Risk Factors Comparison 2024-03-05 to 2023-03-09 Form: 10-K

Legend: **New Text** ~~Removed Text~~ Unchanged Text Moved Text Section

Risks Related to our Financial Position and Need for Additional Capital ● We **have identified conditions and events that raise substantial doubt about our ability to continue as a going concern. ● We have generated limited revenue to date from product sales. We** may never achieve or sustain profitability, which could depress the market price of our common stock ~~,~~and could cause you to lose all or a part of your investment. ● We will require additional capital to fund our operations and if we fail to obtain necessary financing, we may be unable to **continue to** successfully commercialize ZTALMY **in the U. S.** or complete the development and commercialization, if approved, of ganaxolone in the other indications we are developing. ● Our failure to comply with the covenants or other terms of the Credit Agreement or Revenue Interest Financing Agreement, including as a result of events beyond our control, could result in a default under these agreements that could materially and adversely affect the ongoing viability of our business. ● ~~If we are unable to satisfy certain conditions in our Credit Agreement, we will be unable to draw down the remaining amount of the term loan facility. ●~~ Our Credit Agreement and Revenue Interest Financing Agreement ~~contains~~ **contain** restrictions that limit our flexibility in operating our business. ● Raising additional capital could dilute our stockholders, restrict our operations or require us to relinquish rights to ganaxolone or any other future product candidates. ● We intend to expend our limited resources to pursue ganaxolone and may fail to capitalize on other technologies or ~~any other~~ future product candidates that may be more profitable or for which there may be a greater likelihood of success. Risks Related to the Commercialization of ZTALMY and Other Future Product Candidates ● ZTALMY is our first commercial product and we have ~~a limited~~ **no other** history of commercializing drugs, which may make it difficult ~~for you~~ to evaluate the success of our business to date and to assess our future viability. ● Even though we have obtained regulatory approval for ZTALMY in the U. S. **and EU** , we will still face extensive FDA **and EMA** regulatory requirements and may face regulatory difficulties. ● Our **continued** commercial success depends upon attaining significant market access and acceptance of ZTALMY among physicians, patients, government and private payers and others in the medical community and attaining sufficient reimbursement for **ZTALMY and other** ganaxolone **products** . ● We **face substantial** ~~operate in a competitive~~ **competition** ~~market~~ , which may result in others discovering, developing or commercializing products before or more successfully than we do. ● If we are unable to differentiate ZTALMY from current and future products or existing methods of treatments, our ability to successfully commercialize ZTALMY would be adversely affected. ● ZTALMY is our first commercial product. If our sales and marketing capabilities to market and sell **ZTALMY and other** ganaxolone **products** are not effective, we may be unable to generate meaningful revenue. ● While ZTALMY has received favorable reimbursement determinations to date from third party payers for its approved indication, adverse changes in reimbursement or failure to obtain favorable reimbursement for future indications, if approved, could harm our business. ● If the market opportunities for ZTALMY ~~in~~ **for** CDD and other indications for which we obtain regulatory approval, if any, are smaller than we believe they are, our ~~results of operations may be adversely affected and our~~ business may suffer. ● **A variety of risks associated with marketing ganaxolone outside of the U. S. (OUS) could materially adversely affect our business. ● Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of ganaxolone or other future product candidates that we may develop. ●** If the FDA **, EC** or other applicable regulatory authorities approve generic or other products that compete with any of our products or product candidates, it could reduce our sales of those products or product candidates. Risks Related to Clinical Development and Regulatory Approval of ~~our~~ **Our** Product Candidates ~~● Failure to obtain regulatory approval in international jurisdictions would prevent ganaxolone from being marketed in these jurisdictions.~~ ● Our future success is dependent on the successful clinical development, regulatory approval and **continued** commercialization of ganaxolone, which is being studied in several indications and will require significant capital resources and years of additional clinical development effort. ● We are conducting clinical development activities for ganaxolone across multiple indications, and such clinical development activities may not produce favorable results, which could adversely impact our ability to achieve regulatory approval for ganaxolone in such indications. ● Ganaxolone may cause undesirable side effects ~~,~~ or have other properties, such as abuse potential, that could delay or prevent its regulatory approval **in indications under clinical development, limit the commercial profile of an approved label,** or result in significant negative consequences following any marketing approval. ● The therapeutic efficacy and safety of ganaxolone in indications other than CDD have not been established by regulatory authorities, and we may not be able to successfully develop and commercialize ganaxolone in the other indications under clinical development in the future. ● We may not be able to obtain or maintain orphan drug exclusivity for ganaxolone across all indications and markets, which could limit the potential profitability of ganaxolone. ● **Failure to obtain regulatory approval in international jurisdictions would prevent ganaxolone from being marketed in these jurisdictions. ●** ZTALMY is regulated as a controlled substance, which **means the making, use, sale, importation, exportation, and distribution of which** is subject to significant regulation by the Drug Enforcement ~~Administration~~ **Agency** (DEA) and other regulatory agencies. Risks Related to Our Dependence on Third Parties ● We rely on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their duties in compliance with contractual terms and / or regulatory requirements or meet expected timelines, our development plans may be adversely affected and we may not be able to obtain regulatory approval for ganaxolone in indications other than CDD. ● We have multiple ganaxolone drug products in development, and until such products are approved by regulatory authorities, there remains the risk that the drug product quality requirements may not support continued clinical investigation and result in delays or termination of such clinical studies, and product approvals. ● Our experience manufacturing ganaxolone **is limited to** ~~has historically consisted of supplying~~ the needs of our preclinical studies

and clinical trials **, as well as limited commercial supplies following FDA approval of ZTALMY for CDD in the U. S** . We have limited experience manufacturing ganaxolone on a commercial scale and ~~do~~ **have** ~~not~~ **no** ~~operate our own~~ manufacturing facility. We are dependent on third- party manufacturers ~~for the manufacture of ganaxolone drug substance and drug products as well as on third parties for our supply chain~~ , and if we experience problems with any such third parties, the manufacturing and supply of ganaxolone could be delayed. ● We have entered into and may enter into additional collaboration or out- license agreements with third parties for the development or commercialization of ganaxolone in jurisdictions ~~outside of the U. S. (~~ OUS ~~)~~ . If these collaborations or out- licenses are not successful, we may not be able to capitalize on the market potential of ganaxolone **in those jurisdictions** . ● Government funding for certain aspects of our programs adds uncertainty to our research efforts with respect to those programs and may impose requirements that increase the costs of commercialization and production of ~~certain~~ product candidates developed under those government- funded programs. ● We may elect to enter into license or collaboration agreements to partner ganaxolone in territories currently retained by us. Our dependence on such relationships may adversely affect our business. Risks Related to Regulatory Compliance ● Currently enacted and future legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain marketing approval of and commercialize ganaxolone and affect the prices we may obtain. Risks Related to Intellectual Property ● If we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate for our technology and product candidates, our competitive position could be harmed. ● Third parties, such as Ovid Therapeutics, Inc., may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could harm our business. ● We may not be able to protect our intellectual property rights throughout the world. ● Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time. ● We rely on government funding for certain aspects of our research and development activities and we may develop intellectual property through such activities and therefore may be subject to federal regulations such as " march- in " rights, certain reporting requirements and a preference for U. S. based companies. Compliance with such regulations may limit our exclusive rights ~~,~~ and limit our ability to contract with non- U. S. manufacturers ~~. Risks Related to our Business Operations ● The COVID- 19 pandemic could continue to adversely affect our business and our ability to conduct and complete clinical trials~~ . 6PART IUnless the context requires otherwise, any references in this Annual Report on Form 10- K to " we, " " us, " " our, " the " Company " or " Marinus " refers to Marinus Pharmaceuticals, Inc. and its wholly- owned subsidiary. ~~Unless otherwise indicated, all share and per share amounts in this Annual Report on Form 10- K reflect, as applicable, the occurrence of a 1- for- 4 reverse split of our common stock that occurred on September 23, 2020.~~ Item 1. Business. OverviewOur CompanyWe are a commercial- stage pharmaceutical company dedicated to the development of innovative therapeutics for the treatment of seizure disorders, including rare genetic epilepsies and status epilepticus **, which includes the use of ZTALMY ® (ganaxolone)** . On March 18, 2022, the U. S. Food and Drug Administration (FDA) approved our new drug application (NDA) for the use of ZTALMY ~~(ganaxolone)~~ oral suspension **CV** for the treatment of seizures associated with Cyclin- dependent Kinase- like 5 **(CDKL5)** Deficiency Disorder (CDD) in patients ~~2~~ **two** years of age and older ~~. In June 2022, the U. S. Drug Enforcement Administration (DEA) published an interim final rule in the Federal Register placing ganaxolone and its salts in schedule V (CV) of the Controlled Substances Act (CSA), which rule became final on December 9, 2022~~ . ZTALMY, our first FDA approved product, became available for commercial sale and shipment ~~to patients with a prescription in the U. S.~~ in the third quarter of 2022. **On July 28, 2023, the European Commission (EC) granted marketing authorization for ZTALMY for the adjunctive treatment of epileptic seizures associated with CDD in patients two to 17 years of age. ZTALMY may be continued in patients 18 years of age and older.** We ~~plan to~~ **have an exclusive collaboration agreement with Orion Corporation (Orion) for European commercialization of ganaxolone for ZTALMY. Orion is preparing for commercial launches of ZTALMY in select European countries in 2024. We are also** ~~develop~~ **developing** ganaxolone for the treatment of other rare genetic epilepsies, including Tuberous Sclerosis Complex (TSC) ~~,~~ and for the treatment of **Refractory** ~~status~~ **Status** ~~epilepticus~~ **Epilepticus** (**RSE).** SE ~~)~~ **is a life- threatening condition characterized by continuous, prolonged seizures or rapidly recurring seizures without intervening recovery of consciousness. If SE is not treated urgently, permanent neuronal damage may occur, which contributes to high rates of morbidity and mortality** . We are developing ganaxolone in formulations for two different routes of administration: intravenous (IV) and oral. The different formulations are intended to maximize potential therapeutic applications of ganaxolone for adult and pediatric patient populations, in both acute and chronic care ~~, and for both in- patient and self- administered settings~~ . While the precise mechanism by which ganaxolone exerts its therapeutic effects in the treatment of seizures ~~associated with CDD~~ is unknown, its anticonvulsant effects are thought to result from positive allosteric modulation of the gamma- aminobutyric acid type A (GABAA) receptor in the central nervous system (CNS). Ganaxolone is a synthetic analog of allopregnanolone, an endogenous neurosteroid **, and targets** ~~. Ganaxolone acts at~~ both synaptic and extrasynaptic GABAA **. This unique** ~~receptors~~ **receptor binding profile may contribute to the anticonvulsant** ~~, a target known for its anti- seizure~~ , antidepressant and anxiolytic ~~potential~~ **effects shown by neuroactive steroids in animal models, clinical trials or both** . Our Strategy Our mission is to maximize the value of ganaxolone as a best- in- class therapy for rare seizure and neurological disorders through development of multiple formulations for oral and IV administration. The key elements of our strategy include the following: ● Pursuing orphan, genetic epilepsy indications for ganaxolone. Within epilepsy, there are several disorders where the symptoms have been linked to deficits in GABAergic signaling. Based on our clinical data, we believe that increasing activation of GABA receptors and associated processes (GABAergic tone) with ganaxolone could provide therapeutic benefits and that treatments for these small populations have the potential for more efficient paths through clinical development, regulatory approval and commercialization. In addition to CDD ~~and~~ **,** TSC **, and Lennox- Gastaut Syndrome (LGS)** , we may in the future develop ganaxolone in one or more additional indications for rare epilepsies. We may also seek to in- license complementary products to leverage our development **, expertise** and commercial investment. **7** ● Pursuing hospital- based orphan indications for ganaxolone. We believe that hospitalized SE

patients who do not respond to available first- and second- line treatments are significantly underserved with severely limited treatment options. Additionally, SE is associated with significant morbidity and mortality. Due to its activity at extrasynaptic GABAA receptors, ganaxolone may provide a therapeutic benefit for patients whose SE is refractory to currently available first- and second- line treatments. To that end, and based on our Phase 2 trial results, we are conducting the Randomized Therapy ~~In~~ **in** Status Epilepticus ~~trial~~ (RAISE **)** trial ~~)~~, a pivotal Phase 3 trial in **RSE. We are also conducting a second Phase 3 randomized clinical trial in RSE, the RAISE II trial. The RAISE II trial is designed to support European regulatory submission of ganaxolone for RSE and potentially provide data in a broader population than assessed in the U. S. RAISE trial. We are also planning a proof- of- concept trial in super-** refractory status epilepticus (~~RSE~~ **SRSE**) ~~patients. We are also conducting 7the Researching Established Status Epilepties~~ **, which is defined as SE in which fourth- line** ~~Treatment~~ **treatment** ~~Trial, or the RESET~~ **with IV anesthetics has failed. The planned** trial ~~, a Phase 2 trial~~ in ~~established status epilepties~~ **SRSE was prompted by an increasing volume of requests for emergency use of ganaxolone for treatment of SRSE via emergency IND** (~~ESE~~ **eIND**) **applications** ~~, and may in the future study similar and other hospital- based indications that could benefit from ganaxolone' s mechanism of action~~ . ● Reformulation and prodrug compounds. We intend to further develop ~~the current oral formulation of~~ ganaxolone ~~through~~ **with a** second- generation reformulation and **a** prodrug ~~compounds~~ - **compound** . ~~A~~ **The goals of** reformulation ~~or~~ **and** prodrug **development are to** ~~of ganaxolone that increases bioavailability and improves~~ - **improve** the ~~pharmacokinetics~~ - **pharmacokinetic** (PK) profile ~~may~~ **, which could** create ~~substantial indication expansion~~ opportunities ~~and have the potential~~ to **broaden ganaxolone' s clinical indications and** enhance efficacy by better achieving desired ganaxolone blood levels, improve the safety profile through a more consistent PK profile, reduce dosing frequency, generate new ~~IP~~ **intellectual property** , and improve costs of goods through lower active pharmaceutical ingredient (API) requirements. ~~Top- line data~~ **Data** from ~~a~~ Phase 1 **single and multiple ascending dose (MAD) trials of a second generation ganaxolone formulation demonstrated linear kinetics through a wide range of doses. Based on these results, we expect to apply extended- release technologies to the formulation. We now anticipate initiating a clinical** trial **in LGS** with ~~healthy volunteers utilizing the first candidate for~~ a second- generation formulation ~~of ganaxolone were announced~~ in ~~the second quarter of 2022~~ **2025** ~~, including PK characteristics that may allow for twice- daily dosing. We believe that the data support further clinical development of this formulation of ganaxolone. An additional Phase 1 cohort assessing the PK of a second- generation oral formulation candidate has been completed which assessed higher doses of ganaxolone than in the initial phase 1 cohorts. A multiple ascending dose study will be initiated in the second quarter of 2023. This study will also incorporate food effect assessments~~ . We plan to ~~pursue~~ **submit** the **MAD trial data** ~~development of Lennox Gastaut Syndrome (LGS) as a lead indication for a reformulated oral form~~ - **for** ~~of~~ **presentation at an upcoming medical meeting. IND- enabling studies for a** ganaxolone **prodrug are expected** ~~, with a Phase 2 trial targeted~~ to ~~begin in~~ **be completed by** the **end** ~~fourth quarter~~ of ~~2023~~ **2024** ~~, and~~ **. We also plan to** seek additional indications in epilepsy and potentially other therapeutic areas as activities progress. ● Building on our product pipeline. We may expand and diversify our product pipeline through acquisition of additional drug candidates that fit our business strategy. COVID- 19 ~~The continued global spread of~~ COVID- 19 **affected** ~~has impacted~~ our clinical operations and timelines. For example, our RAISE trial **for RSE** is conducted in hospitals, primarily intensive care units in academic medical centers, which ~~have~~ experienced high rates of COVID- 19 admissions. Several of these sites participating in the RAISE trial ~~have~~ experienced COVID- related difficulties, including staff turnover and the need to devote significant resources to patients with COVID- 19, which ~~has~~ resulted in site initiation and enrollment delays for the RAISE trial. Given these COVID- 19- related challenges and the interruption in drug supply in mid- 2022, we previously adjusted our expectation for our top- line data readout for the RAISE trial ~~to the second half of 2023~~ . In May 2022, we resumed screening and recruitment for the RAISE trial. ~~Several of~~ **We reached** the ~~sites participating~~ **enrollment target for the interim analysis** in **the first quarter of 2024. If the pre- defined stopping criteria from the planned interim analysis are met, we expect our interim analysis with top- line data readout for** the RAISE trial ~~continue~~ to ~~encounter COVID- related setbacks, including staff turnover and the need to devote significant resources for patients with COVID- 19. In addition, our ganaxolone clinical trials in the outpatient setting may~~ be **available in** ~~negatively impacted if patients and their~~ -- **the second quarter** ~~caregivers do not want to participate while the COVID- 19 pandemic persists. The duration and severity~~ of **2024** ~~the pandemic and its long- term impact on our business are uncertain at this time~~ . Our Products and Product CandidatesZTALMY ® (ganaxolone) oral suspension CVZTALMY is an oral suspension given three times per day that we have developed for the treatment of CDD **- associated seizures** . ZTALMY was approved by the FDA in March 2022 for the treatment of seizures associated with CDD in patients ~~2~~ **two** years of age and older ~~. In June 2022, the DEA published an interim final rule in the Federal Register placing ganaxolone and its salts in schedule V of the CSA, which rule became final on December 9, 2022~~ . ZTALMY, our first FDA approved product, became available for commercial sale and shipment ~~to patients with a prescription in the U. S.~~ in the third quarter of 2022. We recorded **ZTALMY** net ~~U. S.~~ product revenue ~~related to ZTALMY~~ of $ ~~2~~ **19** . ~~9~~ **6** million for the year ended December 31, ~~2022~~ **2023 . On July 28, 2023, the EC granted marketing authorization for ZTALMY for the adjunctive treatment of epileptic seizures associated with CDD in patients two to 17 years of age. ZTALMY may be continued in patients 18 years of age and older. With the EC marketing authorization granted for ZTALMY, Orion, our commercialization partner for ZTALMY in Europe, announced it has begun preparations for the launch of ZTALMY, 8including engaging in the required processes for obtaining pricing and reimbursement approval in the various European countries. The pricing and reimbursement process can be time- consuming and may delay Orion' s commercial launch of ZTALMY in one or more European countries** . CDD is a serious and rare genetic disorder that is caused by a mutation of the CDKL5 gene, located on the X chromosome. CDD is a severely debilitating and potentially fatal genetic condition, which occurs with an estimated frequency of 1: 40, 000 live births in the U. S. It predominantly affects females and is characterized by early onset, difficult to control seizures and severe neurodevelopmental impairment. The CDKL5 gene encodes proteins essential for ~~8normal~~ - **normal** brain **structure and**

function. Most children affected by CDD have neurodevelopmental deficits such as difficulty walking, talking and taking care of themselves. Many also suffer from scoliosis, gastrointestinal dysfunction or sleep disorders. Genetic testing is available to determine if a patient has a mutation in the CDKL5 gene. In June 2017, we were granted FDA orphan drug designation for ganaxolone for the treatment of CDD. The designation provides the drug developer with a seven- year period of U. S. marketing exclusivity, as well as tax credits for clinical research costs, the ability to apply for annual grant funding, clinical research trial design assistance and waiver of Prescription Drug User Fee Act filing fees. ~~Additionally~~ **In July 2020** , **the FDA granted Rare Pediatric Disease Designation (RPD Designation) for ganaxolone for the treatment of CDD. The FDA grants RPD Designation for diseases that affect fewer than 200, 000 people** in **the U. S. and in which the serious or life- threatening manifestations occur primarily in individuals 18 years of age and younger. Upon FDA approval of ZTALMY for CDD in March 2022, the FDA awarded us a Rare Pediatric Disease Priority Review Voucher (PRV), which we monetized in August 2022 for $ 110. 0 million in cash. In August 2022, we received a letter from Purdue in which Purdue claimed that it was owed $ 5. 5 million by us from the sale of the PRV pursuant to the Purdue License Agreement. We responded to Purdue that we did not agree with their claim. In February 2024, following discussions with Purdue, we agreed to pay Purdue $ 4 million in respect of its claim. This payment will be made to Purdue in two equal installments, the first on or before March 15, 2024, and the second on or before June 15, 2024. In** November 2019, the European ~~Medical~~ **Medicines** Agency' s (EMA) Committee for Orphan Medicinal Products (COMP) granted orphan drug designation for ganaxolone for the treatment of CDD. **Prior to** ~~In July 2020,~~ the ~~FDA granted~~ -- **grant** ~~Rare Pediatric Disease~~ **of the marketing authorization, the COMP is required to determine whether the orphan drug** ~~Designation~~ **designation** ~~(RPD~~ **criteria are still met. On May 26, 2023, the COMP provided a positive opinion to maintain the orphan drug** ~~Designation~~ **designation** ~~)~~ for ganaxolone for ~~the treatment of~~ CDD **in the EU** . The ~~FDA grants RPD Designation for diseases that affect fewer than 200, 000 people in the~~ U. S. and **EC** ~~in which the serious or life- threatening manifestations occur primarily in individuals 18 years of age and younger. The approval~~ **approvals** of ZTALMY ~~in~~ **for** CDD ~~is~~ **are** based on data from ~~the~~ **a** Phase 3 ~~Marigold~~ double- blind placebo- controlled trial **(Marigold Trial)** , in which 101 patients were randomized and treated with ZTALMY. **Clinical trial** ~~Patients~~ **patients receiving ZTALMY** showed a median 30. 7 % reduction in 28- day major motor seizure frequency, compared to a median 6. 9 % reduction for those receiving placebo, achieving the trial' s primary endpoint (p = 0. 0036). ~~In~~ **At two years in** the ~~Marigold~~ open label extension ~~study~~ **phase of the Marigold Trial** , patients ~~treated with ZTALMY for at least 12 months (n = 48) experienced a median 49. 6 % reduction in major motor seizure frequency. On October 13, 2022, we presented two posters at the Child Neurology Society Meeting from our Phase 3 Marigold clinical trial of ZTALMY, including open label extension data showing continued seizure reduction over a two- year period. In the Marigold open- label extension, patients on ganaxolone at 2 years~~ (n = 50) ~~showed~~ **treated with ZTALMY experienced** a median 48. 2 % reduction in major motor seizure frequency ~~suggesting that ganaxolone may provide sustained efficacy for the treatment of seizures associated with CDD. The discontinuation rate was about 30 % during the first year of the open label phase but declined to about 10 % during the second year~~ . These data ~~in total~~ suggest that patients who remain on treatment long- term may demonstrate continued reductions in seizure frequency. **The** ~~In the clinical development program, ZTALMY demonstrated efficacy, safety and tolerability with the~~ most common adverse ~~reactions~~ **events** (AEs) **in the double- blind portion of the Marigold Trial were somnolence** (~~incidence > 5~~ **36. 0** % **in** ~~and at least twice~~ the ~~rate of~~ **ganaxolone group compared to 15. 7 % in the** placebo **group**) ~~in the ZTALMY group being somnolence~~ , pyrexia **(18. 0 % and 7. 8 %** , **respectively) and** salivary hypersecretion ~~,~~ **(6. 0 %** and ~~seasonal allergy~~ **2. 0 %, respectively)** . We own families of patents and pending patent applications that claim certain formulations of ganaxolone and cover certain therapeutic uses of ganaxolone, including for treating CDD. The 20- year terms for patents, and applications that issue as patents, in these families run from 2026 through 2042, absent any available patent term adjustments or extensions. We have also licensed from Ovid certain patents that claim certain therapeutic uses of ganaxolone for the treatment of CDD. The licensed patents include a granted U. S. patent, and pending applications in the U. S. and Europe. The 20- year term for these licensed patents and applications that issue as patents will run through 2037, absent any available patent term adjustments. **U** ~~Priority Review Voucher~~ . **S** ~~As a result of the RPD Designation for ganaxolone for the treatment of CDD, the FDA awarded us a Rare Pediatric Disease Priority Review Voucher (PRV) on March 18, 2022 in connection with the approval of the use of ZTALMY in CDD. On July 13, 2022, we entered into an asset purchase agreement (PRV Asset Purchase Agreement) with Novo Nordisk Inc., pursuant to which we agreed to sell the PRV to Novo Nordisk, Inc. for $ 110. 0 million, payable in cash, upon the closing of the transaction. In August 2022, the transaction closed and we received $ 110. 0 million from Novo Nordisk, Inc~~ . Commercial Strategy. Since ZTALMY was approved by **the** FDA, we have been focused on the implementation and execution of an integrated launch plan to make ZTALMY available to CDD patients **in the U. S.** through a specialty pharmacy. Key ~~launch~~ **commercial** strategies have included and continue to include: (1) ~~establishing~~ **executing** our supply chain network and quality management system to assure product is available to patients; (2) driving clinical ~~awareness~~ **9awareness** of ZTALMY as the first and only FDA approved product indicated specifically for seizures associated with CDD; (3) deploying our field sales force to target physicians who treat this rare pediatric patient population; (4) engaging commercial and government payers with the objective of obtaining insurance coverage; and (5) ~~developing~~ **enhancing** our internal capabilities (such as Finance, Human Resources, Information Technology, Data Analytics and Compliance) to support our first launch as a commercial company. **U. S.** Marketing Strategy. Our marketing strategy **in the U. S.** is to reinforce that seizures are central to the constellation of CDD symptoms, establish ZTALMY as central to the comprehensive management of seizures associated with CDD, and ~~9ensure~~ **ensure** that patients have seamless access to ZTALMY from prescription through fulfillment. Our marketing campaign for ZTALMY is active, and our integrated commercial launch activities initiated in the third quarter of 2022. **U. S.** Sales Strategy. Our **U. S.** commercial sales force includes 16 regional account managers experienced in rare disease. Our field force is targeting identified key accounts and centers of excellence for CDD. Based on our market research, we estimate the addressable patient population for ZTALMY ~~in~~ **for** CDD in the U. S. is approximately 2, 000 patients

~~. For the year ended December 31, 2022, we received over 90 CDD prescription enrollment forms, of which more than 70 were for new commercial patients not previously treated with ZTALMY~~ . As this is the first product approved by the FDA specifically for seizures associated with CDD and the International Classification of Diseases, Tenth Revision (ICD10) code for CDD was established in ~~2020~~ **2021** , there is limited data available for this specific market. We have strengthened both our market access and field force teams, and both payer and customer engagement are ~~underway~~ **ongoing. U. S** . Market Access. We have established a ~~cross- functional~~ payer and reimbursement account team with the objective of obtaining and maintaining reimbursement (coverage) of ZTALMY **in the U. S** . We are focusing our efforts on reimbursement from commercial payers where pharmacy benefit managers (PBMs) control the majority of commercial pharmacy- benefit lives and government payers, primarily Medicaid for the target population for CDD. We expect approximately ~~60~~ **50** % of the CDD patient population will access **primary** coverage through ~~both~~ Fee- for- Service ~~and~~ **or** Managed Medicaid, with the remaining ~~40~~ **approximately 50** % accessing **primary coverage through** commercial ~~coverage~~ **payers** , with the top PBMs having significant influence. ~~Of the CDD patient enrollment forms received in the year ended December 31, 2022, over 75 % received favorable reimbursement coverage and therapy in the year.~~ The prescribing and fulfillment process for ZTALMY **in the U. S.** is managed through ZTALMY One ™, a comprehensive patient support program. Enrollment in the program offers various support and information to help caregivers and patients prescribed ZTALMY access their ZTALMY prescription and assist in determining eligibility for and access to co- pay support or free drug programs. **U. S.** Specialty Pharmacy. We are utilizing Orsini Pharmaceutical Services, LLC (Orsini), a specialty pharmacy, to provide services for patients **in the U. S.** , including patient enrollment, benefit verification and investigation, prior authorization support, patient education and drug counseling, dispensing of product and shipment coordination. **U. S. Specialty Distributor.** We ~~recorded our first sales of~~ **are utilizing ASD Specialty Healthcare, LLC (ASD), a specialty distributor, to provide distribution services in the U. S. in connection with** ZTALMY to ~~Orsini in the third quarter~~ **institutional inpatient pharmacies, U. S. governmental customers, including any Department** of ~~2022~~ **Veterans Affairs or Department of Defense sites, and Kaiser Permanente facilities** . Infrastructure. We continue to enhance our internal capabilities and processes to support a commercial stage company. We have implemented a healthcare compliance program to guide our compliance with rules and regulations regarding pharmaceutical sales. Manufacture of Commercial Supply. We have executed commercial supply agreements for ganaxolone **active pharmaceutical ingredient (** API **)** with our current manufacturer and also with our current supplier for finished bulk drug product. Additionally, we have executed a master supply agreement with a second API supplier ~~in the U. S.~~ to undertake certain process development activities and ~~subsequently to~~ **, if successful,** provide commercial supplies of API and / or API intermediates. Regulated as a Controlled Substance **in the U. S** . On June 1, 2022, the **Drug Enforcement Agency (** DEA **)** published an interim final rule in the Federal Register placing ganaxolone and its salts in schedule V of the **Controlled Substances Act (** CSA **)** , which rule became final December 9, 2022. Under the CSA, drugs are classified into five (5) distinct categories or schedules depending upon the drug' s acceptable medical use and the drug' s abuse or dependency potential. Schedule V is defined by the DEA as drugs with lower potential for abuse than schedule IV and consist of ~~preparations~~ **10preparations** containing limited quantities of certain narcotics. ZTALMY became available for commercial sale and shipment ~~to patients with a prescription in the U. S.~~ in the third quarter of 2022. As a controlled substance, ganaxolone is subject to the applicable CSA requirements such as registration, security, recordkeeping and reporting, storage manufacturing, distribution, importation and other requirements. **FDA** Post **-** Marketing Requirements. In connection with FDA approval of ZTALMY for CDD, we have several post **-** marketing commitments. The Phase 1 renal impairment study commitment was ~~completed and~~ submitted to the FDA in May 2022 ~~. The~~ **, the** Phase 1 hepatic impairment study and the thorough QTc study were ~~completed and~~ submitted to the FDA in December 2022 **, the extractable / leachable study results on the container closure system were submitted to the FDA in July 2023, the M17 in vitro drug- drug interaction (DDI) study was submitted in August 2023, and the M17 in vivo PK study with Brain Penetrance was submitted in December 2023** . The remaining post- marketing requirements include: 2- year carcinogenicity studies of ganaxolone and the major human unconjugated plasma metabolite, M2, in rats; a 26- week carcinogenicity of ganaxolone in transgenic mice; **and** a juvenile animal toxicity study of ~~the major human unconjugated plasma metabolite,~~ M2 ~~,~~ in rats ~~; 10extractable / leachable study results on the container closure system; a CNS distribution study of the M47 metabolite in rats; and in vitro studies to assess the drug interaction potential of M47 metabolite~~ . We expect to be able to complete these remaining required FDA studies **and are working** ~~within~~ -- **with** the ~~requested~~ FDA ~~timeframe~~ **with respect to the timing of their completion and submission. Managed Access Program (MAPS). We have initiated a global managed access program with Uniphar Durbin Ireland LTD to support physician access to ZTALMY for appropriate patients with seizures associated with CDD in geographies where there is no available patient access, local regulatory criteria and program eligibility are satisfied, and we do not already have a commercial distribution relationship in place** . Marketing Authorization Application In August 2021, the Committee for Medicinal Products for Human Use (CHMP) of the EMA granted our request for accelerated assessment of ganaxolone for the treatment of seizures associated with CDD. The marketing authorization application (MAA) for ganaxolone was submitted to the EMA on October 11, 2021 **,** and on October 28, 2021 **,** we received formal notification from the EMA that the CDD MAA was validated. With this validation, the EMA began its formal review of the MAA under the centralized procedure. **On May 26, 2023, the CHMP adopted a positive opinion recommending approval of ZTALMY. On July 28, 2023, the EC approved ZTALMY oral suspension for the adjunctive treatment of epileptic seizures associated with CDD in patients two to 17 years of age. ZTALMY may be continued in patients 18 years of age and older. The EC decision is applicable to all 27 EU member states plus Iceland, Norway and Liechtenstein. ZTALMY is the first treatment in the EU indicated for the treatment of seizures associated with CDD. EC Post- Authorization Measures.** In **connection with** ~~February 2022,~~ the ~~MAA~~ **EC approval of ZTALMY for CDD, we have several post- marketing authorization measures. The clinical study report (CSR) for Study 1042- HME- 1001** was **submitted in September 2023** ~~converted to a standard review timeline~~ . ~~Further~~ **The ganaxolone Steady- State Metabolite**

Study report , the ~~CHMP granted~~ **final Study 1042- CDD- 3001 CSR with the open- label trial completion, the M17 in vitro DDI study, and the M17 in vivo PK study with Brain Penetrance were submitted in December 2023. The remaining post- marketing authorization measures include: participating in Study LLF001 (CANDID observational study) and providing annual updates; participating in the CDD- IPR- CDD- 0 CDKL5 Deficiency Disorder International Patient Registry and providing six monthly updates; conducting a toxicity study with a sediment dwelling organism and** an ~~extension to our Day 120 clock stop~~ **updated Environmental Risk Assessment; developing a sodium benzoate- free suspension and assessing the compatibility of the oral suspension with food** , **drinks, enteral tubes, shake time and** ~~and~~ **stand** ~~as~~ **time; conducting** a ~~result, we submitted our Day 120 responses to the~~ **26- Week Oral Gavage Toxicity Study of M2; conducting a M2 Embryo- fetal Development study; and conducting a 26- week Oral Gavage Carcinogenicity Study of ganaxolone and M2. The** EMA ~~on November 22~~ **also requested weight of evidence (WoE) assessments to evaluate the need for a 2- year carcinogenicity study in rats with ganaxolone** , ~~2022~~ **a 2- year carcinogenicity study in rats with M2, and a juvenile toxicity study with M2** . We **expect** ~~received the Day 180 report, including a List of Outstanding Issues (LoOI) from the EMA on January 26, 2023. The LoOI contains a number of outstanding major objections and other concerns, including a major objection related~~ to ~~the choice of our regulatory starting material (RSM). The CHMP has indicated that the proposed RSM is not acceptable and should be redefined further upstream. We may not~~ be able **complete** ~~to timely address all of~~ the ~~objections to~~ **remaining required studies within** the ~~CHMP' s satisfaction. An initial 30- day clock stop extension was~~ requested **EMA timeframe** ~~and granted to allow for time to respond to the issues raised by the CHMP~~ . ~~The CHMP is~~ **11Our PipelineWe are pursuing development of ganaxolone for** ~~expected~~ **selected indications based** ~~to present its opinion~~ on the **mechanism** ~~MAA in the second quarter~~ of **action** ~~2023. If outstanding issues remain unresolved, we or the CHMP may request an~~ **and clinical profile of** ~~oral explanation, which may or may not be granted. Further delays in the review and approval process could occur if we are not able to timely or adequately respond to the CHMP' s objections and concerns. If we were to ultimately receive a negative opinion on the MAA, we would have the opportunity to request a re- examination by the CHMP. Our Pipeline We are developing~~ ganaxolone ~~in indications where there is a mechanistic rationale for ganaxolone to provide a benefit~~ , including the following ~~indications~~ **programs** : ~~11Status~~ -- **Status** Epilepticus (SE) SE is a life- threatening condition characterized by continuous, prolonged seizures or rapidly recurring seizures without intervening recovery of consciousness. If SE is not treated urgently, permanent neuronal damage may occur, which contributes to high rates of morbidity and mortality. Patients with SE who do not respond to first- line benzodiazepine treatment are classified as having **Established Status Epilepticus (** ESE **)** and those who then progress to and ~~then~~ **subsequently** fail at least one second- line antiepileptic drug (AED) are classified as having RSE. In RSE, synaptic GABAA receptors are internalized into the neuron, resulting in decreased responsiveness to drugs such as benzodiazepines. RSE unresponsiveness to one or more second- line AEDs **may** ~~requires~~ - **require** treatment with IV anesthesia to terminate seizures and prevent neuronal injury and other complications. The IV anesthetic is increased to a level that induces deep coma and is maintained at that rate for 24 hours or more. SE that recurs following an attempted wean of IV anesthesia is classified as super refractory status epilepticus (SRSE). In April 2016, we were granted FDA orphan drug designation for the IV formulation of ganaxolone for the treatment of SE, which includes RSE. In January 2021, we enrolled the first patient in the Phase 3 ~~pivotal~~ RAISE trial **, a randomized, double- blind, placebo- controlled trial in patients with RSE, who have failed two or more antiseizure medications** . The RAISE trial **has** ~~is a randomized, double- blind, placebo- controlled clinical trial in patients with RSE. We expect~~ approximately ~~80~~ **70** trial sites ~~in hospitals~~ , primarily ~~across~~ **in** the U. S. and Canada ~~, to participate~~ . **It** ~~The RAISE trial~~ is designed to enroll approximately 124 patients ~~,~~ who will be randomized to receive ganaxolone or placebo added to standard of care. **We reached alignment** ~~With~~ **with the FDA on a protocol amendment, including a proposal for an interim analysis when two-** ~~this~~ **thirds** ~~number~~ of **the** patients ~~,~~ **(approximately 82) have completed assessment of** the **primary and key secondary** trial ~~is designed to provide~~ **endpoints. At the time of the interim analysis, the trial will have** over 90 % power to detect a ~~30~~ **40** % ~~efficacy~~ difference **in treatment outcomes** between ganaxolone and placebo **. We reached the enrollment target for the interim analysis in the first quarter of 2024. If the pre- defined stopping criteria from the planned interim analysis are met, we expect our interim analysis with top- line data readout for the RAISE trial to be available in the second quarter of 2024. We believe positive interim RAISE trial results would be adequate for regulatory filing purposes in RSE in the U. S** . The co- primary endpoints for the RAISE trial are (1) proportion of patients ~~with RSE~~ who experience ~~seizure~~ **SE** cessation within 30 minutes ~~of treatment initiation~~ without **use of** other **IV antiseizure** medications ~~for SE treatment~~ , and (2) proportion of patients **without** ~~with no~~ progression to IV anesthesia for 36 hours ~~following initiation of the study drug~~ . In June 2022, we announced that we amended the protocol for the RAISE trial to expand ~~eligibility~~ **12eligibility** criteria **,** ~~to support recruitment. We broadened the inclusion~~ - **including allowing** ~~criteria to permit~~ patients previously treated with up to 18 hours of high- dose IV anesthesia to **enroll. Previously** ~~qualify for the trial~~ , ~~rather than excluding~~ **we had excluded** patients treated with **high- dose IV** anesthetics ~~at high doses~~ for any duration. We believe this will facilitate the enrollment of **appropriate** patients transferred to the ICU from other hospitals or the emergency room ~~, who may already have received high doses of anesthetic medication for less than 18 hours. We reached alignment with the FDA on the protocol amendment, including a proposal for a potential interim analysis when two- thirds of the patients (approximately 82) have completed the trial~~ . Several academic medical centers and intensive care units participating in the RAISE trial ~~have~~ experienced COVID- related difficulties, including staff turnover and the need to devote significant resources to patients with COVID- 19, which ~~has~~ resulted in site initiation and enrollment delays. Additionally, in February 2022, we temporarily paused the RAISE trial after routine monitoring of stability batches of clinical supply material indicated that it became necessary to reduce the shelf life to less than the anticipated 24 months to meet product stability testing specifications. We notified the FDA of this issue and our plans to proactively pause the trial, and we subsequently provided additional information to the FDA to support resuming trial activities. In May 2022, we announced that the trial had resumed utilizing new batches of the ~~current~~ **original buffer** IV formulation of ganaxolone, and we implemented a

reduced shelf life of 12 months. In agreement with the FDA, ganaxolone clinical supplies ~~will~~ **with the original buffer IV formulation would** be stored under refrigerated conditions for the entire duration of clinical use. ~~We~~ **The shelf life of the original buffer IV formulation was updated to 18 months under refrigerated conditions, based on stability data which was submitted in the subsequent IND amendment in February 2023. Subsequently, we** manufactured the IV ganaxolone formulation with a new buffer and are targeting a shelf life of ~~at least~~ 24 months **at room temperature, pending the results of ongoing stability monitoring** . The FDA agreed that in principle a buffer change in the ganaxolone IV formulation is acceptable **but requested that additional information be submitted prior to use of the new buffer formulation in clinical trials** . We ~~are working closely~~ **submitted an IND amendment to the FDA in May 2023. All sites have been resupplied** with ~~key investigators and site coordinators to support enrollment efficiencies at existing RAISE trial sites and are also increasing~~ the **new buffer formulation** ~~number of U. S. centers participating in the trial. Additionally~~ , **which** we **believe will not require refrigeration** ~~plan to expand the trial to sites in Canada~~ and **is** ~~Australia. Consistent with the prior announcement, we expect~~ **expected** ~~our top~~ **to ~~have a shelf~~ ~~line~~ life** ~~data readout for the RAISE trial to be available in the second half~~ of ~~2023~~ **24 months** . ~~Planning continues for~~ **We have commenced** a separate Phase 3 RSE trial to support an MAA in Europe (RAISE II trial). We gained alignment on the trial design at a meeting with the EMA in the first quarter of 2021. **The** ~~Due to the delay in clinical trial supply mentioned for the RAISE trial, the~~ RAISE II trial ~~initiation~~ is ~~planned for the second half of 2023. RAISE II will be~~ a double blind, placebo- controlled ~~pivotal~~ registration trial **targeting** ~~expected to enroll~~ **enrollment of** 70 patients who have failed first- line ~~12benzodiazepine~~ -- **benzodiazepine** treatment and at least one second- line **IV** AED. Patients will receive either ganaxolone or placebo, administered in combination with a standard- of- care second- line **IV** AED. The simultaneous administration of a standard- of- care AED with the trial ~~medication~~ **drug** is expected to provide data complementary to that from the RAISE trial. There are two additional key differences between the RAISE and RAISE II trials. First, ~~rather than specifying~~ **unlike the RAISE trial, which specifies** progression to IV anesthesia as ~~a~~ **constituting** treatment failure, ~~under the RAISE II protocol~~ any escalation of care ~~–~~ **whether an additional** ~~will constitute a treatment failure. This could be IV anesthesia or another~~ second- line IV AED **or an IV anesthetic – will fulfill criteria for treatment failure in RAISE II. This aligns more closely with the European standard of practice for RSE in which IV anesthesia is used less commonly than in the U. S** . Second, the primary ~~analysis~~ **endpoint** for the RAISE II trial will be **based on** a responder analysis, with response defined as SE cessation within 30 minutes and no escalation of care within 36 hours, rather than the co- primary endpoints in the RAISE trial, which require statistical significance to be achieved independently on both the 30- minute and 36- hour outcomes. ~~The FDA has indicated alignment on~~ **We expect to complete enrollment for** the ~~overall~~ **RAISE II** trial ~~design for a third SE trial~~ **by the end of 2025. In 2023** , **we discontinued** the RESET trial, a Phase 2 trial evaluating ganaxolone ~~in~~ **for** the treatment of ESE ~~, for which enrollment in the U~~ . **We have focused our resources for** ~~S. is expected to commence in the first half of 2023. The RESET trial will enroll patients with convulsive SE presenting to emergency departments, and will be conducted under Exception from Informed Consent (EFIC) guidelines. The RESET trial will consist of two phases: an initial open- label, dose optimization phase and a subsequent double- blind placebo- controlled phase. In the open- label portion of the trial, sequential cohorts will receive~~ IV ganaxolone ~~for varying durations and at different doses. The dosing for each cohort will depend~~ on **our RSE trials, i. e., completing** the **RAISE trial and accelerating enrollment in the RAISE II trial, as well as developing a proof- of- concept trial in SRSE. SRSE is a life- threatening neurological emergency with high morbidity and mortality, and we have provided ganaxolone to physicians who have requested it for SRSE** treatment ~~effect and tolerability~~ **under eIND applications. To date, 26 patients have** ~~seen~~ **been treated for SRSE** ~~in the previous one,~~ with ~~the expected optimal dose and duration of~~ ganaxolone ~~incorporated~~ **. Based on our observations of treatment outcomes** in ~~the~~ **these** ~~double~~ **patients we plan to submit a protocol to the FDA for a proof** - ~~blind phase~~ of ~~the~~ **- concept** trial **of** ~~to follow. We expect that the double- blind placebo- controlled phase will enroll approximately 80 ESE patients randomized equally to IV~~ ganaxolone **in SRSE** ~~or placebo added to a standard- of- care AED. The primary efficacy endpoint will be the absence of electrographic (rapid EEG) evidence of SE or recurrence of generalized convulsions at 1 hour after the initiation of treatment. We are targeting data from the first dose- finding cohort of the RESET trial by the end of 2023~~ . In September 2021, the U. S. Patent and Trademark Office (USPTO) granted us a patent on a method of treating SE, including dosing regimens. This issued patent expires in 2040. That patent is a member of a patent family we own that includes pending patent applications that claim certain therapeutic regimens for the treatment of SE, including RSE, using intravenous ganaxolone. ~~On~~ **The USPTO granted us a second patent for SE on June 20, 2023, which includes claims related to our clinical therapeutic regimen for the treatment of SE using IV ganaxolone. These new claims cover therapeutic regiments in which high doses of ganaxolone are administered, which we believe is relevant for some patients, and strengthens our intellectual property portfolio for the treatment of SE, including SRSE, using ganaxolone. 13In** July ~~26,~~ 2022, the USPTO issued ~~a~~ **U. S.** ~~patent~~ **Patent** ~~to~~ **No. 11, 395, 817 (** Ovid **‘ 817 Patent) to Ovid Therapeutics, Inc. (Ovid)** with claims that encompass our product candidate for the treatment of SE **. On March 15, 2023, we filed a petition seeking post- grant review (PGR) of the Ovid ‘ 817 Patent with the USPTO Patent Trial and Appeal Board (PTAB). Our petition for PGR argues that the claims of the Ovid ‘ 817 Patent are unpatentable on multiple grounds. Ovid filed a preliminary response to our petition on June 20, 2023. In Ovid’ s reply to our request for PGR, Ovid disclaimed claims 1- 21, 23 and 24 of the Ovid ‘ 817 Patent, which has the effect of erasing these claims from the patent, irrespective of the outcome of the PGR. On August 17, 2023, the PTAB issued a decision granting institution of our petition seeking PGR of the Ovid ‘ 817 Patent. In instituting the PGR, the PTAB stated that it was more likely than not that we would be able to invalidate the remaining claims (22 and 25- 31) of the Ovid ‘ 817 Patent during the proceeding. The decision to institute is not a final decision on the patentability of the claims. The final decision will be based on the full record developed during the proceeding. The PGR process is ongoing, and oral arguments for the proceeding are currently scheduled for May 22, 2024. If we do not prevail in the PGR proceeding, the decision can be appealed to the Court of Appeals for the Federal Circuit. If an appeal is not successful,**

our ability to challenge the Ovid ' 817 Patent in court will be limited in certain respects. On January 9, 2024, the USPTO issued a Notice of Allowance in Ovid' s patent application U. S. 18 / 325, 548 (Ovid ' 548 application) with claims that encompass our product candidate for the treatment of SE. The Ovid ' 548 application issued in February, 2024 as U. S. Patent No. 11, 903, 930 (Ovid ' 930 Patent). We are evaluating the Ovid' 930 Patent. The Ovid ' 817 Patent and the Ovid ' 930 Patent claims cover the use of ganaxolone in the treatment of SE and do not cover or impact our marketing and sales of ZTALMY for the treatment of seizures associated with CDD. If we prevail in the PGR, the Ovid ' 817 Patent will not be enforceable against us . Ovid may file a lawsuit against us alleging infringement of its patents ~~and / or we may challenge the validity of Ovid' s patents with the USPTO or through the courts~~ . Any such ~~proceeding~~ **proceedings , in the PTAB or courts** , regardless of ~~its~~ **their** outcome, would likely result in the expenditure of significant financial resources and the diversion of management' s time and resources. In addition, any such proceeding may cause negative publicity, adversely impact patients, and we may be prohibited from marketing or selling ganaxolone for SE, **including** RSE **,** ~~and ESE~~ during such proceedings or if we are not successful in such proceedings. If Ovid does decide to bring an infringement lawsuit, we do not expect that it will be filed before a **U. S.** commercial launch of ganaxolone for ~~SE,~~ RSE ~~or ESE~~ based upon the " safe harbor " provisions of the Drug Price Competition and Patent Term Restoration Act of 1984 (Hatch- Waxman Act). We may need to acquire or obtain a license to ~~the~~ **certain** Ovid patents to market or sell ganaxolone for ~~SE,~~ RSE ~~and ESE~~ **in the U. S.** , which may not be available on commercially acceptable terms or at all. If we are not able to acquire the **certain** Ovid patents or negotiate a license on acceptable terms, and if our product is determined to infringe Ovid' s patents and ~~the~~ **such** patents are determined to be valid, then we may be forced to pay Ovid royalties, damages and costs, or we may be prevented from commercializing ganaxolone for ~~SE,~~ RSE ~~and ESE~~ **in the U. S.** altogether, which would have a material adverse impact on our business. Tuberous Sclerosis Complex (TSC) TSC is a rare genetic disorder that **causes** ~~affects many organs by causing, typically~~ non- malignant ~~,~~ tumors in the brain, skin, kidney, heart, eyes, and lungs **. Rarely, patients may develop malignant tumors of the kidney, breast or thyroid gland** . The condition is caused by inherited mutations in either the TSC1 or TSC2 gene. It occurs with a frequency of approximately 1: 6, 000 live births, with a **genetic** mutation being found in 85 % of patients. While the disease phenotype can be extremely variable, epilepsy occurs with a frequency of up to 85 %. TSC is a leading cause of genetic epilepsy, often manifesting in the first year of life as either focal seizures or infantile spasms. There are currently few disease- specific treatments approved for seizures in TSC. Orphan drug designation for ganaxolone for the treatment in TSC was granted by the FDA in August 2021 and by the EMA in October 2021. In August 2021, we announced top- line data from our open- label Phase 2 trial ~~(CALM trial)~~ evaluating the safety and efficacy of adjunctive oral ganaxolone in 23 patients with **TSC- associated** seizures associated ~~with TSC~~ . The ~~CALM~~ trial enrolled 23 patients ages 2 to 32 **,** who entered a four- week baseline period followed by a 12- week treatment period, during which they received up to 600 mg of ganaxolone (oral liquid suspension) three times a day. Patients who ~~met 13eligibility criteria~~ **completed the initial 12- week treatment period** were able to continue ganaxolone ~~treatment~~ during **an** ~~a 24- week~~ extension **phase of the trial** . The primary endpoint was the percent change in 28- day TSC- associated seizure frequency during the 12- week treatment period relative to the four- ~~week~~ **14week** baseline period. Secondary outcome measures included the percentage of patients experiencing a greater than or equal to 50 % reduction in 28- day TSC- associated seizure frequency through the end of the 12- week treatment period compared to the 4- week baseline period. The primary endpoint showed a median 16. 6 % reduction in 28- day ~~in the~~ frequency of TSC- associated seizures relative to the four- week baseline period. A secondary endpoint showed that the proportion of patients that achieved at least a 50 % seizure reduction was 30. 4 %. During the trial, patients with focal seizures (n = 19) showed a median 25. 2 % reduction in focal seizure frequency. Ganaxolone was generally well- tolerated with somnolence reported as the most common AE. In addition, one serious adverse event (SAE) of worsening seizures occurred, which was assessed by the investigator as treatment ~~-~~ related. Four patients discontinued the trial due to AEs. Additionally, the data from the trial suggested that in patients ~~on~~ **receiving** concomitant Epidiolex, early elevation of ganaxolone blood levels occurred and appeared to be linked to greater somnolence. The interpretation of these findings is limited by the small sample size and open- label design of the trial. A formal Phase 1 drug- drug interaction trial was completed **in the fourth quarter of 2022** , demonstrating a lack of significant interaction between ganaxolone and Epidiolex. ~~Additionally~~ **Based on findings from the Phase 2 TSC trial, as well as a review of PK findings from prior Phase 1 and Phase 3 trials** , the titration schedule for ~~all subjects in~~ the Phase 3 TSC trial has been adjusted to ~~maximize~~ **optimize** tolerability. In response to our request for an ~~End~~ **end-** of Phase 2 meeting with the FDA regarding a proposed Phase 3 TSC trial, the FDA provided written responses to our questions in lieu of a meeting. We believe the written responses show overall alignment on the clinical development plan in TSC. We believe that, based on the FDA' s written responses, and with **the** FDA approval of CDD, a single trial could serve as necessary support for regulatory approval ~~for~~ **of** TSC in the U. S. In response to our request for Protocol Assistance, which is a special form of scientific advice available for developers of designated orphan medicines for rare diseases, the EMA provided written feedback in December 2021 in lieu of a meeting. We believe the written responses from the EMA, like those from the FDA, show overall alignment on the clinical development plan in TSC. After commencing site initiations in the **U. S. and Europe in the** first ~~quarter of 2022 and dosing the first patient in the second~~ quarter of 2022, we are actively enrolling patients in ~~the U. S., Spain, Germany and the United Kingdom for~~ this global Phase 3 randomized, double blind, placebo- controlled trial (TrustTSC trial) of adjunctive ganaxolone in approximately ~~160~~ **128 patients with** TSC ~~patients~~ **- related seizures** . **Based on** ~~We expect to expand~~ the **sample size of 128** trial ~~to include up to~~ **participants, the trial provides** 90 **% power to detect a 25 % difference in seizure reductions between ganaxolone and placebo. The trial has 93** sites **activated** , including several TSC centers of excellence, predominantly in the U. S., Western Europe, Canada **, Australia, China** and Israel. The primary endpoint ~~for the TrustTSC trial~~ is percent change in 28- day frequency of TSC- associated seizures ~~. We~~ **, and we** plan to announce top- line data ~~from the TrustTSC trial~~ in the ~~first~~ **fourth** quarter of 2024. **In July 2023, the USPTO granted us a patent on a method of treating TSC- related epilepsy by administering oral ganaxolone. This issued patent expires in 2040. This patent is a member of a**

patent family we own that includes pending patent applications that claim certain therapeutic regimens for the treatment of TSC. Second ~~-~~Generation Formulation, ~~Prodrug~~ **Clinical** Development ~~and~~ **in** Lennox- Gastaut Syndrome (LGS) ~~Top~~ **and other epileptic encephalopathies, and Prodrug DevelopmentTop** - line data from a **single ascending dose (SAD)** Phase 1 trial ~~with~~ **in** healthy volunteers utilizing the first candidate for a **second generation formulation of ganaxolone demonstrated linear PK properties at doses of up to 1200 mg. Data from a subsequent phase 1 MAD trial also demonstrated linear kinetics through the range of doses assessed. Based on these results, we intend to apply extended-release technologies to the formulation, which could provide consistent exposure that maintains trough concentrations within the therapeutic range, minimizes peak dose- related side effects and allows once- or twice- daily dosing. The linear kinetics observed in the MAD trial, along with predictable dose- exposure relationships, may allow physicians to individualize dosing to patient needs. We plan to pursue clinical development of the** second- generation formulation of ganaxolone ~~were announced~~ in ~~the second quarter of 2022, including PK characteristics that may allow for twice- daily dosing. We believe that the data support further clinical development of this formulation of ganaxolone. An additional Phase 1 cohort of assessing the PK of the second- generation oral formulation candidate has been completed, which assessed higher doses of ganaxolone than in the initial phase 1 cohorts. A multiple ascending dose study will be initiated in the second quarter of 2023. This study will also incorporate food effect assessments. The development of ganaxolone prodrug compounds continues to advance, with lead oral and IV candidates selected, and Phase 1 data targeted for 2024. We plan to pursue the development of ganaxolone for~~ LGS, a severe form of epilepsy that typically begins between one and eight years of age. Affected children have neurodevelopmental impairments and intractable seizures, including focal, atonic, tonic **, generalized tonic- clonic** and atypical absence seizures **. In March 2023, the FDA granted orphan drug designation to ganaxolone for the treatment of LGS. This designation applies to the active moiety of ganaxolone and is not dependent on the formulation** . Given the overlap in seizure types and etiologies with other disorders where ganaxolone has **therapeutic** potential ~~to reduce seizures~~ , such as CDD and TSC, we believe that LGS represents a promising opportunity for ganaxolone development. We ~~are planning to utilize~~ **anticipate initiating a Phase 2 clinical trial in LGS with** a second ~~-~~-generation formulation **in 2025. 15Additionally, we plan to expand our investment in ZTALMY to explore its potential in the treatment** of **other rare epilepsies. Planning is underway for a clinical trial that would assess oral** ganaxolone for the **treatment of a broad range of epileptic encephalopathies targeted to begin in Q4 2024. The development of ganaxolone prodrug compounds continues to advance with lead oral and IV candidates having been selected. We anticipate completion of IND- enabling studies for the oral prodrug in 2024, followed by IND filing and initiation of Phase 1 trials in 2025. On September 27, 2023, the USPTO issued a Notice of Allowance in an Ovid patent application with claims that encompass our product candidate for the treatment of** LGS ~~development program~~ **. This patent issued** , ~~with a Phase 2 trial targeted to begin in the fourth quarter of~~ **U. S. Patent No. 11, 806, 336, on November 7,** 2023. **The claims in the Ovid LGS patent cover the use of ganaxolone in the treatment of LGS and do not cover or impact the use of ganaxolone in any other indication. Ovid may file a lawsuit against us alleging infringement of its LGS patent claims. Any such proceeding, regardless of the outcome, would likely result in the expenditure of significant financial resources and the diversion of management' s time and resources. In addition, any such proceeding may cause negative publicity, adversely impact patients, and we may be prohibited from marketing or selling ganaxolone for LGS during such proceeding or if we are not successful in such proceedings. If Ovid does decide to bring an infringement lawsuit, we do not expect that it will be filed before a commercial launch of ganaxolone for LGS based upon the " safe harbor " provisions of the Drug Price Competition and Patent Term Restoration Act of 1984 (Hatch- Waxman Act). We may need to acquire or obtain a license to the Ovid LGS patent to market or sell ganaxolone for LGS, which may not be available on commercially acceptable terms or at all. If we are not able to acquire the Ovid LGS patent or negotiate a license on acceptable terms, and if our product is determined to infringe Ovid' s patent and such patent is determined to be valid, then we may be forced to pay Ovid royalties, damages and costs, or we may be prevented from commercializing ganaxolone for LGS altogether, which would have a material adverse impact on our business.** ~~14Orphan~~ -- **Orphan** DesignationsThe FDA has granted orphan drug designation to ganaxolone for the treatment of Infantile Spasms, SE, CDD, TSC, PCDH19- RE ~~and ,~~ Fragile X Syndrome **and LGS** . Orphan drug designation is granted by the FDA Office of Orphan Products Development to novel drugs or biologics that treat a rare disease or condition affecting fewer than 200, 000 patients in the U. S. The designation provides the drug developer with a seven ~~-~~-year period of U. S. marketing exclusivity, as well as tax credits for clinical research costs, the ability to apply for annual grant funding, clinical research trial design assistance and waiver of Prescription Drug User Fee Act filing fees **. In Europe, the COMP has granted orphan drug designation to ganaxolone for the treatment of TSC and CDD** . Ganaxolone Mechanism of Action Ganaxolone is a methylated analog of the endogenous neurosteroid, allopregnanolone. Allopregnanolone exhibits potent anxiolytic, antidepressant and anti- seizure activity. Unlike allopregnanolone, ganaxolone cannot be back-converted to active intermediates possessing steroid hormone activity. Both ganaxolone and allopregnanolone bind to GABAA receptors that, when activated, permit flow of chloride ions into the neuron. This change in concentration of chloride ions results in hyperpolarization and is the basis for the inhibitory effect of GABA. Classic GABAA active drugs bind only at receptors located on the synapse between neurons. However, both allopregnanolone and ganaxolone also bind to extrasynaptic GABAA receptors. Synaptic GABAA receptors respond quickly to inhibit neurotransmission (phasic inhibition), while extrasynaptic GABAA receptors provide a constant baseline level of inhibition (tonic inhibition). ~~Activity at~~ **During prolonged seizures and SE,** ~~extrasynaptic~~ ----- **synaptic** GABAA receptors ~~may be of particular importance for~~ **are internalized into the neuron, rendering** ~~the~~ **them unavailable for binding by GABA. In contrast, extrasynaptic receptors are not internalized during** prolonged seizures **. The binding of ganaxolone to** ~~in SE, during which synaptic, but not~~ extrasynaptic ~~,~~ receptors ~~become internalized into~~ **has been proposed as** the **basis** ~~neuron and are unavailable~~ for ~~binding of GABAergic drugs~~ **its efficacy in RSE** . ~~Safety~~ **16Safety** OverviewOral ~~SafetyMore than~~ **Ganaxolone SafetyAs of October 2023, over** 2, ~~300~~ **200** individuals

have received ~~oral formulations of~~ ganaxolone for durations from one day to more than two years at doses of 50 to 2, 000 mg / day. **Oral** ~~Ganaxolone~~ **ganaxolone** ~~was~~ **has been** administered in Phase 2 clinical trials to pediatric patients at doses up to 1, 800 mg / day and to adult patients at doses up to 1, 875 mg / day. The majority of AEs ~~were~~ **have been** non- serious and resolved upon discontinuation of therapy. The most common side effects with oral ganaxolone relate to sedation or somnolence. In the oral ganaxolone safety database there are no trends of medically important changes in blood chemistry, vital signs, liver function, renal function or cardiovascular parameters in adult or pediatric populations. In the pivotal Phase 3 clinical trial **in CDD** (**the** Marigold Trial) ~~, which evaluated the use of oral ganaxolone in children and young adults with CDD~~ , ganaxolone was generally well tolerated with a safety profile consistent with previous clinical trials. The most common adverse reactions (incidence of at least 5 % and at least twice the rate of placebo) were somnolence, pyrexia, salivary hypersecretion, and seasonal allergy. Somnolence and sedation appeared early during treatment and were generally dose related. Antiepileptic drugs, including ZTALMY, increase the risk of suicidal thoughts or behavior. In addition, as with most antiepileptic drugs, ganaxolone should be withdrawn gradually to minimize the risk of increased seizure frequency and SE. There were no deaths reported in the double- blind phase of the Marigold Trial. Three deaths globally have occurred during the open label extension phase of the trial, two of which were assessed by the investigators as unrelated to trial treatment. The third death was assessed by the investigator as probably related to **reduction in dose of the** trial medication. Given the severity of CDD and its medical complications, **SAEs** ~~serious adverse events~~ or deaths may occur which, in the absence of a control group, make determination of relatedness to treatment difficult. In the Phase 2 TSC trial, ganaxolone was generally well tolerated with somnolence reported as the most common AE, consistent with previous studies. Concomitant Epidiolex appeared to be linked to greater somnolence. A ~~15formal~~ -- **formal** Phase 1 drug- drug interaction trial was completed, demonstrating a lack of significant interaction between ganaxolone and Epidiolex. Additionally, the titration schedule for all subjects in the Phase 3 TSC trial has been adjusted to maximize tolerability. IV SafetyIn 2016, we completed a Phase 1 dose- escalation trial with IV ganaxolone that enrolled 36 patients, designed to determine the PK, pharmacodynamics (PD), and safety of IV ganaxolone administered as an ascending bolus dose (Stage 1) or continuous infusion (Stage 2). Thirty- six healthy volunteers were enrolled. Every dose regimen of IV ganaxolone, either bolus or continuous infusion, was generally safe and well- tolerated and rapidly reached targeted dose levels. Six treatment- emergent AEs were reported, all of which were mild in severity and resolved without intervention. Only headache was considered possibly related to trial treatment. No patient discontinued due to an AE and no SAEs were reported. IV ganaxolone plasma concentrations were generally proportional to the administered dose. In addition, the continuous infusion of IV ganaxolone achieved the targeted exposure levels associated with anticonvulsant activity. In 2019, we announced positive top- line results in our open ~~-~~label, dose ~~-~~finding Phase 2 clinical trial evaluating IV ganaxolone in patients with RSE. In the trial, ganaxolone had an acceptable safety and tolerability profile for the RSE patient population in all dose groups. There were 10 SAEs; eight were considered not related to treatment and two were considered treatment- related (TRSAEs). The TRSAEs were severe sedation in two patients that led to early ganaxolone discontinuation: one in the medium dose group on day three and one in the ~~target~~ **high** dose group on day one. There were 50 ~~AEs~~ **17AEs reported in seven patients** , thirteen of which were considered ~~treatment- related (~~TRAEs ~~) reported in seven patients~~ . The most commonly reported TRAEs were somnolence, mild hypotension and sedation. Preclinical Pharmacology and ToxicologyWe have completed preclinical safety pharmacology and toxicology testing, including reproductive toxicology. Animal pharmacokinetic and in vitro studies show that ganaxolone is metabolized primarily by the Cytochrome P450, family 3, subfamily A (CYP3A) family of liver enzymes, a common route of drug metabolism. All in vitro studies have shown that ganaxolone has low potential for interaction with other drugs at several multiples of observed human ganaxolone levels. Neither ganaxolone nor its metabolites have a ketone ring at the 3- position, a requirement for hormonal activity. In binding and functional activity studies, ganaxolone has no appreciable affinity for estrogen or progesterone receptors. We found no evidence of changes in blood, liver, kidney or the gastrointestinal systems indicating functional or anatomical adverse effects associated with either single- or multiple- dose treatment with ganaxolone in preclinical safety pharmacology studies, nor have we seen evidence of any end organ toxicity from human clinical trials. We have not detected potential for ganaxolone to cause cellular mutations or carcinogenicity in trials to date. Ganaxolone is metabolized extensively in animals and humans. During the development of CDD, one major metabolite (M2) was present in plasma of humans that was not found in plasma of rats or dogs. The chemical structure of M2 has been identified. An activity assay, dose range finding study in rats and an in vivo micronucleus with comet analysis for the detection of genotoxicity have been conducted and the results submitted to the FDA. **The M17 in vitro drug- drug interaction (DDI) study was submitted in August 2023, and the M17 in vivo PK study with Brain Penetrance was submitted in December 2023.** Results from additional preclinical studies are required ~~to~~ **by** the FDA as post- marketing requirement (s). These include: 2- year carcinogenicity studies of ganaxolone and the major human unconjugated plasma metabolite, M2, in rats; a 26- week carcinogenicity of ganaxolone in transgenic mice; **and** a juvenile animal toxicity study of the major human unconjugated plasma metabolite, M2, in rats ~~; a CNS distribution study of the M47 metabolite in rats; and in vitro studies to assess the drug interaction potential of M47 metabolite~~ . Additional post- marketing requirements ~~include~~ **included** : phase 1 renal and hepatic impairment studies and a thorough QTc study; and extractable / leachable study results on the container closure system. The Phase 1 renal impairment study commitment was ~~completed and~~ submitted to the FDA in May 2022. The Phase 1 hepatic impairment study and the thorough QTc study were completed and submitted to the FDA in December 2022 **. The extractable / leachable study results on the container closure system were submitted to the FDA in July 2023** . We plan to complete the required FDA studies within the required FDA timeframe. However, there is a risk that the studies could take longer than expected to complete or the studies may have adverse findings which may require additional ~~16investments~~ -- **investments** and have the potential to materially impact **the label** ~~our~~ -- **or our ability to market ZTALMY. In connection with the EC approval of ZTALMY for CDD, we have several post-** marketing ~~of Ztalmy~~ **authorization measures** . ~~In~~ **The clinical study report (CSR) for Study 1042- HME- 1001 and** the ~~EU~~ **ganaxolone Steady- State Metabolite Study report were submitted**

in September 2023. The ganaxolone Steady- State Metabolite Study report , ~~if additional~~ **the final Study 1042- CDD- 3001 CSR with the open- label trial completion, the M17 in vitro DDI study, and the M17 in vivo PK study with Brain Penetrance were submitted in December 2023. The remaining post- marketing authorization measures include: participating in Study LLF001 (CANDID observational study) and providing annual updates; participating in the CDD- IPR- CDD- 0 CDKL5 Deficiency Disorder International Patient Registry and providing six monthly updates; conducting a toxicity study with a sediment dwelling organism and an updated Environmental Risk Assessment; developing a sodium benzoate- free suspension and assessing the compatibility of the oral suspension with food, drinks, enteral tubes, shake time and stand time; conducting a 26- Week Oral Gavage Toxicity Study of M2; conducting a M2 Embryo- fetal Development study; and conducting a 26- week Oral Gavage Carcinogenicity Study of ganaxolone and M2. The EMA also requested weight of evidence (WoE) assessments to evaluate the need for a 2- year carcinogenicity study in rats with ganaxolone, a 2- year carcinogenicity study in rats with M2, and a juvenile toxicity study with M2. We expect to be able complete the remaining required** studies **within** ~~are needed, these~~ -- **the requested EMA timeframe** ~~are usually required before or during MAA review~~ . In reproductive toxicology studies, ganaxolone did not cause malformations of the embryo or fetus in rats or mice and did not significantly affect the development of offspring. No changes in sperm parameters were found. We believe these findings are important, as many currently marketed AEDs have shown developmental toxicities in animal studies, including fetal death and skeletal abnormalities. Valproate, carbamazepine, phenytoin, topiramate and other ~~AEDs~~ **18AEDs** have been linked to birth defects in humans (e. g., head and facial malformations and lowered birth weight). These findings have resulted in labeling for these drugs indicating evidence of human fetal risk. Intellectual ~~Property~~ **PropertyThe** ~~The~~ proprietary nature of and protection for ZTALMY, other indications being developed for ganaxolone and any other future product candidates, discovery programs and know- how are important to our business. We have sought patent protection in the U. S. and internationally for synthetic methods for making ganaxolone, ganaxolone nanoparticles, which are used in certain oral solid, oral liquid, and IV dose formulations, other injectable and oral ganaxolone formulations, and methods of treatment using ganaxolone. Our policy is to pursue, maintain and defend patent rights whether developed internally or licensed from third parties and to protect the technology, inventions and improvements that are commercially important to the development of our business. The patents and patent applications owned by us comprise approximately ~~17~~ **15** different patent families, filed in various jurisdictions around the world. Nanoparticle Ganaxolone Formulations. We own approximately four patent families directed to **formulations of ganaxolone, including** nanoparticle formulations of ganaxolone and complexing agents that deliver consistent exposure and improved stability of ganaxolone, and certain uses of the formulations. One of the patent families includes eight issued U. S. patents with claims directed to certain solid and liquid ganaxolone formulations and certain methods for the making and use thereof. Corresponding foreign patents have been granted in Australia, Canada, China, Europe, Hong Kong, India, Israel, Japan, Mexico, South Africa, New Zealand, Singapore and South Korea. The 20- year term for patents in this family runs through 2026, absent any available patent term adjustments or extensions. We have filed for a patent term extension of a granted U. S. patent in this patent family that covers ZTALMY. Our patent term extension application requests an extension of five (5) years, which is the maximum extension available under the Hatch- Waxman Act. If the full extension is granted, this U. S. patent would be extended to November 28, 2031. The application for patent term extension is pending at the USPTO. We have not out- licensed any rights to practice these patents in any of these territories. Pursuant to our agreement with Domain Russia Investments Limited (DRI), we assigned to DRI patent rights, which rights were subsequently assigned to NovaMedica LLC (NovaMedica), along with the right to develop and commercialize ganaxolone in Russia and certain other member countries of the Eurasian Patent Organization. We have approximately ~~four~~ **three** patent families consisting of ~~three~~ **one** pending U. S. provisional ~~applications~~ **application** directed to ganaxolone analogs and / or additional formulations of ganaxolone, and ~~an~~ **two** international ~~application~~ **applications** filed under the Patent Cooperation Treaty (PCT) that ~~is~~ **are** directed to additional formulations of ganaxolone. The 20- year term for patents based on ~~this~~ **these** international ~~application~~ **applications** will run through 2042 **and 2043, respectively** , absent any available patent term adjustments. Process for Manufacturing Ganaxolone. Our patent portfolio contains patents issued in Australia, Brazil, Canada, China, Europe, Hong Kong, India, Israel Japan, Mexico, New Zealand, South Korea, and the U. S. covering our synthetic process for manufacturing ganaxolone. The 20- year term for patents in this family runs through 2030, absent any available patent term adjustments or extensions. The European patent has been validated in France, Germany, Ireland, Italy, Spain, and Switzerland. Intravenous Ganaxolone Formulations. We own approximately four patent families directed to our IV ganaxolone formulations that we are developing for the treatment of SE and certain other disorders. One of the patent families includes **patents issued in Australia, India and Japan, and** pending applications in ~~Australia,~~ Canada, China, Europe, Israel ~~, India~~ , Japan, South Africa, and the U. S. that claim certain injectable ganaxolone formulations containing sulfobutyl ether- beta- cyclodextrin and certain methods of use of the formulations, including for the treatment of SE. The 20- year term for this patent family runs through to 2036, absent any available patent term adjustments or extensions. A second patent family currently includes ~~one~~ **two** issued U. S. ~~patent~~ **patents** with claims directed to certain therapeutic regimens for the treatment of SE using IV ganaxolone, ~~17and an~~ **and** ~~international~~ **pending** ~~application~~ **applications** ~~filed under~~ **in Canada, China, Europe, Israel, Japan, Mexico, Singapore, South Africa, and** the ~~PCT~~ **U. S.** that **claim** ~~is directed to~~ certain therapeutic regimens for the treatment of SE using IV ganaxolone **. The 20- year term for patents in this family runs through 2040, absent any available patent term adjustments. A third patent family includes a pending application in the U. S. that claims certain therapeutic uses of IV ganaxolone. The 20- year term for patents in this family runs through 2041, absent any applicable available patent term adjustments. A fourth patent family 19currently consists of a pending U. S. provisional application directed to certain therapeutic uses for SE** . The 20- year term for patents based on this international application will run through ~~2040~~ **2044** , absent any available patent term adjustments **international application will run through 2041,absent any applicable available patent term adjustments.A fourth patent family currently consists of a pending international application filed**

under the PCT directed to certain therapeutic uses for SE.We intend to file national phase applications in various foreign jurisdictions based on this PCT application before applicable deadlines.The 20- year term for patents based on this international application will run through 2042,absent any available patent term adjustments .Additional Therapeutic Uses.We own approximately four patent families directed to certain therapeutic uses of ganaxolone,including for treating genetic epilepsy disorders,such as CDD and PCDH19- Related Epilepsy (PCDH19- RE),and TSC.One of the patent families includes ~~one issue patent in Japan,and~~ pending applications filed in Australia,Canada,China, **Eurasia,** Europe,Japan, ~~South~~ Korea **,Malaysia** ,New Zealand,Singapore,and the U.S.that claim certain methods of treating epileptic disorders.The 20- year term for patents in this ~~family runs through 2038,absent any available patent term adjustments or extensions.A second patent family includes one issued U.S.patent with claims directed to certain methods for treating TSC,and pending applications filed in Australia,Canada,China,Europe,Israel,Japan,South Korea,Mexico,Singapore,New Zealand,and the U.S.that claims certain methods of treating TSC.~~ . We intend to file national phase applications in various foreign jurisdictions based on this PCT application before applicable deadlines. ~~A third patent family currently consists of a pending international application filed under the PCT that is directed to certain therapeutic uses of IV ganaxolone. We intend to file national phase applications in various foreign jurisdictions based on the PCT application before applicable deadlines.~~ The 20- year term for patents based on this international application will run through 2041,.....- year term for patents in this family runs ~~through 2038, absent any available patent term adjustments or extensions. A second patent family currently includes one pending international patent application filed under the PCT that claims certain methods of treating TSC. We intend to file national phase applications in various foreign jurisdictions based on this PCT application before applicable deadlines. The 20- year term for patents based on this family run through 2040, absent any available patent term adjustments or extensions. A third family currently comprises one pending international patent application filed under this PCT directed to certain therapeutic regimens for certain disorders using ganaxolone. We intend to file national phase applications in various foreign jurisdictions based on this PCT application before applicable deadlines. The 20- year term for patents based on this family run through 2041, absent any available patent term adjustments or extensions. A fourth patent family currently consists of a pending international patent application filed under this PCT directed to certain therapeutic regimens for certain disorders using ganaxolone. We intend to file national phase applications in various foreign jurisdictions based on this PCT application before applicable deadlines. The 20- year term for patents based on this family run~~ through 2042, absent any available patent term adjustments or extensions. We have also licensed from Ovid certain patents that are directed to certain therapeutic uses of ganaxolone for the treatment of CDD. The licensed patent family includes a granted U. S. patent and a pending application in Europe. The 20- year term for patents based on this international application will run through 2037, absent any available patent term adjustments. In addition to patents, we rely upon unpatented trade secrets, know- how and continuing technological innovation to develop and maintain a competitive position. We seek to protect our proprietary information, in part, through confidentiality agreements with our employees, collaborators, contractors and consultants, and invention assignment agreements with our employees and some of our collaborators. The confidentiality agreements are designed to protect our proprietary information and, in the case of agreements or clauses requiring invention assignment, to grant us ownership of technologies that are developed through a relationship with a third party. General ConsiderationsAs with other biotechnology and pharmaceutical companies, our ability to maintain and solidify a proprietary position for our ganaxolone synthesis and formulations will depend upon our success in obtaining effective patent claims and enforcing those claims once granted. Our commercial success will depend in part upon not infringing upon the proprietary rights of third parties. It is uncertain whether the issuance of any third- party patent could require us to alter our development or commercial strategies, obtain licenses, or cease certain activities. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. As discussed in the Government Regulation section below, the term of a patent that covers an FDA- approved drug may be eligible for patent term extension, which provides patent term restoration as compensation for the patent ~~18term~~ -- **term** lost during the FDA regulatory review process. The Drug Price Competition and Patent Term Restoration Act of 1984 (Hatch- Waxman Act) permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our pharmaceutical products receive approval in the U. S. or other countries, we expect to apply for patent term extensions, where available, on patents covering those products in the respective jurisdictions. Many pharmaceutical companies, biotechnology companies and academic institutions are competing with us in the field of neuropsychiatric disorders and filing patent applications potentially relevant to our business. Even if a ~~particular~~ **20particular** third- party patent is identified as possibly being relevant to our product candidates or technology, we may conclude upon a thorough analysis, that we do not infringe upon the patent or that the patent is invalid. If the third- party patent owner disagrees with our conclusion and we continue with the business activity in question, we may be subject to patent litigation. Alternatively, we might decide to initiate litigation in an attempt to have a court declare the third- party patent invalid or non- infringed by our activity. In either scenario, patent litigation typically is costly and time- consuming, and the outcome can be favorable or unfavorable. Licenses and CollaborationsOrionOn July 30, 2021, we entered into a collaboration agreement (Orion Collaboration Agreement) with Orion Corporation (Orion), whereby Orion received exclusive rights to commercialize the oral and IV dose formulations of ganaxolone in the European Economic Area, United Kingdom and Switzerland in multiple seizure disorders, including CDD, TSC and RSE. Under the agreement, we received a € 25 million ($ 29. 6 million) upfront fee and are eligible to receive up to an additional € 97 million in R & D reimbursement and cash milestone payments based on specific clinical and commercial achievements, as well as tiered royalty payments based on net sales ranging from the low double digits to the high teens for the oral programs and the low double- digits to the low twenties for the IV programs. TenaciaOn November 16, 2022, we entered

into a collaboration and supply agreement with Tenacia Biotechnology (Shanghai) Co., Ltd. (Tenacia), whereby Tenacia received exclusive rights to develop and commercialize certain oral and IV formulations of ganaxolone in Mainland China, Hong Kong, Macau and Taiwan for the diagnosis, prevention and treatment of certain human diseases, disorders or conditions, initially for the treatment of CDD, TSC and SE. In connection with the agreement, we received an upfront cash payment of $ 10 million in December 2022 and are eligible to receive up to an additional $ 256 million upon the achievement of certain development, regulatory and sales- based milestones. Tenacia has further agreed to pay us tiered royalty payments based on annual net sales ranging from the low double digits to the mid- teens for each of the oral formulation, IV formulation and selected product formulation of licensed products. **BiologixIn May 2023, we entered into an exclusive distribution and supply agreement (Biologix Agreement) with Biologix FZCo (Biologix), whereby Biologix has the right to distribute and sell ganaxolone in Algeria, Bahrain, Egypt, Iraq, Jordan, Kingdom of Saudi Arabia, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Tunisia and United Arab Emirates. In exchange for these rights, we will be the exclusive supplier of our products to Biologix on terms set forth in the Biologix Agreement in exchange for a negotiated purchase price for the products. Upon execution of the Biologix Agreement, we received an upfront payment of $ 0. 5 million which is to be recognized over the term of the Biologix Agreement. We may be entitled to additional fees upon regulatory milestones.** Other Distribution AgreementsWe have entered into an agreement for commercialization of ganaxolone in other territories with NovaMedica whereby NovaMedica has the right to market and sell ganaxolone in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. We continue to assess opportunities in other markets to further expand the distribution and commercialization of ganaxolone globally. CyDex In March 2017, we entered into a License Agreement and a Supply Agreement with CyDex Pharmaceuticals, Inc. (CyDex). Under the terms of the License Agreement, CyDex granted us an exclusive license to use CyDex' s sulfobutylether beta- cyclodextrin, or Captisol ®, drug formulation system and related intellectual property in connection ~~19with~~ **21with** the development and commercialization of ganaxolone in any and all therapeutic uses in humans, with some exceptions. As consideration for this license, we paid an upfront fee and are required to make additional payments in the future upon achievement of various specified clinical and regulatory milestones. We will also be required to pay royalties to CyDex on sales of ganaxolone, if successfully developed, in the low- to- mid single digits based on levels of annual net sales. As of March ~~24~~ **5** , ~~2022~~ **2024** , we have achieved one milestone under the License Agreement, which occurred and was paid in the first quarter of 2021 **. If approved, a second milestone will be due upon approval of an NDA by the FDA for our IV formulation of ganaxolone** . Certain patents relating to Captisol ®, including some that were licensed to us by CyDex, have expired, while other patents that are licensed to us remain in force. Under the terms of the Supply Agreement, we are required to purchase all of our requirements for Captisol with respect to ganaxolone from CyDex, and CyDex is required to supply us with Captisol for such purposes, subject to certain limitations. Purdue Neuroscience Company (Purdue) In September 2004, we entered into a license agreement with Purdue, which was amended and restated in May 2008 (Purdue License Agreement), that granted us exclusive rights to certain know- how and technology relating to ganaxolone, excluding the field of treatment of unpleasant sensory or emotional experience associated with actual or potential tissue damage or described in terms of such damage. The agreement contains a right by us to sublicense, subject to prior written approval by Purdue, and we have sublicensed our licensed rights to NovaMedica for the Covered Territory **(as defined in the Purdue License Agreement)** . We are obligated to pay royalties as a percentage in the range of high single digits up to 10 % of net product sales for direct licensed products, such as ganaxolone. The obligation to pay royalties expires, on a country- by- country basis, ten years from the first commercial sale of a licensed product in each country. Upon commercialization, we estimate the in- licensed technology would result in us paying royalties to Purdue in the low single digits as a percentage of sales. Other payment obligations may be triggered if we successfully partner our product candidates with third parties. In addition, the agreement also requires that we pay Purdue a percentage in the mid- single digits of the non- royalty consideration that we receive from a sublicensee and a percentage in the twenties of milestone payments received from sublicensees for indications other than seizure disorders and vascular migraine headaches not associated with mood disorders. Under the license agreement, we are committed to use commercially reasonable efforts to develop and commercialize at least one licensed product. **In August** ~~On July 14,~~ 2022 ~~, we announced that we had entered into a definitive agreement to sell our PRV for $ 110 million. Thereafter~~ , we received a letter ~~dated August 1, 2022~~ from Purdue in which Purdue claimed that it was owed $ 5. 5 million by us from the sale of the PRV pursuant to the Purdue License Agreement. **We responded** ~~Our position communicated~~ to Purdue ~~is~~ that we ~~do~~ **did** not ~~owe Purdue any of the proceeds from the sale of the PRV. Purdue maintains that they are~~ **agree** ~~owed~~ **with** ~~the~~ **their claim** ~~$ 5~~ . **In February 2024, following** ~~5 million. No associated payment has been made and we continue to discuss~~ **discussions** ~~this matter~~ with Purdue **, we agreed to pay Purdue $ 4 million in respect of its claim. As of December 31, 2023, we have accrued a liability of $ 4. 0 million, which will be paid to Purdue in two equal installments, the first on or before March 15, 2024, and the second on or before June 15, 2024. We recorded a one- time net loss of $ 4. 0 million in the year ended December 31, 2023 related to this payment owed to Purdue in connection with the sale of the PRV** . Ovid LicenseIn March 2022, we entered into an exclusive patent license agreement (License Agreement) with Ovid Therapeutics Inc. (Ovid). Under the License Agreement, we have an exclusive, non- transferable (except as provided in the License Agreement), royalty- bearing, sublicensable license under certain of Ovid' s patent (s) and patent applications to develop, make, have made, commercialize, promote, distribute, sell, offer for sale and import, ganaxolone, including any analogues or derivatives, including its salts, and pharmaceutical formulations of the foregoing (Licensed Products), in the U. S., the member states of the EU, Iceland, Lichtenstein, Norway, the United Kingdom, and Switzerland (Territory) for the treatment of CDD in humans (Field). Under the License Agreement, we have the sole right and responsibility for, and control over, all development, manufacturing, and commercialization activities, including all regulatory activities, with respect to the Licensed Products in the Field in the Territory. In addition, all regulatory approvals and related filings with respect to the Licensed Products in the Field in the Territory will be in the name of, ~~and~~ **22and**

be owned solely by, us. We were required, at Ovid' s option exercisable in accordance with the License Agreement, to (i) pay to Ovid the sum of $ 1. 5 million in cash; or (ii) issue to Ovid 123, 255 shares of our common stock, which option to obtain shares of our common stock was exercisable within the five- business day period following the filing of ~~20our~~ -- **our** Annual Report on Form 10- K for the year ended December 31, 2021 on March 24, 2022. On March 29, 2022, we issued 123, 255 shares of our common stock to Ovid, per Ovid' s option in accordance with the License Agreement. As such, we recorded $ 1. 2 million of IP license fee expenses related to the Ovid License Agreement in the year ended December 31, 2022. The License Agreement provides for payment of royalties by us to Ovid in the low single digits on net sales by us, our affiliates and sublicensees, of Licensed Products in the Field in the Territory. Such royalties are subject to reduction in the event of generic competition in accordance with the License Agreement. We may terminate the License Agreement at any time without cause on thirty days' prior written notice. Either party may terminate the License Agreement for the other party' s material breach or insolvency subject to certain cure periods. ~~Also, Ovid has the right to terminate the License Agreement if there has not been a first commercial sale of any Licensed Products in the Field in the Territory on or before June 30, 2025.~~ In the event of termination, all licenses granted under the License Agreement will terminate. Competition The pharmaceutical industry is highly competitive and subject to rapid and significant technological change. While we believe that our development experience and scientific knowledge provide us with competitive advantages, we face competition from both large and small pharmaceutical and biotechnology companies, specifically from companies that treat rare seizure disorders. There are a variety of available therapies marketed for rare seizure disorders. In many cases, these products are administered in combination to enhance efficacy or to reduce side effects. Some of these drugs are branded and subject to patent protection, some are in clinical development and not yet approved, and others are available on a generic basis. Many of these approved drugs are well established therapies or products and are widely accepted by physicians, patients and third- party payers. Insurers and other third- party payers may also encourage the use of generic products. More established companies have a competitive advantage over us due to their greater size, cash flows, established commercial infrastructure, clinician relationships and institutional experience. Compared to us, many of our competitors have significantly greater financial, technical and human resources with longer histories of marketed products. Our competitors may also develop drugs that are safer, more effective, more widely used and less costly than ours, and may also be more successful than us in manufacturing and marketing their products. These appreciable advantages could render ganaxolone obsolete or non- competitive before we can recover the expenses of ganaxolone' s development and commercialization. We primarily compete with pharmaceutical and biotechnology companies that are developing clinical- stage therapies or marketing drugs to treat indications that we are targeting. SESE patients generally are treated with benzodiazepines as first- line treatment. When benzodiazepines are not effective ~~the~~ **,** patients are ~~in~~ **considered to have** ESE and are treated **next** with ~~various~~ **one or more** second- line IV AEDs, such as levetiracetam, fosphenytoin, lacosamide, or valproate. In 2019, a multicenter, randomized clinical trial (Established Status Epilepticus Treatment Trial; ESETT) was conducted by a group of academic investigators and was designed to evaluate the effectiveness of second- line IV AEDs in ESE. In this trial, the efficacy of levetiracetam, fosphenytoin, or valproate was evaluated in convulsive ESE patients. It was reported that levetiracetam, fosphenytoin, and valproate were effective at stopping SE in 47 %, 45 %, and 46 % of the patients, respectively. When second- line AEDs are not effective, RSE patients are generally placed in a medically ~~-~~induced coma under IV anesthesia in an attempt to stop the seizures and prevent further damage to the brain ~~and death~~. Patients on third- line IV anesthesia are at higher risk for anesthesia- associated morbidities, such as infection, and have **a** 2. 9 times greater mortality rate. In addition, patients on IV anesthetics for SE treatment have increased lengths of stays in the hospital and ICU resulting in increased healthcare utilization. To our knowledge, there are no treatments indicated for RSE. To our knowledge, there is only one other company currently developing a clinical- stage product for the treatment of SE and RSE. Bio- Pharm Solutions Co., a private South Korea- based company, is currently in Phase 2 trials for **an** intravenously administered treatment for SE and RSE. ~~21CDD~~ **23CDD** and TSC There are no drugs other than our product ZTALMY approved specifically for the treatment of seizures associated with CDD, and **there are** two drugs approved for the treatment of seizures associated with TSC: Novartis Pharmaceuticals Corp.' s Afinitor DISPERZ ® (everolimus tablets for oral suspension) and Jazz Pharmaceuticals, Inc.' s EPIDIOLEX ® (cannabidiol). CDD and TSC patients are typically prescribed drugs approved **broadly** for epileptic seizures, which often fail to control seizures in these patient populations. To our knowledge, there is only one other company with a drug in active clinical development for the treatment of CDD (UCB S. A' s, FINTEPLA ® Fenfluramine Hydrochloride). To our knowledge, there are currently two products in development for the treatment of seizures associated with TSC: Noema Pharma AG' s Basimglurant (NOE- 101) in a Phase 2b trial and Ovid' s OV329 in a Phase ~~1A~~ **1** trial. LGSThere are currently three FDA- approved branded drugs for the treatment of seizures in LGS. These include Assertio Holdings Inc.' s SYMPAZAN ® (clobazam) oral film CIV for patients 2 years old, Jazz Pharmaceutical' s EPIDIOLEX ® (cannabidiol) for patients 1 years old, and UCB S. A' s, FINTEPLA ® (Fenfluramine Hydrochloride) for patients 2 years old. Patients with LGS experience life- long epilepsy and exhibit multiple seizure types that are often refractory to treatment. To our knowledge, there are currently ~~four~~ **two** products in clinical- stage development for the treatment of LGS: Takeda Pharmaceutical Company Limited' s Soticlestat in Phase 3 trials, **and** SK Life Science, Inc' s Carisbamate in Phase ~~3 trials, Eisai Inc.' s FYCOMPA ® (perampanel) in Phase 3 trials, and Epygenix Therapeuties Inc.' s EPX- 100 (clemizole hydrochloride) entering pivotal Phase 2 /~~3 trials. Manufacturing Manufacturing of drugs and product candidates, including ganaxolone, must comply with FDA current good manufacturing practice (cGMP) regulations. Ganaxolone is a synthetic small molecule made through a series of organic chemistry steps starting with commercially available organic chemical raw materials. We conduct manufacturing activities under individual purchase orders with independent contract manufacturing organizations (CMOs) to supply our clinical trials. We have executed commercial supply agreements for ganaxolone API with our current manufacturer and also with our current supplier for finished bulk drug product. Additionally, we have executed a master supply agreement with a second API supplier in the U. S. to undertake certain process development activities and subsequently to provide commercial supplies of API and / or API intermediates. We have an

internal quality program and have qualified and signed quality agreements with our major CMOs. We conduct periodic quality audits of their facilities. We believe that our existing suppliers of ganaxolone' s API and finished product will be capable of providing sufficient quantities of each to meet our clinical trial supply needs. We also believe our current API manufacturer will be able to meet our currently forecasted commercial needs for ZTALMY for at least the next three years. CMOs may be used in the future for clinical supplies and commercial manufacturing. Ganaxolone FormulationsThe therapeutic possibilities of ganaxolone have been understood for some time; however, because ganaxolone is a high- dose water insoluble compound, developing a formulation that could provide consistent drug exposure and could be manufactured at a commercially feasible cost had proven challenging. We believe our patented nanoparticulate formulation and novel manufacturing process for ganaxolone can successfully address the cost of manufacturing and pharmacokinetic challenges that previously encumbered the clinical and commercial feasibility of ganaxolone. Ganaxolone is currently formulated for oral and IV administration. In addition, we are evaluating various formulation approaches to improve ganaxolone' s oral drug properties. Commercial OperationsIn connection with the commercialization of ZTAMLY, our first FDA approved product, we have built a commercial operations infrastructure, including, marketing infrastructure, market access capabilities, and sales field ~~22force~~ -- **force** to reach high prescribing neurologists, critical care, epilepsy specialists and other target physician populations in ~~the~~ **24the** U. S. ZTALMY is regulated by the DEA as a controlled substance under the CSA as a schedule V drug. ZTALMY became available for commercial sale and shipment to patients with a prescription in the U. S. in the third quarter of 2022. We believe a focused sales and marketing organization could be leveraged to market ganaxolone across multiple epilepsy indications. We believe that there could also be significant market opportunities for ganaxolone in epilepsy and other neurological and psychiatric conditions outside of the U. S. In order to capitalize on such opportunities, we have entered into collaborations and plan to seek additional collaborations with pharmaceutical companies that have greater reach and resources by virtue of their size and experience in the field. **As of December 31, 2023, we have three customers, one of which, Orsini Pharmaceutical Services, LLC (Orsini), a specialty pharmacy that dispenses ZTALMY directly to patients, represents approximately 99 % of our ZTALMY revenue to date.** Government RegulationAs a pharmaceutical company that operates in the U. S., we are subject to extensive regulation by the FDA and other federal, state, and local regulatory agencies. The Federal Food, Drug, and Cosmetic Act (FDC Act) and its implementing regulations set forth, among other things, requirements for the research, testing, development, manufacture, quality control, safety, effectiveness, approval, packaging, labeling, storage, record keeping, reporting, distribution, import, export, advertising and promotion of our products. Although the discussion below focuses on regulation in the U. S., **we have also received regulatory approval in the EU and** we anticipate seeking approval for, and marketing of, our product candidates in other countries. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the U. S., although there can be important differences. In addition, some significant aspects of regulation in the European Union (EU) are addressed in a centralized way through the European Medicines Agency (EMA), but country- specific regulation also remains in many essential respects. The process of obtaining regulatory marketing approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations will require the expenditure of substantial time and financial resources in order to be successful. United States Government RegulationThe FDA is the main agency that regulates pharmaceuticals in the U. S., and its regulatory authority is based in the FDC Act. Pharmaceutical products are also subject to other federal, state and local statutes. A failure to comply with applicable requirements during the product development, approval, or post- approval periods may lead to administrative or judicial sanctions. These sanctions could include the imposition by the FDA or an institutional review board (IRB) of a hold on clinical trials, refusal to approve pending marketing applications or supplements, withdrawal of approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution. The steps required before a new drug may be marketed in the U. S. generally include: ● completion of preclinical laboratory tests and animal studies in compliance with the FDA' s good laboratory practice (GLP) regulations, as applicable, including pharmacology and formulation studies to develop detailed information relating to the product' s chemistry, manufacturing and controls; ● submission to the FDA of an Investigational New Drug application (IND) to support human clinical trials; ● approval by an IRB at each clinical site before each trial may be initiated; ● performance of adequate and well-controlled clinical trials in accordance with federal regulations, including requirements for good clinical practices (GCP) to establish the safety and efficacy of the investigational product candidate for each targeted indication; ● submission of a new drug application (NDA) to the FDA; ● satisfactory completion of an FDA Advisory Committee review, if applicable; **25** ● satisfactory completion of an FDA inspection of clinical trial sites to ensure compliance with GCP, if applicable; ~~23~~ ● satisfactory completion of an FDA inspection of the manufacturing facilities at which the investigational product candidate is produced to assess compliance with cGMP, and to assure that the facilities, methods and controls are adequate; and ● FDA review and approval of the NDA. The preclinical and clinical testing and approval process requires substantial time, effort, and financial resources, and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all. Clinical TrialsAn IND is a request for authorization from the FDA to administer an investigational product candidate to humans. A 30- day waiting period after the initial submission of an IND is required prior to the commencement of clinical testing in humans. If the FDA has not raised concerns or questions about the proposed clinical testing and placed the IND on clinical hold within this 30- day period, the clinical trial proposed in the IND may initiate. If an IND has been placed on clinical hold, the sponsor must resolve the FDA' s outstanding concerns or questions before clinical trials can begin. Clinical trials involve the administration of the investigational product candidate to subjects under the supervision of qualified investigators in accordance with GCP, which are requirements meant to protect the rights and health of subjects and to assure the quality, reliability and integrity of data collected in clinical trials. Clinical trials are conducted under protocols that detail, among other things, the subject inclusion and exclusion criteria, the dosing regimen, the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. Each protocol involving testing on U. S. subjects and subsequent protocol amendments must be

submitted to the FDA as part of the IND. The informed written consent of each participating subject is required, and an IRB at each site where the trial is conducted must approve the trial. The IRB must monitor the trial until completed. There are also requirements governing the registration of ongoing clinical trials and the reporting of clinical trial results to public registries. The clinical investigation of an investigational product candidate is generally divided into three phases. Although the phases are usually conducted sequentially, they may overlap or be combined. The three phases of an investigation are as follows: ● Phase 1. Phase 1 includes the initial introduction of an investigational product candidate into humans. Phase 1 trials generally are conducted in healthy volunteers but in some cases are conducted in patients with the target disease or condition. These trials are designed to evaluate the safety, metabolism, PKs and pharmacologic actions of the investigational product candidate in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness. During Phase 1 trials, sufficient information about the investigational product candidate' s PKs and pharmacological effects may be obtained to permit the design of Phase 2 trials. The total number of participants included in Phase 1 trials varies but is generally in the range of 20 to 80. ● Phase 2. Phase 2 includes the controlled clinical trials conducted in patients with the target disease or condition, to determine dosage tolerance and optimal dosage, to identify possible adverse side effects and safety risks associated with the product candidate, and to obtain initial evidence of the effectiveness of the investigational product candidate for a particular indication. Phase 2 trials are typically well- controlled, closely monitored, and conducted in a limited subject population, usually involving no more than several hundred participants. ● Phase 3. Phase 3 trials are controlled clinical trials conducted in an expanded subject population at geographically dispersed clinical trial sites. They are performed after preliminary evidence suggesting effectiveness of the investigational product candidate has been obtained, and are intended to further ~~evaluate~~ **26evaluate** dosage, clinical effectiveness and safety, to establish the overall benefit- risk relationship of the product candidate, and to provide an adequate basis for drug approval. Phase 3 trials usually involve several hundred to several thousand participants. In most cases, the FDA requires two adequate and well ~~24controlled~~ -- **controlled** Phase 3 trials to demonstrate the efficacy and safety of the drug; however, the FDA may find a single Phase 2 or Phase 3 trial with other confirmatory evidence to be sufficient in rare instances, particularly in an area of significant unmet medical need and if the trial design provides a well-controlled and reliable assessment of clinical benefit. ● Phase 4. In some cases, the FDA may condition approval of an NDA for a product candidate on the sponsor' s agreement to conduct additional clinical trials after approval. In other cases, a sponsor may voluntarily conduct additional clinical trials after approval to gain more information about the product. Such post- approval trials are typically referred to as Phase 4 clinical trials. Clinical trials may not be completed successfully within a specified period of time, if at all. The decision to terminate development of an investigational product candidate may be made by either a health authority, such as the FDA, or IRB / ethics committees, or by a company for various reasons. The FDA may order the temporary, or permanent, discontinuation of a clinical trial, which is referred to as a clinical hold, at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. In some cases, clinical trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data monitoring committee or data safety monitoring board. Such a group provides recommendations to the sponsor for whether or not a trial may move forward at designated check points, based on limited access to data from the ongoing trial. The suspension or termination of development can occur during any phase of clinical trials if it is determined that the participants or subjects are being exposed to an unacceptable health risk. In addition, there are requirements for the registration of ongoing clinical trials of product candidates on public registries and the disclosure of certain clinical trial results and other trial information after completion. A sponsor may be able to request a special protocol assessment (SPA) the purpose of which is to reach agreement with the FDA on the design and size of certain clinical trials or animal studies that will adequately address scientific and / or regulatory requirements that could support marketing approval. A sponsor may make a specific request for an SPA and provide information regarding the design and size of the proposed clinical trial. An SPA request must be made before the proposed trial begins, and all open issues must be resolved before the trial begins. If a written agreement is reached, it will be documented and made part of the regulatory record. The agreement will be binding on the FDA and may not be changed by the sponsor or the FDA after the trial begins except with the written agreement of the sponsor and the FDA or if the FDA determines that a substantial scientific issue essential to determining the safety or efficacy of the product candidate was identified after the testing began. An SPA is not binding if new circumstances arise, and there is no guarantee that a trial will ultimately be adequate to support an approval even if the trial is subject to an SPA. Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational product candidate information is submitted to the FDA in the form of an NDA to request marketing approval for the product in specified indications. New Drug ApplicationsIn order to obtain approval to market a drug in the U. S., a marketing application must be submitted to the FDA that provides data establishing the safety and effectiveness of the product candidate for the proposed indication. The application includes all relevant data available from pertinent preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product' s chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a product, 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 effectiveness of the investigational product candidate to the satisfaction of the FDA. ~~In~~ **27In** most cases, the NDA must be accompanied by a substantial user fee; there may be some instances in which the user fee is waived. The FDA will initially review the NDA for completeness before it accepts the NDA for filing. The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency' s threshold determination that it is sufficiently complete to permit substantive review. After the NDA ~~25submission~~ -- **submission** is accepted for filing, the FDA begins an in- depth review. The FDA has agreed to certain performance goals in the review of NDAs. Applications for standard review product candidates are reviewed within ten months of FDA' s acceptance for filing. An

accelerated six- month review can be given to applications that meet certain criteria. The FDA can extend the review period by three months, or potentially longer, to consider certain late- submitted information or information intended to clarify information provided in the initial submission. The FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP. FDA Advisory Committee meetings are often held for New Chemical Entities (NCEs), novel indications, or for applications that otherwise present scientific, technical, or policy questions on which the agency believes it would benefit from the perspectives of outside experts. An advisory committee meeting includes a panel of independent experts, including clinicians and other scientific experts, who review, evaluate and make a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. In addition, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. After the FDA evaluates the NDA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA' s satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. As a condition of NDA approval, the FDA may require a risk evaluation and mitigation strategy (REMS) to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use (ETASU). ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the drug. Moreover, product approval may require substantial post- approval testing and surveillance to monitor the drug' s safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory requirements is not maintained or problems are identified following initial marketing. Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and prior FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs. Compounds that have a potential for dependence and abuse are scheduled as controlled substances under the Controlled Substances Act and similar state and foreign laws. In the U. S., for new chemical entities under development for therapeutic use, FDA and HHS complete an analysis and recommendation about whether a drug should be scheduled as a controlled substance, and the Drug Enforcement Administration (DEA) takes the analysis and recommendation into account in the scheduling process. In the case of a new drug approved by the FDA, if scheduling is warranted then the DEA issues an interim final rule controlling the drug 90 days after receipt of the FDA / HHS analysis and recommendation or notice of FDA approval of the drug, whichever is later. Drugs that are scheduled as controlled substances are subject to stringent regulatory requirements, including requirements for registering manufacturing and ~~distribution~~ **28distribution** facilities, security controls and employee screening, recordkeeping, reporting, product labeling and packaging, import and export. There are five federal schedules for controlled substances, known as Schedule I, II, III, IV and V. The regulatory requirements that apply to a drug vary depending on the particular controlled substance schedule into which a drug is placed, based on consideration of a number of factors, including its potential for dependence and ~~26abuse~~ -- **abuse** . Schedules I and II contain the most stringent restrictions and requirements, and Schedule V the least. For all controlled substances, there are potential criminal and civil penalties that apply for the failure to meet applicable legal requirements, and healthcare professionals must have a DEA license in order to handle, prescribe, or dispense controlled substances. Breakthrough Therapy DesignationIn the U. S., the FDA may grant breakthrough therapy designation to a drug candidate if preliminary clinical evidence indicates that the therapy may offer substantial improvement on a clinically significant endpoint over existing options for patients with a serious condition. Features of breakthrough therapy designation include intensive guidance to ensure that the design of clinical trials are as efficient as practicable, increased involvement of senior managers and experienced review staff and where appropriate, a cross- disciplinary project lead assigned to the FDA review team, and rolling review of the NDA. Breakthrough designation can be requested with the IND or ideally no later than the end- of- Phase 2 meeting. Fast Track Designation Fast Track is a designation by the FDA of an investigational drug that is intended to treat a serious condition and for which nonclinical or clinical data demonstrate the potential to address an unmet medical need. The request for fast track designation can be initiated with the IND or ideally no later than the pre- NDA / BLA meeting. Features of fast track designation include more frequent meetings and interactions with FDA to expedite development and review, including to discuss the drug' s development plan and ensure collection of appropriate data needed to support drug approval, and a rolling review of the NDA / BLA. Priority ReviewBased on results of the Phase 3 clinical trials submitted in an NDA, upon the request of an applicant, a priority review designation may be granted to a product by the FDA, which sets the target date for FDA action on the application at six months from FDA acceptance for filing. Priority review may be granted where a product is intended to treat a serious condition and, if approved, would provide a significant improvement in safety or effectiveness of the treatment, diagnosis or prevention of the serious condition. If criteria are not met for priority review, the standard FDA review period is ten months from FDA acceptance for filing. Priority review designation does not change the

scientific / medical standard for approval or the quality of evidence necessary to support approval. Post- Approval RegulationAfter regulatory approval of a drug is obtained, a sponsor is required to comply with several post- approval requirements. For example, as a condition of approval of an NDA, the FDA may require post- marketing testing, including Phase 4 clinical trials, and surveillance to further assess and monitor the product' s safety and effectiveness after commercialization. In addition, as a holder of an approved NDA, a sponsor is required to report adverse reactions and production problems to the FDA, provide updated safety and efficacy information, submit annual reports and comply with advertising and promotional labeling requirements. Additionally, any distribution of prescription drug products and pharmaceutical samples must comply with the U. S. Prescription Drug Marketing Act and the Drug Supply Chain Security Act. Manufacturing must continue to conform to cGMP after approval, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMP. Compliance with cGMP includes adhering to requirements relating to organization and training of personnel, buildings and facilities, equipment, control of components and drug product containers and closures, production and process controls, quality control and quality assurance, packaging and labeling controls, holding and distribution, laboratory controls, and records and reports. In addition, changes to the ~~manufacturing~~ **29manufacturing** process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose manufacturing documentation requirements. Accordingly, sponsors must continue to expend time, money and effort to maintain quality control and compliance with cGMP. We rely, and expect to continue to rely, on ~~27third~~ -- **third** parties for the production of clinical and commercial quantities of ganaxolone. The FDA also conducts regular, periodic visits to re- inspect equipment, facilities, and processes following the initial approval of a product. Future FDA and state inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of previously unknown problems with a product or the failure to comply with applicable requirements may lead to the FDA taking enforcement actions or seeking sanctions, including fines, issuance of warning letters, civil penalties, injunctions, suspension of manufacturing operations, operating restrictions, withdrawal of FDA approval, seizure or recall of products, and criminal prosecution. Although we periodically monitor the FDA compliance of our third- party manufacturers, we cannot be certain that our present or future third- party manufacturers will consistently comply with cGMP and other applicable FDA regulatory requirements. The FDA and other federal regulatory agencies closely regulate the marketing and promotion of drugs through, among other things, standards and regulations for direct- to- consumer advertising, communications regarding unapproved uses, industry- sponsored scientific and educational activities, and promotional activities involving the Internet. A product cannot be commercially promoted before it is approved. After approval, product promotion can include only those claims relating to safety and effectiveness that are consistent with the labeling approved by the FDA. Healthcare providers are permitted to prescribe drugs for " off- label " uses — that is, uses not approved by the FDA and therefore not described in the drug' s labeling — because the FDA does not regulate the practice of medicine. However, FDA regulations impose stringent restrictions on manufacturers' communications regarding off- label uses. In general, a manufacturer may not promote a drug for off- label use, but may engage in non- promotional, balanced communication regarding off- label use under specified conditions. Failure to comply with applicable FDA requirements and restrictions in this area may subject a company to adverse publicity and enforcement action by the FDA, the U. S. Department of Justice (DOJ) or the Office of the Inspector General of the U. S. Department of Health and Human Services (HHS OIG), as well as state authorities. Enforcement action could subject a company to a range of penalties that could have a significant commercial impact, including civil and criminal fines and agreements that materially restrict the manner in which a company promotes or distributes drug products. NDA holders must comply with other regulatory requirements, including submitting annual reports, reporting information about adverse drug experiences, and maintaining certain records. Newly discovered or developed safety or effectiveness data may require changes to a product' s approved labeling, including the addition of new warnings, contraindications, or limitations of use, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA' s policies may change, which could delay or prevent regulatory approval of our products under development. The Hatch- Waxman Amendments to the FDC ActOrange Book ListingIn seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent whose claims cover the applicant' s product or a method of using the product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA' s Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be referenced by potential generic competitors in support of approval of an abbreviated new drug application (ANDA) or 505 (b) (2) application. An ANDA provides for marketing of a drug product that has the same active ingredients, generally in the same strengths and dosage form, as a referenced listed drug (RLD) and has been shown through PK testing to be bioequivalent to the RLD. Other than the requirement for bioequivalence testing, ANDA applicants are generally not required to conduct, or submit results of, preclinical studies or clinical trials to prove the safety or effectiveness of their drug product. 505 (b) (2) applications provide for marketing of a drug product that may have the ~~same~~ **30same** active ingredients as the reference drug and contains full safety and effectiveness data, but at least some of this information comes from studies not conducted by or for the applicant and to which the applicant does not have a right of reference. Drugs approved through an ANDA are commonly referred to as " generic equivalents " and can often be substituted by pharmacists under prescriptions written for the RLD, depending on applicable state laws. ~~28The~~ -- **The** ANDA or 505 (b) (2) applicant is required to certify to the FDA concerning any patents listed for the reference product in the FDA' s Orange Book. Specifically, the applicant must certify that: (i) the required patent information has not been filed; (ii) the listed patent has expired; (iii) the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the new product. The ANDA or 505 (b) (2) applicant may also elect to submit a statement certifying that its proposed ANDA label does not contain (or carves out) any language regarding a

patented method of use or use covered by regulatory exclusivity. If the applicant does not challenge the listed patents by filing a certification that the listed patent is invalid or will not be infringed by the new product, the ANDA or 505 (b) (2) application will not be approved until all the listed patents claiming the referenced product have expired. A certification that the new product will not infringe the already approved product' s listed patents, or that such patents are invalid, is called a Paragraph IV certification. If the ANDA or 505 (b) (2) applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA or 505 (b) (2) application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA or 505 (b) (2) application until the earliest of 30 months, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the ANDA or 505 (b) (2) applicant. The ANDA or 505 (b) (2) application also will not be approved until any applicable non- patent exclusivity listed in the Orange Book for the reference product has expired. Marketing ExclusivityUpon NDA approval of a new chemical entity, which is a drug that contains no active moiety that has been approved by the FDA in any other NDA, that drug receives five years of marketing exclusivity during which the FDA cannot approve any ANDA seeking approval of a generic version of that drug. Certain changes to a drug, such as the addition of a new indication to the package insert, are associated with a three- year period of exclusivity during which the FDA cannot approve an ANDA for a generic drug that includes the change. An ANDA may be submitted one year before **the** five- year marketing exclusivity expires if a Paragraph IV certification is filed. In this case, the 30- month stay, if applicable, runs from the end of the five- year marketing exclusivity period. In the European Economic Area (EEA), which is comprised of twenty- seven Member States of the EU plus Norway, Iceland, and Liechtenstein, medicinal products can only be commercialized after a related Marketing Authorization (MA) has been granted. MA for medicinal products can be obtained through several different procedures. These procedures include a centralized, mutual recognition procedure, decentralized procedure, or national procedure (if marketing authorization is sought for a single EU Member State). The centralized procedure allows a company to submit a single application to the European Medicines Agency (EMA). If a related positive opinion is provided by the EMA, the European Commission will grant a centralized marketing authorization that is valid in all twenty- seven EU Member States and three of the four European Free Trade Association countries (Norway, Iceland, and Liechtenstein) all of whom are part of the EEA. The centralized procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, and medicinal products containing a new active substance indicated for the treatment of HIV, AIDS, cancer, neurodegenerative disorders, diabetes, auto- immune and other immune dysfunctions and viral diseases. The centralized procedure is optional for products containing a new active substance that is not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or for which a grant of centralized marketing authorization is in the interest of patients at EU level within the EU. ~~In~~ **31In** the EU, a medicinal product containing a new active substance, which has never been approved in a medicinal product in the EU before, as well as in certain other circumstances, is entitled to eight years of data exclusivity and ten years of market exclusivity following a grant of MA. During the first eight years, no generic company may refer to the data used by the innovator to obtain a marketing authorization. After eight years, generics may reference the innovator data, but generic medicinal products may only be placed on the market after a total of ten years. Approval of a new indication will not result in a separate additional period of regulatory data protection and market exclusivity. If, ~~29however~~ -- **however** , during the first eight years after initial marketing authorization, a new indication is approved which is considered by the competent authorities to be of significant clinical benefit in comparison to existing therapies, this would result in one additional year of market exclusivity, in addition to the initial eight plus two years. Such significant clinical benefit would generally have to be supported by comparative clinical trials **. In April 2023, the EC published a proposal to reform the regulatory data protection system in the EU. In the proposal, the ' baseline' of eight years of data exclusivity will be brought back to six years. Additional years of exclusivity can be obtained, but under requirements that are perceived to be more difficult to meet than the current requirements. This proposal is not final yet and it is uncertain if the proposal will be adopted in its current form, and if so, when the revised legislation would enter into force** . Patent Term ExtensionAfter NDA approval, owners of relevant drug patents may apply for up to a five year patent extension. The allowable patent term extension is calculated as half of the drug' s testing phase — the time between an effective IND and NDA submission — and all of the review phase — the time between NDA submission and approval, up to a maximum of five years. The time can be shortened if the FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years. Many other countries also provide for patent term extensions or similar extensions of patent protection for pharmaceutical products. For example, in Japan, it may be possible to extend the patent term for up to five years and in the EU, it may be possible to obtain a supplementary protection certificate that would effectively extend patent protection for up to five years. In the EU, if pediatric studies are conducted in accordance with a pediatric investigation plan that was previously agreed upon with the EMA, it may be possible to obtain an extension of a supplementary protection certificate of up to six months. This pediatric extension would not be available if the product is an orphan medicinal product. The extension would also not be available if one additional year of market exclusivity was granted for a new pediatric indication on the basis of the results of pediatric studies conducted in compliance with an agreed pediatric investigation plan. Orphan Drug DesignationThe 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 the disease or condition affects more than 200, 000 individuals in the U. S., there is no reasonable expectation that the cost of developing and making the drug would be recovered from sales in the U. S. In the EU, the EMA' s Committee for Orphan Medicinal Products assesses applications for orphan designations after which the European Commission may grant orphan drug designation. In the EU, orphan designation is granted if it is established that a medicinal product is intended for the diagnosis, prevention or treatment of life- threatening or chronically debilitating conditions affecting not more than five in 10, 000 persons

in the EU. In addition, designation is granted for products intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in the EU would be sufficient to justify the necessary investment in developing the drug. In order to obtain orphan designation in the EU, it must be established that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in the EU or if such method exists, that the medicinal product will be of significant benefit to those affected by the condition. In the U. S., orphan drug designation may confer eligibility for financial incentives, such as opportunities for grant funding towards clinical trial costs, tax credits for certain research and user fee waivers. In addition, if a product ~~receives~~ **32receives** the first FDA approval for the indication for which it has orphan designation, the product is entitled to seven years of market exclusivity. The FDA has interpreted the statutory provisions for orphan drug exclusivity to mean that the FDA may not approve any other application for 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 does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition. In the EU, orphan drug designation may be granted to drugs that can be used to treat life- threatening diseases or chronically debilitating conditions with an incidence of no more than five in 10, 000 people or, for economic reasons, would be unlikely to be developed without incentives. Orphan drug designation also entitles an applicant for MA to financial incentives such as reduction of fees or fee waivers, and protocol assistance, a type of scientific advice specific ~~30for --~~ **for** designated orphan medicinal products. Following a grant of MA, the product is entitled to ten years of exclusivity if the product continues to be designated as an orphan medical product upon grant of the marketing authorization. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is not sufficiently profitable to justify maintenance of market exclusivity. During the orphan exclusivity period, the competent authorities in the EU may not accept a marketing authorization application for a similar medicinal product for the same therapeutic indication. However, marketing authorization may be granted to a similar medicinal product (i. e., a medicinal product with an identical active substance, or an active substance with the same principal molecular structural features and which acts via the same mechanism) with the same orphan indication during the ten- year period with the consent of the marketing authorization holder for the original orphan medicinal product or if the manufacturer of the original orphan medicinal product is unable to supply sufficient quantities. Marketing authorization may also be granted to a similar medicinal product with the same orphan indication if this latter product is demonstrated to be safer, more effective or otherwise clinically superior to the original orphan medicinal product. In the EU, if pediatric studies are conducted in accordance with a pediatric investigation plan that was previously agreed upon with the European Medicines Agency, it may be possible to obtain an extension of orphan market exclusivity of two years, resulting in a total orphan market exclusivity period of twelve years. **In April 2023, the EC published a proposal to reform the current European pharmaceutical legislative framework. The proposal intends to reduce orphan market exclusivity period. Also, under the proposed legislation, where a marketing authorization holder holds more than one orphan marketing authorizations for the same active substance, any second or third orphan marketing authorization would not enjoy a separate full period of orphan market exclusivity. It is currently uncertain if the proposal will be adopted in its current form, and it is uncertain if and when the revised legislation would enter into force.** Orphan drug designation must be requested before submission of an application for marketing approval. Orphan drug designation does not change the scientific / medical standards for approval or the quality of evidence necessary to support approval, or shorten the duration of the regulatory review and approval process. Controlled Substances The federal Controlled Substances Act of 1970 (CSA) and its implementing regulations establish a " closed system " of regulations for controlled substances. The CSA imposes registration, security, recordkeeping and reporting, storage, manufacturing, distribution, importation and other requirements under the oversight of the DEA. The DEA is the federal agency responsible for regulating controlled substances, and requires those individuals or entities that manufacture, import, export, distribute, research, or dispense controlled substances to comply with the regulatory requirements in order to prevent the diversion of controlled substances to illicit channels of commerce. The DEA categorizes controlled substances into one of five schedules — Schedule I, II, III, IV or V — with varying qualifications for listing in each schedule. Schedule I substances by definition have a high potential for abuse, have no currently accepted medical use in treatment in the U. S. and lack accepted safety for use under medical supervision. Pharmaceutical products having a currently accepted medical use that are otherwise approved for marketing may be listed as Schedule II, III, IV or V substances, with Schedule II substances presenting the highest potential for ~~abuse~~ **33abuse** and physical or psychological dependence, and Schedule V substances presenting the lowest relative potential for abuse and dependence. Facilities that manufacture, distribute, import or export any controlled substance must register annually with the DEA. The DEA registration is specific to the particular location, activity (ies) and controlled substance schedule (s). For example, separate registrations are required for importation and manufacturing activities, and each registration authorizes which schedules of controlled substances the registrant may handle. However, certain coincident activities are permitted without obtaining a separate DEA registration, such as distribution of controlled substances by the manufacturer that produces them. The DEA inspects all manufacturing facilities to review security, recordkeeping, reporting and handling prior to issuing a controlled substance registration. The specific security requirements vary by the type of business activity and the schedule and quantity of controlled substances handled. The most stringent requirements apply to manufacturers of Schedule I and Schedule II substances. Required security measures commonly include background checks on employees and physical control of controlled substances through storage in approved vaults, safes and cages, and thorough use of alarm systems and surveillance cameras. Registrants must also report any controlled substance thefts or significant losses, and must comply with CSA and DEA regulatory requirements to destroy or dispose of controlled substances. ~~31The --~~ **The** states also maintain separate controlled substance laws and regulations, including licensing, recordkeeping, security, distribution, and dispensing requirements. State authorities, including Boards of Pharmacy, regulate use of controlled substances in each state. Failure to

maintain compliance with applicable requirements, particularly as manifested in the loss or diversion of controlled substances, can result in enforcement action that could have a material adverse effect on our business, operations and financial condition. The DEA may seek civil penalties, refuse to renew necessary registrations, or initiate proceedings to revoke those registrations. In certain circumstances, violations could lead to criminal prosecution. The Foreign Corrupt Practices ActThe Foreign Corrupt Practices Act (FCPA) prohibits any U. S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the U. S. to comply with accounting provisions requiring such companies to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations. European and Other International Government RegulationIn addition to regulations in the U. S., we are subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. We must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Some countries outside of the U. S. have a similar process that requires the submission of a request for a clinical trial authorization (CTA) much like the IND prior to the commencement of human clinical trials. In the EU, for example, a request for a CTA must be submitted to **EMA** ~~each country' s national health authority~~ and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA request is approved in accordance with a country' s requirements, clinical trial development may proceed. The conduct of a clinical trial in the EU must comply with ~~regulatory requirements based on the Clinical Trials Directive 2001 / 20 / EC (Clinical Trials Directive), the details of which may vary per EU Member State. On January 31, 2022,~~ the EU Clinical Trials Regulation (EU) No 536 / 2014 (Clinical Trials Regulation) ~~came into effect~~. The Clinical Trials Regulation applies to clinical trials in all countries of the European Economic Area (EEA, i. e. the EU Member States plus Iceland, Norway and Liechtenstein ~~). The Clinical Trials Regulation allows investigators to start and conduct a clinical trial in accordance with the Clinical Trials Directive during a transitional period of one year after the application date (i. e. January 31, 2022~~). Clinical trials that were authorized under the ~~current~~ **former** Clinical Trials Directive **2001 / 20 / EC** before January 31, 2023 can continue to be conducted under the Clinical Trials Directive until January 31, 2025. An application to transition ongoing trials from the current Clinical Trials Directive to the new Clinical Trials Regulation will need to be submitted and authorized in time before the end of the transitional period. The new Clinical Trials Regulation is intended to simplify and streamline the approval of clinical trials in the EEA. The main characteristics of the regulation include: (i) a streamlined application procedure through a single entry point known as the " EU portal "; (ii) ~~a~~ **34a** single set of documents to be prepared and submitted for the application as well as simplified reporting procedures for clinical trial sponsors; and (iii) a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. In addition, when conducting a clinical trial in the EU, the processing of personal data, including pseudonymized data, must comply with the EU General Data Protection Regulation **including as implemented in the UK** (**collectively,** GDPR). The GDPR imposes strict obligations on the processing of personal data, including relating to the transfer of personal data to third countries such as the US. The competent authorities of the EU Member States may impose significant financial penalties in the event of violation of the GDPR. To obtain regulatory approval to commercialize a new drug under EU regulatory systems, we must submit a marketing authorization application (MAA). MAAs can be submitted to the EMA through a centralized procedure, resulting in one marketing authorization valid throughout the EU (27 EU Member States as well as in Iceland, Liechtenstein and Norway). The centralized procedure is mandatory for certain products, such as orphan medicinal products or products with a new active substance for certain therapeutic indications and is optional for certain other ~~32products~~ - - **products** , such as products that contain a new active substance that has not previously been approved in a medicinal product in the EU. Alternative MAA routes in the EU are the decentralized procedure in which it is possible to request marketing authorization in a selection of various EU Member States, the national procedure in which a marketing authorization is requested for one EU Member State only or the mutual recognition procedure in which marketing authorization in one or more EU Member States is requested on the basis of a prior marketing authorization in another EU Member State. For other countries outside of the EU, such as countries in Eastern Europe, Russia, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. Internationally, clinical trials are generally required to be conducted in accordance with GCP, applicable regulatory requirements of each jurisdiction and the medical ethics principles that have their origin in the Declaration of Helsinki. Small Medium Enterprise (SME) designation In the EU, small medium enterprise designation (SME) can be granted to non- subsidiary, independent firms which employ fewer than 250 employees to promote innovation and the development of new medicinal products by smaller companies. The criteria for designation are dependent on staff headcount, either turnover or balance sheet total and the ownership structure, including any partnership or linkage. Benefits of SME designation include direct assistance on regulatory aspects of the pharmaceutical legislation, help navigating the array of services available, fee exemptions and reductions for pre- and post- authorization regulatory procedures, assistance with translations of product information into all official EU languages, guidance on clinical data publication and a free redaction tool license, liaison with academic investigators in pediatric- medicine research through the European Network of Pediatric Research at the EMA and workshops and training sessions. In ~~2021~~ **2023** , we renewed our SME designation in the EU. ComplianceDuring all phases of development (pre- and post- marketing), failure to comply with applicable regulatory requirements may result in administrative or judicial sanctions. These sanctions could include the FDA' s imposition of a clinical hold on trials, refusal to approve pending applications, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, product detention or refusal to permit the import or export of products, injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us. Accelerated Review (EU) Under the Centralized Procedure in the EU, the

maximum timeframe for the evaluation of a MAA is 210 days (excluding " clock stops, " when additional written or oral information is to be provided by the applicant in response to questions asked by the Committee for Medicinal Products for Human Use (CHMP)). Accelerated evaluation might be ~~granted~~ **35granted** by the CHMP in exceptional cases, such as when a medicinal product is expected to be of a major public health interest, which should be justified on a case- by- case basis. In this circumstance, the EMA ensures that the opinion of the CHMP is given within 150 days upon submission of an MAA. Healthcare ReformThe Patient Protection and Affordable Care Act, as amended (Affordable Care Act), has substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacts the pharmaceutical industry. The Affordable Care Act has impacted pre- existing government healthcare programs and resulted in the development of new programs. For example, the Affordable Care Act provides for Medicare payments for performance initiatives and improvements to **the** Medicare physician quality reporting system and feedback program. ~~33Among~~ -- **Among** the Affordable Care Act' s provisions of importance to the pharmaceutical industry are the following: ● an annual, nondeductible fee on any covered entity engaged in manufacturing or importing certain branded prescription drugs and biological products, apportioned among such entities in accordance with their respective market share in certain government healthcare programs; ● an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, retroactive to January 1, 2010, to 23. 1 % and 13. 0 % of the average manufacturer price (AMP), for most branded and generic drugs, respectively; ● expansion of healthcare fraud and abuse laws, including the False Claims Act (FCA) and the Anti- Kickback Statute (AKS), new government investigative powers, and enhanced penalties for noncompliance; ● a new prescription drug benefit for Medicare recipients (Medicare Part D), **the** coverage gap discount program, in which manufacturers must agree to offer 70. 0 % (as of January 1, 2019) point- of- sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D (the Inflation Reduction Act of 2022 (IRA **)**) replaces the coverage gap discount program with a new manufacturer discount program beginning in 2025); ● extension of manufacturers' Medicaid rebate liability to covered outpatient drugs dispensed to individuals who are enrolled in Medicaid managed care organizations; ● expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals beginning in 2014 and by adding new mandatory eligibility categories for individuals with income at or below 133. 0 % of the Federal Poverty Level, thereby potentially increasing manufacturers' Medicaid rebate liability; ● expansion of the types of entities eligible for participation in and discounts under the Public Health Service 340B drug pricing program; ● new requirements to report annually specified financial arrangements with physicians and teaching hospitals, as defined in the Affordable Care Act and its implementing regulations, including reporting any " payments or transfers of value " made or distributed to physicians and teaching hospitals, and reporting any ownership and investment interests held by physicians and their immediate family members and applicable group purchasing organizations during the preceding calendar year, with data collection to be required beginning August 1, 2013 and reporting to the Centers for Medicare & Medicaid Services (CMS), to be required by March 31, 2014, and by the 90th day of each subsequent calendar year; **36** ● a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; ● a new Patient- Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and ● a mandatory nondeductible payment for employers with 50 or more full- time employees (or equivalents) who fail to provide certain minimum health insurance coverage for such employees and their dependents, beginning in 2016. Certain provisions of the Affordable Care Act have been subject to judicial challenges as well as efforts to modify them or to alter their interpretation and implementation. For example, the Tax Cuts and Jobs Act (Tax Act) ~~, enacted on December 22, 2017,~~ eliminated the tax- based shared responsibility payment for individuals who fail to ~~34maintain~~ -- **maintain** minimum essential coverage under section 5000A of the Internal Revenue Code of 1986, commonly referred to as the " individual mandate ~~,~~ **.** " ~~effective January 1, 2019.~~ Additional legislative changes, regulatory changes, and judicial challenges related to the Affordable Care Act remain possible. It is unclear how the Affordable Care Act and its implementation, as well as efforts to modify the Affordable Care Act, its implementing regulations, or portions thereof, will affect our business. In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. For example, the Budget Control Act of 2011, among other things, created the Joint Select Committee on Deficit Reduction to recommend proposals in spending reductions to Congress. The Joint Select Committee did not achieve its targeted deficit reduction, which triggered the legislation' s automatic reductions to several government programs. These reductions include aggregate reductions to Medicare payments to healthcare providers of, on average, 2. 0 % per fiscal year, starting in 2013 and continuing through 2031. Sequestration is currently set at 2 % and will increase to 2. 25 % for the first half of fiscal year 2030, to 3 % for the second half of fiscal year 2030, and to 4 % for the remainder of the sequestration period that lasts through the first six months of fiscal year 2031. Additionally, the American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several categories of healthcare providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our customers and accordingly, our financial operations. Further, ~~on August 16,~~ **the Inflation Reduction Act of** 2022 **(** ~~, President Biden signed into law the~~ IRA ~~which~~ **)** , among other things, establishes a Medicare Part B inflation rebate scheme, under which, generally speaking, manufacturers will owe rebates if the average sales price of a Part B drug increases faster than the pace of inflation. Failure to timely pay a Part B inflation rebate is subject to a civil monetary penalty. The IRA also establishes a Medicare Part D inflation rebate scheme, under which generally speaking manufacturers will owe rebates if the average manufacturer price of a Part D drug increases faster than the pace of inflation. Failure to timely pay a Part D inflation rebate is subject to a civil monetary penalty. The IRA also creates a drug price negotiation program under which the prices for Medicare units of certain high Medicare spend drugs and biologics without generic or biosimilar competition will be capped by reference to, among other things, a specified non- federal average manufacturer price, starting in 2026. Failure to comply with requirements under the drug

price negotiation program is subject to an excise tax and / or a civil monetary penalty. The IRA further makes changes to the Medicare Part D benefit, including a limit on annual out- of- pocket costs, and **replaces the existing coverage gap discount program with** a **new** ~~change in~~ manufacturer **discount** ~~liability under the~~ program **(beginning in 2025)** which could negatively affect the profitability of our product candidates. Failure to pay a discount under this new program will be subject to a civil monetary penalty. Congress continues to examine various policy proposals that may result in pressure on the prices of prescription drugs in the government health benefit programs. The IRA or other legislative changes could impact the market conditions for our product candidates. We anticipate that the Affordable Care Act **, the IRA,** and other healthcare reform measures, including those enacted in the future, will result in additional downward pressure on coverage and the price that we receive for any approved product, and could seriously harm our business. Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. In addition, it is possible that there will be further state and federal ~~healthcare~~ **37healthcare** reform measures adopted in the future, any of which could limit the amounts that state and federal governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressure. Coverage and ReimbursementSignificant uncertainty exists as to the coverage and reimbursement status of any drug products for which we obtain regulatory approval. In the U. S. and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third- party payers. Third- party payers include government health administrative authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payer will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payer will pay for the drug product. Third- party payers may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA- approved drugs for a particular indication. Third- party payers are increasingly challenging the price and ~~35examining~~ -- **examining** the medical necessity and cost- effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost- effectiveness of our products, in addition to the costs required to obtain FDA approvals. Ganaxolone may not be considered by payers to be medically necessary or cost- effective for particular diseases or conditions. A payer' s decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third- party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. In addition, Medicare Part D and further legislation may limit payments for pharmaceuticals such as the product candidates that we are developing. While government payment pursuant to Medicare Part D for some of the costs of prescription drugs may increase demand for any products for which we receive marketing approval, to obtain payments under this program, we would be required to sell products to Medicare recipients through prescription drug plans operating pursuant to this legislation. These plans typically negotiate discounted prices for our products. Federal, state and local governments in the U. S. continue to consider legislation to limit the growth of healthcare costs, including the cost of prescription drugs. The IRA has made a number of changes to the Part D program, set to take effect in 2024 and 2025. Different pricing and reimbursement schemes exist in other countries. In the EU, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed upon. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost- effectiveness of a particular product candidate to currently available therapies. Other Member States allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become more intense. As a result, increasingly high barriers are being erected to the entry of new products. The EU provides options for its Member States to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. We may face competition for ganaxolone from lower- priced products in foreign countries that have placed price controls on pharmaceutical products. In addition, in some countries, cross- border imports from low- priced markets exert a commercial pressure on pricing within a country. The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third- party payers fail to provide adequate coverage and reimbursement. In addition, an increasing emphasis on managed care in the U. S. has increased and will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third- party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. ~~Other~~ **38Other** Healthcare Laws and Compliance RequirementsThe federal Anti- Kickback Statute (AKS) prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration (i. e., anything of value), directly or indirectly, in cash or in kind, to induce or in return either for the referral of an individual for, or for purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common business arrangements and activities from prosecution or regulatory sanctions, the exceptions and safe harbors are drawn narrowly and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not fit squarely within an exception or safe harbor. Our

practices may not in all cases meet all of the criteria for safe harbor protection from AKS liability. Moreover, there are no safe harbors for many common practices, such as educational and research grants, ~~36charitable~~ **charitable** donations, product support and patient assistance programs. The regulatory safe harbors also are subject to regulatory revision and interpretation by a number of government agencies. Liability under the AKS may be established without proving 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 AKS constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act (discussed below). Violations of the AKS are punishable by imprisonment, criminal fines, damages, civil monetary penalties, and exclusion from participation in federal healthcare programs. The federal civil False Claims Act (FCA) prohibits any person from, among other things, knowingly presenting, or causing to be presented, a false or fraudulent claim for payment of government funds, or knowingly making, using, or causing to be made or used a false record or statement material to an obligation to pay money to the government, or knowingly concealing or knowingly and improperly avoiding, decreasing, or concealing an obligation to pay money to the federal government. Actions under the FCA may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Such private individuals may share in amounts paid by the entity to the government in recovery or settlement. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for unapproved, and thus non- reimbursable, uses. FCA liability is potentially significant in the healthcare industry because the statute provides for treble damages and significant mandatory penalties per false or fraudulent claim or statement for violations, as well as exclusion from participation in federal healthcare programs. Pharmaceutical and other healthcare companies also are subject to other federal false claims laws, including, among others, federal criminal healthcare fraud and false statement statutes that extend to non- government health benefit programs. The Health Insurance Portability and Accountability Act of 1996 and its implementing regulations (collectively, HIPAA) imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third- party payers, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement or representation, or making or using any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry, in connection with the delivery of or payment for healthcare benefits, items or services. The federal Physician Payments Sunshine Act, implemented as the Open Payments Program, 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 and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. As of 2022, applicable manufacturers are required to report information regarding payments and transfers of value provided to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, and certified nurse- midwives. ~~Also~~ **39Also** , many states have analogous fraud and abuse statutes or regulations, such as state anti- kickback and false claims laws, that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payer. Some state laws require pharmaceutical companies to comply with the pharmaceutical industry' s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures. Other state laws require posting of information relating to clinical trials and their outcomes. Some states restrict the ability of manufacturers to offer co- pay support to patients for certain prescription drugs. Other states require identification or licensing of sales representatives. In addition, we may be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business. HIPAA imposes requirements relating to the privacy, security and transmission of individually identifiable health information. HIPAA imposes privacy and security obligations on covered entity health care providers, health plans, and health care clearinghouses, as well as their " business associates " — certain persons or ~~37entities~~ **entities** that create, receive, maintain, or transmit protected health information in connection with providing a specified service or performing a function on behalf of a covered entity. We may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA and other privacy and data security and consumer protection laws. Although we are not directly subject to HIPAA, other than potentially with respect to providing certain employee benefits, we could potentially be subject to criminal penalties if we, our affiliates, or our agents knowingly receive individually identifiable health information maintained by a HIPAA- covered entity in a manner that is not authorized or permitted by HIPAA, and subject to other civil and / or criminal penalties if we obtain, use, or disclose information in a manner not permitted by other privacy and data security and consumer protection laws. In addition, numerous other federal and state laws and regulations govern privacy and security, including state data breach notification laws, state health information and / or genetic privacy laws, and federal and state consumer protection laws (e. g., Section 5 of the Federal Trade Commission Act, and the California Consumer Privacy Act (CCPA)), many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Compliance with these laws is difficult, constantly evolving, time consuming, and requires a flexible privacy framework and substantial resources. Compliance efforts will likely be an increasing and substantial cost in the future. Federal regulators, state attorneys general, and plaintiffs' attorneys have been and will likely continue to be active in this space. In California, the CCPA establishes certain requirements for data use and sharing transparency and creates new data privacy rights for California consumers. The CCPA and its implementing regulations have already been amended multiple times since their enactment, including by the California Privacy Rights Act, or CPRA. The CPRA introduced significant amendments to the CCPA and established and funded a dedicated

California privacy regulator, the California Privacy Protection Agency, or CPPA. The amendments introduced by the CPRA went into effect on January 1, 2023, and new implementing regulations **continue** ~~are expected~~ to be introduced by the CPPA. Failure to comply with the CCPA may result in, among other things, significant civil penalties and injunctive relief, or statutory or actual damages. In addition, California residents have the right to bring a private right of action in connection with certain types of incidents. These claims may result in significant liability and damages. These laws and regulations are evolving and subject to interpretation, and may impose limitations on our activities or otherwise adversely affect our business. Similarly, there are a number of legislative proposals in the EU, the ~~United States~~ **U. S.** , at both the federal and state level, as well as other jurisdictions that could impose new obligations or limitations in areas affecting our business. For example, other states, including Virginia, Colorado, Utah, **Indiana, Iowa, Tennessee, Montana, Texas** and Connecticut have enacted privacy laws similar to the CCPA that impose new obligations or limitations in areas affecting our business and we continue to assess the impact of these state legislation, on our business as additional information and guidance becomes available. In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services and research activities. These laws and regulations, as well as any associated claims, inquiries, or investigations or any other government actions may lead to unfavorable outcomes including increased compliance costs, delays or impediments in the development of new products, negative publicity, increased operating costs, diversion of management time and attention, and remedies that harm our business, including fines or demands or orders that we modify or cease existing business practices. ~~The~~ **40The** EU, EEA countries and other jurisdictions **, including the UK,** have adopted data protection laws and regulations, which impose significant compliance obligations. The GDPR is directly applicable in each ~~EEA~~ **EU** country. The GDPR imposes strict restrictions and obligations on companies' ability to collect, analyze and transfer personal data or otherwise process personal data, especially if they process sensitive personal data (such as data concerning patient health), including significant fines for non- compliance with the GDPR. Implementation of the GDPR has influenced other jurisdictions to either amend or propose legislation to amend their existing data privacy and cybersecurity laws to resemble the requirements of GDPR. With regard to transfer of personal data, the GDPR restricts the ability of companies to transfer personal data from the ~~EEA~~ **EU, United Kingdom and Switzerland** to the U. S. and other countries **(except those deemed to be adequate by the EC or UK Secretary of State, as applicable)** , which may adversely affect our ability to transfer personal data or otherwise may cause us to incur significant **compliance** costs ~~to come into compliance with applicable~~ **for implementing lawful transfer mechanisms, conducting** data transfer impact assessments **,** and ~~implementation~~ --- **implementing** ~~of legal~~ **additional measures where necessary to ensure that personal** data **transferred are adequately protected in a manner essentially equivalent to the EU. The GDPR provides different** transfer mechanisms **we** ~~. One mechanism previously relied upon by U. S. companies for such transfers was the EU- U. S. Privacy Shield Framework, or Privacy Shield. However, in July 2020, the European Court of Justice ruled the Privacy Shield to be an~~ **can use** ~~invalid data transfer mechanism and confirmed that the European Commission' s Standard Contractual Clauses, or the Model Clauses, remain valid and in June 2021, the 38European Commission published updated versions of the Model Clauses, which must be incorporated into new and existing agreements within prescribed timeframes in order to continue~~ to lawfully transfer personal data **from the EU to countries** outside ~~of~~ the EU. **An example is relying** ~~As a result, companies may no longer rely~~ on **adequacy decisions of** the ~~Privacy Shield~~ **EC, such** as ~~a basis on which to transfer personal data from the EU to the U. S. U. S.- based companies are permitted to rely on other authorized means and procedures to transfer personal data provided by the GDPR. The Model Clauses may also come under increased scrutiny as a result of the European Court of Justice' s judgement in July 2020, though they remain the most common authorized procedure to transfer personal data out of the EU. On December, 13 2022, the European Commission adopted a draft adequacy decision for~~ the EU- U. S. Data Privacy Framework. **In July** ~~This draft decision follows the signature of a US Executive Order by President Biden on October, 7 2022~~ **2023** , ~~along with~~ the **EC adopted its** ~~regulations issued by the US Attorney General Merrick Garland. These two instruments implemented into U. S. law the agreement in principle announced by President von der Leyen and President Biden in March 2022. The draft~~ adequacy decision **for** ~~, which reflects~~ the **EU-** ~~assessment by the European Commission of the~~ U. S. ~~legal framework has now been published and transmitted to the European~~ Data **Privacy Framework** ~~Protection Board, or EDPB, for its opinion~~ . The ~~draft~~ **adequacy** decision concludes that the ~~United States~~ **U. S.** ensures an adequate level of protection **(compared to that of the EU)** for personal data transferred from the EU to U. S. companies **participating in the EU- U. S. Data Privacy Framework** . The ~~draft~~ adequacy decision ~~text will also have~~ **on the EU- U. S. Data Privacy Framework covers data transfers from any public or private entity in the EEA** to **U. S. companies participating in the EU- U. S. Data Privacy Framework. With the adoption of the adequacy decision, European entities are able to transfer personal data to participating companies in the U. S., without having to put in place additional data protection safeguards. The adequacy decisions of the EC are subject to periodic reviews and may** be **amended or withdrawn. Another example of a lawful transfer mechanism is using the EU Standard Contractual Clauses as** approved by ~~a committee composed of representatives of~~ **the EC in June 2021. In order to use** the EU ~~Member States and~~ **Standard Contractual Clauses mechanism,** the ~~European Parliament~~ **exporter and the importer must ensure that the importer may guarantee a level of personal data protection in the importing country' s level of protection must be adequate that is essentially equivalent to that of the EEA. Compliance with EU data transfer obligations involves conducting transfer impact assessments, which includes documenting detailed analyses of data access and protection laws in the countries in which data importers are located, which** can ~~exercise its right of scrutiny~~ **be costly and time- consuming** . ~~After this process,~~ **Data importers must also expend resources in analyzing** ~~the~~ **their ability** ~~European Commission is then expected~~ to **comply with transfer obligations** ~~adopt the final adequacy decision~~ , ~~which will allow~~ **including implementing new safeguards and controls to further protect personal** data ~~to flow freely from the EU to the U. S. After one year from the notification date of the adequacy decision to the Member States and subsequently at least every four years, the European Commission will carry out~~

~~a new evaluation and could conclude that an adequate level of protection is no longer ensured and decide to suspend, amend or repeal the adequacy decision, or limit its scope~~ . In addition to the foregoing requirements, we have certain price reporting obligations ~~to~~ **under** the Medicaid Drug Rebate Program. Under the Medicaid Drug Rebate Program, we are required to pay a rebate to each state Medicaid program for our covered outpatient drugs that are dispensed to Medicaid beneficiaries and paid for by a state Medicaid program as a condition of having federal funds made available to states for our drugs under Medicaid and Medicare Part B. Those rebates are based on pricing data that we report on a monthly and quarterly basis to CMS, the federal agency that administers the Medicare and Medicaid Drug Rebate Programs. These data include the average manufacturer price and, in the case of innovator products, the best price for each drug which, in general, represents the lowest price available from the manufacturer to any entity in the U. S. in any pricing structure, calculated to include all sales and associated rebates, discounts and other price concessions, subject to certain exclusions. The Affordable Care Act made significant changes to the Medicaid Drug Rebate Program, and CMS issued a final regulation ~~, which became effective on April 1, 2016,~~ to implement the changes to the Medicaid Drug Rebate Program under the Affordable Care Act. ~~On December 21, 2020,~~ CMS issued ~~a~~ **another** final regulation that (i) modified existing Medicaid Drug Rebate Program regulations to permit reporting multiple best price figures with regard to value- based purchasing arrangements and (ii) provided definitions for " line extension, " " new formulation, " and related terms with the practical effect of expanding the scope of drugs considered to be line extensions **. If we become aware that our Medicaid reporting for a prior quarter was incorrect** , ~~with such~~ **or has** ~~changes~~ **changed** ~~taking~~ **as a result of recalculation of the pricing data, we are obligated to resubmit the corrected data for up to three years after those data originally were due, which revisions could** ~~effect~~ **affect our rebate liability for prior quarters. If we fail to pay the required rebate amount or report pricing data on a timely basis, we may be subject to civil monetary penalties and / or termination of our Medicaid Drug Rebate program agreement,** in ~~2022~~ **which case federal payments may not be available under Medicaid or Medicare Part B for 41our covered outpatient drugs** . Our failure to comply with the aforementioned price reporting and rebate payment obligations, as well as pharmacy benefit manager (PBM) " accumulator " programs, could negatively impact our financial results. In addition, statutory and regulatory changes or other agency action regarding the Medicaid Drug Rebate Program could negatively affect our financial results or expand our rebate liability. Federal law requires that any company that participates in the Medicaid Drug Rebate Program also participate in the 340B program in order for federal funds to be available for the manufacturer' s drugs under Medicaid and Medicare Part B. The 340B program, which is administered by the Health Resources and Services Administration (HRSA) requires participating manufacturers to agree to charge statutorily defined covered entities no more than the 340B " ceiling price " for the manufacturer' s covered outpatient drugs. These 340B covered entities include a variety of community health clinics and other entities that receive health services grants from the Public Health Service, as well as hospitals that serve a disproportionate share of low- income patients. The Affordable Care Act expanded the list of covered entities to include certain free- standing cancer hospitals, critical access hospitals, rural referral centers and sole community hospitals, but exempts " orphan drugs " from the ceiling price requirements for these covered entities. The 340B ceiling price is calculated using a statutory formula based on the average manufacturer price and rebate amount for the covered outpatient drug as calculated under the Medicaid Drug Rebate Program, and in general, products subject to Medicaid price reporting and rebate liability are also subject to the 340B ceiling price calculation and discount requirement. **If we are found to have knowingly and intentionally charged 340B covered entities more than the statutorily mandated ceiling price, we could be subject to significant civil monetary penalties and / or such failure also could be grounds for HRSA to terminate our agreement to participate in the 340B program, in which case our covered outpatient drugs would no longer be eligible for federal payment under the Medicaid or Medicare Part B program.** Any additional future changes to the definition of average manufacturer price and the Medicaid rebate ~~39amount~~ -- **amount** ~~under the Affordable Care Act or other legislation or regulation~~ could affect our 340B ceiling price calculations and negatively impact our results of operations if we successfully commercialize one or more products for which we receive regulatory approval. HRSA issued a final regulation ~~, effective January 1, 2019,~~ regarding the calculation of the 340B ceiling price and the imposition of civil monetary penalties on manufacturers that knowingly and intentionally overcharge covered entities. **It is unclear how HRSA will apply its enforcement authority under this regulation.** HRSA also has implemented a ceiling price reporting requirement, pursuant to which manufacturers must report the 340B ceiling prices for their covered outpatient drugs to HRSA on a quarterly basis. HRSA then publishes those prices to 340B covered entities. Moreover, under ~~a~~ **another** final regulation ~~effective January 13, 2021~~ , HRSA newly established an administrative dispute resolution (ADR) process for claims by covered entities that a manufacturer has engaged in overcharging, and by manufacturers that a covered entity violated the prohibitions against diversion or duplicate discounts. Such claims are to be resolved through an ADR panel of government officials rendering a decision that ~~could~~ **may** be appealed **to** ~~only in~~ federal court. An ADR proceeding could subject a manufacturer to onerous procedural requirements and could result in additional liability. In addition, changes to legislation, regulations, or guidance could modify 340B program compliance or expand discount liability. Federal law also requires that a company report average sales price information each quarter to CMS for certain categories of drugs that are payable under the Medicare Part B program. Manufacturers calculate the average sales price based on a statutorily defined formula as well as regulations and interpretations of the statute by CMS. CMS **may** ~~uses~~ -- **use** these submissions to determine payment rates for drugs under Medicare Part B. ~~Beginning in 2023, manufacturers~~ **Manufacturers** must pay refunds to Medicare for single source drugs or biologics, or biosimilar biological products, reimbursed under Medicare Part B and packaged in single- dose containers or single- use packages, for units of discarded drug reimbursed by Medicare Part B in excess of 10 % of total allowed charges under Medicare Part B for that drug (or a percentage established for drugs with unique circumstances). Manufacturers that **knowingly submit any false pricing or other information to the government, make a misrepresentation in the reporting of average sales price, or** fail to **timely** pay refunds **,** could be subject to civil monetary penalties ~~of 125 % of the refund amount~~ . The IRA establishes a Medicare Part B inflation rebate scheme, under which, generally speaking, manufacturers will owe rebates if the

average sales price of a Part B drug increases faster than the pace of inflation. Failure to timely pay a Part B inflation rebate is subject to a civil monetary penalty. In addition, manufacturers are **currently** required to provide to CMS a 70 % discount on brand name prescription drugs utilized by Medicare Part D beneficiaries when those beneficiaries are in the coverage gap phase of the Part D benefit design. The IRA replaces the coverage gap discount program with a new manufacturer discount program beginning in 2025. Under either program, civil monetary penalties ~~could be applied if a manufacturer fails to provide these discounts~~ in the amount of 125 % of the discount that was due **42could be applied if a manufacturer fails to provide these discounts** . Moreover, the IRA also establishes a Medicare Part D inflation rebate scheme, under which, generally speaking, manufacturers will owe rebates if the average manufacturer price of a Part D drug increases faster than the pace of inflation. Failure to timely pay a Part D inflation rebate is subject to a civil monetary penalty. In **addition, manufacturers are required to provide to CMS a 70 % discount on brand name prescription drugs utilized by Medicare Part D beneficiaries when those beneficiaries are in the coverage gap phase of the Part D benefit design. The IRA replaces the coverage gap discount program with a new manufacturer discount program beginning in 2025. Under either program, civil monetary penalties could be applied if a manufacturer fails to provide these discounts in the amount of 125 % of the discount that was due. Moreover, the IRA also establishes a Medicare Part D inflation rebate scheme, under which, generally speaking, manufacturers will owe rebates if the average manufacturer price of a Part D drug increases faster than the pace of inflation. Failure to timely pay a Part D inflation rebate is subject to a civil monetary penalty. In** order to be eligible to have our products that we successfully commercialize paid for with federal funds under the Medicaid and Medicare Part B programs and purchased by certain federal agencies and grantees, we also would have to participate in the U. S. Department of Veterans Affairs (VA), Federal Supply Schedule (FSS), pricing program. As part of this program, we would be obligated to make our **innovator** products available for procurement on an FSS contract under which we must comply with standard government terms and conditions and charge a price that is no higher than the statutory Federal Ceiling Price (FCP) to four federal agencies (VA, U. S. Department of Defense (DOD), Public Health Service, and U. S. Coast Guard). The FCP is based on the Non- Federal Average Manufacturer Price (Non- FAMP), which we would be required to calculate and report to the VA on a quarterly and annual basis. Pursuant to applicable law, knowing provision of false information in connection with a Non- FAMP filing can subject a manufacturer to significant civil monetary penalties for each item of false information. The FSS pricing and contracting obligations also contain extensive disclosure and certification requirements. **Under Section 703 of the National Defense Authorization Act for FY 2008, we would be required to pay quarterly rebates to DOD on utilization of innovator products that are dispensed through DOD' s Tricare network pharmacies to Tricare beneficiaries. The rebates are calculated as the difference between the annual Non- FAMP and FCP for the calendar year that the product was dispensed.** For additional information regarding obligations under federal health care programs, refer to the risk factor entitled " We participate in the Medicaid Drug Rebate Program and if we fail to comply with our reporting and payment obligations under that program or other governmental pricing programs that we participate in, we could be subject to additional reimbursement requirements, penalties, sanctions and fines, which could have a material ~~40adverse~~ -- **adverse** effect on our business, financial condition, results of operations and growth prospects " in this Annual Report on Form 10- K. In the U. S. our activities are potentially subject to additional regulation by various federal, state and local authorities in addition to the FDA, including CMS, other divisions of HHS (for example, the OIG), the DOJ and individual U. S. Attorney offices within the DOJ, and state and local governments. Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre- marketing product approvals, or refusal to allow us to enter into supply contracts, including government contracts, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post- marketing requirements, including safety surveillance, anti- fraud and ~~abuse~~ **43abuse** laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals. In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in some states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Several states have enacted legislation requiring pharmaceutical companies to, among other things, establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and / or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing specified physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit other specified sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws. **Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.** Human Capital **As of December 31** ~~We are committed to a work environment that is welcoming~~ , **2023** ~~inclusive and encouraging. To achieve our plans and goals~~ , ~~it is imperative that~~ we **had 165** ~~attract and retain top talent. In order to do so, we aim to have a safe and encouraging workplace, with opportunities for our employees to grow and develop professionally, supported by strong compensation, benefits, and other incentives. In addition to competitive base salaries, we offer~~ full- time employees ~~a cash target bonus, a comprehensive benefits package~~ and **one** ~~equity compensation. As of December 31, 2022, we had 151 full- time employees and two~~ part- time ~~employees~~ - **employee** . In

addition to our employees, we contract with third parties for the conduct of certain clinical development, manufacturing, accounting and administrative activities. We anticipate increasing the number of our employees as we continue to grow as a commercial organization and increase our research and development. We have no collective bargaining agreements with our employees, and none are represented by labor unions ~~. Throughout the COVID- 19 pandemic, most of our employees have been working remotely. We implemented a number of significant safety measures based on current guidelines recommended by the Centers for Disease Control for employees who choose to work at our facilities~~. Corporate InformationWe were incorporated in Delaware in August 2003. Our principal executive offices are located at 5 Radnor Corporate Center, Suite 500, 100 Matsonford Rd, Radnor, Pennsylvania 19087 and our telephone number is (484) 801- 4670. Our website address is www. marinuspharma. com. The inclusion of our website address is, in each case, intended to be an inactive textual reference only and not an active hyperlink to our website. The information contained in, or that ~~41can --~~ **can** be accessed through, our website is not part of this Annual Report on Form 10- K. We make available free of charge on our website, Form 10- Ks, Form 10- Qs, Form 8- Ks and amendments to those reports as soon as reasonably practicable after filing with or furnishing to the Securities and Exchange Commission (SEC). Item 1A. Risk Factors Our business is subject to substantial risks and uncertainties. The occurrence of any of the following risks and uncertainties, either alone or taken together, could materially and adversely affect our business, financial condition, results of operations or prospects. In these circumstances, the market price of our common stock could decline and you may lose all or part of your investment. The risks and uncertainties described below are not the only ones we face. Risks and uncertainties of general applicability and additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially and adversely affect our business, financial condition, results of operations or prospects. ~~Risks~~ **44Risks** Related to our Financial Position and Need for Additional CapitalWe **have identified conditions and events that raise substantial doubt about our ability to continue as a going concern. We have incurred significant operating losses since our inception, including a net loss of $ 141. 4 million for the year ended December 31, 2023. As of December 31, 2023, we had an accumulated deficit of $ 571. 9 million. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital. Our losses have resulted principally from costs incurred in our research and development activities. We anticipate that our operating losses will substantially increase over the next several years as we execute our plan to expand our research, development and commercialization activities of ganaxolone. Our continuation as a going concern is dependent on our ability to (1) generate sufficient cash flows from operations to meet our obligations, (2) obtain additional debt / equity financing, and / or (3) execute strategic transactions, all as may be required. In addition, we expect to continue to incur significant expenses in connection with the continued commercialization of ZTALMY. Because of the numerous risks and uncertainties associated with developing pharmaceutical products, we are unable to predict the extent of any future losses or whether or when we will become profitable, if ever. 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. As of December 31, 2023, our Cash and cash equivalents and Short- term investments of $ 150. 3 million, excluding the $ 15. 0 million liquidity requirement associated with our Note Payable, was not sufficient to fund operations for the one- year period after the date hereof. These factors raise substantial doubt about our ability to continue as a going concern. As a result, our independent registered public accounting firm has included an explanatory paragraph in its report on our audited consolidated financial statements for the year ended December 31, 2023 related to our ability to continue as a going concern. If we are unable to continue as a going concern, we may have to liquidate our assets and may receive less than the value at which those assets are carried on our financial statements, and it is likely that investors will lose all or a part of their investment. Future reports of our independent registered public accounting firm may contain statements expressing substantial doubt about our ability to continue as a going concern. If we seek additional financing to fund our business activities and there remains substantial doubt about our ability to continue as a going concern, investors or other financing sources may be unwilling to provide funding to us on commercially reasonable terms, if at all. We** have generated limited revenue to date from product sales. We may never achieve or sustain profitability, which could depress the market price of our common stock, and could cause you to lose all or a part of your investment. To date, we have generated limited revenue from sales of ZTALMY ~~in CDD in the U. S.~~ and no **revenue from** sales **of** ~~from any~~ other **formulations** ~~geographic markets or any other indications~~ being developed for ganaxolone. The extent to which we can generate revenue from product sales and achieve profitability ~~will depend~~ **depends** upon our ability **to continue** to successfully commercialize ZTALMY in ~~CDD and~~ **the U. S., Orion' s ability** to ~~achieve successful~~ **successfully** ~~clinical~~ **commercialize ZTALMY in Europe, and our ability to successfully** ~~development~~ ---- **develop** ~~of~~ ganaxolone in **additional** ~~the other~~ indications ~~we are developing~~ or other product candidates that we may develop, in- license or acquire in the future. Our ability to **continue to** generate revenue from product sales of ZTALMY ~~,~~ and from ~~other~~ **additional** indications we are developing for ganaxolone or any other future product candidates also depends on a number of additional factors, including our ability to: ● successfully complete pre- clinical and clinical development activities, including enrollment of clinical trial participants, completion of the necessary pre- clinical studies and clinical trials and attainment of study and trial results that will support regulatory approvals; ● complete and submit NDAs to the FDA, MAAs with the EMA and other marketing authorization filings with regulatory agencies in other countries, and obtain regulatory approval for indications **, other than CDD in the U. S. and EU,** for which there is a commercial market; **45** ● **continue to** make or have made commercial quantities of our products at acceptable cost levels; ● ~~develop~~ **maintain** a commercial organization capable of **having** manufacturing, selling, marketing and distributing any products we intend to sell ourselves in the markets in which we choose to commercialize on our own; ● find suitable partners to help us market, sell and distribute our approved products in other markets; ● obtain adequate pricing, coverage and

reimbursement from third parties, including government and private payers; ● launch and commercialize ZTALMY in other indications being developed for ganaxolone and any other future product candidates for which we obtain regulatory approval; ● obtain market acceptance of ZTALMY in other indications being developed for ganaxolone and any other future product candidates as viable treatment options; ● address any competing technological and market developments; ~~42~~ ● implement additional internal systems and infrastructure, as needed; ● identify and validate new product candidates; ● negotiate favorable terms in any collaboration, licensing or other commercial arrangements into which we may enter; ● resolve potential intellectual property disputes with third parties; ● maintain, protect and expand our portfolio of intellectual property rights, including patents, trade secrets and know- how; and ● attract, hire and retain qualified personnel. In addition, because of the numerous risks and uncertainties associated with product development, including that ganaxolone may not advance through development or achieve the endpoints of applicable preclinical studies and clinical trials for ganaxolone in the other indications we are developing, we are unable to predict the timing or amount of increased expenses, or if or when we will be able to achieve or maintain profitability. Our expenses could increase beyond expectations if we are required by the FDA or other regulatory agencies, domestic or foreign, to perform preclinical studies and clinical trials or other studies in addition to those that we currently anticipate. Even if we are able to complete the development and regulatory process for ZTALMY or ganaxolone in the other indications we are developing, we anticipate incurring significant costs associated with commercializing ZTALMY, any other indications for ganaxolone or other product candidates. Even if we are able to generate substantial revenue from the sale of ZTALMY, other indications being developed for ganaxolone or any future commercial products, we may not become profitable and will need to obtain additional funding to continue operations. If we fail to become profitable or are unable to sustain profitability on a continuing basis, and we are not successful in obtaining additional funding, then we may be unable to continue our operations at planned levels, or at all, which would likely materially and adversely affect our business and the market price of our common stock. ~~We~~ **46We** will require additional capital to fund our operations and if we fail to obtain necessary financing, we may be unable to **continue to successfully** commercialize ZTALMY **in the U. S.** or complete the development and ~~commercialization~~ , if approved, **commercialization** of ganaxolone in the other indications we are developing. Our operations have consumed substantial amounts of cash since inception. We expect to continue to spend substantial amounts to commercialize ZTALMY in ~~CDD in~~ the U. S. and to advance the clinical and regulatory development of ganaxolone in the other **geographic regions and** indications we are developing and, if approved, commercialize ganaxolone in those indications. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our commercialization efforts or our research and development programs. We believe that our existing ~~cash~~ **Cash** and cash equivalents **and Short- term investments of $ 150. 3 million** as of December 31, ~~2022~~ **2023** will be sufficient to fund our operating expenses and capital expenditure requirements, as well as maintain the minimum cash balance required under our debt facility, into the ~~second half~~ **fourth quarter** of 2024. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we currently expect. Our future funding requirements, both near and long- term, will depend on many factors, including, but not limited to: ● the results of our preclinical studies and clinical trials; ● the development, formulation and commercialization activities related to ganaxolone, including ZTALMY; ● the scope, progress, results and costs of researching and developing ganaxolone, including ZTALMY, or any other future product candidates, and conducting preclinical studies and clinical trials; ~~43~~ ● the timing of, and the costs involved in, obtaining regulatory approvals for ganaxolone, including ZTALMY **in indications other than CDD in the U. S.** , **EU,** or **other significant markets, and** any other future product candidates **in these markets** ; ● the cost of commercialization activities for ZTALMY ~~in~~ **for** CDD in the ~~US~~ **U. S.** , including marketing, sales and distribution costs; ● the cost of commercialization activities for ZTALMY, **and of** ganaxolone in any other indications ~~,~~ or any other future product candidates ~~,~~ **that** are approved for sale, including marketing, sales and distribution costs; ● the cost of manufacturing and formulating ganaxolone, or any other future product candidates, to internal and regulatory standards for use in preclinical studies, clinical trials and, if approved, commercial sale; ● our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements; ● our ability to receive funding under the BARDA Contract; ● our expectations regarding the amount and timing of milestone and royalty payments owed to us pursuant to our **collaboration** ~~exclusive license~~ agreement with Orion for the commercialization of ganaxolone in Europe ~~and~~ **,** our exclusive license agreement with Tenacia for the commercialization of ganaxolone in Mainland China, Hong Kong, Macau and Taiwan **and our exclusive distribution and supply agreement with Biologix for the distribution and supply of ganaxolone in the Middle East and North Africa region** ; ● our expectations regarding the amount and timing of milestone and royalty payments owed by us pursuant to our revenue interest financing agreement with Sagard Healthcare Royalty Partners, LP (Sagard); ● any product liability, infringement or other lawsuits related to ZTALMY or other indications being developed for ganaxolone **or any other future product candidates** and, if approved, products; **47** ● capital needed to attract and retain skilled personnel; ● the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation; and ● the timing, receipt and amount of sales of, or royalties on, ZTALMY ~~in~~ **for** CDD and on future approved products, if any. If we are unable to expand our operations or otherwise capitalize on our business opportunities due to a lack of capital, our ability to become profitable will be compromised. Failure to progress our product development or commercialization of ganaxolone as anticipated will have a negative effect on our business, future prospects and ability to obtain further financing on acceptable terms, if at all, and the value of the enterprise, which could require us to, among other things: ● significantly delay, scale back or discontinue the development or commercialization of ganaxolone or one or more ~~of our~~ other research and development initiatives; ● seek collaborators for one or more of our current or future product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available; ● sell or license on unfavorable terms our rights to ganaxolone or one ~~of our~~ **or more** future product candidates that we otherwise would seek to develop or commercialize ourselves; or ● seek bankruptcy protection. ~~44Our~~ **Our** failure to comply with the covenants

or other terms of ~~the Credit Agreement, including as a result of events beyond our control, could result in a default under~~ the Credit Agreement or Revenue Interest Financing Agreement **, including as a result of events beyond our control, could result in a default under these agreements** that could materially and adversely affect the ongoing viability of our business. On May 11, 2021 (Credit Agreement Closing Date), we entered into a Credit Agreement and Guaranty (as amended by that certain letter agreement on May 17, 2021, that certain letter agreement on May 23, 2022 and that certain Limited Consent and First Amendment to Credit Agreement on October 28, 2022, the Credit Agreement) with Oaktree Fund Administration, LLC, as administrative agent (Oaktree) and the lenders party thereto (collectively, the Lenders) that ~~provides~~ **provided** for a five- year senior secured term loan facility in an aggregate original principal amount of up to $ ~~100~~ **125** . 0 million, ~~consisting~~ **which consisted** of (i) tranche A- 1 term loans in an aggregate principal amount of $ 15. 0 million advanced on the Credit Agreement Closing Date; (ii) tranche A- 2 term loans in an aggregate principal amount of $ 30. 0 million advanced on September 27, 2021; (iii) tranche B term loans in an aggregate principal amount of $ 30. 0 million advanced on March 30, 2022; ~~and~~ (iv) tranche C term loans in an aggregate principal amount of $ 25. 0 million (**Tranche C** ~~collectively, the~~ Term Loans) **; and (v) tranche D term loans in an aggregate principal amount of $ 25. 0 million (collectively, the Term Loans). In May 2022, we delivered to Oaktree a separate notice of commitment termination with respect to the tranche D term loans (Tranche D Term Loans) commitment, and in August 2023, we delivered to Oaktree a separate notice of commitment termination with respect to the Tranche C Term Loans commitment** . Our ability to draw each tranche of the Term Loans ~~is~~ **was** subject to the satisfaction of certain conditions applicable to each tranche as specified in the Credit Agreement. The Term Loans bear interest at a fixed per annum rate (subject to increase during an event of default) of 11. 50 % and are scheduled to mature on the fifth anniversary of the Credit Agreement Closing Date (Maturity Date). In addition, at the time of funding of any tranche of the Term Loans, we ~~are~~ **were** required to pay an upfront fee of 2. 0 % of the aggregate principal amount being funded. We are required to make quarterly interest payments until the Maturity Date. We are also required to make principal payments, which are payable in quarterly installments beginning on the last day of the first quarter ending after the third anniversary of the Credit Agreement Closing Date, in an amount equal to 5. 0 % of the aggregate amount of the Term Loans outstanding on the date of the first such quarterly principal payment and continuing until the Maturity Date, on which date all outstanding Term Loans and other amounts owed under the Credit Agreement will be required to be paid in full. The Term Loans will be guaranteed by certain of our future subsidiaries. Our obligations under the Credit Agreement and the guarantee of such obligations are secured, subject to customary permitted liens and other agreed upon exceptions and subject to an intercreditor agreement with Sagard Healthcare ~~Royalty~~ **48Royalty** Partners, LP (Sagard), by a pledge of substantially all of our assets and will be secured by a pledge of substantially all of the assets of the future guarantors. The Credit Agreement contains various covenants that limit our ability to engage in specified types of transactions without Oaktree' s prior consent, as well as a financial covenant that requires us to maintain at all times ~~cash~~ **Cash** and cash equivalents in certain deposit accounts in an amount at least equal to ~~(i) from the funding date of the tranche A- 2 term loans until the funding date of the tranche B term loans, $ 20. 0 million, and (ii) from~~ the funding of the tranche B term loans until the Maturity Date, $ 15. 0 million. Oaktree may elect to accelerate the repayment of all unpaid principal of the Term Loans, accrued interest and other amounts owed under the Credit Agreement upon consummation of a specified change of control transaction or the occurrence of certain events of default (as specified in the Credit Agreement), including, among other things: ● our default in a payment obligation under the Credit Agreement; ● our breach of the restrictive covenants or other terms of the Credit Agreement; ● our breach of reporting obligations; ● our failure to properly maintain the collateral; ● certain regulatory actions that cause an ongoing delay in commercialization of ganaxolone and which could reasonably be expected to result in a material adverse effect; ● a recall of ganaxolone that could reasonably be expected to result in a material adverse effect; ● an injunction against the sale or manufacture of ganaxolone for more than 45 days that could, after the termination of such 45- day period, reasonably be expected to result in a material adverse effect; ~~and~~45 -- **and** ● certain specified insolvency and bankruptcy- related events. Subject to any applicable cure period set forth in the Credit Agreement, all amounts outstanding with respect to the Term Loans (principal and accrued interest), as well as any applicable prepayment premiums, interest " make- whole " payments or exit fees, would become due and payable (i) immediately, in the case of a payment or bankruptcy event of default or (ii) in the case of any other event of default, upon the request of Lenders holding at least a majority of the outstanding Term Loans and Term Loan commitments, at a default interest rate of 13. 50 %. Our assets or cash flow may not be sufficient to fully repay our obligations under the Term Loans if the obligations thereunder are accelerated upon any events of default ~~. The duration and magnitude of any negative impact from the COVID- 19 pandemic on ganaxolone commercialization, development or net revenues could also affect our ability to meet the requirements to draw on one or more of the Term Loan tranches and to remain in compliance with our liquidity financial covenant~~ . Further, if we are unable to repay, refinance or restructure our obligations under the Term Loans, Oaktree on behalf of the Lenders could proceed to protect and enforce their rights under the Credit Agreement and other loan documents by exercising such remedies (including foreclosure on the assets securing our obligations under the Credit Agreement and the other loan documents) as are available to Oaktree and the Lenders and in respect thereof under applicable law, either by suit in equity or by action at law, or both, whether for specific performance of any covenant or other agreement contained in the Credit Agreement or other loan documents or in aid of the exercise of any power granted in the Credit Agreement or other loan documents. The foregoing would materially and adversely affect the ongoing viability of our business. On October 28, 2022 (RIFA Closing Date), we entered into a revenue interest financing agreement (Revenue Interest Financing Agreement) with Sagard pursuant to which Sagard agreed to pay us $ 32. 5 million (Investment Amount) to provide funding for our development and commercialization of ganaxolone and related pharmaceutical products, including the commercial launch of ZTALMY, and for working capital and general administrative purposes. In exchange for the Investment Amount, we have agreed to make quarterly payments to Sagard (the Payments) as follows: (i) for each calendar quarter from and after the RIFA Closing Date through and including the quarter ended June 30, 2026, an amount equal to 7. 5 % of (a) our net sales of ZTALMY and all other pharmaceutical products that contain ganaxolone

(Net Sales), in each case with any dosage form, dosing regimen, or strength, or any improvements related thereto (collectively, the Included Products); and (b) payments received by us in connection with the ~~manufacture~~ **49manufacture**, development and sale of Included Products in the U. S., including in connection with any out- licensing of U. S. rights to any Included Product (Other Included Payments, and together with Net Sales, Product Revenue), and (ii) for each calendar quarter following the calendar quarter ended June 30, 2026, an amount equal to (x) 15. 0 % of the first $ 100. 0 million in annual Product Revenues of the Included Products and (y) 7. 5 % of annual Product Revenues of the Included Products in excess of $ 100. 0 million. The Payments are subject to a hard cap equal to 190 % ($ 61. 8 million) of the Investment Amount (Hard Cap). Sagard' s right to receive payments will terminate when Sagard has received payments in respect of the Included Products, including any additional payments described below, equal to the Hard Cap. Further, we have the right to make voluntary prepayments to Sagard, and such payments will be credited against the Hard Cap. If Sagard has not received aggregate payments equaling at least 100 % of the Investment Amount by December 31, 2027 or at least 190 % of the Investment Amount by December 31, 2032 (each, a Minimum Amount), then we will be obligated to make a cash payment to Sagard in an amount sufficient to gross up Sagard up to the applicable Minimum Amount within a specified period of time after each reference date. The obligations under the Revenue Interest Financing Agreement, including the Payments, will be guaranteed by certain of our future subsidiaries (Subsidiaries) that are required to become a party thereto as guarantors (Guarantors). Our obligations under the Revenue Interest Financing Agreement and the guarantee of such obligations are secured, subject to customary permitted liens and other agreed upon exceptions and subject to an intercreditor agreement with Oaktree as administrative agent for the lenders under the Credit Agreement, by a pledge of substantially all of ours and the Guarantors' assets that relate to, or are used or held for use for, the development, manufacture, use and / or commercialization of ZTALMY and all other pharmaceutical products that contain ganaxolone in the U. S., including the Product Revenue, pursuant to the terms of the Security Agreement dated as of the RIFA Closing Date by and among us, the Guarantors from time to time party thereto, and Sagard (Security Agreement). ~~46At~~ **At** any time, we have the right, but not the obligation (Call Option), to repurchase all, but not less than all, of Sagard' s interest in the Payments at a repurchase price (Put / Call Price) equal to: (a) on or before the third anniversary of the RIFA Closing Date, 160 % of the Investment Amount; (b) after the third anniversary but on or prior to the fourth anniversary of the RIFA Closing Date, 180 % of the Investment Amount; and (c) after the fourth anniversary of the RIFA Closing Date, 190 % of the Investment Amount, in each case, less the aggregate of all of our payments in respect of the Payments made to Sagard prior to such date. The Revenue Interest Financing Agreement contains certain restrictions on ours and our Subsidiaries' abilities, among other things, to incur additional debt, grant or permit additional liens, make investments and acquisitions, dispose of assets, pay dividends and distributions and enter into affiliate transactions, in each case, subject to certain exceptions. In addition, the Revenue Interest Financing Agreement contains a financial covenant that requires us to maintain at all times ~~cash~~ **Cash** and cash equivalents in certain deposit accounts in an amount at least equal to (i) from the RIFA Closing Date until the repayment of the loans under the Credit Agreement, $ 15. 0 million and (ii) thereafter, $ 10. 0 million. In addition, the Revenue Interest Financing Agreement provides that if certain events occur, including certain bankruptcy events, a change of control, non- payment of Payments, divestiture of rights to commercialize Included Products in the U. S., divestiture of certain assets related to the Included Products (subject to customary carve- outs), and (subject to applicable cure periods) non- compliance with the covenants in the Revenue Interest Financing Agreement, Sagard has the right, but not the obligation, to require us to repurchase all, but not less than all, of Sagard' s interest in the Payments at the Put / Call Price. Our assets or cash flow may not be sufficient to fully repurchase all of Sagard' s interest in the Payments if such obligation is triggered upon any events of default ~~. The duration and magnitude of any negative impact from the COVID- 19 pandemic on ganaxolone commercialization, development or net revenues could also affect our ability to remain in compliance with our liquidity financial covenant~~ . Further, if we are unable to repay, refinance or restructure our obligations under the Revenue Interest Financing Agreement, Sagard could proceed to protect and enforce its rights under the Revenue Interest Financing Agreement and other transaction documents by exercising such remedies (including foreclosure on the assets securing our obligations under the Revenue Interest Financing Agreement and the other transaction documents) as are available to Sagard and in respect thereof under applicable law, either by suit in equity or by action at law, or both, whether for specific performance of any covenant or other agreement contained in the Revenue Interest Financing Agreement or other transaction documents or in aid of the exercise of any power granted ~~in~~ **50in** the Revenue Interest Financing Agreement or other transaction documents. The foregoing would materially and adversely affect the ongoing viability of our business ~~. If we are unable to satisfy certain conditions in our Credit Agreement, we will be unable to draw down the remaining amount of the term loan facility. For our Credit Agreement, we must satisfy certain conditions to be eligible to draw down the tranche C term loans of $ 25. 0 million. The tranche C term loans of $ 25. 0 million may be drawn by us on or before December 31, 2023, provided that we satisfy certain conditions described in the Credit Agreement, including (i) the completion of one or more financings, including through the issuance of common stock, convertible debt, subordinated debt, a synthetic royalty or a sublicense in which we receive gross proceeds in an aggregate amount of at least $ 40. 0 million and net proceeds in an aggregate amount of at least $ 36. 0 million (Qualified Financing Condition) and (ii) either our current Phase 3 RAISE trial or a Phase 3 trial in tuberous sclerosis complex (TSC) achieving statistical significance (p value < 0. 05) across all primary endpoints and ganaxolone being generally well tolerated, with a safety profile generally consistent with previous clinical trials. We satisfied the Qualified Financing Condition in connection with our November 2022 underwritten public offering, however, if we are unable to satisfy the remaining condition, we would not be able to draw down the remaining tranche of loans and may not be able to obtain alternative financing on commercially reasonable terms or at all~~ . Our Credit Agreement and Revenue Interest Financing Agreement contain restrictions that limit our flexibility in operating our business. The Credit Agreement and the Revenue Interest Financing Agreement contain various covenants that limit our ability to engage in specified types of transactions without the prior consent of Oaktree and the Lenders holding a ~~47majority~~ -- **majority** of the Term Loan commitments and / or Sagard, as applicable ~~,~~. These covenants limit our ability to, among other things: ● sell,

transfer, lease or dispose of our assets; ● create, incur or assume additional indebtedness; ● encumber or permit liens on certain of our assets; ● make restricted payments, including paying dividends on, repurchasing or making distributions with respect to our common stock; ● make specified investments (including acquisitions, loans and advances); ● consolidate, merge, sell or otherwise dispose of all or substantially all of our assets; ● enter into certain transactions with our affiliates; ● grant certain license rights related to our products, technology and other intellectual property rights; ● in the case of the Credit Agreement, permit our ~~cash~~ **Cash** and cash equivalents held in certain deposit accounts to at any time be less than ~~(i) from the funding of the tranche A- 2 term loans until the funding of the tranche B term loans,~~ $ ~~20~~ **15** . 0 million ~~and (ii)~~ from the funding date of the tranche B term loans until the Maturity Date ~~, $ 15. 0 million~~ ; and ● in the case of the Revenue Interest Financing Agreement, permit our ~~cash~~ **Cash** and cash equivalents held in certain deposit accounts to be less than (i) from the RIFA Closing Date until the repayment of the loans under the Credit Agreement, $ 15. 0 million and (ii) thereafter, $ 10. 0 million. The covenants in our Credit Agreement, Revenue Interest Financing Agreement and related security agreements may limit our ability to take certain actions that may be in our long- term best interests. In the event that we breach one or more covenants, Oaktree and / or Sagard may choose to declare an event of default and (i) in the case of the Credit Agreement, require that we immediately repay all amounts outstanding under the Credit Agreement, plus penalties and interest, terminate the Lenders' commitments to fund any undrawn Term Loan tranches and foreclose on the collateral granted to them to secure the obligations under the Credit Agreement and the other loan documents and / or (ii) in the case of the Revenue Interest Financing Agreement, require that we repurchase all, but not less than all, of Sagard' s interest in the Payments and foreclose on the collateral granted to them to secure the obligations under the Revenue Interest Financing Agreement and the other transaction documents. Such repayment could have a material adverse effect on our business, operating results and financial condition. Raising additional capital could dilute our stockholders, restrict our operations or require us to relinquish rights to ganaxolone or any other future product candidates. Until we can generate substantial revenue from product sales, if ever, we expect to seek additional capital through a combination of private and public equity offerings, debt financings, government funding, collaborations, licensing arrangements and other commercial transactions and funding opportunities. To the extent that we raise ~~additional~~ **51additional** capital through the sale of equity or convertible debt securities, the ownership interests of stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of stockholders. Debt financing or other commercial transactions, if available, may involve agreements that include liens or restrictive covenants limiting our ability to take important actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaborations, licensing arrangements or other commercial with third parties, we may have to relinquish valuable rights to ganaxolone or any other future product candidates in particular countries, or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds ~~48when~~ -- **when** needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant rights to develop and market ganaxolone or any other future product candidates that we would otherwise prefer to develop and market ourselves. We intend to expend our limited resources to pursue ganaxolone and may fail to capitalize on other technologies or any other future product candidates that may be more profitable or for which there may be a greater likelihood of success. Because we have limited financial and managerial resources, we are focusing on **the continued** ~~commercializing~~ - **commercialization of** ZTALMY and on research programs relating to ganaxolone, which concentrates the risk of product failure in the event ganaxolone proves to be ineffective or inadequate for clinical development or commercialization. As a result, we may forego or delay pursuit of opportunities for other technologies or product candidates that later could prove to have greater commercial potential. We may be unable to capitalize on viable commercial products or profitable market opportunities as a result of our resource allocation decisions. Our spending on proprietary research and development programs relating to ganaxolone may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for ganaxolone, we may relinquish valuable rights to ganaxolone through collaboration, licensing or other commercial arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to ganaxolone. We have a limited operating history, which may make it difficult for you to evaluate the success of our business to date and to assess our future viability. Our operations to date have been limited to conducting preclinical and clinical development and regulatory activities for ganaxolone as well as early commercialization of ZTALMY for CDD in the ~~US~~ **U. S** . In addition, we have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the pharmaceutical area. Commercial sales from ZTALMY ~~in~~ **for** CDD, an ultra rare disease, are not expected to be sufficient to fund our clinical development of new indications for ganaxolone, including RSE and TSC. Consequently, any predictions about our future performance may not be as accurate as they would be if we had a longer history of successfully developing and commercializing pharmaceutical products. Further, our budgeted expense levels are based in part on our expectations concerning the costs of **our continued** commercialization of ZTALMY and on our research, preclinical development and clinical trials, which depend on the success of such activities, and our ability to effectively and efficiently conduct such research, preclinical development, clinical trials and our expectations related to our efforts to achieve FDA or foreign regulatory approval with respect to ganaxolone for additional indications. Our limited operating history and clinical trial experience make these costs difficult to forecast accurately. We may be unable to adjust our operations in a timely manner to compensate for any unexpected increase in costs. Further, our manufacturing costs and operating expenses may increase significantly as we expand our operations and our commercial activities. Accordingly, a significant increase in costs could have an immediate and material adverse effect on our business, results of operations and financial condition. Our ability to use our net operating loss carryforwards and other tax attributes may be limited. As of December 31, ~~2022~~ **2023** , we had U. S. net operating loss, or NOL, carryforwards of approximately $ ~~233~~ **292** . ~~5~~ **2** million for U. S. federal income tax and approximately $ ~~204~~ **240** . ~~6~~ **1** million for state income tax purposes available to offset future taxable income and U. S. federal and state research and development tax credits of approximately $ ~~30~~ **39** . ~~2~~ **6** million, prior to consideration of annual limitations that

may be imposed under Section 382 of the Internal Revenue Code of 1986, as amended, or Section 382. Our U. S. NOL carryforwards begin to expire in 2029 if not utilized. ~~The~~ **52The** NOL carry forwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities. NOL and tax credit carry forwards are subject to an annual limitation due to certain cumulative changes in the ownership interest of significant stockholders over a three ~~-~~year period in excess of 50 %, as defined under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended ~~, or the Code~~ , as well as similar state tax provisions. This limits the amount of NOLs that we can utilize annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of our company immediately prior to an ownership change. Subsequent ownership changes may further affect the limitation in future years. In addition, U. S. tax laws limit ~~49the~~ -- **the** time during which these carry forwards may be applied against future taxes, therefore, we may not be able to take full advantage of these carry forwards for federal income tax purposes. We may experience additional ownership changes in the future as a result of subsequent shifts in our stock ownership, including through completed or contemplated financings, some of which may be outside of our control. If we determine that a future ownership change has occurred and our ability to use our historical net operating loss and tax credit carryforwards is materially limited, it would harm our future operating results by effectively increasing our future tax obligations. Furthermore, the losses could expire before we generate sufficient income to utilize them. Risks Related to the **Continued** Commercialization of ZTALMY and Other Future Product CandidatesZTALMY is our first commercial product and we have ~~a limited~~ **no other** history of commercializing drugs, which may make it difficult ~~for you~~ to evaluate the success of our business to date and to assess our future viability. Our operations to date have been largely focused on raising capital and developing ganaxolone in several indications, including undertaking preclinical studies and conducting clinical trials. ~~We have only recently received FDA approval of~~ ZTALMY **became available for commercial sale and shipment in the U. S. in the third quarter of 2022** , and as such we have ~~not yet~~ **only begun to** ~~demonstrated~~ **demonstrate** our ability to ~~successfully~~ supply ZTALMY for ongoing commercial sale ~~or~~ **and to** conduct sales, marketing and distribution activities necessary for **continued** successful product commercialization. Consequently, any predictions about our future success or viability may not be as accurate as they could be if we had a longer history of successfully developing and commercializing drugs. Even though we have obtained regulatory approval for ZTALMY in the U. S. **and EU** , we will still face extensive FDA **and EMA** regulatory requirements and may face regulatory difficulties. Even though we have obtained regulatory approval in the U. S. **and EU** for ZTALMY, the FDA **, EC** and state regulatory authorities (and, if we obtain **other** foreign regulatory approvals, comparable foreign regulatory authorities) may still impose significant restrictions on the indicated uses or marketing of ZTALMY ~~,~~or impose ongoing requirements for potential costly post- approval studies or post- marketing surveillance. For example, as part of its approval of ZTALMY for the treatment of CDD, the FDA requires several post- marketing commitments. The Phase 1 renal impairment study commitment was completed and submitted to the FDA in May 2022. The Phase 1 hepatic impairment study and the thorough QTc study were completed and submitted to the FDA in December 2022. The **extractable / leachable study results on the container closure system were submitted to the FDA in July 2023, the M17 in vitro drug- drug interaction (DDI) study was submitted in August 2023, and the M17 in vivo PK study with Brain Penetrance was submitted in December 2023. The** remaining post- marketing commitments include the following studies: ● 2- year carcinogenicity studies of ganaxolone and the major human unconjugated plasma metabolite, M2 **,** in rats. ● a 26- week carcinogenicity study of ganaxolone in transgenic mice. ● a juvenile animal toxicity study of the major human unconjugated plasma metabolite, M2, in rats. ~~● extractable / leachable~~ **In connection with the EC approval of ZTALMY for CDD, we have several post- marketing authorization measures. The clinical** study ~~results on the container closure system~~ **report (CSR) for Study 1042- HME- 1001 was submitted in September 2023** . ~~● a CNS distribution~~ **The ganaxolone Steady- State Metabolite Study report, the final Study 1042- CDD- 3001 CSR with the open- label trial completion, the M17 in vitro DDI study, and the M17 in vivo PK** study with ~~M47 metabolite~~ **Brain Penetrance were submitted in 53December 2023. The remaining post- marketing authorization measures include: participating in Study LLF001 (CANDID observational study) and providing annual updates; participating in the CDD- IPR- CDD- 0 CDKL5 Deficiency Disorder International Patient Registry and providing six monthly updates; conducting a toxicity study with a sediment dwelling organism and an updated Environmental Risk Assessment; developing a sodium benzoate- free suspension and assessing the compatibility of the oral suspension with food** , **drinks, enteral tubes, shake time and stand time; conducting a 26- Week Oral Gavage Toxicity Study of M2; conducting a M2 Embryo- fetal Development study; and conducting a 26- week Oral Gavage Carcinogenicity Study of ganaxolone and M2. The EMA also requested weight of evidence (WoE) assessments to evaluate the need for a 2- year carcinogenicity study** in rats ~~.~~ ~~●~~ **with ganaxolone, a 2- year carcinogenicity study** in ~~vitro~~ **rats with M2, and a juvenile toxicity study with M2. We expect to be able complete the remaining required** studies **within** ~~to assess~~ the **requested EMA timeframe** ~~drug interaction potential of M47 metabolite~~ . These additional studies will likely require us to undergo a costly and time- consuming development process. If we do not meet our obligations, the FDA **and EC** may issue ~~a~~ non- compliance ~~letter~~ **letters** and may also consider ZTALMY to be misbranded and subject to potential enforcement action. There is a risk that the studies could take longer than expected to complete or the studies may have adverse findings which may require additional investments and have the potential to materially impact our marketing of ~~Ztalmy~~ **ZTALMY** . We are also subject to ongoing FDA **and EC** requirements governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, safety surveillance, patient registry, import, export, advertising, ~~50promotion~~ -- **promotion** , recordkeeping and reporting of safety and other post- market information. The safety profile of ganaxolone will continue to be closely monitored by the FDA **, EC** and comparable foreign regulatory authorities after approval. If new safety information becomes available after approval of ganaxolone, the FDA **, EC** or **other** comparable foreign regulatory authorities may require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on ganaxolone' s indicated uses or marketing, or impose ongoing requirements for potentially costly post- approval trials or post- market surveillance. We will also be subject to continued compliance with current good manufacturing practices

(cGMP) and good clinical practices (GCP) requirements for any clinical trials that we conduct post- approval. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA **, EC** and other regulatory authorities for compliance with cGMP and other regulations. If we or a regulatory authority discover previously unknown problems with a product, such as AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory authority may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. If we, ganaxolone or the manufacturing facilities for ganaxolone fail to **meet or** comply with applicable regulatory requirements **or product specifications** , a regulatory authority may, among other things: ● issue warning letters or untitled letters; ● mandate modifications to promotional materials or require us to provide corrective information to healthcare practitioners; ● require us to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions and penalties for noncompliance; ● seek an injunction or impose civil or criminal penalties or monetary fines; ● suspend or withdraw regulatory approval; ● suspend any ongoing clinical trials; ● refuse to approve pending applications or supplements to applications filed by us; ● suspend or impose restrictions on operations, including costly new manufacturing requirements; ~~or~~ **or54** ● seize or detain products, refuse to permit the import or export of products, or require us to initiate a product recall. The occurrence of any event or penalty described above may inhibit or preclude our ability to commercialize ganaxolone and generate revenue. The FDA **' s, EC** ' s and other regulatory authorities' policies may change, and additional government regulations may be enacted **. An important and foreseeable example of this is the forthcoming EU pharmaceutical legislation revision** . We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U. S. or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval for ganaxolone that we may have obtained, and we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations. Advertising and promotion of pharmaceutical products, including ZTALMY, is heavily scrutinized by, among others, the FDA, the U. S. Department of Justice (DOJ), the Office of the Inspector General of the U. S. Department of Health and Human Services (HHS OIG), state attorneys general, members of Congress and the public. The FDA and other federal regulatory agencies closely regulate the marketing and promotion of drugs through, among other things, standards and regulations for direct- to- consumer advertising, advertising and promotion to healthcare professionals, communications regarding unapproved uses, industry-sponsored scientific and educational activities, and promotional ~~51activities~~ -- **activities** involving the Internet. A product cannot be promoted before it is approved. After approval, product promotion can include only those claims relating to safety and effectiveness that are consistent with the labeling approved by the FDA. Healthcare providers are permitted to prescribe drugs for " off- label " uses — that is, uses not approved by the FDA and not described in the product' s labeling — because the FDA does not regulate the practice of medicine. However, FDA regulations impose restrictions on manufacturers' communications regarding off- label uses. Broadly speaking, a manufacturer may not promote a drug for off- label use, but under certain conditions may engage in non- promotional, balanced, scientific communication regarding off- label use. Failure to comply with applicable FDA requirements and restrictions in this area may subject a company to adverse publicity and enforcement action, including enforcement letters, inquiries and investigations, and civil and criminal sanctions by the FDA or other government agencies. In addition, advertising and promotion of ganaxolone, if approved outside of the U. S., will be heavily scrutinized by comparable foreign regulatory authorities. In the U. S., promoting ganaxolone for unapproved indications can also subject us to false claims litigation under federal and state statutes, and other litigation and / or investigation, which can lead to civil and criminal penalties and fines and agreements that materially restrict the manner in which we promote or distribute our drug products. These false claims statutes include the False Claims Act (FCA), which allows any individual to bring a lawsuit against a pharmaceutical company on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government prevails in the lawsuit, the individual will share in any fines or settlement funds. If we do not lawfully promote our approved products, we may become subject to such litigation and / or investigation and, if we are not successful in defending against such actions, those actions could adversely affect our business prospects, financial condition and results of operations. ~~In~~ **55In** the European Union (EU), strict requirements and restrictions regarding advertising and promotion apply, the details of which may vary per EU Member States. Violation of those rules could subject us to litigation, investigations and / or civil and criminal penalties, which could adversely affect our business, prospects, financial condition and results of operations. Our **continued** commercial success depends upon attaining significant market access and acceptance of ZTALMY among physicians, patients, government and private payers and others in the medical community and attaining sufficient reimbursement for **ZTALMY and other** ganaxolone **products** . Even though ZTALMY received FDA **and EC** approval for CDD, it may not gain market acceptance among physicians, patients, government and private payers, or others in the medical community. Market acceptance of ZTALMY (and of any potential future products we commercialize) depends on a number of factors, including: ● clinically and commercially viable product profile as supported by clinical trials; ● efficacy and safety of ganaxolone, or ganaxolone administered with other drugs, each as demonstrated in clinical trials and post- marketing experience; ● clinical indications for which ganaxolone is approved; ● acceptance by physicians and patients of ganaxolone as a safe and effective treatment; ● potential and perceived advantages of ganaxolone over alternative treatments; ● safety of ganaxolone seen in a broader patient group, including its use outside the approved indications should physicians choose to prescribe for such uses; ● prevalence and severity of any side effects and drug interactions with other medications, including other antiseizure medications; ~~52~~ ● product labeling or product insert requirements of the FDA **, EC** or comparable foreign regulatory authorities; ● restrictions in distribution and use due to controlled substance laws and regulations; ● timing of market introduction of ganaxolone as well as competitive products; ● cost of treatment in relation to alternative treatments; ●

availability of coverage and adequate reimbursement and pricing by government and private payers; ● ability to manufacture commercial quantities of ZTALMY (or any future products) at a reasonable cost and with sufficient speed to meet commercial demand; ● ability to obtain and maintain appropriate state licenses in the states in which we intend to sell ZTALMY ~~(~~or any future products ~~)~~; ● ability to successfully defend any challenges to our intellectual property relating to ZTALMY (or any future products); ● relative convenience and ease of administration **of ZTALMY or any future products** ; **56** ● effectiveness of our sales and marketing strategy and efforts and effective use of promotional resources; ● adequate commercial investment; and ● stability and continuity of product supply chains. If ZTALMY fails to achieve market acceptance among physicians, patients, government or private payers or others in the medical community, or ~~the~~ products or product candidates **co-** ~~that are being~~ administered with ganaxolone cause AEs, as the case may be, we may not be able to generate significant revenues, which would compromise our ability to become profitable. Many of these matters are beyond our control and are subject to other risks described elsewhere in this " Risk Factors " section. Accordingly, we cannot assure you that we will be able to successfully commercialize or generate revenue from ZTALMY (or any future products). We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do. The development and commercialization of new drug products is highly competitive. We face competition with respect to ganaxolone both for the treatment of CDD and for other indications ~~,~~ and will face competition with respect to any other product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which we are developing ganaxolone. Some of these competitive products and therapies are based on scientific approaches that are the same as, or similar to, our approach, and others are based on entirely different approaches. For example, there are several companies developing product candidates that target the same GABAA neuroreceptor that we are targeting or that are testing product candidates in the same indications that we are testing. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization. ~~53Ganaxolone~~ -- **Ganaxolone** is presently being developed as an antiepileptic therapeutic. There are a variety of marketed therapies available for these patients. Specifically, there are more than 25 approved AEDs available in the U. S. and worldwide, including the generic products levetiracetam, lamotrigine, carbamazepine, oxcarbazepine, valproic acid and topiramate. Recent market entrants include branded products developed by UCB (including acquisition of Zogenix), Eisai, Jazz Pharmaceuticals (via acquisition of GW Pharmaceuticals), SK Biopharmaceuticals and Sunovion Pharmaceuticals. In addition, there are several drugs in clinical development for the treatment of pediatric orphan epilepsy indications, including compounds being developed by **Eisai,** Jazz Pharmaceuticals (via acquisition of GW Pharmaceuticals), **Longboard Pharmaceuticals, Neurocrine Biosciences, Praxis Precision Medicines,** UCB (including acquisition of Zogenix) **,** and Takeda. Many of the approved drugs are well established therapies or products and are widely accepted by physicians, patients and third- party payers. Insurers and other third- party payers may also encourage the use of generic products. These factors may make it difficult for us to achieve market acceptance at desired levels or in a timely manner to ensure viability of our business. More established companies may have a competitive advantage over us due to their greater size, cash flows and institutional experience. Compared to us, many of our competitors may have significantly greater financial, technical and human resources. As a result of these factors, our competitors may obtain regulatory approval of their products before we are able to, which may limit our ability to develop or commercialize ganaxolone. Our competitors may also develop products that are safer, more effective, more widely used and cheaper than ours, and may also be more successful than us in ~~manufacturing~~ **57manufacturing** and marketing their products. These appreciable advantages could render ganaxolone obsolete or non- competitive before we can recover the expenses of ganaxolone' s development and commercialization. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early- stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and subject registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. If we are unable to differentiate ZTALMY from current and future products or existing methods of treatments, our ability to successfully commercialize ZTALMY would be adversely affected. We initially intend to commercialize ZTALMY for the treatment of CDD and seek FDA approval for ganaxolone with respect to additional indications. Ganaxolone is the first product to receive regulatory approval for reduction of seizures specifically in patients with CDD. Patients with CDD are generally on a number of anti- epileptic medications and physicians' determining whether to prescribe ZTALMY to their CDD patients may add ZTALMY to existing regimens for patients or make changes in their patients' current medications to introduce ZTALMY. If we are unable to achieve significant differentiation for ZTALMY against these other products and treatments or future treatments, including on the basis of efficacy, safety and tolerability profile, reliability, convenience of administration, price and reimbursement, the opportunity for ZTALMY to be commercialized successfully would be adversely affected. ZTALMY is our first commercial product. If our sales and marketing capabilities to market and sell **ZTALMY and other** ganaxolone **products** are not effective, we may be unable to generate meaningful revenue. ZTALMY is our first commercial product and **our** ~~we have hired experienced~~ commercial leadership **continues** ~~in our organization~~ to support **the** commercialization of ZTALMY ~~, including~~ **and includes** sales, marketing, sales operations, a field force, market access professionals, and supply chain and distribution professionals. We compete for commercial talent with companies that have extensive, well- funded marketing and sales operations and successful products in the market. We have a limited track record with the **commercialization of** ~~early launch for~~ ZTALMY ~~in~~ **for** CDD **,** which may make it more difficult to attract and retain effective commercial talent. If we are unable to maintain an effective commercial team, we may not be

~~54successful --~~ **successful** in generating meaningful revenue. Even if we are able to maintain an effective commercial team, we may be unable to compete successfully against more established companies. While ZTALMY has received favorable reimbursement determinations to date from third party payers for its approved indication, adverse changes in reimbursement or failure to obtain favorable reimbursement for future indications, if approved, could harm our business. Our ability to successfully commercialize ganaxolone depends, in part, on the extent to which coverage and adequate reimbursement for ganaxolone is available from government health administration authorities, including Medicaid, which we expect will be a significant portion of patients prescribed ZTALMY, private health insurers and other organizations. Government authorities and commercial third- party payers, such as private health insurers and health maintenance organizations, determine which medications they will cover, the process for making such decisions, and the reimbursement levels for those medications. Obtaining formulary coverage and favorable reimbursement levels for ZTALMY from government authorities or other third-party commercial payers can be a time consuming and costly process, especially in the early years ~~of~~ **after** regulatory approval. It is expected that we will be required to provide supporting clinical scientific and economic evidence in the form of cost-effectiveness and real- world data, outcomes beyond the data required to obtain marketing approval. We may not be able to gain acceptance from government health authorities, third- party payers or employer sponsored plans and, even if we are able to do so, the timing and the consistency in payer formulary placement or utilization management may vary greatly from government health authorities, third- party payers and by employer sponsored plans. A primary trend in the U. S. healthcare industry and elsewhere is budget predictability and cost containment. Government authorities and third- party payers have attempted to control costs by limiting access through utilization ~~management~~ **58management** controls, formulary placement and reimbursement amounts for particular medications and procedures. Increasingly, third- party payers are requiring that drug companies provide them with predetermined utilization discounts from list prices and are challenging the prices charged for drugs. Third- party payers or PMBs may also seek additional clinical and economic evidence, beyond the data required to obtain marketing approval, which may include demonstrating clinical benefits and value in specific patient populations before covering ganaxolone for those patients. We cannot be sure that formulary placement, coverage and adequate reimbursement will be available for ganaxolone and, if such is available, what hurdles may be put in place for prescribing physicians to navigate. Coverage and reimbursement may impact physician or institutional demand for ganaxolone, and that demand may vary by region or by payer segment. If coverage and reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize ganaxolone. There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA **, EC** or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may only be temporary. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on formulary coverage or reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs will be reduced by mandatory discounts or rebates required by Medicaid government healthcare programs and may be reduced by private payers and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the U. S. ~~.~~Third- party payers and PBMs often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies. Any challenges in obtaining coverage and favorable reimbursement rates from both government- funded and private payers for ZTALMY could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition. ~~55If~~ **If** the market opportunities for ZTALMY ~~in~~ **for** CDD and other indications for which we obtain regulatory approval, if any, are smaller than we believe they are, our results of operations may be adversely affected and our business may suffer. We focus our research and product development on therapeutics to treat patients suffering from seizure disorders. Our projections of both the number of people who have these disorders, as well as the subset of people with these diseases who have the potential to benefit from treatment with ganaxolone, are based on estimates. These estimates may prove to be incorrect and new studies or clinical trials may change the estimated incidence or prevalence of these disorders. The number of patients in the U. S. and elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with ganaxolone, or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business. ZTALMY has received regulatory approval in the U. S. **and EU** for CDD **,** and our estimates of the market for ZTALMY ~~in~~ **for** CDD may be incorrect. Our ability to obtain market information is limited since ZTALMY is the first drug to be approved specifically for use in seizures associated with CDD and the ICD10 code for CDD was established in 2020, and there is limited market data available for CDD. A variety of risks associated with marketing ganaxolone ~~internationally~~ **outside of the U. S.** could materially adversely affect our business. We **have obtained regulatory approval for ZTALMY for CDD in the EU and** plan to seek regulatory approval for ganaxolone **in** ~~outside of the~~ **other** ~~U~~ **international jurisdictions** . ~~S., and, accordingly~~ **Accordingly** , we expect that we will be subject to additional risks related to operating in foreign countries if we obtain the necessary approvals, including: ● differing regulatory requirements in foreign countries; ● the potential for so- called parallel importing, which is what happens when a local seller, faced with high or higher local prices, opts to import goods from a foreign market (with low or lower prices) rather than buying them locally; **59** ● viable pricing awarded in international markets to support commercial investment is required; ● unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements; ● economic weakness, including inflation, or political instability in particular foreign economies and markets; ● compliance with tax, employment, immigration and labor laws for employees living or traveling abroad; ● foreign taxes, including with respect to our Irish subsidiary; ● foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country; ● difficulties staffing and managing foreign operations; ● workforce

uncertainty in countries where labor unrest is more common than in the U. S.; ● challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the U. S.; ● production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; ~~and56 --~~ **and** ● business interruptions resulting from geo- political actions, including war and terrorism ~~, as well as from pandemics, including the COVID- 19 pandemic~~ . These and other risks associated with our international operations may materially adversely affect our ability to attain or maintain profitable operations. Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of ganaxolone or other future product candidates that we may develop. We face an inherent risk of product liability exposure related to the testing of ganaxolone by us or our investigators in human clinical trials and will face an even greater risk now that ZTALMY has received FDA approval and we enter the commercial market. Product liability claims may be brought against us by patients enrolled in our clinical trials, patients, healthcare providers or others using, administering or selling ganaxolone. If we cannot successfully defend ourselves against claims that ganaxolone caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in, for example: ● decreased demand for ganaxolone; ● termination of clinical trial sites, entire clinical trials or development programs; ● injury to our reputation and significant negative media attention; ● withdrawal of clinical trial patients; ● significant costs to defend the related litigation; ● substantial monetary awards to patients; **60** ● loss of revenue; ● diversion of management and scientific resources from our business operations; ● the inability to commercialize ganaxolone; and ● increased scrutiny and potential investigation by, among others, the FDA, the DOJ, the HHS OIG, state attorneys general, members of Congress and the public. We currently have product liability insurance coverage, which may not be adequate to cover all liabilities that we may incur. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. We have expanded our product liability insurance coverage to include commercial sales of ZTALMY, but we may be unable to obtain commercially reasonable limits for product liability insurance. Large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us, particularly if judgments exceed our insurance coverage, could have a material adverse effect on our business and financial condition. If the FDA **, EC** or other applicable regulatory authorities approve generic **or other** products that compete with any of our products or product candidates, it could reduce our sales of those products or product candidates. In the U. S., after an NDA is approved, the product generally becomes a " listed drug " which can, in turn, be relied upon by potential competitors in support of approval of an ANDA. The Federal Food, Drug, and Cosmetic Act, FDA regulations and other applicable regulations and policies provide incentives to manufacturers to create generic, non- infringing versions of a drug to facilitate the approval of an ANDA. These manufacturers might show that their product has the same active ingredients, dosage form, strength, route of administration, conditions of use, and labeling as ~~57our --~~ **our** product candidate and might conduct a relatively inexpensive study to demonstrate that the generic product is absorbed in the body at the same rate and to the same extent as, or is bioequivalent to, our product **. In the EU, a medicinal product containing a new active substance, which has never been approved in a medicinal product in the EU before, as well as in certain other circumstances, is entitled to eight years of data exclusivity and ten years of market exclusivity following a grant of marketing authorization (MA). During the first eight years, no generic company may refer to the data used by us to obtain a marketing authorization. After eight years, generics may reference our data, provided that they have demonstrated with appropriate bioavailability studies, that their product is bioequivalent to our product. Generic medicinal products may only be placed on the market in the EU after a total of ten years have expired after our initial MA** . These generic equivalents would be significantly less costly than ours to bring to market, and companies that produce generic equivalents are generally able to offer their products at lower prices. Thus, after the introduction of a generic competitor, a significant percentage of the sales of any branded product are typically lost to the generic product. Accordingly, competition from generic equivalents to our products would substantially limit our ability to generate revenues and therefore to obtain a return on the investments we have made in our products. Risks Related to Clinical Development and Regulatory Approval of our Product CandidatesOur future success is dependent on the successful clinical development, regulatory approval and **continued** commercialization of ganaxolone, which is being studied in several indications and will require significant capital resources and years of additional clinical development effort. ~~We have only recently~~ **In March 2022, we** received FDA approval of ZTALMY ~~in~~ **for** CDD **in the U. S., and in July 2023, we received EC approval of ZTALMY for CDD in the EU** , and we plan to develop ganaxolone in several **other geographic regions and** additional indications in oral and IV formulations. As a result, our business is dependent on our ability to successfully complete clinical development, scale- up manufacturing, obtain regulatory approval, and, if **it is** approved, commercialize ganaxolone in a timely manner. We cannot commercialize **additional indications or formulations of** ganaxolone in the U. S. in any other indication without first obtaining regulatory approval from the FDA; similarly, we ~~cannot~~ **61cannot** commercialize **additional indications or formulations of** ganaxolone outside of the U. S. without obtaining regulatory approval from comparable foreign regulatory authorities. Before obtaining regulatory approvals for the commercial sale of ganaxolone for a target indication, we must demonstrate with substantial evidence gathered in preclinical studies and clinical trials and, with respect to approval in the U. S., to the satisfaction of the FDA, that ganaxolone is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate. Ganaxolone is metabolized extensively in animals and humans. During the development of CDD, one major metabolite (M2) was present in plasma of humans that was not found in plasma of rats or dogs. The chemical structure of M2 has been identified. An activity assay, dose range finding study in rats and an in vivo micronucleus with comet analysis for the detection of genotoxicity have been conducted and the results submitted to the FDA. **The M17 in vitro drug- drug interaction (DDI) study was submitted in August 2023, and the M17 in vivo PK study with Brain Penetrance was submitted in December 2023.** Results from additional preclinical studies are required ~~to~~ **by** the FDA as post- marketing requirement (s). These include: 2- year carcinogenicity studies of ganaxolone and the major human

unconjugated plasma metabolite, M2, in rats; a 26- week carcinogenicity of ganaxolone in transgenic mice; **and** a juvenile animal toxicity study of the major human unconjugated plasma metabolite, M2, in rats ~~; a CNS distribution study of the M47 metabolite in rats; and in vitro studies to assess the drug interaction potential of M47 metabolite~~ . Additional post- marketing requirements ~~include~~ **included** : phase 1 renal and hepatic impairment studies and a thorough QTc study; and extractable / leachable study results on the container closure system. The Phase 1 renal impairment study commitment was ~~completed and~~ submitted to the FDA in May 2022. The Phase 1 hepatic impairment study and the thorough QTc study were completed and submitted to the FDA in December 2022 **. The extractable / leachable study results on the container closure system were submitted to the FDA in July 2023** . We plan to complete the required FDA studies within the required FDA timeframe. However, there is a risk that the studies could take longer than expected to complete or the studies may have adverse findings which may require additional investments and have the potential to materially impact the label or our ability to market ~~Ztalmy~~ **ZTALMY** . In **connection with the EC approval of ZTALMY for CDD, we have several post- marketing authorization measures. The clinical study report (CSR) for Study 1042- HME- 1001 was submitted in September 2023. The ganaxolone Steady- State Metabolite Study report, the final Study 1042- CDD- 3001 CSR with the open- label trial completion, the M17 in vitro DDI study, and the M17 in vivo PK study with Brain Penetrance were submitted in December 2023. The remaining post- marketing authorization measures include: participating in Study LLF001 (CANDID observational study) and providing annual updates; participating in the CDD- IPR- CDD- 0 CDKL5 Deficiency Disorder International Patient Registry and providing six monthly updates; conducting a toxicity study with a sediment dwelling organism and an updated Environmental Risk Assessment; developing a sodium benzoate- free suspension and assessing the compatibility of the oral suspension with food, drinks, enteral tubes, shake time and stand time; conducting a 26- Week Oral Gavage Toxicity Study of M2; conducting a M2 Embryo- fetal Development study; and conducting a 26- week Oral Gavage Carcinogenicity Study of ganaxolone and M2. The EMA also requested weight of evidence (WoE) assessments to evaluate the need for a 2- year carcinogenicity study in rats with ganaxolone, a 2- year carcinogenicity study in rats with M2, and a juvenile toxicity study with M2. While we expect to be able complete the remaining required studies within the requested EMA timeframe,** ~~the~~ **there** ~~EU, if~~ **is a risk that the studies could take longer or the studies may have adverse findings which may require** additional **investments and have** ~~studies are needed, these~~ -- **the** ~~are usually required before~~ **potential to materially impact the label or** ~~or~~ **our** ~~during MAA review~~ **ability to marker ZTALMY** . We are conducting the RAISE trial in RSE, which is a life **-** threatening medical condition involving prolonged seizure activity in seriously ill patients. The RAISE trial requires expertise in electroencephalogram (EEG) interpretation, which may be subject to variability, and the FDA or foreign regulatory authorities could find the data generated in this trial inadequate or difficult to interpret, which could delay, limit or prevent regulatory approval for this indication. There is also a risk that the Phase 3 clinical trial of ganaxolone in RAISE will generate data that is not sufficient to support regulatory approvals for this indication. Additionally, the clinical trial endpoints of the RAISE trial are based on treatment outcomes, including initiation of anesthesia for treatment of RSE. Practice variability in the use of anesthesia for SE treatment could adversely impact the ability to show a treatment effect with ganaxolone. Even if the RAISE trial shows that ganaxolone is effective, there is a risk that the FDA will require more safety data generated with IV ganaxolone at the doses given to patients in this trial before approving an NDA or require post approval commitments to generate additional safety data as a condition of approval ganaxolone for use in RSE. ~~58We have recently~~ **62In August 2021, we** reported data from ~~the CALM~~ **an open- label, single- arm Phase 2** trial evaluating **the** safety and ~~efficacy~~ **effectiveness** of adjunctive oral ganaxolone treatment in **23** patients with TSC. The primary endpoint showed **a** median 16. 6 % reduction in 28- day ~~primary endpoint seizure~~ frequency **of TSC- associated seizures** relative to the four- week baseline period. In addition, data from the Phase 2 TSC trial suggested that in patients on concomitant Epidiolex, early elevation of ganaxolone blood levels occurred and appeared to be linked to greater somnolence. A formal Phase 1 drug- drug interaction trial was completed, demonstrating a lack of significant interaction between ganaxolone and Epidiolex. Additionally, the titration schedule for all subjects in the Phase 3 TSC trial has been adjusted to maximize tolerability. Undesirable side effects could delay clinical trials and result in the FDA or other regulatory authorities requiring us to conduct additional studies or trials for our product candidate either prior or post- approval, such as additional drug- drug interaction studies or safety or efficacy studies, or it may object to elements of our clinical development program. There is also a risk that the Phase 3 clinical trial of ganaxolone in TSC will generate data that is not sufficient to support regulatory approvals for this indication. Even if ganaxolone were to obtain approval from the FDA and comparable foreign regulatory authorities for TSC, RSE, or any other indication under development, any approval might contain significant limitations, such as restrictions as to specified age groups, warnings, precautions or contraindications, or may be subject to burdensome post- approval trial or risk management requirements. If we are unable to obtain regulatory approval for ganaxolone in these additional indications in one or more jurisdictions, or any approval contains significant limitations, we may not be able to obtain sufficient funding or generate sufficient revenue to continue the development of any other indications for ganaxolone or any other product candidate that we may in- license, develop or acquire in the future. Furthermore, even with regulatory approval for ganaxolone, we will still need to develop a commercial organization, establish commercially viable pricing and obtain adequate reimbursement from third- party and government payers. If we are unable to successfully commercialize ganaxolone, we may not be able to earn sufficient revenue to continue our business. We are conducting clinical development activities for ganaxolone across multiple indications, and such clinical development activities may not produce favorable results, which could adversely impact our ability to achieve regulatory approval for ganaxolone in such indications. We are conducting clinical development activities for ganaxolone across multiple indications. Success in preclinical studies and early clinical trials in one indication does not ensure that later clinical trials in such indication or other indications will generate adequate data to demonstrate the efficacy and safety of ganaxolone in one or more indications. Furthermore, unfavorable clinical trial results in one ganaxolone indication may adversely impact our ability to continue to develop such indication or other

ganaxolone indications. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience, have suffered significant setbacks in clinical trials, even after seeing promising results in earlier studies and clinical trials. For example, while ganaxolone showed statistical separation from placebo in a Phase 2 clinical trial in adjunctive treatment of adults with focal onset seizures, ~~ganaxolone~~ **it** failed to show a similar statistically significant separation in a Phase 3 clinical trial for the same indication. As a result, we discontinued our program in adult focal onset seizures and began to focus our efforts on advancing ganaxolone in RSE and pediatric orphan genetic epilepsy indications. We do not know whether the clinical trials we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market ganaxolone in any particular jurisdiction or indication. If clinical trials underway or conducted in the future do not produce favorable results, our ability to achieve regulatory approval for ganaxolone in those indications may be adversely impacted. Further, even if we believe the data collected from our clinical trials of ganaxolone are promising, these data may not be sufficient to support approval by the FDA or foreign regulatory authorities. Pre- clinical and clinical data can be interpreted in different ways. Accordingly, the FDA or foreign regulatory authorities could interpret these data in different ways from us, which could delay, limit or prevent regulatory approval. Ganaxolone may cause undesirable side effects or have other properties, such as abuse potential, that could delay or prevent its regulatory approval in indications under clinical development, limit the commercial profile of an approved label, or result in significant negative consequences following any marketing approval. Undesirable side effects caused by ganaxolone could cause us, an institutional review board (IRB), or regulatory authorities to interrupt, delay or halt clinical trials and could result in a restrictive label or the delay or denial ~~of~~ **63of** regulatory approval by the FDA or other comparable foreign regulatory authority. ~~More than~~ **As of October 2023, over** 2, ~~300~~ **200** individuals have ~~59received~~ -- **received** ~~oral formulations of~~ ganaxolone for durations from one day to more than two years at doses of 50 to 2, 000 mg / day. The majority of AEs were non- serious and resolved upon discontinuation of therapy. The most common side effects with oral ganaxolone relate to sedation or somnolence. Somnolence and sedation ~~have~~ appeared early during treatment and were generally dose related. In the oral ganaxolone safety database there are no trends of medically important changes in blood chemistry, vital signs, liver function, renal function or cardiovascular parameters in adult or pediatric populations. ~~Additionally~~ **To date**, over ~~60~~ **80** patients have received the IV formulation of ganaxolone in our clinical trials ~~to date~~ **or under emergency INDs**. Although ganaxolone has generally been well- tolerated by patients in our clinical trials to date, in some cases there were side effects, and some of the side effects were severe. The most frequent side effects were dizziness, fatigue and somnolence (or drowsiness). More side effects of the CNS were categorized as severe as compared to side effects of other body systems. Antiepileptic drugs, including ganaxolone, increase the risk of suicidal thoughts or behavior. In addition, as with most antiepileptic drugs, ganaxolone should be withdrawn gradually to minimize the risk of increased seizure frequency and status epilepticus. There were no deaths reported in the double- blind phase of the Marigold Trial. Three deaths globally have occurred during the open label extension phase of the trial, two of which were assessed by the investigators as unrelated to trial treatment. The third death was assessed by the investigator as probably related to trial medication. Given the severity of CDD and its medical complications, **SAEs** ~~serious adverse events~~ or deaths may occur which, in the absence of a control group, make determination of relatedness to treatment difficult. If these side effects are reported in future clinical trials, or if other safety or toxicity issues are reported in our future clinical trials, we may not receive approval to market ganaxolone or approval may be limited, which could prevent us from ever generating material revenue or achieving profitability. Furthermore, although we are currently developing ganaxolone for multiple indications, negative safety findings in any one indication could force us to delay or discontinue development in other indications. Results of our clinical trials could reveal an unacceptably high severity and prevalence of side effects. In such an event, our clinical trials could be suspended or terminated, and the FDA or comparable foreign regulatory authorities could order us to cease further development, or deny approval, of ganaxolone for any or all targeted indications. Drug- related side effects could affect trial subject recruitment or the ability of enrolled patients to complete our future clinical trials and may result in potential product liability claims. Additionally, in our clinical trials ganaxolone is added to the standard of care, which includes many antiseizure medications. Drug interactions with any of the medications could result in safety concerns or reduce the population in which ganaxolone may be used. For example, in our recently completed clinical trial of ganaxolone in TSC, we reported data that suggested that in patients on concomitant Epidiolex, early elevation of ganaxolone blood levels occurred and appeared to be linked to greater somnolence. A formal Phase 1 drug- drug interaction trial was completed, demonstrating a lack of significant interaction between ganaxolone and Epidiolex. Additionally, the titration schedule for all subjects in the Phase 3 TSC trial has been adjusted to maximize tolerability. Undesirable side effects could delay clinical trials and result in the FDA or other regulatory authorities requiring us to conduct additional studies or trials for our product candidate either prior to or post- approval, such as additional drug- drug interaction studies or safety or efficacy studies or trials, or it may object to elements of our clinical development program. Ganaxolone is metabolized extensively in animals and humans. During the development of CDD, one major metabolite (M2) was present in plasma of humans that was not found in plasma of rats or dogs. The chemical structure of M2 has been identified. An activity assay, dose range finding study in rats and an in vivo micronucleus with comet analysis for the detection of genotoxicity have been conducted and the results submitted to the FDA. **The M17 in vitro drug- drug interaction (DDI) study was submitted in August 2023, and the M17 in vivo PK study with Brain Penetrance was submitted in December 2023.** Results from additional preclinical studies are required ~~to~~ **by** the FDA as post- marketing requirement (s). These include: 2- year carcinogenicity studies of ganaxolone and the major human unconjugated plasma metabolite, M2, in rats; a 26- week carcinogenicity of ganaxolone in transgenic mice; **and** a juvenile animal toxicity study of the major human unconjugated plasma metabolite, M2, in rats ~~; a CNS distribution study of the M47 metabolite in rats; and in vitro studies to assess the drug interaction potential of M47 metabolite~~. Additional post- marketing requirements include: phase 1 renal and hepatic impairment studies and a thorough QTc study; and extractable / leachable study results on the container closure system. The Phase 1 renal impairment study commitment was ~~completed and~~ submitted to the FDA in May 2022. The Phase 1 hepatic impairment study

and the thorough QTc study were completed and submitted to the FDA in December 2022. **The extractable / leachable study results on the container closure system were submitted to the FDA in July 2023.** We plan to complete the required FDA studies within the required FDA timeframe. However, there is a risk that the ~~studies~~ **64studies** could take longer than expected to complete or the studies may have adverse findings which may require additional ~~60investments~~ -- **investments** and have the potential to materially impact **the label** ~~our~~ -- **or our ability to market ZTALMY. In connection with the EC approval of ZTALMY for CDD, we have several post-** marketing ~~of Ztalmy~~ **authorization measures** . ~~In~~ **The clinical study report (CSR) for Study 1042- HME- 1001 was submitted in September 2023. The ganaxolone Steady- State Metabolite Study report, the final Study 1042- CDD- 3001 CSR with the open- label trial completion, the M17 in vitro DDI study and the M17 in vivo PK study with Brain Penetrance were submitted in December 2023. The remaining post- marketing authorization measures include: participating in Study LLF001 (CANDID observational study) and providing annual updates; participating in the CDD- IPR- CDD- 0 CDKL5 Deficiency Disorder International Patient Registry and providing six monthly updates; conducting a toxicity study with a sediment dwelling organism and an updated Environmental Risk Assessment; developing a sodium benzoate- free suspension and assessing the compatibility of the oral suspension with food, drinks, enteral tubes, shake time and stand time; conducting a 26- Week Oral Gavage Toxicity Study of M2; conducting a M2 Embryo- fetal Development study; and conducting a 26- week Oral Gavage Carcinogenicity Study of ganaxolone and M2. The EMA also requested weight of evidence (WoE) assessments to evaluate the need for a 2- year carcinogenicity study in rats with ganaxolone, a 2- year carcinogenicity study in rats with M2, and a juvenile toxicity study with M2. While we expect to be able complete the remaining required studies within the requested EMA timeframe,** ~~the~~ **there** ~~EU, if~~ **is a risk that the studies could take longer than expected to complete or the studies may have adverse findings which may require** additional **investments and have** ~~studies are needed, these~~ -- **the** ~~are usually required before~~ **potential to materially impact the label or** ~~or~~ **our** ~~during MAA review~~ **ability to market ZTALMY** . If we or others identify undesirable side effects caused by ganaxolone after receiving marketing approval, a number of potentially significant negative consequences could result, including: ● we may be forced to suspend marketing of ganaxolone; ● regulatory authorities may withdraw their approvals of ganaxolone; ● regulatory authorities may require additional warnings on the label that could diminish the usage or otherwise limit the commercial success of ganaxolone; ● we may be required to conduct post- marketing trials; ● we may be required to develop a Risk Evaluation and Mitigation Strategy (REMS) for ganaxolone or if a REMS is already in place, to incorporate additional requirements under the REMS, and comparable regulatory authorities outside the U. S. may require similar risk management strategies; ● we could be sued and held liable for harm caused to patients; and ● our reputation may suffer. Any of these events could prevent us from achieving or maintaining market acceptance of ganaxolone. The FDA recommended scheduling of ganaxolone as a controlled substance based on the abuse liability assessment conducted for the NDA submission. As such, the U. S. DEA reviewed ganaxolone and following the review classified ganaxolone as a Schedule V drug. As a controlled substance, the manufacture, import, export, distribution, storage, sale, dispensing, prescribing, and use will be subject to a significant degree of additional regulation by the DEA as well as state regulatory authorities. The restrictive nature of these regulations could also limit commercialization and market acceptance of ganaxolone. ~~The~~ **65The** therapeutic efficacy and safety of ganaxolone in indications other than CDD have not been established by regulatory authorities, and we may not be able to successfully develop and commercialize ganaxolone in the other indications under clinical development in the future. Our ability to generate revenue from ganaxolone in other indications we have under clinical development such as RSE and TSC will depend on our successful development and commercialization after regulatory approval in those indications, which is subject to many potential risks and may not occur. Ganaxolone may interact with human biological systems in unforeseen, ineffective or harmful ways. If ganaxolone is associated with undesirable side effects or has characteristics that are unexpected in these indications, we may need to limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk- benefit perspective. Many compounds that are approved in one indication fail to achieve regulatory approvals in additional indications. As a result of these and other risks described herein that are inherent in the development of novel therapeutic agents, we may never successfully develop ganaxolone in additional indications, which would significantly decrease the commercial potential of ganaxolone overall. Clinical development of product candidates involves a lengthy and expensive process with an uncertain outcome. Clinical trials are expensive, can take many years to complete, and are inherently uncertain as to outcome. Failure can occur at any time during the clinical development process. ~~61We~~ **We** may experience delays in our ongoing or future clinical trials and we do not know whether planned clinical trials will begin or enroll patients on time, need to be redesigned or be completed on schedule, if at all. There can be no assurance that the FDA or other foreign regulatory authorities will not put clinical trials of ganaxolone on clinical hold now or in the future. Clinical trials may be delayed, suspended or prematurely terminated for a variety of reasons, such as: ● delay or failure in reaching agreement with the FDA or a comparable foreign regulatory authority on a trial design that we are able to execute; ● delay or failure in obtaining authorization to commence a trial or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial; ● delay or failure in reaching agreement on acceptable terms with prospective clinical 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; ● lack of adequate essential functions and staff, ~~including related to the COVID- 19 pandemic,~~ which may impact the ability of site staff to conduct assessments, or result in delays to the conduct of the assessments, as part of our clinical trial protocols, or the ability to enter assessment results into clinical trial databases in a timely manner; ● delay or failure in obtaining IRB approval or the approval of other reviewing entities, including comparable foreign regulatory authorities, to conduct a clinical trial at each site; ● withdrawal of clinical trial sites from our clinical trials as a result of changing standards of care or the ineligibility of a site to participate in our clinical trials; ● delay or failure in recruiting and enrolling suitable trial patients to participate in a trial; ● delay or failure in trial patients completing a trial or returning for post-

treatment follow- up; ● clinical sites and investigators deviating from a trial protocol, failing to conduct the trial in accordance with regulatory requirements, or dropping out of a trial; **66** ● inability to identify and maintain a sufficient number of trial sites, many of which may already be engaged in other clinical trial programs, including some that may be for competing product candidates with the same indication; ● failure of our third- party clinical trial managers to satisfy their contractual duties or meet expected deadlines; ● limitations on our or our third- party clinical trial managers' ability to access and verify clinical trial data captured at clinical trial sites through monitoring and source document verification; ● delay or failure in adding new clinical trial sites; ● ambiguous or negative interim results or results that are inconsistent with earlier results; ● feedback from the FDA or a comparable regulatory authority outside the U. S., IRBs, or data safety monitoring boards, or results from earlier stage or concurrent preclinical studies and clinical trials, that might require modification to the protocol for the trial; ~~62~~ ● decision by the FDA or a comparable regulatory authority outside the U. S., an IRB or us, or a recommendation by a data safety monitoring board to suspend or terminate clinical trials at any time for safety issues or for any other reason; ● unacceptable risk- benefit profile, unforeseen safety issues or adverse side effects or AEs associate with a product candidate; ● failure of a product candidate to demonstrate any or enough of a benefit; ● difficulties in manufacturing or obtaining from third parties sufficient quantities of a product candidate for use in clinical trials that meet internal and regulatory standards; ● lack of adequate funding to continue the clinical trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional clinical trials or increased expenses associated with the services of our CROs and other third parties; ● political developments that affect our ability to develop and obtain approval for ganaxolone or impair our license rights to develop and obtain approval for ganaxolone in other countries; or ● changes in governmental regulations or administrative actions. Trial subject enrollment, which significantly impacts the timing of clinical trials, is affected by many factors including the size and nature of the subject population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, ability to obtain and maintain patient consents, risk that enrolled patients will drop out before completion, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved or product candidates that may be studied in competing clinical trials for the indications we are investigating. Some of our clinical trials are directed at small patient populations. Patient enrollment in these trials could be particularly challenging. In the past, we have experienced delays in enrolling patients in trials directed at small patient populations. We rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials, and while we have agreements governing their committed activities, we have limited influence over their actual performance. If we experience delays in the completion of any clinical trial of ganaxolone, the commercial prospects of ganaxolone may be harmed, and our ability to generate product revenue from ganaxolone, if approved, will be delayed. ~~In~~ **67In** addition, any delays in completing our clinical trials will increase our costs, slow down our development and approval process for ganaxolone and jeopardize our ability to commence product sales and generate revenues. In addition, many of the factors that could cause a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of ganaxolone. We may not be able to obtain or maintain orphan drug exclusivity for ganaxolone across all indications and markets, which could limit the potential profitability of ganaxolone. Regulatory authorities in some jurisdictions, including the U. S. and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200, 000 people in the U. S. Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for an indication for which it receives the designation, then the product is entitled to a period of marketing exclusivity that precludes the FDA from approving another marketing application for the same drug for the same indication for the exclusivity period except in limited situations. For purposes of small molecule drugs, the FDA defines " same drug " as a drug that contains the same active moiety and is intended for the same use as the drug in question. A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. ~~63We~~ **We** have received orphan drug designation in the U. S. for treating Infantile Spasms, SE, CDD, TSC, PCDH19- RE ~~and ,~~ Fragile X Syndrome **and LGS** with ganaxolone and expect that we may in the future pursue orphan drug designations for ganaxolone for one or more additional indications. However, obtaining an orphan drug designation can be difficult and we may not be successful in doing so for additional ganaxolone indications. Orphan drug exclusivity for a product candidate may not effectively protect the product from the competition of different drugs for the same condition, which could be approved during the exclusivity period. In addition, after an orphan drug is approved, the FDA could subsequently approve another application for the same drug for the same indication if the FDA concludes that the later drug is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug exclusive marketing rights in the U. S. also may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition. The failure to obtain or maintain an orphan drug designation for any indication of ganaxolone that we may develop, or the inability to obtain or maintain orphan drug exclusivity could reduce our ability to make sufficient sales of ganaxolone to balance our expenses incurred to develop it, which would have a negative impact on our operational results and financial condition. In the EU, we have received orphan designation for treating CDD **and TSC** with ganaxolone. Orphan designation would entitle us to receive ten years of orphan market exclusivity in the EU, but only if the product continues to meet the orphan designation criteria when the marketing authorization is granted. If a similar medicinal product (i. e., a medicinal product with an identical active substance, or an active substance with the same principal molecular structural features and which acts via the same mechanism) receives marketing authorization for the same indication before we receive marketing authorization, the other product' s orphan market exclusivity may prevent ganaxolone from receiving marketing authorization, unless we are able to demonstrate that ganaxolone is safer, more effective or otherwise clinically superior. In the EU, if we obtain and maintain orphan designation for ganaxolone upon marketing authorization, the

European Commission could subsequently approve a similar medicinal product for the same indication if the European Commission, after assessment by the EMA, concludes that the similar medicinal product is safer, more effective or otherwise clinically superior. Orphan market exclusivity rights in the EU may also be lost if we are unable to supply sufficient quantities of the product. **A forthcoming revision of the EU pharmaceutical legislation aims to change the current orphan market exclusivity system. The proposal intends to reduce the orphan market exclusivity period. It is currently uncertain if the proposal will be adopted in its current form, and it is uncertain if and when the revised legislation would enter into force.** The failure to obtain or maintain an orphan drug designation for any indication of ganaxolone that we may develop, or the inability to obtain or maintain orphan drug exclusivity could reduce our ability to make sufficient sales of ganaxolone to balance our expenses incurred to develop it, which would have a negative impact on our operational results and financial condition. ~~Failure~~ **68Failure** to obtain regulatory approval in international jurisdictions would prevent ganaxolone from being marketed in these jurisdictions. In order to market and sell our products in the EU and many other jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the U. S. generally includes all of the risks associated with obtaining FDA approval. In addition, many countries outside the U. S. require that a product be approved for reimbursement before the product can be approved for sale in that country. We may not obtain approvals from regulatory authorities outside the U. S. on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the U. S. does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. In the European Union, we submitted an MAA for ganaxolone ~~in~~ **for** CDD to the EMA on October 11, 2021 and ~~currently expect the EMA CHMP' s opinion~~ on **October 28,** ~~the MAA by the second quarter of 2023~~ **2021 ,** ~~. The Day 180 report and LoOI~~ we received **formal notification from the EMA that the CDD MAA was validated. With this validation, the EMA began its formal review of the MAA under the centralized procedure. On May 26, 2023, the CHMP adopted a positive opinion recommending approval of ZTALMY and** on ~~January 26~~ **July 28** , 2023 **,** ~~contain a number of outstanding major objections and other~~ -- **the** ~~concerns, including a major objection related~~ **EC approved ZTALMY oral suspension for the adjunctive treatment of epileptic seizures associated with CDD in patients** ~~to~~ **two** ~~the choice~~ **to 17 years** of ~~our regulatory starting material (RSM)~~ **age. ZTALMY may be continued in patients 18 years of age and older** . The ~~CHMP has~~ **EC decision is applicable to all 27 EU member states plus Iceland, Norway and Liechtenstein. ZTALMY is the first treatment in the EU** indicated ~~that~~ **for** the **treatment of seizures associated with CDD** ~~proposed RSM is not acceptable and should be redefined further upstream~~ . ~~If~~ **In connection with the EC approval of ZTALMY for CDD, we have several post- marketing authorization measures, and if** we are unable to ~~address~~ **satisfy** ~~the~~ **these measures** ~~CHMP' s outstanding major objections and other concerns~~ , **we** ~~including the major objection related to the RSM, the European Commission~~ may not ~~approve~~ **maintain** our MAA ~~for ganaxolone in CDD even though we have received FDA approval for CDD in the United States~~ . If we **fail to maintain our MAA or** are unable to obtain approval ~~of ganaxolone by regulatory authorities~~ in ~~the EU or another~~ -- **other** ~~64country~~ **countries** or ~~jurisdiction~~ **jurisdictions** , the commercial prospects of ganaxolone may be significantly diminished and our business prospects could decline. ZTALMY is regulated as a controlled substance, which means the making, use, sale, importation, exportation, and distribution of which is subject to significant regulation by the DEA and other regulatory agencies. The DEA regulates ganaxolone as a schedule V drug. The DEA regulates controlled substances as Schedule I, II, III, IV or V substances. Schedule I substances by definition have no established medicinal use, and may not be marketed or sold in the U. S. A pharmaceutical product may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest risk of abuse and Schedule V substances the lowest relative risk of abuse among such substances. Because ganaxolone is a schedule V controlled substance, the manufacturing, shipping, distribution, import, export, packaging, storing, prescribing, dispensing, selling and use of ganaxolone will be subject to additional regulations, including under the CSA and DEA regulations. Regulations associated with controlled substances also govern production and procurement quotas, recordkeeping, reporting, handling, and disposal. Additionally, because ganaxolone is a controlled substance, facilities conducting research, manufacturing, distributing, importing or exporting, or dispensing ganaxolone must be registered (licensed) to perform these activities and have the security, control, recordkeeping, reporting and inventory mechanisms required by the DEA. All these facilities must renew their registrations annually, except dispensing facilities, which must renew every three years. The DEA, and some states, also conduct periodic inspections of registered establishments that handle controlled substances. These regulations increase the personnel needs and the expense associated with commercialization of products. Because of their restrictive nature, these laws and regulations could also limit commercialization of ganaxolone. Failure to comply with these laws and regulations could also result in loss of DEA registrations, disruption in manufacturing and distribution activities, consent decrees, criminal and civil penalties and state actions, among other consequences. Various states also independently regulate controlled substances. Though state controlled substances laws often mirror federal law, because states are separate jurisdictions, they may separately schedule drugs as well. While some states automatically schedule a drug when the DEA does so, in other states there must be a rulemaking or a legislative action. State scheduling may delay commercial sale of ganaxolone and adverse scheduling could impair the commercial attractiveness of ganaxolone. Many states require separate state registrations in order to be able to obtain, manufacture, handle, distribute and dispense controlled substances for clinical trials or commercial sale, and failure to meet applicable regulatory requirements could lead to enforcement and sanctions from the states in addition to those from the DEA or otherwise arising under federal law. ~~Risks~~ **69Risks** Related to Our Dependence on Third PartiesWe rely on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their duties in compliance with contractual terms and / or regulatory requirements or meet expected timelines, our development plans may be adversely affected and we may not be able to obtain regulatory approval for ganaxolone in

indications other than CDD. We rely on third- party CROs to monitor and manage data for our ongoing preclinical and clinical programs. We also rely on third parties to assist in conducting our preclinical studies in accordance with GLP and the Animal Welfare Act requirements, where applicable. We and our CROs are required to comply with federal regulations and GCP, which are international requirements meant to protect the rights and health of patients that are enforced by the FDA, the competent authorities of the EU Member States and comparable foreign regulatory authorities for ganaxolone. Regulatory authorities enforce GCP through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot ~~assure you~~ **be certain** that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP requirements. In addition, our clinical trials must be conducted with product produced under cGMP requirements. Failure to comply with these regulations may require us to repeat or conduct additional preclinical studies and clinical trials, which would delay the regulatory approval process. ~~65Although~~ -- **Although** we depend heavily on these parties and have contractual agreements governing their activities, we cannot control them and therefore, we cannot be ~~assured~~ **certain** that these third parties will devote sufficient time and resources to our ongoing clinical, nonclinical and preclinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements or for other reasons, our preclinical studies and clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize ganaxolone. As a result, our results of operations and the commercial prospects for ganaxolone would be harmed, our costs could increase and our ability to generate revenue could be delayed. For example, we announced in February 2022 a product supply interruption for our IV ganaxolone clinical supplies. Routine monitoring of stability batches of IV clinical supply material showed visible particulates of aluminum phosphate in the drug solution, which led to a pause in recruitment for the RAISE trial. In May 2022, we announced that the ~~RAISE~~ trial had resumed utilizing new batches of the current IV formulation of ganaxolone **, and we implemented a reduced shelf life of 12 months** . **In agreement** ~~We have also worked~~ with ~~our third- party manufacturers to implement improvements in~~ the **FDA, ganaxolone clinical supplies with the original buffer** IV formulation ~~with a goal~~ **would be stored under refrigerated conditions for the entire duration** of **clinical use. The** ~~achieving a 24- month~~ shelf life ~~for our~~ **of the original buffer** IV formulation **was updated to 18 months under refrigerated conditions** , ~~including~~ **based on stability data which was submitted in the subsequent IND amendment in February 2023. Subsequently, we manufactured the IV ganaxolone formulation with** a **new buffer and are targeting a shelf life of 24 months at room temperature, pending the results of ongoing stability monitoring. The FDA agreed that in principle a buffer** change in the **ganaxolone** ~~buffer in our~~ IV formulation **is acceptable but requested that additional information be submitted prior** to **use** ~~increase stability~~ of the **new buffer** formulation **in** ~~. We are highly dependent on our third- party manufacturers to continue to supply IV ganaxolone for our ongoing~~ clinical trials **. We submitted** ~~and~~ - **an IND amendment** to ~~manufacture~~ **the FDA in May 2023. All sites have been resupplied with the** new ~~supplies of IV ganaxolone. We do~~ **buffer formulation, which we believe will** not **require refrigeration** ~~control our third- party manufacturers~~ and ~~there~~ is ~~a risk that they could take longer than~~ expected to **have a shelf life of 24 months** ~~supply IV ganaxolone or to reformulate ganaxolone as planned~~ . If any of our relations terminate, switching or adding additional CROs would involve additional cost and require management time and focus. Identifying, qualifying and managing performance of third- party service providers can be difficult, time consuming and cause delays in our development programs. In addition, there is a natural transition period when a new CRO commences work. If any of our relationships with our third- party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. As a result, delays my occur, which can materially impact our ability to meet our desired development timelines. In addition, the use of third- party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated. We currently have a small number of employees, which limits the internal resources we have available to monitor our third- party providers. To the extent we ~~are~~ **70are** unable to identify and successfully manage the performance of third- party service providers, our business may be adversely affected. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects. We have multiple ganaxolone drug products in development, and until such products are approved by regulatory authorities, there remains the risk that the drug product quality requirements may not support continued clinical investigation and result in delays or termination of such clinical studies, and product approvals. We currently have multiple ganaxolone drug products in clinical development, including an ~~oral suspension,~~ IV solution and a new formulation which is in Phase 1 clinical trials. While we strive to develop a full understanding of manufacturing processes used, as well as the resultant product quality attributes, there is a risk that problems may arise over the course of development which could render a given drug product non- viable. Such problems could relate to manufacturing reproducibility, scale- up challenges, drug product chemical or physical stability issues. Related quality requirements may not support continued clinical investigation and result in delays or termination of such clinical studies and product approvals. Such quality requirements can include physical and chemical attributes of the drug product, stability and shelf life, microbial and other contamination, including adverse impact of drug product packaging and administration devices. These problems could result in unacceptable manufacturing economics, or direct concerns related to drug product safety or efficacy. For example, we announced in February 2022 a product supply interruption for our IV ganaxolone clinical supplies. Routine monitoring of stability batches of IV clinical supply material showed visible particulates of aluminum phosphate in the drug solution, which led to a pause in recruitment for the RAISE trial. In May 2022, we announced that the ~~RAISE~~ trial had resumed utilizing new batches of the current IV formulation of ganaxolone ~~. In connection with the resumption of the trial and in consultation with the FDA~~ , **and** we

~~have~~ implemented a **reduced** ~~12- month~~ shelf life ~~,~~ **of 12 months. In agreement with the FDA, ganaxolone clinical supplies with the current IV formulation will be stored under** refrigerated ~~storage~~ conditions for the entire duration of clinical use ~~, including 66storage at the clinical sites; and frequent testing for visible particles~~ . If we experience issues with product quality requirements and we are unable to resolve these issues in a timely manner or at all, we may need to delay or terminate our RAISE or other clinical trials with the current IV formulation, which could further delay our clinical development plans and future product approvals. Our experience manufacturing ganaxolone is limited to the needs of our preclinical studies and clinical trials, as well as ~~initial,~~ limited commercial supplies following FDA approval of ZTALMY for CDD in the ~~US~~ **U. S** . We have limited experience manufacturing ganaxolone on a commercial scale and have no manufacturing facility. We are dependent on third- party manufacturers for the manufacture of ganaxolone drug substance and drug products as well as on third parties for our supply chain, and if we experience problems with any such third parties, the manufacturing and supply of ganaxolone could be delayed. We do not own or operate facilities for the manufacture of ganaxolone. We currently have no plans to build our own clinical or commercial scale manufacturing capabilities. We currently rely on CMOs for the manufacture of ganaxolone APIs and other CMOs for the production of ganaxolone drug products, including capsules, liquid oral suspension and IV solution, and we rely on CMOs for the manufacture of ganaxolone for commercial use. To meet our projected needs for preclinical and clinical supplies to support our activities for commercial manufacturing, the CMOs with whom we currently work will need to increase the scale of production. We may need to identify additional CMOs for continued production of supply for ganaxolone. Although alternative third- party suppliers with the necessary manufacturing and regulatory expertise and facilities exist, it could be expensive and take a significant amount of time to arrange for alternative suppliers. If we are unable to arrange for alternative third- party manufacturing sources on commercially reasonable terms, in a timely manner or at all, we may not be able to complete development of ganaxolone, or market or distribute ganaxolone. Reliance on third- party manufacturers entails risks to which we would not be subject if we manufactured ganaxolone ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control, including a failure to synthesize and manufacture ganaxolone, and the possibility of termination or nonrenewal of the manufacturing agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities will require that ganaxolone be manufactured according to cGMP and similar foreign standards. Any failure by our third- party manufacturers to comply with cGMP **, meet product 71specifications** or **successfully** ~~failure to~~ scale up manufacturing processes, including any failure to deliver sufficient quantities of ganaxolone in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of ganaxolone. In addition, such failure could be the basis for the FDA or other regulatory authorities to issue a warning letter, withdraw approvals for ganaxolone previously granted to us, or take other regulatory or legal action, including recall or seizure of outside supplies of ganaxolone, total or partial suspension of production, suspension of ongoing clinical trials, refusal to approve pending applications or supplemental applications, detention of product, refusal to permit the import or export of products, injunction, or imposing civil and criminal penalties. Any significant disruption in our supplier relationships could harm our business. Any significant delay in the supply of ganaxolone or its key raw materials for an ongoing preclinical study or clinical trial could considerably delay completion of such preclinical study or clinical trial, product testing and potential regulatory approval of ganaxolone. If our manufacturers or we are unable to purchase these key raw materials after regulatory approval has been obtained for ganaxolone, the commercial launch of ganaxolone would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of ganaxolone. Ganaxolone drug substance is manufactured by a CMO in Taiwan, and key starting materials, including the regulatory starting material (RSM) are sourced from China. ~~While the FDA has accepted our RSM, the EMA may ultimately not accept the RSM, which could result in a significant delay to EU approvals.~~ In addition, the current drug substance supply chain sourcing API supply from China and Taiwan is subject to the geopolitical environment, which is difficult to predict and may become less stable, which may put our API supply from that region at risk. We have entered into and may enter into additional collaboration or out- license agreements with third parties for the development or commercialization of ganaxolone in jurisdictions outside of the United States (OUS). We will depend ~~67on~~ **on** these third parties for the development and / or commercialization of ganaxolone in such jurisdictions. If these collaborations or out- licenses are not successful, we may not be able to capitalize on the market potential of ganaxolone. On July 30, 2021, we entered into a collaboration agreement (Orion Collaboration Agreement) with Orion Corporation (Orion) whereby Orion received exclusive rights to commercialize the oral and intravenous (IV) dose formulations of ganaxolone in the European Economic Area, United Kingdom and Switzerland in multiple seizure disorders, including CDD, TSC and ~~refractory status epilepticus (~~RSE ~~)~~. On November 16, 2022, we entered into a collaboration and supply agreement (Tenacia Collaboration Agreement) with Tenacia Biotechnology (Shanghai) Co., Ltd. (Tenacia), whereby Tenacia received exclusive rights to develop, commercialize and otherwise exploit certain products incorporating certain oral and IV formulations of ganaxolone in Mainland China, Hong Kong, Macau and Taiwan for the diagnosis, prevention and treatment of certain human diseases, disorders or conditions, including CDD, TSC and ~~status epilepticus (~~SE **,) (** including RSE **. In May 2023, we entered into** ~~and~~ **an** ~~Established Status Epilepticus~~ **exclusive distribution and supply agreement** (~~ESE~~ **Biologix Agreement**) ~~)~~ **with Biologix, whereby Biologix has the right to exclusively distribute and sell ganaxolone in Algeria, Bahrain, Egypt, Iraq, Jordan, Kingdom of Saudi Arabia, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Tunisia and United Arab Emirates** . The timing and amount of any milestone and royalty payments we receive under ~~either~~ **any** of these agreements will depend in part on the applicable ~~licensee~~ **collaborator** ' s efforts. We **have also entered into an agreement for commercialization of ganaxolone in other territories with NovaMedica whereby NovaMedica has the right to market and sell ganaxolone in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan, and we have initiated a global managed access program with Uniphar Durbin Ireland LTD to support physician access to ZTALMY for appropriate patients with seizures associated with CDD in geographies where there is**

no available patient access, local regulatory criteria and program eligibility are satisfied, and we do not already have a commercial distribution relationship in place. We will ~~also~~ depend on the applicable ~~licensee~~ **commercial partner** under each agreement to comply with all applicable laws relative to the development or commercialization of ganaxolone in the specified jurisdictions subject to the applicable agreement. We do not control the individual efforts of any of our ~~licensees~~ **collaborators** , and any failure by any such ~~licensee~~ **collaborator** to devote sufficient time and effort to the development or commercialization of ganaxolone could have a material adverse impact on our financial results and operations, such as a failure by such ~~licensee~~ **collaborator** to meet its obligations to us. In addition, if a ~~licensee~~ **collaborator** were to violate, or was alleged to have violated, any laws or regulations during the performance of its obligations for us, it is possible that we could suffer financial and reputational harm or other negative outcomes, including possible legal consequences. Any termination, breach or expiration of the Orion Collaboration Agreement, Tenacia Collaboration Agreement **, Biologix Agreement** or any other collaboration or out- license agreements could have a material adverse effect on our ~~financial~~ **72financial** position by reducing or eliminating the potential for us to receive milestones and royalties. In such an event, we may be required to devote additional efforts and to incur additional costs associated with pursuing the development or commercialization of ganaxolone in the applicable jurisdictions. If we breach our obligations under the Orion Collaboration Agreement, Orion may terminate the agreement and retain all rights to commercialize ganaxolone in the applicable jurisdictions with no obligation to make any additional milestone or royalty payments to us. In addition, OUS collaborations and licenses involving ganaxolone pose a number of risks, including the following: ● collaborators or licensees have significant discretion in determining the amount and timing of efforts and resources that they will apply to these collaborations or licenses; ● collaborators or licensees may not perform their obligations as expected; ● collaborators or licensees may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon ganaxolone, repeat or conduct new clinical trials or require a new formulation of ganaxolone for clinical testing; ● collaborators or licensees may not pursue commercialization and development of ganaxolone if ganaxolone receives marketing approval or may elect not to continue or renew commercialization or development programs based on clinical trial results, changes in any such collaborator' s or licensee' s strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities; ● collaborators or licensees could independently develop, or develop with third parties, products that compete directly or indirectly with ganaxolone if the collaborators or licensees believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours; ~~68~~ ● product candidates discovered under the collaboration or license with us may be viewed by our collaborators or licensees as competitive with their own product candidates or products, which may cause collaborators or licensees to cease to devote resources to the commercialization of our product candidates; ● collaborators or licensees with marketing and distribution rights to ganaxolone may not, upon achieving regulatory approval, commit sufficient resources to the marketing and distribution of ganaxolone; ● collaborators or licensees could become involved in a business combination, which might deemphasize or terminate the commercialization or development of ganaxolone licensed to it by us; ● disagreements with collaborators or licensees, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the research, development or commercialization of ganaxolone, might lead to additional responsibilities for us with respect to ganaxolone, or might result in litigation or arbitration, any of which would divert management attention and resources, be time-consuming and expensive; ● collaborators or licensees may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation; ● collaborators or licensees may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; ~~and~~ **and73** ● commercialization collaborations or licenses may be terminated for the convenience of the collaborator or licensee and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of ganaxolone. OUS collaboration agreements and licenses may not lead to commercialization or development of ganaxolone in the most efficient manner, or at all. If any collaborations or licenses that we enter into do not result in the successful commercialization and development of products or if one of our collaborators or licensees terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration or license **. In the second half of 2023, we were notified by one of our contract manufacturers regarding an out of specification (OOS) result for ganaxolone. We notified the FDA and EMA of this OOS result and our plans to continue to manufacture and use ganaxolone both clinically and commercially in accordance with its currently approved specifications. Neither the FDA nor the EMA have indicated any concerns with our approach to continue to use ZTALMY within currently approved specifications, including for the launch of ZTALMY in Europe. Under EU law, the qualified person (QP) is responsible for certifying that each batch of a medicinal product, such as ZTALMY, meets all required provisions, including all required product specifications and testing, when released from a manufacturing facility within the EU, or imported into the EU. Therefore, before Orion is permitted to launch ZTALMY in Europe, its QP must approve its release. If the Orion QP delays or does not support the release of ZTALMY, the commercialization of ZTALMY in Europe will be delayed, which could have a material adverse effect on our financial condition and results of operations** . Additionally, if one of our collaborators or licensees terminates its agreement with us, we may find it more difficult to attract new collaborators or licensees and our perception in the business and financial communities could be harmed. If we are unable to reach agreements with suitable new collaborators or licensees on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a ganaxolone, reduce or delay its development program or one or more of our other development programs, 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 fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If

we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop ganaxolone or bring ganaxolone to market or continue to develop ganaxolone. Government funding for certain aspects of our programs adds uncertainty to our research efforts with respect to those programs and may impose requirements that increase the costs of commercialization and production of product candidates developed under those government- funded programs. In September 2020, we entered into a contract (BARDA Contract) with the Biomedical Advanced Research and Development Authority (BARDA), a division of the U. S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response. Under the BARDA Contract, we received an award of up to an ~~69estimated~~ -- **estimated** $ 51 million for development of IV- administered ganaxolone for the treatment of RSE. The BARDA Contract provides for funding to support, on a cost- sharing basis, the completion of a Phase 3 clinical trial of IV- administered ganaxolone in patients with RSE, which covers the RAISE trial, funding of pre- clinical studies to evaluate IV- administered ganaxolone as an effective treatment for RSE due to chemical nerve gas agent exposure, and funding of certain ganaxolone manufacturing scale- up and regulatory activities. In March 2022, we entered into an amendment with BARDA to extend the end date of our base performance period for funding under the BARDA Contract from September 1, 2022 to December 31, 2023. In September 2022, we entered into an amendment with BARDA that, among other things, (i) provides for the exercise of BARDA' s option under the BARDA Contract to support U. S. onshoring of the manufacturing capabilities for ganaxolone API (Option 2), (ii) changes the end date of our performance period under Option 2 from December 31, 2026 to July 31, 2025, (iii) increases the government cost share amount under Option 2 from approximately $ 11. 5 million to approximately $ 12. 3 million, and (iv) increases our cost share amount under Option 2 from approximately $ 4. 9 million to approximately $ 5. 3 million. **In September 2023, we entered into an amendment 74with BARDA to extend the end date of our base performance period for funding under the BARDA Contract from December 31, 2023 to September 30, 2024.** The BARDA Contract consists of an approximately ~~two~~ **four** - year base period, **including the extension periods** ~~which was extended through December 31, 2023~~ , during which BARDA ~~will~~ **agreed to** provide up to approximately $ 21 million of funding for the RAISE trial on a cost share basis and funding of additional preclinical studies of ganaxolone in nerve agent exposure models. **As of December 31, 2023, we have recorded the entire base period funding of approximately $ 21 million.** Following successful completion of the RAISE trial and preclinical studies in ~~contract~~ **the base** period **and extension periods** , the BARDA Contract provides for approximately $ 31 million of additional BARDA funding for three options in support of ganaxolone manufacturing, supply chain, clinical, regulatory and toxicology activities, including the $ 12. 3 million exercise of Option 2 as described above. Under the BARDA Contract, we will be responsible for cost sharing in the amount of approximately $ 33 million and BARDA will be responsible for approximately $ 52 million ~~,~~ if all development options are completed. The contract period- of- performance (base period plus option exercises) is up to approximately five years. Programs funded by the U. S. government and its agencies include provisions that confer on the government substantial rights and remedies, many of which are not typically found in commercial contracts, including powers of the government to: ● terminate agreements, in whole or in part, for any reason or no reason; ● reduce or modify the government' s obligations under such agreements without the consent of the other party; ● claim rights, including intellectual property rights, in products and data developed under such agreements; ● audit contract- related costs and fees, including allocated indirect costs; ● suspend the contractor from receiving new contracts pending resolution of alleged violations of procurement laws or regulations; ● impose U. S. manufacturing requirements for products that embody inventions conceived or first reduced to practice under such agreements; ● suspend or debar the contractor from doing future business with the government; and ● control and potentially prohibit the export of products. We may not have the right to prohibit the U. S. government from using or allowing others to use certain technologies developed by us, and we may not be able to prohibit third- party companies, including our competitors, from using those technologies in providing products and services to the U. S. government. The U. S. government generally obtains the right to royalty- free use of technologies that are developed under U. S. government contracts. ~~70In~~ **In** addition, government contracts normally contain additional requirements that may increase our costs of doing business, reduce our profits, and expose us to liability for failure to comply with these terms and conditions. These requirements include, for example: ● specialized accounting systems unique to government contracts; ● mandatory financial audits and potential liability for price adjustments or recoupment of government funds after such funds have been spent; ● public disclosures of certain contract information, which may enable competitors to gain insights into our research program; ~~and~~ **and75** ● mandatory socioeconomic compliance requirements, including labor standards, non- discrimination and affirmative action programs and environmental compliance requirements. If we fail to maintain compliance with these requirements, we may be subject to potential contract liability and to termination of our contracts. In addition, if an audit or review uncovers any improper or illegal activity, we may be subject to civil and criminal penalties and administrative sanctions, including termination of our contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U. S. government. We could also suffer serious harm to our reputation if allegations of impropriety were made against us. In addition, under U. S. government purchasing regulations, some of our costs may not be reimbursable or allowed under the BARDA Contract. Further, as a U. S. government contractor, we are subject to an increased risk of investigations, criminal prosecution, civil fraud, whistleblower lawsuits and other legal actions and liabilities as compared to private sector commercial companies. Further, changes in government budgets and agendas may result in a decreased and de- prioritized emphasis on supporting the RSE development program. Any reduction or delay in BARDA funding may force us to seek alternative funding in order to progress our RSE program, which may not be available on non- dilutive terms, terms favorable to us or at all. We may elect to enter into license or collaboration agreements to partner ganaxolone in territories currently retained by us. Our dependence on such relationships may adversely affect our business. Because we have limited resources, we have and expect that we will continue to enter into license or collaboration agreements with other pharmaceutical or biotechnology companies. Any failure by our partners to perform their obligations or any decision by our partners to terminate these agreements could negatively impact our

ability to successfully develop, obtain regulatory approvals for and commercialize ganaxolone. In the event we grant exclusive rights to such partners, we would be precluded from potential commercialization of ganaxolone within the territories in which we have a partner. In addition, any termination of our license or collaboration agreements will terminate the funding we may receive under the relevant license or collaboration agreement and may impair our ability to fund further development efforts and our progress in our development programs. Our commercialization strategy for ganaxolone may depend on our ability to enter into agreements with partners to obtain assistance and funding for the development and potential commercialization of ganaxolone in the territories in which we seek to partner. Despite our efforts, we may be unable to secure license or collaboration agreements or other arrangements that are necessary for us to further develop and commercialize ganaxolone. Supporting diligence activities conducted by potential licensees or collaborators and negotiating the financial and other terms of a license or collaboration agreement are long and complex processes with uncertain results. Even if we are successful in entering into one or more license or collaboration agreements, such agreements may involve greater uncertainty for us, as we would have less control over certain aspects of our partnered programs than we do over our un- partnered programs. We may determine that continuing a license or collaboration under the terms provided is not in our best interest, and we may terminate the license or collaboration. Our potential future partners could delay or terminate their agreements, and as a result ganaxolone may never be successfully commercialized. ~~71Further~~ -- **Further** , our potential future partners may develop alternative products or pursue alternative technologies either on their own or in collaboration with others, including our competitors, and the priorities or focus of our partners may shift such that ganaxolone receives less attention or resources than we would like, or they may be terminated altogether. Any such actions by our potential future partners may adversely affect our business prospects and ability to earn revenue. In addition, we could have disputes with our potential future partners, such as the interpretation of terms in our agreements. Any such disagreements could lead to delays in the development or commercialization of ganaxolone or could result in time- consuming and expensive litigation or arbitration, which may not be resolved in our favor. ~~If~~ **76If** our third- party manufacturers use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages. Our research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials by our third- party manufacturers. Our manufacturers are subject to federal, state and local laws and regulations in the U. S. governing the use, manufacture, storage, handling and disposal of medical, radioactive and hazardous materials. We cannot completely eliminate the risk of contamination or injury resulting from medical, radioactive or hazardous materials. As a result of any such contamination or injury we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical radioactive or hazardous materials. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations. Risks Related to Regulatory ~~ComplianceCurrently~~ **Compliance Currently** enacted and future legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain marketing approval of and commercialize ganaxolone and affect the prices we may obtain. The regulations that govern, among other things, marketing approvals, coverage, pricing and reimbursement for new drug products vary widely from country to country. In the U. S. and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of ganaxolone, restrict or regulate post- approval activities and affect our ability to successfully sell ganaxolone, if we obtain marketing approval. In the U. S., there have been and continue to be a number of legislative and regulatory changes and proposed changes to contain healthcare costs. For example, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (Medicare Modernization Act) changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by eligible beneficiaries and introduced a new reimbursement methodology based on average sales prices for physician administered drugs. In recent years, Congress has considered reductions in Medicare reimbursement for drugs administered by physicians. The Centers for Medicare & Medicaid Services (CMS) also has the authority to revise reimbursement rates and to implement coverage restrictions for drugs. Cost reduction initiatives and changes in coverage implemented through legislation or regulation could decrease utilization of, and reimbursement for, any approved products, which in turn would affect the price we can receive for those products. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our drugs. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for ganaxolone, if approved, or additional pricing pressures. The Affordable Care Act is intended to reduce the cost of, improve the quality of, and expand access to healthcare, among other things. Among other things, the Affordable Care Act expanded manufacturers' Medicaid rebate liability to include covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations, ~~72increased~~ -- **increased** the minimum rebate due for innovator drugs from 15. 1 % of average manufacturer price (AMP) to 23. 1 % of AMP **. The** ~~and capped the total~~ rebate amount ~~for innovator drugs at 100. 0 % of AMP~~ **is no longer subject to a cap, effective January 1, 2024** . The Affordable Care Act and subsequent legislation also changed the definition of AMP ~~(which cap is set to be lifted on January 1, 2024)~~ . Furthermore, the Affordable Care Act imposed a significant annual, nondeductible fee on companies that manufacture or import certain branded prescription drug products. Certain provisions of the Affordable Care Act have been subject to judicial challenges as well as efforts to modify them or to alter their interpretation or implementation. Additional legislative changes, regulatory changes, and judicial challenges related to the Affordable Care Act remain possible, but the nature and extent of such potential ~~changes~~ **77changes** or challenges are

uncertain at this time. The implications of the Affordable Care Act, and efforts to modify or invalidate the Affordable Care Act or its implementing regulations, or portions thereof, and the political uncertainty surrounding any efforts to further reform health care for our business and financial condition, if any, are not clear. We will continue to evaluate the effect that the Affordable Care Act as well as its possible modification or invalidation and other healthcare reform measures, has on our business. In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. The Budget Control Act of 2011, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve its targeted deficit reduction, which triggered the legislation' s automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to healthcare providers of, on average, 2. 0 % per fiscal year, starting in 2013 and continuing through 2031. Sequestration is currently set at 2 % and will increase to 2. 25 % for the first half of fiscal year 2030, to 3 % for the second half of fiscal year 2030, and to 4 % for the remainder of the sequestration period that lasts through the first six months of fiscal year 2031. Additionally, the American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several categories of healthcare providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. If we ever obtain regulatory approval and commercialization of ganaxolone, these laws may result in reductions in Medicare and other healthcare funding, which could have a material adverse effect on our customers and accordingly, our financial operations. Further, ~~on August 16, 2022, President Biden signed into law~~ the Inflation Reduction Act of 2022 **(** ~~, or~~ IRA **)** ~~, which~~ , among other things, establishes a Medicare Part B inflation rebate scheme, under which, generally speaking, manufacturers will owe rebates if the average sales price of a Part B drug increases faster than the pace of inflation. Failure to timely pay a Part B inflation rebate is subject to a civil monetary penalty. The IRA also establishes a Medicare Part D inflation rebate scheme, under which generally speaking manufacturers will owe rebates if the average manufacturer price of a Part D drug increases faster than the pace of inflation. The IRA also creates a drug price negotiation program under which the prices for Medicare units of certain high Medicare spend drugs and biologics without generic or biosimilar competition will be capped by reference to, among other things, a specified non- federal average manufacturer price, starting in 2026. Failure to comply with requirements under the drug price negotiation program is subject to an excise tax and / or a civil monetary penalty. The IRA further makes changes to the Medicare Part D benefit, including a limit on annual out- of- pocket costs ~~,~~ and **replaces the existing coverage gap discount program with** a **new** ~~change in~~ manufacturer **discount** ~~liability under the~~ program **(beginning in 2025),** which could negatively affect the profitability of our product candidates. Failure to pay a discount under this new program will be subject to a civil monetary penalty. Congress continues to examine various policy proposals that may result in pressure on the prices of prescription drugs in the government health benefit programs. The IRA or other legislative changes could impact the market conditions for our product candidates. In addition, legislative and regulatory proposals have been made to expand post- approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of ganaxolone may be. In the U. S., the EU and other potentially significant markets for ganaxolone, there has been increasing legislative, regulatory, and enforcement interest with respect to drug pricing practices. There have been several U. S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between ~~73pricing~~ -- **pricing** and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. Individual states in the U. S. have also increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including by requiring pharmaceutical manufacturers to report to state agencies when they introduce new drugs to market with prices over a certain threshold, or when they increase the price of a drug over a certain threshold. Government authorities and third- party payers are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. Furthermore, the increased emphasis on managed healthcare in the U. S. and on country and regional pricing and reimbursement controls in the EU will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales and results of operations. These pressures ~~can~~ **78can** arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for ganaxolone in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, which could negatively impact the revenue we are able to generate from the sale of the product in that particular country. Adverse pricing limitations may hinder our ability to recoup our investment in ganaxolone even if ganaxolone obtains marketing approval. We participate in the Medicaid Drug Rebate Program and if we fail to comply with our reporting and payment obligations under that program or other governmental pricing programs that we participate in, we could be subject to additional reimbursement requirements, penalties, sanctions and fines, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects. We participate in the Medicaid Drug Rebate Program. Under the Medicaid Drug Rebate Program, we are required to pay a rebate to each state Medicaid program for our covered outpatient drugs that are dispensed to Medicaid beneficiaries and paid for by a state Medicaid program as a condition of having federal funds being made available for our drugs under Medicaid and Medicare Part B. Those rebates are based on pricing data that we report on a monthly and quarterly basis to CMS, the federal agency that administers the Medicaid Drug Rebate Program. These data include the average manufacturer price and, in the case of single- source and innovator multiple- source products, the best price for each drug which, in general, represents the lowest price available from

the manufacturer to any entity in the United States in any pricing structure, calculated to include all sales and associated rebates, discounts and other price concessions subject to certain exclusions. The Affordable Care Act made significant changes to the Medicaid Drug Rebate Program, and CMS issued a final regulation ~~, which became effective on April 1, 2016,~~ to implement the changes to the Medicaid Drug Rebate program under the Affordable Care Act. ~~On December 21, 2020,~~ CMS issued ~~a~~ **another** final regulation that (i) modified existing Medicaid Drug Rebate Program regulations to permit reporting multiple Best Price figures with regard to value- based purchasing arrangements and (ii) provided definitions for " line extension, " " new formulation, " and related terms with the practical effect of expanding the scope of drugs considered to be line extensions, with such changes taking effect in 2022). **If we become aware that our Medicaid reporting for a prior quarter was incorrect or has changed as a result of recalculation of the pricing data, we are obligated to resubmit the corrected data for up to three years after those data originally were due, which revisions could affect our rebate liability for prior quarters. If we fail to pay the required rebate amount or report pricing data on a timely basis, we may be subject to civil monetary penalties and / or termination of our Medicaid Drug Rebate program agreement, in which case federal payments may not be available under Medicaid or Medicare Part B for our covered outpatient drugs.** Our failure to comply with the aforementioned price reporting and rebate payment obligations, as well as pharmacy benefit manager (PBM) " accumulator " programs, could negatively impact our financial results. In addition, statutory and regulatory changes or other agency action regarding the Medicaid Drug Rebate Program could negatively affect our financial results or expand our rebate liability. For example, Congress could enact legislation that would extend rebates under the Medicaid Drug Rebate Program to all Children' s Health Insurance Program or CHIP utilization. Federal law requires that any company that participates in the Medicaid Drug Rebate Program also participate in the 340B program in order for federal funds to be available for the manufacturer' s drugs under Medicaid and Medicare Part B. The 340B program, which is administered by the Health Resources and Services Administration (HRSA), requires participating manufacturers to agree to charge statutorily defined covered entities no more than the 340B " ceiling price " for the manufacturer' s covered outpatient drugs. These 340B covered entities include a variety of community health clinics and other entities that receive health services grants from the Public Health Service, as well as certain hospitals that serve a disproportionate share of low ~~-~~income patients. The Affordable Care Act expanded the list of covered entities to include certain children' s hospitals, free- standing cancer hospitals, critical access hospitals, rural referral centers and sole ~~74community~~ - **community** hospitals, but exempted " orphan drugs " from the ceiling price requirements for these covered entities. The 340B ceiling price is calculated using a statutory formula based on the average manufacturer price and unit rebate amount for the covered outpatient drug as calculated under the Medicaid Drug Rebate Program, and in general, products subject to Medicaid price reporting and rebate liability are also subject to the 340B ceiling price calculation and discount ~~requirement~~ **79requirement . If we are found to have knowingly and intentionally charged 340B covered entities more than the statutorily mandated ceiling price, we could be subject to significant civil monetary penalties and / or such failure also could be grounds for HRSA to terminate our agreement to participate in the 340B program, in which case our covered outpatient drugs would no longer be eligible for federal payment under the Medicaid or Medicare Part B program** . Any additional future changes to the definition of average manufacturer price and the Medicaid unit rebate amount under the Affordable Care Act or other legislation or regulation could affect our 340B ceiling price calculations and negatively impact our results of operations if we successfully commercialize one or more products for which we receive regulatory approval. HRSA issued a final regulation ~~, effective January 1, 2019,~~ regarding the calculation of the 340B ceiling price and the imposition of civil monetary penalties on manufacturers that knowingly and intentionally overcharge covered entities. **It is unclear how HRSA will apply its enforcement authority under this regulation.** HRSA also has implemented a ceiling price reporting requirement, pursuant to which manufacturers must report the 340B ceiling prices for their covered outpatient drugs to HRSA on a quarterly basis. HRSA then publishes those prices to 340B covered entities. Moreover, under ~~a~~ **another** final regulation ~~effective January 13, 2021~~ , HRSA newly established an administrative dispute resolution (ADR) process for claims by covered entities that a manufacturer has engaged in overcharging, including claims that a manufacturer has limited the covered entity' s ability to purchase covered outpatient drugs at or below the 340B ceiling price, and by manufacturers that a covered entity violated the prohibitions against diversion or duplicate discounts, including claims that an individual does not qualify as a patient for 340B Program purposes and claims that a covered entity is not eligible for the 340B Program. Such claims are to be resolved through an ADR panel of government officials rendering a decision that can be appealed to a federal court. An ADR proceeding could subject a manufacturer to onerous procedural requirements and could result in additional liability. In addition, changes to legislation, regulations, or guidance could modify 340B program compliance or expand discount liability. Federal law also requires that a company report average sales price information each quarter to CMS for certain categories of drugs that are payable under the Medicare Part B program. Manufacturers calculate the average sales price based on a statutorily defined formula as well as regulations and interpretations of the statute by CMS. CMS **may** ~~uses~~ - **use** these submissions to determine payment rates for drugs under Medicare Part B. ~~Beginning in 2023, manufacturers~~ **Manufacturers** must pay refunds to Medicare for single source drugs or biologics, or biosimilar biological products, reimbursed under Medicare Part B and packaged in single- dose containers or single- use packages, for units of discarded drug reimbursed by Medicare Part B in excess of 10 % of total allowed charges under Medicare Part B for that drug (or a percentage established for drugs with unique circumstances). Manufacturers that **knowingly submit any false pricing or other information to the government, make a misrepresentation in the reporting of average sales price, or** fail to **timely** pay refunds could be subject to civil monetary penalties ~~of 125 % of the refund amount~~ . The IRA establishes a Medicare Part B inflation rebate scheme, under which, generally speaking, manufacturers will owe rebates if the average sales price of a Part B drug increases faster than the pace of inflation. Failure to timely pay a Part B inflation rebate is subject to a civil monetary penalty. In addition, manufacturers are **currently** required to provide to CMS a 70 % discount on brand name prescription drugs utilized by Medicare Part D beneficiaries when those beneficiaries are in the coverage gap phase of the Part D benefit design.

The IRA replaces the coverage gap discount program with a new manufacturer discount program beginning in 2025. Under either program, civil monetary penalties could be applied **,** ~~if a manufacturer fails to provide these discounts~~ in the amount of 125 % of the discount that was due **, if a manufacturer fails to provide these discounts** . Moreover, the IRA also establishes a Medicare Part D inflation rebate scheme, under which generally speaking manufacturers will owe rebates if the average manufacturer price of a Part D drug increases faster than the pace of inflation. Failure to timely pay a Part D inflation rebate is subject to a civil monetary penalty. Pricing and rebate calculations vary among products and programs. The calculations are complex and are often subject to interpretation by the manufacturer, governmental or regulatory agencies, and the courts. Such interpretation can change and evolve over time. In the case of Medicaid pricing data, if a manufacturer becomes aware that its reporting for a prior quarter was incorrect, or has changed as a result of recalculation of the pricing data, the manufacturer is obligated to resubmit the corrected data for up to three years after those data originally were due. Such restatements and recalculations increase costs for complying with the laws and regulations governing the Medicaid Drug Rebate program and could result in an overage or underage in our rebate liability for past quarters. Price recalculations also may affect the ceiling price at which a manufacturer is required to offer its products under the 340B program. Retroactive Medicaid ~~rebates~~ **80rebates** and 340B program refunds could become due as a result of these restatements. It is unclear how these restatements will impact our liability with respect to the Part B and Part D inflation rebates. ~~75In~~ **In** addition, if we are found to have knowingly submitted false average manufacturer price or best price information to the government, we may be liable for significant civil monetary penalties per item of false information. Our failure to submit monthly / quarterly average manufacturer price and best price data on a timely basis also could result in a significant civil monetary penalty per day for each day the information is late beyond the due date. And if we are found to have knowingly misclassified a drug (i. e., by knowingly classifying it as a generic drug for Medicaid Drug Rebate Program purposes, which are subject to lower rebates, instead of a single- source or innovator multiple- source drug), we could be subject to civil monetary penalties no greater than two times the difference between the rebates we should have paid and the rebates we actually paid, which penalties are in addition to the penalties discussed previously. Such failures also could be grounds for CMS to terminate our Medicaid drug rebate agreement, pursuant to which we would be participating in the Medicaid Drug Rebate Program. In the event that CMS terminates our rebate agreement, no federal payments would be available under Medicaid or Medicare Part B for our covered outpatient drugs. If we are found to have made a misrepresentation in the reporting of our average sales price, the Medicare statute provides for significant civil monetary penalties for each misrepresentation for each day in which the misrepresentation was applied. Civil monetary penalties can also be applied if we are found to have knowingly and intentionally charged 340B covered entities more than the statutorily mandated ceiling price. A covered entity or association representing covered entities can also bring claims against us through HRSA' s 340B ADR process. HRSA could terminate our 340B program Pharmaceutical Pricing Agreement for good cause, which would cause our Medicaid National Drug Rebate Agreement to be terminated, rendering federal funds for our covered outpatient drugs unavailable under Medicaid and Medicare Part B. Finally, we note again that civil monetary penalties could apply **, in the amount of 125 % of the discount that was due,** if a manufacturer fails to provide discounts under the Medicare Part D coverage gap discount program ~~in the amount of 125 % of the discount that was due~~ and similar civil monetary penalties will apply with respect to the new manufacturer discount program established under the IRA. CMS and the HHS OIG have pursued manufacturers that were alleged to have failed to report these data to the government in a timely manner. Governmental agencies may also make changes in program interpretations, requirements or conditions of participation, some of which may have implications for amounts previously estimated or paid. If we participate in the Medicaid Drug Rebate Program and consequently the 340B program, we cannot assure you that our submissions will not be found to be incomplete or incorrect. In order to be eligible to have our products that we successfully commercialize paid for with federal funds under the Medicaid and Medicare Part B programs and purchased by certain federal agencies and grantees, we also would have to participate in the Department of Veterans Affairs (VA) Federal Supply Schedule (FSS) pricing program. As part of this program, we would be obligated to make our **innovator** products available for procurement on an FSS contract under which we would be required to comply with standard government contract terms and conditions and charge a price that is no higher than the statutory Federal Ceiling Price (FCP) to four federal agencies (VA, Department of Defense (DOD), Public Health Service, and U. S. Coast Guard). The FCP is based on the Non- Federal Average Manufacturer Price (Non- FAMP), which we would be required to calculate and report to the VA on a quarterly and annual basis. Pursuant to applicable law and related contract terms, knowing provision of false information in connection with a Non- FAMP filing can subject a manufacturer to significant civil monetary penalties for each item of false information. The FSS pricing program and contract also contain extensive disclosure and certification requirements. If we successfully commercialize one or more products for which we receive regulatory approval, we also would participate in the Tricare Retail Pharmacy program, under which we would be required to pay quarterly rebates on utilization of innovator products that are dispensed through the Tricare Retail Pharmacy network to Tricare beneficiaries. The rebates are calculated as the difference between the annual Non- FAMP and FCP. We would be required to list our innovator products on a Tricare Agreement in order for them to be eligible for DOD formulary inclusion. If it were concluded that we had overcharged the government in connection with our FSS contract or Tricare Agreement, whether due to a misstated FCP or otherwise, we would be required to refund the difference to the government. Failure to make ~~necessary~~ **81necessary** disclosures and / or to identify contract overcharges could result in allegations against us under the FCA and / or other laws and regulations. Unexpected refunds to the government, and / or having to respond to a government ~~76investigation~~ -- **investigation** or enforcement action, could be expensive and time- consuming, and could have a material adverse effect on our business, financial condition, results of operations and growth prospects. Laws and regulations governing international operations may preclude us from developing, manufacturing and selling product candidates outside of the U. S. and require us to develop and implement costly compliance programs. As we seek to expand our operations outside of the U. S., we must comply with numerous laws and regulations in each jurisdiction in which we plan to operate. The creation and implementation of

international business practices compliance programs is costly and such programs are difficult to enforce, particularly where reliance on third parties is required. The Foreign Corrupt Practices Act (FCPA) prohibits any U. S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the U. S. to comply with certain accounting provisions requiring such companies to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations. The anti- bribery provisions of the FCPA are enforced primarily by the DOJ. The SEC is involved with enforcement of the books and records provisions of the FCPA. Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions. Various laws, regulations and executive orders also restrict the use and dissemination outside of the U. S., or the sharing with certain foreign nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. Our expanding presence outside of the U. S. will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling ganaxolone outside of the U. S., which could limit our growth potential and increase our development costs. The failure to comply with laws governing international business practices may result in substantial penalties, including suspension or debarment from government contracting. Violation of the FCPA can result in significant civil and criminal penalties. Indictment alone under the FCPA can lead to suspension of the right to do business with the U. S. government until the pending claims are resolved. Conviction of a violation of the FCPA can result in long- term disqualification as a government contractor. The termination of a government contract or relationship as a result of our failure to satisfy any of our obligations under laws governing international business practices would have a negative impact on our operations and harm our reputation and ability to procure government contracts. The SEC also may suspend or bar issuers from trading securities on U. S. exchanges for violations of the FCPA' s accounting provisions. Our relationships with customers and third- party payers **are** ~~will be~~ subject to applicable anti- kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings. Healthcare providers, physicians and others ~~will~~ play a primary role in the recommendation and prescription of **our commercial products and** any **other** product candidates for which we obtain marketing approval. Our ~~future~~ arrangements with healthcare professionals, third- party payers, patients and others ~~will~~ expose us to broadly applicable fraud and abuse, anti- kickback, false claims, and other healthcare laws and regulations that may affect the business or financial arrangements and relationships through which we would market, sell and distribute our products. Even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third- party payers, federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our ~~business~~ **82business** . Restrictions under applicable federal and state healthcare laws and regulations that may affect our operations (including our ~~77marketing~~ -- **marketing** , promotion, educational programs, pricing, and relationships with healthcare providers or other entities, among other things) and expose us to areas of risk including the following: ● the federal Anti- Kickback Statute (AKS) prohibits, among other things, knowingly and willfully soliciting, offering, or receiving remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, or arranging for the purchase, lease, or order of, any healthcare item or service, for which payment may be made under a federal healthcare program such as Medicare & Medicaid; ● the FCA prohibits, among other things, individuals or entities from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment of government funds, or knowingly making, using, or causing to be made or used a false record or statement material to an obligation to pay money to the government, or knowingly and improperly avoiding, decreasing or concealing an obligation to pay money to the federal government; ● other federal false claims laws, including, among others, federal criminal healthcare fraud and false statement statutes that extend to non- government health benefit programs; ● the Health Insurance Portability and Accountability Act of 1996 and its implementing regulations (collectively, HIPAA) imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, including private third- party payers, and also prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statements in connection with the delivery of or payment for healthcare benefits, items or services; ● the federal Physician Payments Sunshine Act, implemented as the Open Payments Program, requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or Children' s Health Insurance Program, to report annually to CMS information related to payments and other transfers of value to physicians, and teaching hospitals, and starting in 2022 certain other health care professionals, and ownership and investment interests held by physicians and their immediate family members; and ● analogous state and foreign laws and regulations, such as state anti- kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non- governmental third- party payers, including private insurers, as well as other state laws and regulations governing pharmaceutical manufacturers; and ● state and foreign laws and regulations govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts **. We refer you to the section titled " Other Healthcare Laws and Compliance Requirements " in the Government Regulation section for a more fulsome description of these laws** . Efforts to ensure that our business arrangements with third parties are compliant with applicable healthcare laws and regulations will involve the expenditure of appropriate, and possibly significant, resources. Nonetheless, it is possible that governmental

authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, such as Medicare & Medicaid, and the curtailment or restructuring of our operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. ~~78We~~ **83We** may be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business, which could impose significant regulatory hurdles on our business. HIPAA imposes requirements relating to the privacy, security and transmission of individually identifiable health information. HIPAA imposes privacy and security obligations on covered entity health care providers, health plans, and health care clearinghouses, as well as their " business associates " — certain persons or entities that create, receive, maintain or transmit protected health information in connection with providing a specified service on behalf of a covered entity. We may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA. Although we are not directly subject to HIPAA, other than potentially with respect to providing certain employee benefits, we could potentially be subject to criminal penalties if we, our affiliates, or our agents knowingly receive individually identifiable health information maintained by a HIPAA- covered entity in a manner that is not authorized or permitted by HIPAA. In addition, numerous other federal and state laws and regulations govern privacy and security, including state data breach notification laws, state health information and / or genetic privacy laws, and federal and state consumer protection laws (e. g., Section 5 of the FTC Act, and the California Consumer Privacy Act (CCPA) **)** , many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Compliance with these laws is difficult, constantly evolving, and time consuming. Federal regulators, state attorneys general, and plaintiffs' attorneys have been and will likely continue to be active in this space. Furthermore, states are constantly adopting new laws or amending existing laws relating to the data privacy and security and consumer protection, requiring attention to frequently changing regulatory requirements. For example, in California, the CCPA establishes certain requirements for data use and sharing transparency and creates new data privacy rights for California residents. The CCPA and its implementing regulations have already been amended multiple times since their enactment. In November 2020, California voters approved the California Privacy Rights Act (CPRA) ballot initiative which introduced significant amendments to the CCPA and established and funded a dedicated California privacy regulator, the California Privacy Protection Agency (CPPA). The amendments introduced by the CPRA go into effect on January 1, 2023, and new implementing regulations **continue** ~~are expected~~ to be introduced by the CPPA. Failure to comply with the CCPA may result in, among other things, significant civil penalties and injunctive relief, or potential statutory or actual damages. In addition, California residents have the right to bring a private right of action in connection with certain types of incidents. These claims may result in significant liability and potential damages. We implemented processes to manage compliance with the CCPA and continue to assess the impact of the CPRA, and other state legislation, on our business as additional information and guidance becomes available. The Federal Trade Commission (FTC) also sets expectations for failing to take appropriate steps to keep consumers' personal information secure, or failing to provide a level of security commensurate to promises made to individual about the security of their personal information (such as in a privacy notice) may constitute unfair or deceptive acts or practices in violation of Section 5 (a) of the Federal Trade Commission Act (FTC Act). The FTC expects a company' s data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Individually identifiable health information is considered sensitive data that merits stronger safeguards. With respect to privacy, the FTC also sets expectations that companies honor the privacy promises made to individuals about how the company handles consumers' personal information; any failure to honor promises, such as the statements made in a privacy policy or on a website, may also constitute unfair or deceptive acts or practices in violation of the FTC Act. While we do not intend to engage in unfair or deceptive acts or practices, the FTC has the power to enforce promises as it interprets them, and events that we cannot fully control, such as data breaches, may ~~be~~ result in FTC enforcement. Enforcement by the FTC under the FTC Act can result in civil penalties or enforcement actions. Similarly, there are a number of legislative proposals in the EU, the U. S. (at both the federal and state level), as well as in other jurisdictions that could change existing obligations, and / or impose new obligations or limitations in areas affecting our business. These laws and regulations are evolving and subject to interpretation, and may impose limitations on our activities or otherwise adversely affect our business. In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services and research activities. These laws and regulations, as well as any associated claims, inquiries, or investigations or any other government actions may lead ~~79to~~ **84to** unfavorable outcomes including increased compliance costs, delays or impediments in the development of new products, negative publicity, increased operating costs, diversion of management time and attention, and remedies that harm our business, including fines or demands or orders that we modify or cease existing business practices. If we, our agents, or our third party partners fail to comply or are alleged to have failed to comply with these or other applicable data protection and privacy laws and regulations, or if we were to experience a data breach involving personal information, we could be subject to government enforcement actions or private lawsuits. Any associated claims, inquiries, or investigations or other government actions could lead to unfavorable outcomes that have a material impact on our business including through significant penalties or fines, monetary judgments or settlements including criminal and civil liability for us and our officers and directors, increased compliance costs, delays or impediments in the development of new products, negative publicity, increased operating costs, diversion of management time and attention, or other remedies that harm our

business, including orders that we modify or cease existing business practices. In addition, the EU' s legislative and regulatory landscape for privacy and data security continues to evolve. There has been increased attention to privacy and data security issues that could potentially affect our business, including the EU General Data Protection Regulation **including as implemented in the UK** (**collectively,** GDPR), which imposes penalties **for breaches of related obligations** up to 4 % of annual global turnover **,** ~~for~~ - **or** ~~breaches of related obligations~~ **€ 20 million EUR, whichever amount is higher** . In the event we enroll patients in our ongoing or future clinical trials in the European Economic Area (EEA), we will be subject to the additional privacy restrictions imposed by the GDPR, including restrictions relating to the collection, use, storage, transfer, and other processing of personal data, including personal health data, regarding individuals in the EEA as governed by the GDPR and the related national data protection laws of the individual EEA countries. The GDPR imposes several requirements on companies that process personal data, with especially strict rules on the transfer of personal data out of the EEA, including to the U. S, and fines and penalties for failure to comply with the requirements of the GDPR and the related national data protection laws of the individual EEA countries. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. The obligations under the GDPR may be onerous and adversely affect our business, financial condition, results of operations and prospects. Compliance with the GDPR will be a rigorous and time- intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with any EEA activities. Further, the United Kingdom' s exit from the EU, often referred to as Brexit, has created uncertainty with regard to future data protection regulation in the United Kingdom. The European Commission has adopted an Adequacy Decision concerning the level of data protection in the United Kingdom. Personal data may now flow freely from the EEA to the United Kingdom, however, the European Commission may suspend the Adequacy Decision if it considers that the United Kingdom no longer provides for an adequate level of data protection **. Similar laws exist in many other countries around the world, and these laws (which are evolving and expanding) create complicated and potentially inconsistent obligations that may impact our business** . Because of the remote work policies we implemented due to the COVID- 19 pandemic, information that is normally protected, including company confidential information, may be less secure. Cybersecurity and data security threats continue to evolve and raise the risk of incidents, including breaches, that could affect our operations or compromise our business information or sensitive personal information, including health data. With the ever- changing threat landscape, and while we have implemented security measures to protect our information technology systems and infrastructure, there can be no assurance that such measures will prevent service interruptions or security breaches that could adversely affect our business. We may also need to collect more extensive health- related information from our employees to manage our workforce. If we or our third party partners fail to comply or are alleged to have failed to comply with applicable data protection and privacy laws and regulations, and related employment rules, or if we were to experience a data breach involving personal information, we could be subject to government enforcement actions, fines, or private lawsuits. ~~In~~ **85In** addition, our business could be adversely impacted if our ability to transfer personal data outside of the EEA or Switzerland is restricted, which could adversely impact our operating results. **Based on previous case law of** ~~For example, in July 2020,~~ the **EU** Court of Justice ~~of the European Union~~ , ~~or the Court of Justice,~~ **we have seen that transfer mechanisms may be** declared **invalid (e. g.,** the **previous EU- U. S.** Privacy Shield ~~to be~~ **which has now been replaced by the EU- U. S. Data Protection Framework). Such decisions may have** an ~~invalid data transfer mechanism and confirmed that the Model Clauses remain valid and in June 2021, the European Commission published 80updated versions of the Model Clauses, which must be incorporated into new and existing agreements within prescribed timeframes in order to continue to lawfully transfer personal data outside of the EU. This Decision (Decision 2018 / 1250) invalid, which could adversely~~ impact **on** ~~our ability to transfer personal data from the EU to the U. S. The Court~~ -- **our business** ~~of Justice further ruled that in order to transfer data outside of the EU, under the existing mechanism known as the Standard Contractual Clauses (SCCs), the exporter~~ and ~~the importer must ensure that the importer may guarantee a level of personal data protection in the importing country' s level of protection must be adequate that is essentially equivalent to that of the EEA. Compliance~~ **compliance costs** ~~with data transfer obligations involves documenting detailed analyses of data access and protection laws in the countries in which data importers are located, which can be costly and time- consuming. Data importers must also expend resources in analyzing their ability to comply with transfer obligations, including implementing new safeguards and controls to further protect personal data~~ . On September 8, 2020, the Federal Data Protection and Information Commissioner (FDPIC) of Switzerland issued an opinion concluding that the Swiss- U. S. Privacy Shield Framework does not provide an adequate level of protection for data transfers from Switzerland to the U. S. The FDPIC also found that SCCs may still be legally adequate at an individual level provided that they can pass a risk assessment conducted by the FDPIC. If the level of protection in the U. S. or any other importing country is called into question under the SCCs, this could further impact our ability to transfer data outside of the EU or Switzerland. The UK withdrew from the EU on January 31, 2020, commonly referred to as Brexit. Marketing authorizations granted through the EU centralized procedure continue to be valid in Northern Ireland by virtue of the Northern Ireland Protocol, but such EU marketing authorizations are not valid in the rest of the UK (England, Wales and Scotland, or collectively Great Britain). EU marketing authorizations existing as of the end of the Brexit transition period on December 31, 2020, were automatically converted into Great Britain marketing authorizations as of January 1, 2021. Until the end of 2023, a marketing authorization for Great Britain can be applied for on an expedited timetable through the UK European Commission Decision Reliance Procedure **(ECDRP)** , after having received a positive opinion from the EMA' s Committee for Medicinal Products for Human Use. ~~It is not yet known whether~~ **Effective January 1, 2024,** the ~~UK European Commission Decision Reliance Procedure~~ **ECDRP has been replaced with a new international recognition framework (IRP). ECDRP submissions received before January 1, 2024** will ~~remain available after 2023~~ **be processed under the existing practices** . A Great Britain marketing authorization can alternatively be applied for separately through the

standard national level procedure. Although the body of the UK- EU Trade and Cooperation Agreement **(Cooperation Agreement)** includes general terms which apply to medicinal products, greater detail on sector- specific issues is provided in an Annex to the Agreement. The Annex provides a framework for the recognition of GMP inspections and for the exchange and acceptance of official GMP documents. The regime does not, however, extend to procedures such as batch release certification. Among the changes that will now occur are that Great Britain, comprised of England, Scotland and Wales, will be treated as a third country. Northern Ireland will, with regard to EU regulations, continue to follow the EU regulatory rules. As part of the ~~UK- EU Trade and~~ Cooperation Agreement, the EU and the UK **(each, a Party)** will recognize GMP inspections carried out by the other Party and the acceptance of official GMP documents issued by the other Party. The ~~UK- EU Trade and~~ Cooperation Agreement also encourages, although it does not oblige, the parties to consult one another on proposals to introduce significant changes to technical regulations or inspection procedures. Among the areas of absence of mutual recognition are batch testing and batch release. The EU continues to apply EU laws that require batch testing and batch release to take place in the EU territory. This means that medicinal products that are tested and released in the UK must be retested and re- released when entering the EU market for commercial use. Risks Related to Intellectual ~~PropertyIf~~ -- **Property If** we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate for our technology and product candidates, our competitive position could be harmed. Our **continued** commercial success will depend in large part on our ability to obtain and maintain patent and other intellectual property protection in the U. S. and other countries with respect to our technology and products. We rely on trade secret, patent, copyright and trademark laws, and confidentiality, licensing and other agreements with employees and third parties, all of which offer only limited protection. We seek to protect our proprietary position by filing and prosecuting patent applications in the U. S. and abroad related to our novel technologies and products that are important to our business. ~~81The~~ -- **The** patent positions of biotechnology and pharmaceutical companies generally are highly uncertain, involve complex legal and factual questions and have in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patents, including those patent rights licensed to us ~~by~~ **86by** third parties, are highly uncertain. The steps we or our licensors have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information or infringement of our intellectual property rights, both inside and outside the U. S. Further, the examination process may require us or our licensors to narrow the claims for our pending patent applications, which may limit the scope of patent protection that may be obtained if these applications issue. The rights already granted under any of our currently issued patents or those licensed to us and those that may be granted under future issued patents may not provide us with the protection or competitive advantages we are seeking. If we or our licensors are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection obtained is not sufficient, our competitors could develop and commercialize technology and products similar or superior to ours, and our ability to successfully commercialize our technology and products may be adversely affected. It is also possible that we or our licensors will fail to identify patentable aspects of inventions made in the course of our development and commercialization activities before it is too late to obtain patent protection on them. With respect to patent rights, the ganaxolone compound and its original synthesis were published in the early 1990s and **is therefore off patent,** we do not own or license patent rights on the ganaxolone compound. We seek patent protection in the U. S. and internationally for synthetic methods for making ganaxolone, ganaxolone nanoparticles, which are used in certain oral solid, oral liquid, and IV dose formulations, other injectable and oral ganaxolone formulations, and methods of treatment using ganaxolone. We do not know whether any of our granted or issued patents will, or if any of our pending patent applications will grant as patents that will ~~,~~ effectively prevent others from commercializing competitive technologies and products. There is a risk that others, including companies that make generic pharmaceuticals, may develop ganaxolone for the same as similar uses as us, and that our patents will not effectively prevent them from commercializing their ganaxolone products. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the U. S. and other jurisdictions are typically not published until 18 months after filing or in some cases not at all, until they are issued as a patent. Therefore, we cannot be certain that we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions. Our pending applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, issued patents that we own or have licensed from third parties may be challenged in the courts or patent offices in the U. S. and abroad. Such challenges may result in the loss of patent protection, the narrowing of claims in such patents or the invalidity or unenforceability of such patents, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection for our technology and products. Protecting against the unauthorized use of our or our licensors' patented technology, trademarks and other intellectual property rights is expensive, difficult and may in some cases not be possible. In some cases, it may be difficult or impossible to detect third- party infringement or misappropriation of our intellectual property rights, even in relation to issued patent claims, and proving any such infringement may be even more difficult. Competitors may infringe our patents or misappropriate or otherwise violate our intellectual property rights. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of our own intellectual property rights or the proprietary rights of others. Also, third parties may initiate legal proceedings against us to challenge the validity or scope of intellectual property rights we own or control. These proceedings can be expensive and time consuming. Many of our current and potential competitors have the ability to dedicate substantially greater resources to defend their intellectual property rights than we can. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that a patent owned or controlled

by us is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, ~~82held --~~ **held** unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of ~~hearings~~ **87hearings** , 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 shares of our common stock. Third parties, such as Ovid Therapeutics, Inc., may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could harm our business. Our commercial success depends upon our ability to develop, manufacture, market and sell our products **and product candidates** , all of which contain ganaxolone ~~, if approved~~ , and to use our related technologies. We may become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to one or more of our products, including interference or derivation proceedings before the U. S. Patent and Trademark Office (USPTO). Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. If we are found to infringe a third party' s intellectual property rights, we could be required to obtain a license from such third party to continue commercializing one or more of our products. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Under certain circumstances, we could be forced, including by court order, to cease commercializing one or more of our products. In addition, in any such proceeding or litigation, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing one or more of our products or force us to cease some of our business operations, which could materially harm our business. Any claims by third parties that we have misappropriated their confidential information or trade secrets could have a similar negative impact on our business. While our product candidates are in preclinical studies and clinical trials, we believe that the use of our product candidates in these preclinical studies and clinical trials falls within the scope of the exemptions provided by 35 U. S. C. Section 271 (e) in the U. S., which exempts from patent infringement liability activities reasonably related to the development and submission of information to the FDA (Federal Development Patent Infringement Exemption). As our product candidates progress toward commercialization, the possibility of a patent infringement claim against us increases. While ganaxolone itself is off patent, we attempt to ensure that our product candidates and the methods we employ to manufacture ganaxolone do not infringe other parties' patents and other proprietary rights. There can be no assurance they do not, however, and competitors or other parties may assert that we infringe their proprietary rights in any event. On July 26, 2022, the USPTO issued ~~a~~ **U. S.** ~~patent~~ **Patent No. 11, 395, 817 (Ovid ' 817 Patent)** to Ovid Therapeutics, Inc. (Ovid) with claims that encompass our product candidate for the treatment of SE. **On March 15, 2023, we filed a petition seeking post- grant review (PGR) of the Ovid ' 817 Patent with the USPTO Patent Trial and Appeal Board (PTAB). Our petition for PGR argues that the claims of the Ovid ' 817 Patent are unpatentable on multiple grounds. Ovid filed a preliminary response to our petition on June 20, 2023. In Ovid' s reply to our request for PGR, Ovid disclaimed claims 1- 21, 23 and 24 of the Ovid ' 817 Patent, which has the effect of erasing these claims from the patent, irrespective of the outcome of the PGR. On August 17, 2023, the PTAB issued a decision granting institution of our petition seeking PGR of the Ovid ' 817 Patent. In instituting the PGR, the PTAB stated that it was more likely than not that we would be able to invalidate the remaining claims (22 and 25- 31) of the Ovid ' 817 Patent during the proceeding. The decision to institute is not a final decision on the patentability of the claims. The final decision will be based on the full record developed during the proceeding. The PGR process is ongoing, and oral arguments for the proceeding are currently scheduled for May 22, 2024. If we do not prevail in the PGR proceeding, the decision can be appealed to the Court of Appeals for the Federal Circuit. If an appeal is not successful, our ability to challenge the Ovid ' 817 Patent in court will be limited in certain respects. On January 9, 2024, the USPTO issued a Notice of Allowance in Ovid' s patent application U. S. 18 / 325, 548 (Ovid ' 548 application) with claims that encompass our product candidate for the treatment of SE. The Ovid ' 548 application issued in February, 2024 as U. S. Patent No. 11, 903, 930 (Ovid ' 930 Patent). We are evaluating the Ovid' 930 Patent. The Ovid ' 817 Patent and the Ovid ' 548 Patent claims cover the use of ganaxolone in the treatment of SE and do not cover or impact our marketing and sales of ZTALMY for the treatment of seizures associated with CDD. If we prevail in the PGR, the Ovid ' 817 Patent will not be enforceable against us. 88On September 27, 2023, the USPTO issued a Notice of Allowance in an Ovid patent application with claims that encompass our product candidate for the treatment of LGS. The patent issued on November 7, 2023. The claims in this Ovid LGS patent application cover the use of ganaxolone for the treatment of LGS and do not cover or impact the use of ganaxolone in any other indication.** Ovid may file a lawsuit against us alleging infringement of its patents ~~and / or we may challenge the validity of Ovid' s patents with the USPTO or through the courts~~ . Any such proceeding, **in the PTAB or courts,** regardless of ~~its~~ **their** outcome, would likely result in the expenditure of significant financial resources and the diversion of management' s time and resources. In addition, any such proceeding may cause negative publicity, adversely impact patients, and we may be prohibited from marketing or selling ganaxolone for SE, RSE and ~~ESE~~ **LGS** during such proceedings or if we are not successful in such proceedings. If Ovid does decide to bring an infringement lawsuit, we do not expect that it will be filed before a commercial launch of ganaxolone for SE, RSE or ~~ESE~~ **LGS** based upon the " safe harbor " provisions of the Hatch- Waxman Act. We may need to acquire or obtain a license to ~~the~~ **certain** Ovid patents to market or sell ganaxolone for SE, RSE or ~~ESE~~ **LGS** , which may not be available on commercially acceptable terms or at all. If we are not able to acquire ~~the~~ **certain** Ovid patents or negotiate a license on acceptable terms, and if our product is determined to infringe Ovid' s patents and ~~the~~ **such** patents are determined to be valid, then we may be forced to pay Ovid royalties, damages and costs, or we may be prevented from commercializing ganaxolone for SE, RSE and ~~ESE~~ **LGS** altogether, which would have a material adverse impact 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 candidates and any future product candidates throughout the world would be prohibitively expensive, and our or our licensors' intellectual property rights in some countries outside the U. S. can be less extensive than those in the U. S. In addition, the laws and practices of some foreign countries, particularly those relating to pharmaceuticals, do not protect intellectual property rights to the same extent as ~~83federal~~ -- **federal** and state laws in the U. S. For example, novel formulations and methods of medical treatment and manufacturing processes may not be patentable in certain jurisdictions, and the requirements for patentability may differ in certain countries, particularly developing countries. Furthermore, generic drug manufacturers or other competitors may challenge the scope, validity or enforceability of our patents, requiring us to engage in complex, lengthy and costly litigation or other proceedings. Generic drug manufacturers may develop, seek approval for, and launch generic versions of our products. Many countries, including EU countries, India, Japan and China, have compulsory licensing laws under which a patent owner may be compelled under certain circumstances to grant licenses to third parties. In those countries, we may have limited remedies if patents are infringed or if we are compelled to grant a license to a third party, which could materially diminish the value of our patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from our intellectual property. 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 into or within 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 export otherwise infringing products to territories where we have patent protection, but where enforcement is not as strong as that in the U. S. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from competing with us in these jurisdictions. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. ~~Patent~~ **89Patent** terms may be inadequate to protect our competitive position on our products for an adequate amount of time. Given the amount of time required for the development, testing and regulatory review of new product candidates, such as our product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. For example, certain patents licensed to us by CyDex that relate to Captisol ®, which is used in some of our product candidates, have expired, and sulfobutylether beta- cyclodextrin compounds that are similar to CyDex' s Captisol ® are available from other suppliers. It is possible that others may seek to develop ganaxolone formulations using sulfobutylether beta- cyclodextrin compounds obtained from such other suppliers. We expect to seek extensions of patent terms in the U. S. and, if available, in other countries where we are prosecuting patents. In the U. S., the Drug Price Competition and Patent Term Restoration Act of 1984 permits under certain circumstances a patent term extension of up to five years beyond the normal expiration of a patent. However, the applicable authorities, including the FDA and the USPTO in the U. S., and any analogous regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case. For example, we have a pending patent term extension application of a granted U. S. patent that covers ZTALMY. This application requests an extension of five (5) years, which, if the full extension is granted, this U. S. patent would be extended to November 28, 2031. It is possible that we will not obtain patent term extension for this U. S. patent, or if we obtain such an extension, it may be for a shorter period than we had sought. Changes in patent laws could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. As is the case with other pharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the pharmaceutical industry ~~involve~~ **involves** technological and legal ~~84complexity~~ -- **complexity** , and obtaining and enforcing pharmaceutical patents is costly, time- consuming, and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the U. S. and other countries may diminish the value of our patents or narrow the scope of our patent protection. For example, the U. S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents ~~,~~ once obtained. Depending on decisions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce existing patents and patents we may obtain in the future. Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. In addition, the Leahy- Smith America Invents Act (Leahy- Smith Act) includes a number of provisions that affect the way patent applications are prosecuted and may also affect patent litigation. In particular, under the Leahy- Smith Act, the U. S. transitioned to a " first to file " system in which the first inventor to file a patent application is entitled to the patent. Third parties are allowed to submit prior art before the issuance of a patent by the USPTO and may become involved in derivation, reexamination, inter- partes review or post- grant review proceedings challenging our patent rights or the patent rights of our licensors. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate patent rights, which could adversely affect our competitive position. Obtaining and maintaining our patent protection depends on compliance with various procedural, document submissions, 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 on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in ~~accordance~~ **90accordance** with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non- compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non- payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our product candidates, our competitive position would be adversely affected. We may be subject to claims by third parties asserting that we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property. Some of our employees were previously employed at universities or at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, including each member of our senior management, executed proprietary rights, non- disclosure and non-competition agreements, or similar agreements, in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know- how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such third party. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management. ~~85We~~ **We** rely on government funding for certain aspects of our research and development activities and we may develop intellectual property through such activities and therefore may be subject to federal regulations such as " march- in " rights, certain reporting requirements and a preference for U. S. based companies. Compliance with such regulations may limit our exclusive rights, and limit our ability to contract with non- U. S. manufacturers. In September 2020, we entered into the BARDA Contract for the completion of pre- clinical and clinical development activities for IV administered ganaxolone for the treatment of RSE. We may generate intellectual property rights through the use of this U. S. government funding and are therefore subject to certain federal regulations. As a result, the U. S. government may have certain rights to intellectual property embodied in our current or future product candidates pursuant to the Bayh- Dole Act of 1980 (Bayh- Dole Act), and implementing regulations. These U. S. government rights in certain inventions developed under a government- funded program include a non- exclusive, non- transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U. S. government has the right to require us to grant exclusive, partially exclusive, or non- exclusive licenses to any of these inventions to a third party if it determines that: (i) adequate steps have not been taken to commercialize the invention; (ii) government action is necessary to meet public health or safety needs; or (iii) government action is necessary to meet requirements for public use under federal regulations (also referred to as " march- in rights "). The U. S. government also has the right to take title to these inventions if we to disclose the invention to the government and fail to file an application to register the intellectual property in the specified manner and within specified time limits. These time limits have recently been changed by regulation, and may change in the future. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. In addition, the U. S. government requires that any products embodying the subject invention or produced through the use of the subject invention be manufactured substantially in the U. S. The manufacturing preference requirement can be waived if the owner of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U. S. or that under the circumstances domestic manufacture is not commercially feasible. This preference for U. S. manufacturers may limit our ability to contract with non- U. S. product manufacturers for products covered by such intellectual property. To the extent any of our current or future intellectual property is generated through the use of U. S. government funding, the provisions of the Bayh- Dole Act may similarly apply. ~~Intellectual~~ **91Intellectual** property rights do not necessarily address all potential threats to our competitive advantage. The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative: ● others may be able to make compounds or ganaxolone formulations that are similar to our product candidates but that are not covered by the claims of the patents that we own or control; ● we or any strategic partners might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or control; ● we might not have been the first to file patent applications covering certain of our inventions; ● others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights; ● it is possible that our pending patent applications will not lead to issued patents; ● issued patents that we own or control may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges; ● our competitors might conduct research and development activities in the U. S. and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as ~~86well~~ -- **well** as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets; ● we may not develop additional proprietary technologies that are patentable; and ● the patents of others may have an adverse effect on our business. Risks Related to our Business Operations and Ownership of our Common ~~StockThe~~ **StockPandemics, epidemics, or outbreaks could adversely affect our business and our ability to conduct and complete clinical trials.** COVID- 19 ~~pandemic could continue to adversely affect~~ **affected** ~~our business and our~~

~~ability to conduct and complete clinical trials. The continued global spread of COVID- 19, including the Omicron variant, has impacted~~ our clinical operations and timelines. For example, our ~~Phase 3~~ **Randomized Therapy In Status Epilepticus (** RAISE **)** trial **for RSE** is conducted in hospitals, ~~including~~ **primarily** intensive care units ~~and~~ **in** academic medical centers, which ~~have~~ experienced high rates of COVID- 19 admissions. Several **of these sites** ~~academic medical centers and intensive care units~~ participating in the RAISE trial ~~have~~ experienced COVID- related difficulties, including staff turnover and the need to devote significant resources to patients with COVID- 19, which ~~has~~ resulted in site initiation and enrollment delays for the RAISE trial ~~. Given these COVID- 19- related challenges and our recent interruption in drug supply as described above, we now expect our top- line data readout for the RAISE trial to be available in the second half of 2023~~ . Several of the sites participating in the RAISE trial continue to encounter COVID- related setbacks, including staff turnover and the need to devote significant resources for patients with COVID- 19 ~~. In addition, our ganaxolone clinical trials in the outpatient setting may be negatively impacted if patients and their caregivers do not want to participate while the COVID- 19 pandemic persists. The duration and severity of the pandemic and its long- term impact on our business are uncertain at this time~~ . If a patient participating in one of our clinical trials contracts COVID- 19, this could negatively impact the data readouts from these trials; for example, the patient may be unable to participate further (or may have to limit participation) in our clinical trial, the patient may show a different efficacy assessment than if the patient had not been infected, or the patient could experience an AE that could be attributed to our product candidate. There is also a risk that clinical supplies of our product candidates may be significantly delayed or may become unavailable as a result of COVID- 19 **, or other pandemics, epidemics or outbreaks,** and the resulting impact on our suppliers' labor forces and operations, including as a result of governmental restrictions on business operations and the movement of people and goods in an effort to curtail the spread of the virus. There can be no assurance that we would be ~~able~~ **92able** to timely implement any mitigation plans. Disruptions in our supply chain, whether as a result of restricted travel, quarantine requirements or otherwise, could negatively impact clinical supplies of our product candidates, which could materially adversely impact our clinical trial and development timelines. ~~The global spread of COVID- 19 has also led to severe disruption and volatility in the global capital markets, which could increase our cost of capital and adversely affect our ability to access the capital markets in the future. The potential exists for the continued spread of COVID- 19 to cause an economic slowdown or recession or cause other unpredictable events, each of which could adversely affect our business, results of operations or financial condition. The extent to which COVID- 19 impacts our business will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the COVID- 19 outbreak and the actions to contain the outbreak or treat its impact, among others. Moreover, the COVID- 19 outbreak has begun to have indeterminable adverse effects on general commercial activity and the world economy, and our business and results of operations could be adversely affected to the extent that COVID- 19 or any other pandemic harms the global economy generally.~~ We will need to grow the size of our organization, and we may experience difficulties in managing this growth. As of December 31, ~~2022~~ **2023** , we had ~~151~~ **165** full- time employees and ~~two~~ **one** part- time ~~employees~~ **employee** . As our development and **continued** commercialization ~~plans and~~ strategies develop, or as a result of any future acquisitions, we ~~will~~ **may** need additional ~~87managerial~~ -- **managerial** , operational, sales, marketing, financial and other resources. In addition, it may become more cost effective to bring in house certain resources currently outsourced to consultants and other third ~~-~~ parties. Our management, personnel and systems currently in place may not be adequate to support our future growth. Future growth would impose significant added responsibilities on members of management, including: ● **further** growing our commercial operations; ● managing our clinical trials effectively; ● identifying, recruiting, maintaining, motivating and integrating additional employees; ● managing our internal development efforts effectively while complying with our contractual obligations to licensors, licensees, contractors and other third parties; ● ~~improving~~ **enhancing** our managerial, development, operational and finance systems; and ● expanding our facilities. As our operations expand, we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to commercialize ZTALMY and, if approved, ganaxolone in other indications we are currently developing, and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development efforts and clinical trials effectively and hire, train and integrate additional management, administrative and sales and marketing personnel. Our failure to accomplish any of these tasks could prevent us from successfully growing our company. Our business and operations would suffer in the event of computer system failures, cyberattacks or a deficiency in our cybersecurity or those of any business partners. **We extensively rely upon sophisticated IT systems (including cloud services) to operate our business. We produce, collect, process, store and transmit large amounts of confidential information (including de- identified or pseudonymized information of patients enrolled in our clinical trials and intellectual property), and we deploy and operate an array of technical and procedural controls to maintain the confidentiality, integrity and availability of such confidential information.** Despite the implementation of security measures, our ~~internal computer~~ systems **and infrastructure** , and those of our CROs and other third parties on which we rely, are vulnerable to ~~damage from~~ , among other things, computer viruses, unauthorized access, natural disasters, fire, terrorism, war, telecommunication and electrical failures, cyberattacks or cyber- intrusions over the Internet, **and** loss of funds or information from phishing or other fraudulent schemes ~~, or attachments to emails~~ . The risk of a ~~security~~ **cybersecurity** ~~breach~~ **incident** or **network** disruption, particularly through cyber- attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. ~~Such~~ **Given the evolving nature of cybersecurity threats** ~~an~~ **and safeguards, there can be no assurance that any preventive, protective, or remedial measures are or will be adequate to address threats that arise. However,** ~~event~~ **even security measures that are appropriate, reasonable, and / or in accordance with applicable legal requirements may not be able to fully protect our systems or infrastructure and the data contained therein, or our data that is contained in our subsidiaries' or third parties' systems. Additionally, while we**

have implemented security measures that we believe are appropriate, a regulator could deem our security measures not to be appropriate given the lack of prescriptive measures in certain data protection laws. A cybersecurity incident or 93network disruption could cause interruption of our operations or loss of our funds and have a negative financial consequence on our business. ~~In addition, our systems safeguard important confidential personal data regarding patients enrolled in our clinical trials.~~ If a **cybersecurity incident or network** disruption ~~event~~ were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of data relating to completed, ongoing **,** or planned clinical trials could result in delays in our regulatory approval efforts and cause us to incur significant additional costs to recover or reproduce the data. To the extent that ~~any~~ **a cybersecurity incident or network** disruption ~~or security breach~~ results in a loss of or damage to our data or applications, misappropriation of funds to unintended recipients, or inappropriate disclosure of confidential, proprietary **,** or personal information, we could incur material legal claims and liabilities ~~and~~ **, experience** damage to our reputation **,** and the further development of ganaxolone could be delayed. Additionally, ~~breach~~ **the cost and operational consequences of responding to cybersecurity incidents and implementing** remediation ~~costs~~ **measures** may be significant. **Moreover, increased regulation of data protection practices, including self-regulation and industry standards, changes in existing laws and regulations, enactment of new laws and regulations, increased enforcement activity, and changes in interpretation of laws, could increase our cost of compliance and operation, limit our ability to grow our business or otherwise harm our business. Any associated claims, inquiries, investigations, or other government actions could lead to unfavorable outcomes that have a material impact on our business including through significant penalties or fines, monetary judgments or settlements, including criminal and civil liability for us and our officers and directors, increased compliance costs, delays or impediments in the development of new products, negative publicity, increased operating costs, diversion of management time and attention, or other remedies that harm our business, including orders that we modify or cease existing business practices. In addition, significant disruptions of our third party vendors' and / or service providers' security systems or infrastructure, or other similar cybersecurity incidents, could adversely affect our business operations and / or result in the loss, misappropriation, and / or unauthorized access, use or disclosure of, or the prevention of access to, regulated confidential or personal information, which could harm our business. We maintain insurance policies to cover certain losses relating to our information technology systems and data. However, there may be exceptions to our insurance coverage such that our insurance policies may not cover some or all aspects of a cybersecurity incident. Even where an incident is covered by our insurance, the insurance limits may not cover the costs of complete remediation and redress that we may be faced with in the wake of a cybersecurity incident.** ~~88The~~ -- **The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co- insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage and coverage for errors and omissions will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim. The** market price of our stock has been, and may continue to be, highly volatile, and you could lose all or part of your investment. Historically, the trading price of our common stock has been highly volatile, and it is likely that such price will continue to be volatile in the future. The trading price of our common stock could be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed elsewhere in this " Risk Factors " section, these factors could include: ● the success of competitive products or technologies; ● regulatory actions with respect to our products or our competitors' products; ● actual or anticipated changes in our growth rate relative to our competitors; ● announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments; ● developments or disputes concerning patent applications, issued patents or other proprietary rights; ● the level of expenses related to our clinical development programs; **94** ● the results of our efforts to in- license or acquire additional product candidates or products; ● actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts; ● variations in our financial results or those of companies that are perceived to be similar to us; ● fluctuations in the valuation of companies perceived by investors to be comparable to us; ● share price and volume fluctuations attributable to inconsistent trading volume levels of our shares; ● announcement or expectation of additional financing efforts; ● sales of our common stock by us, our insiders or our other stockholders; ● changes in the structure of healthcare payment systems; and ● other events or factors, many of which are beyond our control. In addition, the stock market in general, the Nasdaq Global Market and pharmaceutical and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any of these risks or any of a broad range of other risks, including those described in these " Risk Factors, " could have a dramatic and material adverse impact on the market price of our common stock. Insiders have substantial influence over us and could delay or prevent a change in corporate control. We estimate that our executive officers, directors and holders of 5 % or more of our capital stock collectively beneficially own approximately ~~39~~ **58** . ~~8~~ **0** % of our voting stock. Upon conversion of ~~all~~ our outstanding ~~convertible preferred stock and~~ pre- funded warrants, as of December 31, ~~2022~~ **2023** , our executive officers, directors and holders of 5 % or more of our capital stock collectively would beneficially own approximately ~~37~~ **55** . ~~6~~ **9** % of our voting stock. This concentration of ~~89ownership~~ -- **ownership** could harm the market price of our common stock by delaying, deferring or preventing a strategic transaction, even if such a transaction would benefit other stockholders. The interests of this group of stockholders may not always coincide with your interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily those of other stockholders, including seeking a premium value for their common stock, and might negatively affect the prevailing market price for our common stock. Our operating results may fluctuate significantly in the future, which may cause our results to fall

below the expectations of securities analysts, stockholders and investors. Our operating results may fluctuate significantly in the future as a result of a variety of factors, many of which are outside of our control. These factors include, but are not limited to: ● the timing, implementation and cost of our research, preclinical studies and clinical trials; ● our ability to attract and retain personnel with the necessary strategic, technical and creative skills required for effective operations; ● introduction of new technologies; ● product liability litigation, class action and derivative action litigation, or other litigation; **95** ● the amount and timing of capital expenditures and other costs relating to the expansion of our operations; ● the state of the debt and / or equity capital markets at the time of any proposed offering we choose to initiate; ● our ability to successfully integrate new acquisitions into our operations; ● government regulation and legal developments regarding ganaxolone in the U. S. and in the foreign countries in which we may operate in the future; and ● general economic conditions. As a strategic response to changes in the competitive environment, we may from time to time make pricing, service, technology or marketing decisions or business or technology acquisitions that could have a material adverse effect on our operating results. Due to any of these factors, our operating results may fall below the expectations of securities analysts, stockholders and investors in any future period, which may cause our stock price to decline. Some provisions of our charter documents and Delaware law may have anti- takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders and may prevent attempts by our stockholders to replace or remove our current management. Provisions in our fourth amended and restated certificate of incorporation, as amended (Certificate of Incorporation) and amended and restated bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders, or remove our current management. These include provisions that: ● permit our board of directors to issue up to 25, 000, 000 shares of preferred stock, with any rights, preferences and privileges as it may designate, of which **no** ~~4, 300~~ shares of ~~Series A Preferred~~ **preferred** ~~Stock~~ **stock** are outstanding; ● provide that all vacancies on our board of directors, including as a result of newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum; ~~90~~ ● establish a classified board of directors such that only one of three classes of directors is elected each year; ● provide that directors can only be removed for cause; ● require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent; ● provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder' s notice; ● not provide for cumulative voting rights, thereby allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election; and ● provide that special meetings of our stockholders may be called only by the chairperson of the board of directors, the chief executive officer or the board of directors. These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management. Because we are incorporated in Delaware, we are governed **96** ~~by the provisions of Section 203 of the Delaware General Corporation Law (DGCL), which prohibits, with some exceptions, stockholders owning in excess of 15. 0 % of our outstanding capital stock from merging or combining with us. Our Certificate of Incorporation contains exclusive forum provisions, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents. Our Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders, (c) any action asserting a claim arising pursuant to any provision of the DGCL, or (d) any action asserting a claim that is governed by the internal affairs doctrine, in each such case subject to such Court of Chancery' s having personal jurisdiction over the indispensable parties named as defendants therein. For the avoidance of doubt, the exclusive forum provisions described above do not apply to any claims arising under the Securities Act or under the Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. The choice of forum provisions in our Certificate of Incorporation may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. The applicable courts may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. With respect to the provision making the Court of Chancery the sole and exclusive forum for certain types of actions, stockholders who do bring a claim in the Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. Finally, if a court were to find these provisions of our Certificate of Incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions 91~~