of marketing applications; and • initiate criminal prosecutions. We may rely on collaborations with third parties to commercialize LUMRYZ and **any** ~~certain of our~~ future ~~product~~ **products** ~~candidates outside of the U. S., if granted the necessary approvals or authorizations~~ . Such strategy involves risks that could impair our prospects for realizing profits from such products. We expect that ~~the~~ commercialization of LUMRYZ and ~~our~~ **any** future ~~product~~ **products** ~~candidates~~ outside of the U. S. ~~, if granted the necessary approvals or authorizations,~~ may require collaboration with third- party partners involving strategic alliances, licenses, product divestitures or other arrangements. We may not be successful in entering into such collaborations on favorable terms, if at all, or our collaboration partners may not adequately perform under such arrangements, and as a result our ability to commercialize these products will be negatively affected and our prospects will be impaired. We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator' s resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator' s own evaluation of a potential collaboration. Such factors a potential collaborator will use to evaluate a collaboration may include the design or results of clinical trials, the likelihood of final approval by ~~the FDA or comparable~~ foreign regulatory authorities, the potential market for LUMRYZ or **any** future ~~product~~ **products** ~~candidates~~ , the potential of competing products, the existence of uncertainty with respect to our ownership of our intellectual property, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and ~~- 44 -~~ industry and market conditions generally. The collaborator may also consider alternative **products,** product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with **- 43-** us for LUMRYZ or ~~our~~ **any** future **product or** product candidates. The terms of any additional collaborations or other arrangements that we may establish may not be favorable to us. We may also be restricted under collaboration agreements from entering into future agreements on certain terms with potential collaborators. Collaborations are complex and time- consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. We may not be able to negotiate additional collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of ~~our~~ **any future** product candidates for which we are seeking to collaborate, reduce or delay its development program, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to ~~further~~ develop **future drug candidates, commercialize** LUMRYZ ~~and~~ **outside of the U. S.** ~~our~~ **or bring any** future ~~product candidates outside of the U. S., if granted the necessary approvals or authorizations, or bring these~~ products to market and generate product revenue. In addition, 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. Collaborators generally have significant discretion in determining the efforts and resources ~~that~~ they will apply to these collaborations. Disagreements between parties to a collaboration arrangement regarding clinical development and commercialization matters can lead to delays in the **product** development process or commercializing the applicable product ~~candidate~~ and, in some cases, termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither **party** ~~of the parties~~ has final decision- making authority. Collaborations with pharmaceutical or biotechnology companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect us financially and could harm our business reputation. If we cannot adequately protect our intellectual property and proprietary information, we may be unable to effectively compete. Our success depends, in part, on our ability to obtain and enforce patents and other intellectual property rights for ~~our product candidate and~~ **LUMRYZ, as well as** future **products,** product candidates and technology ~~,~~ **(** including our

drug delivery technologies ~~,~~ **)** and to preserve our trade secrets and other proprietary information. If we cannot do so, our competitors may exploit our technologies and deprive us of the ability to realize revenues and profits from our **LUMRYZ,** ~~product candidate and~~ future **products and** product candidates **,** and technologies. To the extent **our product and** any ~~of our product candidate and~~ future **products and** product candidates may benefit from protections afforded by patents, we face the risk that patent law relating to the scope of claims in the pharmaceutical and biotechnology fields is continually evolving and can be the subject of uncertainty and may change in a way that would limit protection. If challenged, a court or other body may determine that our patents may not be ~~exclusive,~~ valid or enforceable. For example, our patents may not protect us against challenges by companies that submit drug marketing applications to the FDA, or the competent authorities of EU Member States or other jurisdictions in which we may attempt to compete, in particular **,** where such applications rely, at least in part, on safety and efficacy data from our product ~~candidate and~~ **or any** future product **or product** ~~candidates~~ **candidate** . In addition, competitors may obtain patents that may have an adverse effect on our ability to conduct business, or they may discover ways to circumvent our patents. The scope of any patent protection may not be sufficiently broad to cover our product ~~candidate and~~ **or any** future product **or product** ~~candidates~~ **candidate,** or to exclude competing products. Any patent applications we have made or may make relating to our potential products or technologies may not result in patents being issued. Even after issuance, our patents may be challenged in the courts or patent offices in the U. S. and elsewhere. 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 product candidates, or limit the duration of the patent protection of **LUMRYZ** ~~our~~ **or a future product or** product candidate ~~and future product candidates~~ . Further, patent protection once obtained is limited in time, after which competitors may use the **claimed invention** ~~covered product or technology~~ without obtaining a license from us. Because of the time required to obtain regulatory marketing approval, the remaining period of effective patent protection for a marketed product is frequently substantially shorter than the full duration of the patent. While a patent term extension can be requested under certain circumstances, the grant of such a request is not guaranteed. **- 44-** Our partnerships with third parties expose us to risks that they will claim intellectual property rights on our inventions or fail to ~~- 45-~~ keep our unpatented ~~products or technology~~ **inventions and proprietary information** confidential. If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed. We also rely on trademarks, copyrights, trade secrets and know- how to develop, maintain and strengthen our competitive position. **We** ~~To protect our product candidate, trade secrets and proprietary technologies, we~~ rely, in part, on confidentiality agreements with our employees, suppliers, consultants, advisors and partners **to protect trade secrets, know- how and proprietary information related to, for example, current and future products, product candidates, and manufacturing processes** . These agreements may not provide adequate protection for our trade secrets **, know- how** and other proprietary information in the event of any unauthorized use or disclosure, or if others lawfully develop the information. If these agreements are breached, we cannot be certain we will have adequate remedies. Further, we cannot guarantee that third parties will not know, discover or independently develop equivalent **trade secrets, know- how or other** proprietary information ~~or technologies~~ , or that they will not gain access to our trade secrets **, know- how or other proprietary information** or disclose **same** ~~our trade secrets~~ to the public. Therefore, we cannot guarantee we can maintain and protect ~~unpatented~~ **our trade secrets, know- how and other** proprietary information ~~and trade secrets~~ . Misappropriation or other loss of our intellectual property would adversely affect our competitive position and may cause us to incur substantial litigation or other costs. If we and our partners do not adequately protect the trademarks and trade names for our **current and future** products, then we and our partners may not be able to build name recognition in our markets of interest and our business may be adversely affected. Our competitors or other third parties may challenge, infringe or circumvent the trademarks or trade names for our **current and future** products. We and our partners may not be able to protect these trademarks and trade names. In addition, if the ~~trademarks~~ **trademark** or trade ~~names~~ **name** for **a** ~~one of our products~~ **product** ~~infringe~~ **infringes** the **valid** rights of others, we or our partners may be forced to stop using the ~~trademarks~~ **trademark** or trade ~~names~~ **name** , which we need for name recognition in our markets of interest. If we cannot establish name recognition based on our trademarks and trade names, we and our partners may not be able to compete effectively **,** and our business may be adversely affected. Changes in U. S. or ex- U. S. patent laws could diminish the value of patents in general, thereby impairing our ability to protect **current** ~~our product candidate~~ and future ~~product~~ **products** ~~candidates~~ . Changes in either the patent laws or interpretation thereof in the U. S. or in ex- U. S. jurisdictions could increase uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For example, the Leahy- Smith America Invents Act of 2011 (" AIA "), changed the previous U. S. " first- to- invent " system to the current system that awards a patent to the " first- inventor- to- file " for an application for a patentable invention. This change alters the pool of available materials that can be used to challenge patents in the U. S. and limits the ability to rely on prior research to lay claim to patent rights. Under the current system, disputes are resolved through new derivation proceedings, and the AIA includes mechanisms to allow challenges to issued patents in reexamination, inter partes review and post grant proceedings. The AIA also includes bases and procedures that may make it easier for competitors to challenge our patents, which could result in increased competition and have a material adverse effect on our business and results of operations. The AIA may also make it harder to challenge third- party patents and place greater importance on being the first inventor to file a patent application on an invention. The AIA amendments to patent filing and litigation procedures in the U. S. may result in litigation being more complex and expensive and divert the efforts of our technical and management personnel. In addition, the patent positions of companies in the development and commercialization of pharmaceuticals may be particularly uncertain. Depending on future actions by the U. S. Congress, the U. S. federal courts, and the USPTO, or by similarly legislative, judicial, and regulatory authorities in other jurisdictions, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future. **- 45-** Third parties may claim that

our **current** ~~product candidate~~ or future product ~~candidates infringe~~ **infringes** their rights, and we may incur significant costs resolving these claims. Additionally, legal proceedings related to such claims could materially delay or otherwise adversely affect commercialization plans related to ~~our~~ **such** product ~~candidate, if granted final approval by the FDA~~. Third parties may claim infringement of their patents and other intellectual property rights by the manufacture, use, import, offer for sale or sale of **a commercial** ~~our drug delivery technologies or our other products~~ **product**. **Further** ~~For example~~, in connection with us seeking regulatory approval for a product candidate, a third party may allege that our product candidate infringes its patents or other intellectual property rights and file suit to delay / prevent regulatory approval and / or commercialization of such product. In response to any claim of infringement, we may choose or be forced to seek licenses, defend infringement actions or challenge ~~- 46-~~ the validity or enforceability of those patent rights in court or administrative proceedings. If we cannot obtain required licenses on commercially reasonably terms, or at all, are found liable for infringement or are not able to have such patent rights declared invalid or unenforceable, our business could be materially harmed. We may be subject to claims (and even held liable) for significant monetary damages (including enhanced damages and / or attorneys' fees), encounter significant delays in bringing products to market or be precluded from the manufacture, use, import, offer for sale or sale of products or methods of drug delivery covered by the patents of others. Even if a license is available, it may not be available on commercially reasonable terms or may be non- exclusive, which could result in our competitors gaining access to the same intellectual property. We may not have identified, or be able to identify in the future, U. S. or non- U. S. patents that pose a risk of potential infringement claims. In addition to the possibility of intellectual property infringement claims, a third party could submit a citizen' s petition to the FDA requesting relief that, if granted, could materially adversely affect the NDA and / or underlying product candidate. For example, such a third- party petition could, if granted, materially adversely affect the likelihood and / or timing of NDA approval, content of final product labeling, and / or resulting regulatory exclusivity (if any) for such product. Parties making claims against us may be able to sustain the costs of patent litigation more effectively than we can because they have substantially greater resources. In addition, any claims, with or without merit, that our product ~~candidate~~, **future products or** future product candidates ~~or drug delivery technologies~~ infringe proprietary rights of third parties could be time- consuming, result in costly litigation or divert the efforts of our technical and management personnel, any of which could disrupt our relationships with our partners and could significantly harm our financial positions and operating results. An NDA submitted under Section 505 (b) (2) subjects us to the risk that we may be subject to a patent infringement lawsuit that would delay or prevent the review or approval of ~~our~~ **any future** product candidates ~~. The LUMRYZ NDA was submitted under Section 505 (b) (2) of the FDCA~~. Section 505 (b) (2) permits the submission of an NDA where at least some of the information required for approval comes from preclinical studies or clinical trials that were not conducted by, or for, the applicant and for which the applicant has not obtained a right of reference. A 505 (b) (2) NDA enables the applicant to reference published literature for which the applicant does not have a right of reference and the FDA' s previous findings of safety and effectiveness for a previously approved drug. For 505 (b) (2) NDAs, the patent certification and related provisions of the Hatch- Waxman Amendments apply. Accordingly, if the applicant relies for approval on the safety or effectiveness information for a previously approved drug, referred to as a listed drug, the applicant is required to include patent certifications in its 505 (b) (2) NDA regarding any applicable patents covering the listed drug. If there are applicable patents listed in the FDA publication Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book, for the listed drug, and the applicant seeks to obtain approval prior to the expiration of one or more of those patents, the applicant is required to submit a Paragraph IV certification indicating their belief that the relevant patents are invalid or unenforceable or will not be infringed by the manufacture, **import,** use **, offer for sale** or sale of the product that is the subject of the 505 (b) (2) application. Otherwise, the 505 (b) (2) NDA cannot be approved by the FDA until the expiration of any patents listed in the Orange Book for the listed drug ~~. On May 24, 2022, we were notified by the FDA that the LUMRYZ NDA patent statement pertaining to the REMS Patent was deemed inappropriate. On June 29, 2022, we announced that we had submitted a Paragraph IV certification pertaining to the REMS Patent to LUMRYZ' s NDA. On July 18, 2022, we received tentative approval from the FDA for LUMRYZ for the treatment of cataplexy or EDS in adults suffering from narcolepsy. Jazz requested delisting of the REMS Patent from FDA' s Orange Book on February 28, 2023, pursuant to the United States Court of Appeals for the Federal Court decision of February 24, 2023, affirming the previous ruling from the Delaware Court, ordering such delisting. On March 1, 2023, we submitted an amendment to our NDA for LUMRYZ requesting final approval~~. There can be no assurance that we will not be required to submit a Paragraph IV certification in respect of any future product candidates for which we seek approval under Section 505 (b) (2). Following any Paragraph IV certification that may be required, an applicant will be required to provide notice of that certification to the NDA holder and patent owner. Under the Hatch- Waxman Amendments, the patent owner may file a patent infringement lawsuit after receiving such notice. If a patent infringement lawsuit is filed within 45 days of the patent owner' s or NDA holder' s receipt of notice (whichever is later), a one- time, automatic stay of the FDA' s ability to approve the 505 (b) (2) NDA is triggered, which typically extends for 30 months unless patent litigation is resolved in favor of the Paragraph IV filer **, the patent is removed from FDA' s orange book** or the patent expires before that time. Accordingly, we may invest a significant amount of time and expense in the development of one or more product candidates only to be subject to significant delay and patent litigation before such product candidates **, if approved,** may be commercialized, if at all. **- 46-** In addition, a 505 (b) (2) NDA will not be approved until any applicable non- patent exclusivity listed in the Orange Book for the listed drug, or for any other drug with the same protected conditions of approval as our product, has expired. The FDA also may require us to perform one or more additional clinical trials or measurements to support the change from the listed drug, which could be time consuming and could substantially delay our achievement of regulatory approval. The FDA also may reject any ~~- 47-~~ future 505 (b) (2) NDAs and require us to submit traditional NDAs under Section 505 (b) (1), which would require extensive data to establish safety and effectiveness of the product for the proposed use and could cause delay and additional costs. In addition, the FDA could reject any future 505 (b) (2) application and require us to submit a Section 505 (b) (1) NDA or a Section 505 (j)

ANDA if, before the submission of our 505 (b) (2) application, the FDA approves an application for a product that is pharmaceutically equivalent to ours and determines that our product is inappropriate for review through the 505 (b) (2) pathway. These factors, among others, may limit our ability to commercialize ~~our~~ **any future** product candidates **, if approved,** successfully. If we or our partners are required to obtain licenses from third parties, our revenues and royalties on any future commercialized products could be reduced. The development of certain products based on our drug delivery technologies may require the use of raw materials (e. g., proprietary excipient), active ingredients, drugs (e. g., proprietary proteins) or technologies developed by third parties. The extent to which efforts by other researchers have resulted or will result in patents and the extent to which we or our partners are forced to obtain licenses from others, if available, on commercially reasonable terms is currently unknown. If we or our partners must obtain licenses from third parties, fees may be required for such licenses, which could reduce the net revenues and royalties we receive on any future commercialized products that incorporate our drug delivery technologies. Patent terms may be inadequate to protect ~~our~~ **the** competitive position ~~on~~ **of** our product ~~candidate~~ or **any** future ~~product~~ **products** ~~candidates~~ for an adequate amount of time. Patents have a limited lifespan. In the U. S., if all maintenance fees are timely paid, the natural expiration of a **utility** patent is generally 20 years from its earliest U. S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product ~~candidate and~~ **or any** future ~~product~~ **products** ~~candidates~~ are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. 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 **, if approved,** are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. 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 non- compliance with these requirements. Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and / or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the U. S. in several stages over the lifetime of the patents and / or applications. We rely on our outside counsel to coordinate payment of these fees due to patent agencies. The USPTO and various non- U. S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and 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 non- compliance 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. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business. We may not be able to protect our intellectual property rights throughout the world. Filing, prosecuting and defending patents on our product ~~candidate~~ and **any** future **products and** product candidates in all countries throughout the world would be prohibitively expensive, and intellectual property rights in some countries outside the U. S. can be less extensive than those in the U. S. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the U. S., or from selling or importing products made using our inventions in and into the U. S. or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the U. S. These products may compete with our product ~~candidate~~ and **any** future ~~product~~ **products** ~~candidates~~ **,** and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. **- 47-** Many companies have encountered significant problems in protecting and defending intellectual property rights in non- U. S. 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, which could make it difficult for us to stop ~~the~~ infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our ~~- 48-~~ patent rights in non- U. S. 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 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 we develop or license. Risks Related to **Our Business** ~~Acceptance, Sales, Marketing~~ and **Industry Our** ~~Competition If we are unable to establish effective sales, marketing and distribution capabilities for LUMRYZ, if granted final approval by the FDA, or enter into agreements with third parties to market, sell and distribute our product candidate, if granted final approval by the FDA, or if we are unable to achieve market acceptance for LUMRYZ, our~~ business , results of operations, financial condition..... our medicines. Any of these issues could impair our ability to successfully commercialize LUMRYZ..... significant market share, our revenues may be adversely affected ~~and~~ **by the effects of health epidemics, in regions where we** ~~our~~ **or third parties on which we rely have significant manufacturing facilities, concentrations of potential clinical trial sites or other** business **operations** ~~may suffer~~ . **Health epidemics** ~~LUMRYZ is an investigational formulation of sodium oxybate designed to be taken once at bedtime for the treatment of cataplexy or EDS~~ in **regions where we have concentrations** ~~adults with narcolepsy. Our estimates~~ of ~~the market opportunities for LUMRYZ are based on the estimated market size for the twice- nightly administration of sodium oxybate, which is the current standard of care for cataplexy or EDS in patients with narcolepsy, and our expectations with regard to LUMRYZ' s~~ potential ~~to take a~~ **clinical trial sites or other business operations could adversely affect our business, including by causing** significant share of this market. These estimates.....; and • the marketing and distribution --- **disruption in** support it receives. If LUMRYZ,..... and review by the FDA and other -- **the**

operations ~~applicable regulatory authorities. These requirements include, but are not limited to, restrictions governing promotion~~ of an approved product, submissions of safety..... We, our CDMOs and other third parties upon whom we rely will be subject to applicable controlled substances..... adversely affect sales of our product candidate . For example, ~~in the future, we expect LUMRYZ to face competition from manufacturers of generic twice- nightly sodium oxybate formulations who have reached settlement agreements with the current brand product marketer. On January 3, 2023, Hikma Pharmaceuticals plc, announced that they~~ **the** launched an authorized generic version of Jazz..... business and our financial results. The COVID- 19 pandemic **presented a substantial public health and economic challenge around the world and affected employees, patients, communities and business operations,** ~~has~~ **as** ~~spread globally~~ **well as the economy and financial markets** . **Health epidemics** ~~The continued spread of COVID- 19~~ could **continue** ~~adversely impact our operations, including our ability~~ to **produce** ~~fully enroll and complete RESTORE, our OLE / switch study of LUMRYZ, initiate and complete any future clinical trials, manufacture sufficient supply of LUMRYZ at sufficient scale for commercialization, if granted final approval by the FDA. In addition, COVID- 19 has resulted in~~ significant ~~governmental measures being implemented to control the spread of the virus, including quarantines, travel restrictions, social distancing~~ and **prolonged** ~~business shutdowns. We have taken precautionary measures intended to help minimize the risk of the virus to our employees, including allowing employees to work remotely. These measures could negatively affect our business. For instance, temporarily allowing employees to work remotely may induce absenteeism, disrupt~~ **disruption of,** ~~our~~ **or** ~~operations or increase the risk of a cybersecurity incident. COVID- 19 has also caused~~ volatility in ~~the~~ **,** global financial markets **, reducing our ability to access capital** ~~and threatened a slowdown in the global economy~~ , which ~~may~~ **could in the future** negatively affect our ~~ability to raise~~ **liquidity. In** ~~additional~~ **addition, to the extent the lingering effects of the COVID- 19 pandemic adversely affect our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described elsewhere in this " Risk Factors " section. We are currently operating in a period of economic uncertainty and** capital **markets disruption,** ~~on attractive terms or at all. The extent to~~ which **has been significantly** ~~COVID- 19 may impact~~ **impacted by geopolitical instability** ~~our business will depend on future developments~~ , ~~which are~~ **ongoing military conflicts, including the conflict between Russia and Ukraine and the conflict in Israel, and** ~~highly~~ **high** ~~uncertain~~ **inflation** and **rising interest rates** ~~cannot be predicted with confidence~~ , ~~such as the duration of the pandemic, the severity of COVID- 19, the identification of new variations of the virus or the effectiveness of actions to contain and treat COVID- 19, particularly in the geographies where we or our third party suppliers and CDMOs, or CROs operate. We cannot presently predict the scope and severity of~~ any ~~potential business shutdowns or disruptions. If we or any~~ of ~~the third parties with whom we engage, however, were to experience shutdowns or other business disruptions, our ability to conduct our business in the manner and on the timelines presently- 52- planned could be materially and negatively affected, which could have a material adverse impact on our business and our results of operations and financial condition. Our cost structure optimization efforts, including a reduction in workforce, announced in June 2022, may not result in anticipated savings, could result in total costs and expenses that are greater than expected and could disrupt our business. In June 2022, we announced a reduction in workforce of nearly 50 percent in connection with cost structure optimization efforts. We may not realize, in full or in part, the anticipated benefits and cost savings from our cost structure optimization efforts due to unforeseen difficulties, delays or unexpected costs. If we are unable to realize the expected operational efficiencies and cost savings from the restructuring, our operating results and financial condition would be adversely affected. We also cannot guarantee that we will not have to undertake additional workforce reductions or restructuring activities in the future. Furthermore, our cost structure optimization efforts may be disruptive to our operations. For example, our workforce reductions could yield unanticipated consequences, such as attrition beyond planned staff reductions, increased difficulties in our day- to- day operations and reduced employee morale. If we need to take further restructuring actions, necessary third- party consents may not be granted. In June 2022, we announced our cost structure optimization efforts to reduce our quarterly cash operating expenses through a reduction in workforce of nearly 50 percent. Our management may determine we need to take further restructuring actions to achieve additional cost savings, to generate additional capital needed for our business strategy, or for other purposes. Certain restructuring scenarios that management consider could require obtaining the consent of third parties, such as holders of our 2023 Notes. For example, the voluntary bankruptcy filing by Avadel Specialty Pharmaceuticals LLC (" Specialty Pharma ") in February 2019 required the consent of holders of a majority in principal amount of our February 2023 Notes in order to avoid a default under the Indenture governing such February 2023 Notes. While we were successful in obtaining that consent, there can be no assurance we will be successful in obtaining additional consents in the future from such holders or from other third parties whose consents may be required. Failure to obtain these third- party consents would prevent us from taking additional restructuring actions,~~ which could have a material adverse effect on our **business** ~~cash flow~~ , financial ~~resources~~ **condition** and ~~ability~~ **results of operations. U. S. and global markets are experiencing volatility and disruption caused by economic uncertainty, including as a result of the ongoing Russia- Ukraine conflict and the effects of sanctions imposed on Russia as a result of the conflict, as well as the recent conflict in Israel and the Gaza Strip. In February 2022, a full- scale military invasion of Ukraine by Russian troops began. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine has led** to ~~successfully pursue~~ **market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions, which has contributed to record inflation globally. In addition, global markets may experience additional disruptions as a result of the current armed conflict in Israel and the Gaza Strip, with Israel having declared war on Hamas, a U. S. designated Foreign Terrorist Organization, due to recent attacks. We are continuing to monitor inflation, the situations in Ukraine and Israel and global capital markets and assessing their potential impact on** our business ~~strategy~~ **, including the impact on the supply chains we rely on for the manufacture of LUMRYZ or other future product candidates. Although, to date, our business has not been materially impacted by the events described above, geopolitical tensions, or record inflation, it is impossible to predict the extent to which our**

operations will be impacted in the short and long term, or the ways in which such matters may impact our business. The extent and duration of the conflicts in Ukraine and Israel, geopolitical tensions, record inflation and resulting market disruptions are impossible to predict but could be substantial. Any such disruptions may also magnify the impact of other risks we face . Risks Related to Litigation and Legal Matters We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful. Competitors may infringe our patents or other intellectual property. If we were to initiate legal proceedings against a third party to enforce a patent covering our product ~~candidate~~ or **any** future product **or product** ~~candidates~~ **candidate** , the defendant could counterclaim that the patent is invalid and / or unenforceable. In patent litigation in the U. S., 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, written description or non- enablement. Grounds for an unenforceability **- 48-** assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO ~~,~~ or made a misleading statement ~~,~~ during prosecution. There is risk that a court could rule in favor of the defendant with respect to such a counterclaim of patent invalidity and / or unenforceability. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non- exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring ~~our product candidate and~~ future product candidates **, if approved,** to market. Because of the substantial amount of discovery that can occur in connection with intellectual property- related litigation and / or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation / proceeding. 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 a material adverse effect on the price of our shares. ~~- 53-~~ We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers. We employ or may employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we endeavor to ensure that our employees, consultants and independent contractors do not use the proprietary information or know- how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee' s former employer 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 any awarded monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and / or be a distraction to management and other employees. We and companies to which we have licensed ~~,~~ or will license ~~our~~ **any** future products or ~~drug delivery~~ technologies and subcontractors we engage or may engage for services related to the development and manufacturing of our ~~lead~~ product ~~candidate~~ or **any** future product candidates are subject to extensive regulation by the FDA and other regulatory authorities. Our and their failure to meet strict regulatory requirements could adversely affect our business. We, and companies to which we ~~will~~ **may** license ~~our~~ **any** future ~~products~~ **product** or ~~drug delivery~~ technologies, as well as companies acting as subcontractors for our product developments, including but not limited to non- clinical, pre- clinical and clinical studies, and manufacturing, are subject to extensive regulation by the FDA, other U. S. authorities and equivalent non- U. S. regulatory authorities, particularly the European Commission and the competent authorities of EU Member States. Those regulatory authorities may conduct periodic audits or inspections of the applicable facilities to monitor compliance with regulatory standards **,** and we remain responsible for the compliance of our subcontractors. If the FDA or another regulatory authority finds failure to comply with applicable regulations, the authority may institute a wide variety of enforcement actions, including: • warning letters or untitled letters; • fines and civil penalties; • delays in clearing or approving, or refusal to clear or approve, products; • withdrawal, suspension or variation of approval of products; product recall or seizure; • orders to the competent authorities of EU Member States to withdraw or vary national authorization; • orders for physician notification or device repair, replacement or refund; • interruption of production; • operating restrictions; • injunctions; and • criminal prosecution. **- 49-** Any adverse action by a competent regulatory agency could lead to unanticipated expenditures to address or defend such action and may impair our ability to produce and market applicable products, which could significantly impact our revenues and royalties that we would be eligible to receive from our potential customers. We may face product liability claims related to **our product or future products, or claims related to** clinical trials for **any** ~~our product candidate or~~ future product candidates ~~or their misuse~~ . The testing, including through clinical trials, manufacturing and marketing, and the use of our product ~~candidate~~ and **any** future **products and** product candidates may expose us to potential product liability and other claims. If any such claims against us are successful, we may be required to make significant compensation payments. Any indemnification that we have obtained, or may obtain, from CROs or pharmaceutical and biotechnology companies or hospitals conducting human clinical trials on our behalf may not protect us from product liability claims or from the costs of related litigation. Insurance coverage is expensive and difficult to obtain, and we may be unable to obtain coverage in the future on acceptable terms, if at all. We currently maintain general liability insurance and product liability insurance. We cannot be certain that the coverage limits of our insurance policies or those of our strategic partners will

be adequate. If we are unable to obtain sufficient insurance at an acceptable cost, a product liability claim or recall could adversely affect our financial condition. Similarly, any indemnification we have obtained, or may obtain, from pharmaceutical and biotechnology companies with whom we are **manufacturing our current product or** developing, or will develop, ~~our~~ **any** future products may not protect us from product liability claims from the consumers of those products or from the costs of related litigation. ~~- 54-~~ If we use hazardous biological and / or chemical materials in a manner that causes injury, we may be liable for significant damages. Our research ~~and~~ **,** development **and manufacturing** activities involve the controlled use of potentially harmful biological and / or chemical materials, and are subject to U. S., **EU,** state ~~, EU~~ , national and local laws and regulations governing the use, storage, handling and disposal of those materials and specified waste products. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these materials, including fires and / or explosions, storage tank leaks and ruptures and discharges or releases of toxic or hazardous substances. These operating risks can cause personal injury, property damage and environmental contamination, and may result in the shutdown of affected facilities and the imposition of civil or criminal penalties. The occurrence of any of these events may significantly reduce the productivity and profitability of a particular manufacturing facility and adversely affect our operating results. We currently maintain property, business interruption and casualty insurance with limits that we believe to be commercially reasonable but may be inadequate to cover any actual liability or damages. Risks Related to Ownership of Our Securities The price of ADSs representing our ordinary shares has been volatile and may continue to be volatile. The trading price of ADSs **representing our ordinary shares** has been, and is likely to continue to be, highly volatile. The market value of an investment in ADSs may fall sharply at any time due to this volatility **. During the year ended December 31, 2023, the closing sale price of ADSs as reported on the Nasdaq Global Market ranged from $ 6. 41 to $ 16. 48** . During the year ended December 31, 2022, the closing sale price of ADSs as reported on the Nasdaq Global Market ranged from $ 1. 07 to $ 10. 00. ~~During the year ended December 31, 2021, the closing sale price of ADSs as reported on the Nasdaq Global Market ranged from $ 6. 49 to $ 11. 18.~~ The market prices for securities of drug delivery, specialty pharma, biotechnology and pharmaceutical companies historically have been highly volatile. Factors that could adversely affect our share price include, among others: • fluctuations in our operating results **; • the success of our LUMRYZ sales and anticipated product revenue; • the success of competitive products or technologies** ; • announcements of technological partnerships, innovations or new products by us or our competitors; • actions with respect to the acquisition of new or complementary businesses; • governmental regulations; • developments in patent or other proprietary rights owned by us or others; • public concern as to the safety of drug delivery technologies developed by us or drugs developed by others using our ~~platform~~ **technologies** ; • the results of pre- clinical testing and clinical studies or trials by us or our competitors; • adverse events related to **LUMRYZ** ~~our~~ **or any** ~~product candidate or~~ future **products or** product candidates; **- 50-** • lack of efficacy of **LUMRYZ** ~~our~~ **or any** ~~product candidate or~~ future **products or** product candidates; • litigation; • decisions by our pharmaceutical and biotechnology company partners relating to ~~the~~ products that may incorporate our technologies; • the perception by the market of specialty pharma, biotechnology, and high technology companies generally; • general market conditions, including the impact of the current financial environment; and • the dilutive impact of any new equity or convertible debt securities we may issue or have issued. If we pay dividends, the dividends may be subject to Irish dividend withholding tax. In certain circumstances, as an Irish tax resident company, we may be required to deduct Irish dividend withholding tax (currently at the rate of ~~20~~ **25** %) from dividends paid to its shareholders. Shareholders who are resident in the U. S., EU countries (other than Ireland) or other countries with which Ireland has signed a tax treaty (whether the treaty has been ratified or not) generally should not be subject to Irish withholding tax so long as the shareholder (a) where the shareholder is a body corporate, is not under the control of persons resident in Ireland and (b) has provided its broker, for onward transmission to our qualifying intermediary or other designated agent (in the case of shares held beneficially), or us or our transfer agent (in the case of shares held directly), with all the necessary documentation by the appropriate due date prior to payment of the dividend. However, some shareholders may be subject to dividend withholding tax, which could adversely affect the price of ordinary shares and ADSs ~~and the value of their Notes.- 55- Risks Related to the Notes Servicing our Notes may require a significant amount of cash, and we may not have sufficient cash or the ability to raise the funds necessary to settle exchanges of the Notes in cash, repay the Notes at maturity, or repurchase the Notes as required following a fundamental change. In February 2018, we issued $ 143, 750 aggregate principal amount of our February 2023 Notes. On March 16, 2022, we executed an agreement to exchange $ 117, 375 of the February 2023 Notes for a new series of Exchangeable Senior Notes due October 2, 2023 (the " October 2023 Notes "). On November 4, 2022, we repurchased $ 8, 875 of our February 2023 Notes and on their maturity date of February 1, 2023, we repaid the remaining $ 17, 500 aggregate principal amount of our February 2023 Notes. On March 29, 2023, we executed an agreement to exchange $ 96, 188 of our $ 117, 375 October 2023 Notes for a new series of Exchangeable Senior Notes due April 2027 (the " April 2027 Notes ", together with the October 2023 Notes, the " Notes "). The remaining $ 21, 187 aggregate principal amount of the October 2023 Notes will maintain a maturity date of October 2, 2023. If holders of the Notes elect to exchange their Notes, unless we elect to deliver solely our ADSs to settle such exchanges, we will be required to make cash payments in respect of the Notes being exchanged. Holders of the Notes also have the right to require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change (as defined in the applicable indenture governing the Notes) at a repurchase price equal to 100 % of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest. If the Notes have not previously been exchanged or repurchased, we will be required to repay the Notes in cash at maturity. Our ability to make cash payments in connection with exchanges of the Notes, repurchase the Notes in the event of a fundamental change, or to repay or refinance the Notes at maturity will depend on market conditions and our future performance, which is subject to economic, financial, competitive, and other factors many of which are beyond our control. We incurred a net loss in 2021 and 2022. As a result, we may not have enough available cash or be able to obtain financing at the time we are required to repurchase or repay the Notes or in the event we elect to pay cash with respect to Notes being exchanged. The exchange feature of the October 2023 Notes, if~~

~~triggered prior to May 1, 2023 and in any case after May 1, 2023, and in any case may adversely affect our financial condition and operating results. In the event the conditional exchange feature of the October 2023 Notes is triggered and in any case after May 1, 2023, holders of October 2023 Notes will be entitled to exchange the October 2023 Notes at any time during specified periods at their option. If one or more holders elect to exchange their October 2023 Notes, unless we elect to satisfy our exchange obligation by causing to be delivered solely ADSs (other than paying cash in lieu of any fractional ADSs), we would be required to settle a portion or all of our exchange obligation through the payment of cash, which could adversely affect our liquidity. If we are unable to make the required payments, or if we fail to comply with the various requirements and covenants of the indenture, we will be in default, which would require immediate repayment of the outstanding principal and interest on the October 2023 Notes. In addition, even if holders do not elect to exchange their October 2023 Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the October 2023 Notes as a current rather than long- term liability, which would result in a material reduction of our net working capital. The accounting method for convertible and exchangeable debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results. In accordance with Financial Accounting Standards Board (" FASB ") Accounting Standards Codification (" ASC ") Topic 470, Debt, an entity must separately account for the liability and equity components of convertible debt instruments (such as the October 2023 Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer' s economic interest cost. ASC 470- 20 requires the value of the conversion option of the October 2023 Notes, representing the equity component, to be recorded as additional paid- in capital within stockholders' equity in our consolidated balance sheets and as a discount to the October 2023 Notes, which reduces their initial carrying value. In addition, under the treasury stock method, if the conversion value of the October 2023 Notes exceeds their principal amount for a reporting period, then we will calculate our diluted earnings per share assuming that all the October 2023 Notes were converted and that we issued our ADSs to settle the excess. However, if reflecting the October 2023 Notes in diluted earnings per share in this manner is anti- dilutive, or if the conversion value of the October 2023 Notes does not exceed their principal amount for a reporting period, then the shares underlying the October 2023 Notes will not be reflected in our diluted earnings per share. In August 2020, the FASB issued Accounting Standards Update (" ASU ") 2020- 06, Debt- Debt with Conversion and Other Options (Subtopic 470- 20) and Derivatives and Hedging- Contracts in Entity' s Own Equity (Subtopic 815- 40): Accounting for Convertible Instruments and Contracts in an Entity' s Own Equity (" ASU 2020- 06 "), which eliminates the beneficial conversion and cash conversion accounting models for convertible instruments. This would reduce non- cash interest expense, and thereby- 56- decrease net loss (or increase net income). Additionally, the treasury stock method for calculating earnings per share will no longer be allowed for convertible debt instruments whose principal amount may be settled using shares and the if- converted method will be required. We elected to early adopt ASU 2020- 06 beginning with our fiscal year ending December 31, 2021, including any interim periods within that fiscal year. Under ASU 2020- 06, the 2023 Notes will be subject to the " if- converted " method for calculating diluted earnings per share. Accordingly, under the " if- converted " method, diluted earnings per share will be calculated assuming that all of the Convertible Notes were converted solely into shares of common stock at the beginning of the reporting period, unless the result would be anti- dilutive. This new method of calculating earnings per share may adversely affect our reported financial condition and results. Exchanges of the Notes will dilute the ownership interest of our existing shareholders and holders of the ADSs, including holders who may exchange their Notes and receive ADSs upon exchange, to the extent our exchange obligation includes ADSs. The exchange of some or all of the Notes will dilute the ownership interests of our existing shareholders and holders of the ADSs to the extent our exchange obligation includes ADSs. Any sales in the public market of the ADSs issuable upon such exchange of the Notes could adversely affect prevailing market prices of the ADSs and, in turn, the price of the Notes. In addition, the existence of the Notes may encourage short selling by market participants because the exchange of the Notes could depress the price of the ADSs. The fundamental change repurchase feature of the Notes may delay or prevent an otherwise beneficial takeover attempt of Avadel. The indenture governing the Notes will require us to repurchase the Notes for cash upon the occurrence of a fundamental change and, in certain circumstances, to increase the exchange rate for a holder that exchanges its Notes in connection with a make- whole fundamental change. A takeover of Avadel may trigger the requirement that we repurchase the Notes and / or increase the exchange rate, which could make it more costly for a potential acquirer to engage in a combinatory transaction with us. Such additional costs may have the effect of delaying or preventing a takeover of Avadel that would otherwise be beneficial to investors~~ . General Risk Factors Provisions of our articles of association could delay or prevent a third- party' s effort to acquire us. Our articles of association could delay, defer or prevent a third- party from acquiring us, even where such a transaction would be beneficial to the holders of ADSs, or could otherwise adversely affect the price of ADSs. For example, certain provisions of our articles of association: • permit our board of directors to issue preferred shares with such rights and preferences as they may designate, subject to applicable law; • impose advance notice requirements for shareholder proposals and director nominations to be considered at annual shareholder meetings; and • require the approval of a supermajority of the voting power of our shares entitled to vote at a general meeting of shareholders to amend or repeal any provisions of our articles of association. We believe these provisions, if implemented in compliance with applicable law, may provide some protection to holders of ADSs from coercive or otherwise unfair takeover tactics. These provisions are not intended to make us immune from takeovers. They will, however, apply even if some holders of ADSs consider an offer to be beneficial and could delay or prevent an acquisition that our Board of Directors determines is in the best interest of the holders of ADSs. Certain of these provisions may also prevent or discourage attempts to remove and replace incumbent directors. In addition, mandatory provisions of Irish law could prevent or delay an acquisition of the Company by a third party. For example, Irish law does not permit shareholders of an Irish public limited company to take action by written consent with less than unanimous consent. In addition, an effort to acquire us may be subject to various provisions of Irish law relating to mandatory bids, voluntary bids, requirements to make a cash offer and minimum price requirements, as well as substantial acquisition rules and rules requiring the disclosure of interests

in ADSs in certain circumstances. ~~- 57 -~~ These provisions may discourage potential takeover attempts or bids for our ordinary shares at a premium over the market price or they may adversely affect the market price of, and the voting and other rights of the holders of, ADSs. These provisions could also discourage proxy contests and make it more difficult for holders of ADSs to elect directors other than the candidates nominated by our board of directors and could depress affect the market price of ADSs. Irish law differs from the laws in effect in the U. S. and might afford less protection to the holders of ADSs and any actual or potential takeover offer for the ~~company~~ **Company** will be subject to Irish Takeover Rules. Holders of ADSs could have more difficulty protecting their interests than would the shareholders of a corporation incorporated in a jurisdiction of the U. S. As an Irish- incorporated company, we are governed by Irish law, including the Irish Companies Act 2014 and the Irish Takeover Rules, which differs in some significant, and possibly material, respects from provisions set forth **- 51-** in various U. S. state laws applicable to U. S. corporations and their shareholders, including provisions relating to interested directors, mergers and acquisitions, takeovers, shareholder lawsuits and indemnification of directors. The duties of directors and officers of an Irish company are generally owed to the company only. Therefore, under Irish law shareholders of Irish companies do not generally have a right to commence a legal action against directors or officers and may only do so in limited circumstances. Directors of an Irish company must act with due care and skill, honestly and in good faith with a view to the best interests of the company. Directors must not put themselves in a position in which their duties to the company and their personal interests conflict and must disclose any personal interest in any contract or arrangement with the company or any of our subsidiaries. A director or officer can be held personally liable to the company in respect of a breach of duty to the company. It may not be possible to enforce court judgments obtained in the U. S. against us in Ireland based on the civil liability provisions of U. S. federal or state securities laws. In addition, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U. S. courts obtained against us or our directors or officers based on the civil liabilities provisions of U. S. federal or state securities laws or hear actions against us or those persons based on those laws. We have been advised that the U. S. currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any U. S. federal or state court based on civil liability, whether or not based solely on U. S. federal or state securities laws, would not automatically be enforceable in Ireland. In addition, any actual or potential takeover offer for our company will be subject to the Irish Takeover Rules. Under the Irish Takeover Rules, during the course of an offer or at any earlier time during which our Board has reason to believe that an offer for our company may be imminent, the Board will not be permitted to take any action, other than seeking alternative offers, which might frustrate the making of an offer for our ordinary shares unless we obtain approval from our shareholders or from the Irish Takeover Panel for such action. Potentially frustrating actions that are prohibited during the course of an offer, or at any earlier time during which our Board has reason to believe an offer is or may be imminent, include (i) the issuance of shares, options or convertible securities or the redemption or purchase of own shares, (ii) material acquisitions or disposals, (iii) entering into contracts other than in the ordinary course of business or (iv) any action, other than seeking alternative offers, which may result in frustration of an offer. Accordingly, if these restrictions become applicable to us, we may be unable to take, or may be delayed in taking, certain actions, in connection with a financing, commercial or strategic transaction or otherwise, that we believe are in the best interest of the Company. Judgments of U. S. courts, including those predicated on the civil liability provisions of the federal securities laws of the U. S., may not be enforceable in Irish courts. An investor in the U. S. may find it difficult to: • effect service of process within the U. S. against us and our non- U. S. resident directors and officers; • enforce U. S. court judgments based upon the civil liability provisions of the U. S. federal securities laws against us and our non- U. S. resident directors and officers in Ireland; or • bring an original action in an Irish court to enforce liabilities based upon the U. S. federal securities laws against us and our non- U. S. resident directors and officers. Judgments of U. S. courts, including those predicated on the civil liability provisions of the federal securities laws of the ~~United States~~ **U. S.** , may not be enforceable in Cayman Islands courts. We have been advised by our Cayman Islands legal counsel, Maples and Calder, that the courts of the Cayman Islands are unlikely (i) to recognize or enforce against us ~~or Avadel~~ judgments of courts of the U. S. predicated upon the civil liability provisions of the securities laws of the U. S. or any State; and (ii) in original actions brought in the Cayman Islands, to impose ~~- 58 -~~ liabilities against us ~~or Avadel~~ predicated upon the civil liability provisions of the securities laws of the U. S. or any State, so far as the liabilities imposed by those provisions are penal in nature. In those circumstances, although there is no statutory enforcement in the Cayman Islands of judgments obtained in the U. S., the courts of the Cayman Islands will recognize and enforce a foreign money judgment of a foreign court of competent jurisdiction without retrial on the merits based on the principle that a judgment of a competent foreign court imposes upon the judgment debtor an obligation to pay the sum for which judgment has been given provided certain conditions are met. For a foreign judgment to be enforced in the Cayman Islands, such judgment must be final and conclusive and for a liquidated sum, and must not be in respect of taxes or a fine or penalty, inconsistent with a Cayman Islands judgment in respect of the same matter, impeachable on the grounds of fraud or obtained in a manner, and or be of a kind the enforcement of which is, contrary to natural justice or the public policy of the Cayman Islands (awards of punitive or multiple damages may well be held to be contrary to public policy). A Cayman Islands Court may stay enforcement proceedings if concurrent proceedings are being brought elsewhere. **- 52-** Holders of ADSs have fewer rights than shareholders and have to act through the Depositary to exercise those rights. Holders of ADSs do not have the same rights as shareholders and, accordingly, cannot exercise rights of shareholders against us. The Bank of New York Mellon, as depositary (the " Depositary "), is the registered shareholder of the deposited shares underlying the ADSs. Therefore, holders of ADSs will generally have to exercise the rights attached to those shares through the Depositary. We will use reasonable efforts to request that the Depositary notify the holders of ADSs of upcoming votes and ask for voting instructions from them. If a holder fails to return a voting instruction card to the Depositary by the date established by the Depositary for receipt of such voting instructions, or if the Depositary receives an improperly completed or blank voting instruction card, or if the voting instructions included in the voting instruction card are illegible or unclear, then such holder will be deemed to have

instructed the Depositary to vote its shares, and the Depositary shall vote such shares in favor of any resolution proposed or approved by our Board of Directors and against any resolution not so proposed or approved. Security breaches and other disruptions could compromise confidential information and expose us to liability and cause our business and reputation to suffer. In the ordinary course of our business, we collect and store on our networks various intellectual property including our proprietary business information and that of ~~former~~ customers, suppliers and business partners. The secure maintenance and transmission of this information is critical to our operations and business strategy. Despite our security measures, our information systems and infrastructure may be vulnerable to disruptions such as computer hacking, phishing attacks, ransomware, dissemination of computer viruses, worms and other destructive or disruptive software, attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, investigations by regulatory authorities in the U. S. and EU Member States, disruption to our operations and damage to our reputation, any of which could adversely affect our business. We could suffer financial loss or the loss of valuable confidential information. Although we develop and maintain systems and controls designed to prevent these events from occurring and we have a process to identify and mitigate threats, the development and maintenance of these systems, controls and processes is costly and requires ongoing monitoring and updating as technologies change and efforts to overcome security measures become increasingly sophisticated. Moreover, despite our efforts, the possibility of these events occurring cannot be eliminated entirely and there can be no assurance that any measures we take will prevent cyber- attacks or security breaches that could adversely affect our business. We have broad discretion in the use of our cash and may not use it effectively. Our management has broad discretion in the use of our cash and may not apply our cash in ways that ultimately increases the value of any investment in our securities. We currently intend to use our cash to fund marketing activities for **LUMRYZ** ~~any future commercialized products~~, to fund ~~certain~~ clinical trials for product candidates, to fund research and development activities for potential new product candidates, and for working capital, capital expenditures and general corporate purposes. As in the past **,** we expect to invest our excess cash in available- for- sale marketable securities, including corporate bonds, U. S. government securities, other fixed income securities and equities; and these investments may not yield a favorable return. If we do not invest or apply our cash effectively, our financial position and the price of ADSs may decline. We currently do not intend to pay dividends and cannot assure the holders of our ADSs that we will make dividend payments in the future. We have never declared or paid a cash dividend on any of our ordinary shares or ADSs and do not anticipate declaring cash dividends in the foreseeable future. Declaration of dividends will **be at the sole discretion of our Board of Directors and** depend upon, among other things, future earnings, if any, the ~~- 59-~~ operating and financial condition of our business, our capital requirements, general business conditions and such other factors as our Board of Directors deems relevant. Our effective tax rate could be highly volatile and could adversely affect our operating results. Our future effective tax rate may be adversely affected by a number of factors, many of which are outside of our control, including: • the jurisdictions in which profits are determined to be earned and taxed; **- 53-** • changes in the valuation of our deferred tax assets and liabilities; • changes in share- based compensation expense; • changes in domestic or international tax laws or the interpretation of such tax laws; • changes in available tax credits; • adjustments to estimated taxes upon finalization of various tax returns; and • the resolution of issues arising from tax audits with various tax authorities. Any significant increase in our future effective tax rates could impact our results of operations for future periods adversely. Changes in tax law could adversely affect our business and financial condition. We are subject to income and other taxes in the U. S. and foreign jurisdictions. Changes to applicable U. S. or foreign tax laws and regulations, or their interpretation and application (which changes may have retroactive application), including with respect to net operating losses and research and development tax credits, could adversely affect us or holders of our ordinary shares or ADSs. In recent years, many such changes have been made and changes are likely to continue to occur in the future. Future changes in tax laws could have a material adverse effect on our business, cash flow, financial condition or results of operations. We urge investors to consult with their legal and tax advisors regarding the implications of potential changes in tax laws on an investment in our ordinary shares or ADSs. Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited. As of December 31, ~~2022~~ **2023** , we had $ ~~124~~ **212** , ~~443~~ **426** of net operating losses in the U. S. Of the $ ~~124~~ **212** , ~~443~~ **426** of net operating losses in the U. S., $ 10, 365 were acquired due to the acquisition of FSC Therapeutics and FSC Laboratories, Inc., (collectively " FSC ") and $ ~~114~~ **195** , ~~078~~ **595** are due to the losses at Avadel US Holdings, Inc. The portion due to the acquisition of FSC will expire in 2034 through 2035 ~~. The U. S. net operating losses acquired as part of the acquisition of FSC are subject to an~~ **and** ~~annual limitation under Internal Revenue Code Section 382 and $ 1, 473 of the $ 10, 365~~ will not be fully utilized before they expire ~~. The remaining $ 114, 078 of net operating losses do not have an expiration date~~. Under U. S. federal tax legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act (" Tax Act "), U. S. federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such U. S. federal net operating losses is limited. Under Sections 382 and 383 of the U. S. Internal Revenue Code of 1986 (the " Code ") if a corporation undergoes an " ownership change " (generally defined as a greater than 50 percentage- point cumulative change (by value) in the equity ownership of certain shareholders over a rolling three- year period), the corporation' s ability to use its pre- change net operating losses and other pre- change tax attributes to offset its post-change taxable income or taxes may be limited. We may also experience ownership changes as a result of this offering or future issuances of our stock or as a result of subsequent shifts in our stock ownership, some of which are outside our control. We have completed an analysis to determine that no events have been triggered in the past. If any ownership changes are determined to be triggered in the future, our ability to use our current net operating losses to offset post- change taxable income or taxes would be subject to limitation. We will be unable to use our net operating losses if we do not attain profitability sufficient to offset our available net operating losses prior to their expiration. As of December 31, ~~2022~~ **2023** , we had approximately $ ~~147~~ **111** , ~~240~~ **647** of net operating losses in Ireland that do not have an expiration date. While these losses do not have an expiration date,

substantial changes in the activities performed in these jurisdictions could have an impact on our ability to utilize these tax attributes in the future. ~~- 60 -~~ U. S. Holders of ordinary shares or ADSs may suffer adverse U. S. tax consequences if we are classified as a passive foreign investment company. Generally, if, for any taxable year, at least 75 % of our gross income is passive income, or at least 50 % of the value of our assets is attributable to assets that produce passive income or are held for the production of passive income, including cash, we would be characterized as a passive foreign investment company (“ PFIC ”) for U. S. federal income tax purposes. For purposes of these tests, passive income includes dividends, interest, and gains from the sale or exchange of investment property and rents and royalties other than rents and royalties that are received from unrelated parties in connection with the active conduct of a trade or business. Our status as a PFIC depends on the composition of our income and the composition and value of our assets (for which purpose the total value of our assets may be determined in part by the market value of the ordinary shares or ADSs, which are subject to change) from time to time. If we are characterized as a PFIC, U. S. Holders (as defined below under “ Material U. S. Federal Income Tax Considerations for U. S. Holders ”) of ordinary shares or ADSs may suffer materially adverse tax consequences, including having gains realized on the sale of ordinary shares or ADSs treated as ordinary income, rather than capital gain, the loss of the preferential rate applicable to dividends received on ordinary shares or ADSs by **- 54-** individuals who are U. S. Holders, and having interest charges apply to distributions by us and the proceeds of sales of ordinary shares or ADSs. We believe that we were not a PFIC for the taxable year ending December 31, ~~2022~~ **2023** and, based on the expected value of our assets, including any goodwill, and the expected nature and composition of our income and assets, we expect that we will not be a PFIC for our current taxable year. However, our status as a PFIC is a fact- intensive determination subject to various uncertainties, and we cannot provide any assurances regarding our PFIC status for the current, prior or future taxable years. Certain U. S. Holders that own 10 percent or more of the vote or value of ordinary shares or ADSs may suffer adverse U. S. tax consequences because our non- U. S. subsidiaries are expected to be classified as controlled foreign corporations. Each ‘ ‘ Ten Percent Shareholder’’ (as defined below) in a non- U. S. corporation that is classified as a ‘ ‘ controlled foreign corporation,’’ or a CFC, for U. S. federal income tax purposes generally is required to include in income for U. S. federal tax purposes such Ten Percent Shareholder’ s pro rata share of the CFC’ s ‘ ‘ Subpart F income’’ and investment of earnings in U. S. property, even if the CFC has made no distributions to its shareholders. Subpart F income generally includes dividends, interest, rents, royalties, ‘ ‘ global intangible low- taxed income,’’ gains from the sale of securities and income from certain transactions with related parties. In addition, a Ten Percent Shareholder that realizes gain from the sale or exchange of shares in a CFC may be required to classify a portion of such gain as dividend income rather than capital gain. A non- U. S. corporation generally will be classified as a CFC for U. S. federal income tax purposes if Ten Percent Shareholders own, directly or indirectly, more than 50 % of either the total combined voting power of all classes of stock of such corporation entitled to vote or of the total value of the stock of such corporation. A ‘ ‘ Ten Percent Shareholder’’ is a U. S. person (as defined by the Code) who owns or is considered to own 10 % or more of the total combined voting power of all classes of stock entitled to vote or 10 % or more of the total value of all classes of stock of such corporation. We believe that we were not a CFC in the ~~2022~~ **2023** taxable year, but that our non- U. S. subsidiaries were CFCs in the ~~2022~~ **2023** taxable year. We anticipate that our non- U. S. subsidiaries will remain CFCs in the ~~2022~~ **2024** taxable year, and it is possible that we may become a CFC in the ~~2023~~ **2024** taxable year or in a subsequent taxable year. The determination of CFC status is complex and includes attribution rules, the application of which is not entirely certain. U. S. Holders should consult their own tax advisors with respect to the potential adverse U. S. tax consequences of becoming a Ten Percent Shareholder in a CFC, including the possibility and consequences of becoming a Ten Percent Shareholder in one or more of our non- U. S. subsidiaries that are anticipated to be treated as CFCs. If we are classified as both a CFC and a PFIC, we generally will not be treated as a PFIC with respect to those U. S. Holders that meet the definition of a Ten Percent Shareholder during the period in which we are a CFC, subject to certain exceptions. We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to compliance requirements, including establishing and maintaining internal controls over financial reporting. We ~~had identified a material weakness in our internal control over financial reporting during 2021 that was remediated in 2022. We~~ may be exposed to potential risks if we are unable to comply the requirements to maintain internal controls over financial reporting or if we identify ~~additional~~ material weaknesses. As a ~~public~~ company **, publicly- listed** in the ~~United States organized~~ **U. S.** , we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the" Exchange Act") and the listing rules of the Nasdaq Stock Market (" Nasdaq"), and incur significant legal, accounting and other expenses to comply with applicable requirements. These rules impose various requirements on public companies, including requiring certain corporate governance practices. Our management and other ~~- 61-~~ personnel devote a substantial amount of time to these requirements. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time- consuming and costly. For example, the Sarbanes- Oxley Act of 2002 (the" Sarbanes- Oxley Act") requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluations and testing of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes- Oxley Act. Such compliance may require that we incur substantial accounting expenses and expend significant management efforts. ~~In connection with the Company’ s fiscal 2021 financial statement close process, management identified a deficiency in the design of internal control over financial reporting related to its February 2023 Notes indenture, which has been remediated. In the future we may determine that we have additional material weaknesses. Our failure to remediate the material weaknesses or failure to identify and address any other material weaknesses or control deficiencies could result in inaccuracies in our financial statements and could also impair our ability to comply with applicable financial reporting requirements and related regulatory filings on a timely basis, which could cause investors to lose confidence in our reported financial information, which may result in volatility in and a decline in the market price of our ADSs.~~ Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud. We are

subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules **- 55-** and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well- conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision- making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected. Sales of a substantial number of ADSs by us or existing security holders in the public market could cause our share price to fall. Sales of a substantial number of ADSs by us or existing security holders in the public market or the perception that these sales might occur could depress the market price of ADSs and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that such sales may have on the prevailing market price of ADSs. In addition, the sale of substantial amounts of ADSs could adversely impact its price. As of ~~March 23~~ **February 26** , ~~2023~~ **2024** , we had outstanding ~~64~~ **90** , ~~478~~ **577** ordinary shares, ~~488~~ **5, 194** ordinary shares issuable upon conversion of our preferred shares, options to purchase ~~9~~ **10** , ~~578~~ **246** ordinary shares or ADSs, with an average exercise price of $ ~~6~~ **7** . ~~70~~ **30** , and unsettled restricted shares and performance shares relating to ~~34~~ **38** ordinary shares ~~. In addition, ordinary shares are issuable upon exchange of our outstanding Notes~~ . The sale or the availability for sale of a large number of ADSs in the public market could cause the price of ADSs to decline. Because we expect we will need to raise additional capital to fund our future activities, we may in the future sell substantial amounts of ADSs or securities convertible into or exchangeable for ordinary shares. If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline. The trading market for our common stock relies in part on the research and reports that industry or financial analysts publish about us or our business. We do not have control over these analysts. There can be no assurance that existing analysts will continue to provide research coverage or that new analysts will begin to provide research coverage. Although we have obtained analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline. ~~- 62-~~ A transfer of ordinary shares may be subject to Irish stamp duty. Transfers of ordinary shares (as opposed to ADSs) could be subject to Irish stamp duty (currently at the rate of 1 % of the higher of the price paid or the market value of the shares acquired). Payment of Irish stamp duty is generally a legal obligation of the transferee. Although transfers of ADSs are not subject to Irish stamp duty, the potential for stamp duty to arise on transfers of ordinary shares could adversely affect the price of our ordinary shares or ADSs. Our business is affected by macroeconomic conditions, including rising inflation, interest rates and supply chain constraints. Various macroeconomic factors could adversely affect our business and the results of our operations and financial condition, including changes in inflation, interest rates and overall economic conditions and uncertainties such as those resulting from the current and future conditions in the global financial markets. Recent supply chain constraints have led to higher inflation, which if sustained could have a negative impact on ~~our~~ **any future** product candidate development, commercialization ~~preparations~~ **activities** for LUMRYZ ~~, if approved~~ **and any future products** , and operations. If inflation or other factors were to significantly increase our business costs, our ability to develop our current pipeline and new therapeutic products may be negatively affected. Interest rates, the liquidity of the credit markets and the volatility of the capital markets could also affect the operation of our business and our ability to raise capital on favorable terms, or at all, in order to fund our operations. Similarly, these macroeconomic factors could affect the ability of our third- party suppliers and manufacturers to manufacture clinical trial **and commercial** materials ~~for our product candidates and the potential commercial launch of LUMRYZ~~ . Adverse developments affecting the financial services industry, such as actual events or concerns involving liquidity, defaults, or non- performance by financial institutions or transactional counterparties, could adversely affect the Company' s current and projected business operations and its financial condition and results of operations. Actual events involving limited liquidity, defaults, non- performance or other adverse developments that affect financial institutions, transactional counterparties or other companies in the financial services industry or the financial services industry **- 56-** generally, or concerns or rumors about any events of these kinds or other similar risks, have in the past and may in the future lead to market- wide liquidity problems ~~. For example, on March 10, 2023, Silicon Valley Bank (" SVB ") was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (" FDIC ") as receiver. Similarly, on March 12, 2023, Signature Bank and Silvergate Capital Corp. were each swept into receivership. Although a statement by the Department of the Treasury, the Federal Reserve and the FDIC indicated that all depositors of SVB would have access to all of their money after only one business day of closure, including funds held in uninsured deposit accounts, borrowers under credit agreements, letters of credit and certain other financial instruments with SVB, Signature Bank or any other financial institution that is placed into receivership by the FDIC may be unable to access undrawn amounts thereunder. Although we are not a borrower or party to any such instruments with SVB, Signature or any other financial institution currently in receivership, if any of our lenders or counterparties to any such instruments were to be placed into receivership, we may be unable to access such funds. In addition, if any of our customers, suppliers or other parties with whom we conduct business are unable to access funds pursuant to such instruments or lending arrangements with such a financial institution, such parties' ability to pay their obligations to us or to enter into new commercial arrangements requiring additional payments to us could be adversely affected. In this regard, counterparties to SVB credit agreements and arrangements, and third parties such as beneficiaries of letters of credit (among others), may experience direct impacts from the closure of SVB and uncertainty remains over liquidity concerns in the broader financial services industry. Similar impacts have occurred in the past, such as during the 2008- 2010 financial crisis~~ . Inflation and rapid increases in

interest rates have led to a decline in the trading value of previously issued government securities with interest rates below current market interest rates. Although the U. S. Department of Treasury, **the Federal Deposit Insurance Corporation (“** FDIC **”)** and Federal Reserve Board have announced a program to provide up to $ 25 billion of loans to financial institutions secured by certain of such government securities held by financial institutions to mitigate the risk of potential losses on the sale of such instruments, widespread demands for customer withdrawals or other liquidity needs of financial institutions for immediately liquidity may exceed the capacity of such program. Additionally, there is no guarantee that the U. S. Department of Treasury, FDIC and Federal Reserve Board will provide access to uninsured funds in the future in the event of the closure of other banks or financial institutions, or that they would do so in a timely fashion. Although we assess our banking and customer relationships as we believe necessary or appropriate, our access to funding sources and other credit arrangements in amounts adequate to finance or capitalize our current and projected future business operations could be significantly impaired by factors that affect the Company, the financial institutions with which the Company has credit agreements or arrangements directly, or the financial services industry or economy in general. These factors could include, among others, events such as liquidity constraints or failures, the ability to perform obligations under various types of financial, credit or liquidity agreements or arrangements, disruptions or instability in the financial services ~~- 63 -~~ industry or financial markets, or concerns or negative expectations about the prospects for companies in the financial services industry. These factors could involve financial institutions or financial services industry companies with which the Company has financial or business relationships, but could also include factors involving financial markets or the financial services industry generally. The results of events or concerns that involve one or more of these factors could include a variety of material and adverse impacts on our current and projected business operations and our financial condition and results of operations. These could include, but may not be limited to, the following: • Delayed access to deposits or other financial assets or the uninsured loss of deposits or other financial assets; • Delayed or lost access to, or reductions in borrowings available under revolving existing credit facilities or other working capital sources and / or delays, inability or reductions in the ~~company~~ **Company** ’ s ability to refund, roll over or extend the maturity of, or enter into new credit facilities or other working capital resources; • Potential or actual breach of contractual obligations that require the Company to maintain letters of credit or other credit support arrangements; • Potential or actual breach of financial covenants in our credit agreements or credit arrangements; • Potential or actual breach of our long- term debt obligations; • Potential or actual cross- defaults in other credit agreements, credit arrangements or operating or financing agreements; or • Termination of cash management arrangements and / or delays in accessing or actual loss of funds subject to cash management arrangements. In addition, investor concerns regarding the U. S. or international financial systems could result in less favorable commercial financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on acceptable terms or at all. Any decline in available funding or access to our cash and liquidity resources could, among other risks, adversely impact our ability to meet our operating expenses, financial obligations or fulfill our other obligations, result in breaches of our financial and / or contractual obligations or result in violations of federal or state wage and hour laws. Any of these impacts, or any other impacts resulting from the factors described above or other related or similar factors not described above, could have material adverse impacts on our liquidity and our current and / or projected business operations and financial condition and results of operations. ~~In addition, any further deterioration in the macroeconomic economy or financial services industry could lead to losses or defaults by our customers or parties with whom we conduct business, which in turn, could have a material adverse effect on our current and / or projected business operations and results of operations and financial condition. For example, a party with whom we conduct business may fail to make payments when due, default under their agreements with us, become insolvent or declare bankruptcy, or a supplier may determine that it will no longer deal with us as a customer. In addition, a party with whom we conduct business could be adversely affected by any of the liquidity or other risks described above as factors that could result in material adverse impacts on the Company, including but not limited to delayed access or loss of access to uninsured deposits or loss of the ability to draw on existing credit facilities involving a troubled or failed financial institution. Any customer or supplier bankruptcy or insolvency, or the failure of any customer to make payments when due, or any breach or default by a customer or supplier, or the loss of any significant supplier relationships, could result in material losses to the Company and may have a material adverse impact on our business.~~