Risk Factors Comparison 2025-03-31 to 2024-04-01 Form: 10-K

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

The ~~Risk Factor SummaryThe~~ following is a summary of the principal risks that could adversely affect our business, operations, and financial results. Risks Related to Our Business • We have a limited operating history, expect to incur further losses as we grow, and may be unable to achieve or sustain profitability. • We expect to incur significant additional costs as we continue commercialization efforts for current prescription drug candidates or other product candidates and undertake the clinical trials necessary to obtain any necessary regulatory approvals, which will increase our losses. • We will need to raise substantial additional capital in the future in the event that we conduct clinical trials for new indications **and for the launch of Gelclair** , and we may be unable to raise such funds when needed and on acceptable terms, which would force us to delay, limit, reduce or terminate one or more of our product development programs. • We are substantially dependent on the success of Mytesi, our current lead prescription drug product, and Canalevia- CA1, our conditionally approved prescription drug product for CID in dogs. We cannot be certain that necessary approvals will be received for planned Mytesi or Canalevia- CA1 follow- on indications or that these product candidates will be successfully commercialized **, either** by us or any of our partners. • **We cannot be certain that we will be successful in the commercialization of Gelclair. • We face uncertainty in the launch of Gelclair as the market for oral mucositis treatments is highly competitive, with established companies and emerging therapies. Gelclair' s success depends on its ability to differentiate itself and gain market share. •** If we are not successful in identifying, licensing, developing, and commercializing additional product candidates and products, our ability to expand our business and achieve our strategic objectives could be impaired. • Mytesi faces significant competition from other pharmaceutical companies, both for its currently approved indication and for planned follow- on indications, and our operating results will suffer if we fail to compete effectively. • We may be unable to obtain, or obtain on a timely basis, regulatory approval for our existing or future human or animal prescription drug product candidates under applicable regulatory requirements, which would harm our operating results. • **The failure to identify a reasonable regulatory pathway to make crofelemer available for breast cancer patients based on a responder analysis may lead us to pause, change or discontinue commercialization of other products within our cancer supportive care business. •** The results of our earlier studies of Mytesi may not be predictive of the results in any future clinical trials and species- specific formulation studies, respectively, and we may not be successful in our efforts to develop or commercialize line extensions of Mytesi. • Development of prescription drug products is inherently expensive, time- consuming, and uncertain, and any delay or discontinuance of our current or future pivotal trials would harm our business and prospects. • We will partially rely on third parties to conduct our development activities. If these third parties do not successfully carry out their contractual duties, we may be unable to obtain regulatory approvals or commercialize our current or future human or animal product candidates on a timely basis or at all. • Even if we obtain regulatory approval for planned follow- on indications of crofelemer, Canalevia, or our other product candidates, they may never achieve market acceptance. Further, even if we are successful in the ongoing commercialization of Mytesi and Canalevia, we may not achieve commercial success. • Human and animal gastrointestinal health products are subject to unanticipated post- approval safety or efficacy concerns, which may harm our business and reputation. • Future federal and state legislation may result in increased exposure to product liability claims, which could result in substantial losses. • If we fail to retain current members of our senior management or to identify, attract, integrate, and retain additional key personnel, our business will be harmed. • We are dependent on two suppliers for the raw material used to produce the active pharmaceutical ingredients in Mytesi and Canalevia **- CA1** . The termination of either of these contracts would result in a disruption to product development and **manufacturing, and** harm our business. • We are dependent upon third- party contract manufacturers, both for the supply of the active pharmaceutical ~~ingredient~~ **ingredients** in Mytesi and Canalevia- CA1, as well as for the supply of finished products for commercialization. • **The termination of any of these contracts would result in a disruption to product development and manufacturing and harm our business. •** If we are unable to establish sales capabilities on our own or through third parties, we may not be able to market and sell our current or future human products and product candidates, if approved, and generate product or other revenue. • ~~35~~ • We will need to increase the size of our organization and may not successfully manage such growth. • Canalevia- CA1 and our animal health prescription drug product candidates may be marketed in the US only in the target animals and for the indications for which they are approved, and if we want to expand the approved animals or indications, it will need to obtain additional approvals, which may not be granted. • The misuse or extra- label use of Mytesi, Canalevia, and our human or animal prescription drug product candidates, if approved by regulatory authorities, may harm our reputation or result in financial or other damages. • We may be unable to obtain, or obtain on a timely basis, a renewal of conditional approval for Canalevia- CA1 or to eventually obtain full regulatory approval of Canalevia- CA1, which would harm our operating results. • We may not maintain the benefits associated with MUMS designation, including market exclusivity. • The market for our human and animal products, and the gastrointestinal health market as a whole, is uncertain and may be smaller than we anticipate, which could lead to lower revenue and harm our operating results. • Insurance coverage for Mytesi for its current approved indication could decrease or end, or Mytesi might not receive insurance coverage for any approved follow- on indications, which could lead to lower revenue and harm our operating results. • **We may face challenges obtaining favorable reimbursement and insurance coverage for Gelclair, which could limit its market adoption and commercial success. •** We may engage in future acquisitions that increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks. • Certain of the countries in which we plan to commercialize our products in the future are developing

countries, some of which have potentially unstable political and economic climates. • **Changing political environment in the US could adversely affect our business and financial performance.** • Fluctuations in the exchange rate of foreign currencies could result in currency transaction losses. • Laws and regulations governing global trade compliance could adversely impact our business. • There are other gastrointestinal- focused human pharmaceutical companies, and we face competition in the marketplaces in which we operate or plan to operate. • Our obligations to Streeterville are secured by a security interest in all of Napo' s NP- 300 assets, so if we default on those obligations, Streeterville could foreclose on ~~our~~ **the NP- 300** assets. • Our royalty interests require us to make minimum royalty payments, even if we do not sell a sufficient amount of products to cover the amount of such payments, which may strain our cash resources. • Failure in our information technology systems, **through** ~~including by~~ cyber- attacks or other data security incidents, could significantly disrupt our operations. • Global macroeconomic conditions may negatively affect us and may magnify certain risks that affect our business. • Unfavorable global economic conditions could adversely affect our business, financial condition, or results of operations. • Substantially all of our revenue for recent periods has been received from two customers. • The Company' s ability to attract and retain qualified members of our board of directors may be impacted due to new state laws, including recently enacted gender quotas. • Evolving expectations around corporate responsibility practices, specifically related to environmental, social, and governance (" ESG ") matters, may expose us to reputational and other risks. • The growing use of artificial intelligence (" AI ") systems to automate processes, analyze data, and support decision- making poses inherent risks. Risks Related to Our Intellectual Property • We cannot be certain that our patent strategy will be effective in protecting against competition. • Obtaining and maintaining our patent protection depends on compliance with various procedural requirements, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non- compliance with these requirements. • Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, which would be costly and time- consuming and, if successfully asserted against us, delay or prevent the development and commercialization of our current or future products and product candidates. ~~• 36 •~~ Our proprietary position depends upon the botanical guidance of our drug approval and patents that are formulation or method- of- use patents, which do not prevent a competitor from using the same human or animal drug for another use. • We may be involved in lawsuits to protect or enforce our patents, which could be expensive, time- consuming, and unsuccessful, and third parties may challenge the validity or enforceability of our patents, and they may be successful. • If we are unable to prevent disclosure of our trade secrets or other confidential information to third parties, our competitive position may be impaired. • Changes in US patent law could diminish the value of patents in general, thereby impairing our ability to protect our products. • We may not be able to protect our intellectual property rights throughout the world, which could impair our business. • Our business could be harmed if we fail to obtain certain registered trademarks in the US or in other countries. • We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential third- party information. • Even if we receive any of the required regulatory approvals for our current or future prescription drug product candidates and non- prescription products, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expenses. • Any of our current or future prescription drug product candidates or non- prescription products may cause or contribute to adverse medical events that we would be required to report to regulatory authorities and if we fail to do so, we could be subject to sanctions that would harm our business. • Legislative or regulatory reforms with respect to animal health may make it more difficult and costly for us to obtain regulatory clearance or approval for any of our current or future product candidates and to produce, market, and distribute our products after clearance or approval is obtained. • We believe that our non- prescription products are not subject to regulation by regulatory agencies in the US, but there is a risk that regulatory bodies may disagree with our interpretation or may redefine the scope of their regulatory reach in the future, which would result in additional expense and could delay or prevent the commercialization of these products. • Even if we receive the required regulatory approvals for our current or future prescription drug product candidates and non- prescription products, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expenses. Risks Related to Our Common Stock • Our failure to meet the continued listing requirements of The Nasdaq Capital Market could result in a delisting of our common stock. • If our shares become subject to the penny stock rules, it would become more difficult to trade our shares. • The price of our common stock could be subject to volatility related or unrelated to our operations, and purchasers of our common stock could incur substantial losses. • A possible " short squeeze " due to a sudden increase in demand for our common stock that largely exceeds supply may lead to further price volatility in our common stock. • You may be unable to resell our common stock when you wish to sell it or at a price that you consider attractive or satisfactory. • If securities or industry analysts do not publish research or reports about our company, or if they issue adverse or misleading opinions regarding us or our stock, our stock price and trading volume could decline. • You may be diluted by ~~conversions of outstanding shares of non- voting common stock,~~ exercises of outstanding options and warrants, and issuances of securities pursuant to our ATM Agreement **and / or our stockholder rights plan** . • Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management. • Our amended and restated bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees. ~~• 37 •~~ We do not intend to pay dividends on our common stock, and your ability to achieve a return on your investment will depend on appreciation in the market price of our common stock. • The requirements of being a public company, including compliance with the reporting requirements of the Exchange Act and the requirements of the Sarbanes- Oxley Act, may strain our resources, increase our costs, and distract management, and we may be unable to comply with these requirements in a timely or cost- effective manner. • We are a smaller reporting company, and the reduced reporting requirements applicable to smaller reporting companies may make our common stock less attractive to investors ~~.~~

~~Risks Related to Our BusinessWe have a limited operating history, expect to incur further losses as we grow, and may be unable to achieve or sustain profitability~~ . Since the consummation of our merger with Napo Pharmaceuticals Inc. in 2017, our operations have been primarily focused on research, development, and the ongoing commercialization of our lead prescription drug product, Mytesi, which the FDA approves for the symptomatic relief of noninfectious diarrhea in adults with HIV / AIDS on antiretroviral therapy. As a result, we have limited meaningful historical operations upon which to evaluate our business and prospects and have not yet demonstrated an ability to broadly commercialize any of our human health products beyond Mytesi for HIV- related diarrhea or animal health products, obtain any required marketing approval for any of our animal prescription drug product candidates or successfully overcome the risks and uncertainties frequently encountered by companies in emerging fields such as the animal health industry or the gastrointestinal health industry in general. Our revenues to date have been insufficient to offset our expenses, and we expect to continue to incur significant research and development and other expenses. Our net comprehensive losses for the years ended December 31, **2024 and** 2023, ~~and 2022~~ were $ **39. 0 million and $** 41. 9 million ~~and $ 49. 1 million~~ , respectively. As of December 31, ~~2023~~ **2024** , we had a total stockholder equity of $ ~~4~~ **6** . ~~9~~ **5** million. We expect to continue to incur losses for the foreseeable future, which will increase significantly from historical levels as we expand our product development activities, seek necessary approvals for our human and veterinary drug product candidates, conduct species- specific formulation studies for our non- prescription products, and increase commercialization activities. Even if we succeed in developing and broadly commercializing one or more of our products or product candidates, we expect to continue to incur losses for the foreseeable future, and we may never become profitable. If we fail to achieve or maintain profitability, then we may be unable to continue our operations at planned levels and be forced to reduce or cease operations. As more fully discussed in Note 1 to our consolidated financial statements, we believe there is substantial doubt about our ability to continue as a going concern as we do not currently have sufficient cash resources to fund our operations through March ~~2025~~ **2026** , or one year from the filing date of our Form 10- K. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. If we are unable to continue as a viable entity, our stockholders may lose their investment ~~. We expect to incur significant additional costs as we continue commercialization efforts for current prescription drug candidates or other product candidates and undertake the clinical trials necessary to obtain any necessary regulatory approvals, which will increase our losses~~ . Napo commenced sales of Mytesi for adults with HIV / AIDS on antiretroviral therapy in September 2016. Jaguar launched Canalevia- CA1 for chemotherapy- induced diarrhea (“ CID ”) in dogs in December 2021. We will need to continue to invest in developing our internal and third- party sales and distribution network and outreach efforts to key opinion leaders in the gastrointestinal health industry, including physicians and veterinarians, as applicable. We are actively identifying additional products for development and ~~commercializationand~~ ~~---~~ **commercialization and** will continue to expend substantial resources for the foreseeable future to develop Mytesi, NP- 300, ~~and~~ Canalevia- CA1 **, and Gelclair** . These expenditures will include costs associated with: ~~●~~ identifying additional potential prescription drug product candidates and non- prescription products; ~~•~~ ~~38~~ ~~●~~ formulation studies; ~~●~~ conducting pilot, pivotal, and toxicology studies; ~~●~~ completing other research and development activities; ~~●~~ payments to technology licensors; ~~●~~ maintaining our intellectual property; ~~●~~ obtaining necessary regulatory approvals; ~~●~~ establishing commercial supply capabilities **;** and ~~●~~ sales, marketing and distribution of our commercialized products. We may also incur unanticipated costs in developing and commercializing our products. Because the outcome of our development activities and commercialization efforts is inherently uncertain, the actual amounts necessary to successfully complete the development and commercialization of our current or future products and product candidates may be greater than we anticipate. Because we anticipate incurring significant costs for the foreseeable future, if we are not successful in broadly commercializing any of our current or future products or product candidates or raising additional funding to pursue our research and development efforts, we may never realize the benefit of our development efforts and our business may be harmed. In the event that we conduct clinical trials for new indications and new products, we will need to raise substantial additional capital in the future, and we may be unable to raise such funds when needed and on acceptable terms, which would force us to limit new indications and new product development. We are forecasting continued losses and negative cash flows as we continue to fund our operating and marketing activities and research and development programs and to complete the development of all the current products in our pipeline or any additional products we may identify. We will need to seek additional funds through public or private equity or debt ~~financings~~ **financing** or other sources such as strategic collaborations. Any such financings or collaborations may result in dilution to our stockholders, the imposition of debt covenants and repayment obligations, or other restrictions that may harm our business or the value of our common stock. We may also seek from time to time to raise additional capital based upon favorable market conditions or strategic considerations such as potential acquisitions or potential license arrangements. Our future capital requirements depend on many factors, including, but not limited to: ~~●~~ the scope, progress, results and costs of researching and developing our current and future prescription drug product candidates and non- prescription products; ~~●~~ the timing of, and the costs involved in, obtaining any regulatory approvals for our current and any future products; ~~●~~ the number and characteristics of the products we pursue; ~~●~~ the cost of manufacturing our current and future products and any products we successfully commercialize; ~~●~~ the cost of commercialization activities for Mytesi and Canalevia, if approved, including sales, marketing and distribution costs; ~~●~~ the expenses needed to attract and retain skilled personnel; ~~•~~ ~~39~~ ~~●~~ the costs associated with being a public company; ~~●~~ our ability to establish and maintain strategic collaborations, distribution, or other arrangements and the financial terms of such agreements; and ~~●~~ the costs involved in preparing, filing, prosecuting, maintaining, defending, and enforcing possible patent claims, including litigation costs and the outcome of any such litigation. General economic conditions, both inside and outside the US, including heightened inflation, capital market volatility, interest rate and currency rate fluctuations, ~~and~~ economic slowdown or recession ~~as well as the COVID- 19 pandemic, including the evolution of new and existing variants of COVID- 19~~ , and geopolitical events, including civil or political unrest (such as the ongoing war between Ukraine and Russia), have resulted in a significant disruption of global financial markets. If the disruption persists and deepens,

we could experience an inability to access additional capital, which could, in the future, negatively affect our capacity for certain corporate development transactions or our ability to make other important, opportunistic investments. In addition, market volatility, high levels of inflation, and interest rate fluctuations may increase our financing costs or restrict our access to potential sources of future liquidity. Additional funds may not be available when we need them on terms that are acceptable to us, or we may not have sufficient authorized shares to raise additional capital. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce, or terminate one or more of our product development programs or future commercialization efforts. We are substantially dependent on the success of Mytesi, our current lead prescription drug product, and Canalevia- CA1, our conditionally approved prescription drug product for CID in dogs. We cannot be certain that necessary approvals will be received for planned Mytesi and Canalevia- CA1 follow- on indications or that these product candidates will be successfully commercialized, either by us or any of our partners. **We cannot be certain that we will be successful in the commercialization of Gelclair.** Other than Mytesi and Canalevia- CA1 (for which we have conditional approval), we currently do not have regulatory approval for any of our prescription drug product candidates. Our current efforts are primarily focused on the ongoing commercialization of Mytesi and Canalevia- CA1 and development efforts related to Mytesi and Canalevia- CA1. With regard to Mytesi, we are focused on marketing the product in the US as well as on development efforts related to a follow- on indication for Mytesi in CTD, an important supportive care indication for patients undergoing primary or adjuvant chemotherapy for cancer treatment. Mytesi is also in development for other possible follow- up indications, including the rare disease indications of SBS with intestinal failure and CDD, for IBS- D and idiopathic / functional diarrhea, and for pediatric MVID patients. With regard to Canalevia- CA1, we are focused on the ongoing commercialization of the product in the US for CID in dogs. In addition, a second- generation proprietary anti- secretory agent is in development for symptomatic relief and treatment of moderate- to- severe diarrhea, with or without concomitant antimicrobial therapy, from bacterial, viral, and parasitic infections, including Vibrio cholerae, the bacterium that causes cholera. Crofelemer has been granted orphan- drug designation for SBS and MVID, a CDD condition, by both the FDA and EMA. Accordingly, our near- term prospects, including our ability to generate material product revenue, obtain any new financing if needed to fund our business and operations, or enter into potential strategic transactions, will depend heavily on the success of Mytesi and Canalevia- CA1. Substantial time and capital resources have been previously devoted by third parties in the development of crofelemer, the active pharmaceutical ingredient (" API "), in Mytesi and Canalevia, and the development of the botanical extract used in Equilevia and Neonorm. Both crofelemer and the botanical extract used in Equilevia and Neonorm were originally developed at Shaman Pharmaceuticals, Inc. (" Shaman "), by certain members of our management team, including Lisa A. Conte, our chief executive officer and president, and Steven R. King, Ph. D., our executive vice president of sustainable supply, ethnobotanical research and intellectual property and secretary. Shaman spent significant development resources before voluntarily filing for bankruptcy in 2001 pursuant to Chapter 11 of the US Bankruptcy Code. The rights to crofelemer and the botanical extract used in Equilevia and Neonorm, as well as other intellectual property rights, were subsequently acquired by Napo from Shaman in 2001 pursuant to a court- approved sale of assets. Ms. Conte founded Napo in 2001 and was Napo' s interim chief executive officer and a member of its board of directors prior to the merger. While at Napo, certain members of our management team, including Ms. Conte and Dr. King, continued the development of crofelemer. Following the merger of Jaguar and ~~40Napo --~~ **Napo** in July 2017, Napo became Jaguar' s wholly ~~–~~owned subsidiary. If we are not successful in the development and commercialization of Mytesi, our business, and our prospects will be harmed. The successful development and commercialization of Mytesi ~~and ,~~ Canalevia- CA1 **and Gelclair** will depend on a number of factors, including the following: ~~●–●~~ our ability to demonstrate, to the satisfaction of the FDA and any other regulatory bodies, the safety and efficacy of Canalevia; ~~●–●~~ our ability and that of our contract manufacturers to manufacture supplies of Mytesi ~~and ,~~ Canalevia- CA1 **and Gelclair,** and to develop, validate, and maintain viable commercial manufacturing processes that are compliant with current good manufacturing practices, or cGMPs if required; ~~●–●~~ our ability to successfully market Mytesi ~~and ,~~ Canalevia- CA1 **and Gelclair** , whether alone or in collaboration with others; ~~●–●~~ the availability, perceived advantages, relative cost, relative safety, and relative efficacy of our prescription drug product candidates compared to alternative and competing treatments; ~~●–●~~ the acceptance of our prescription drug product candidates and non- prescription products as safe and effective by physicians, veterinarians, patients, animal owners, and the human and animal health community, as applicable; ~~●–●~~ our ability to achieve and maintain compliance with all regulatory requirements applicable to our business; and ~~●–●~~ our ability to obtain and enforce our intellectual property rights and marketing exclusivity for our prescription drug product candidates and non- prescription products, and avoid or prevail in any third- party patent interference, patent infringement claims, or administrative patent proceedings initiated by third parties or the US Patent and Trademark Office (" USPTO "). Many of these factors are beyond our control. Accordingly, we may not be successful in developing or commercializing Mytesi, **Gelclair,** Neonorm, Equilevia, Canalevia, or any of our other potential products. If we are unsuccessful or are significantly delayed in commercializing Mytesi **or Gelclair** , our business and prospects will be harmed and you may lose all or a portion of the value of your investment in our common stock **. We recently introduced Gelclair in the US as a prescription treatment specifically designed for oral mucositis, a painful and common side effect experienced by cancer patients undergoing chemotherapy and radiation therapy. However, Gelclair faces significant competition from established treatments provided by larger pharmaceutical companies, as well as emerging therapies under development. Many competitors have significantly greater financial resources, well- established brands, extensive marketing capabilities, and strong relationships with healthcare providers, which could limit Gelclair' s market penetration. Although Gelclair offers distinctive benefits, including rapid and long- lasting pain relief without numbing or stinging the mouth, these benefits alone do not guarantee market acceptance. Our success in commercializing Gelclair will depend substantially on our ability to effectively communicate its unique advantages to healthcare providers and patients and to persuade healthcare providers to integrate Gelclair into their treatment protocols over other established or emerging therapies. If we are unable to effectively differentiate Gelclair and establish its value in the marketplace, our financial**

performance and business prospects could be adversely affected . If we are not successful in identifying, licensing, developing and commercializing additional product candidates and products, our ability to expand our business and achieve our strategic objectives could be impaired. Although a substantial amount of our efforts is focused on the commercial performance of Mytesi and Canalevia- CA1, a key element of our strategy is to identify, develop and commercialize a portfolio of products to serve the gastrointestinal health market. Most of our potential products are based on our knowledge of medicinal plants. Our current focus is primarily on product candidates whose active pharmaceutical ~~ingredient~~ **ingredients** or botanical extract has been successfully commercialized or demonstrated to be safe and effective in human or animal trials. In some instances, we may be unable to develop these potential products further because of perceived regulatory and commercial risks. Even if we successfully identify potential products, we may still fail to yield products for development and commercialization for many reasons, including the following: • competitors may develop alternatives that render our potential products obsolete; • an outside party may develop a cure for any disease state that is the target indication for any of our planned or approved drug products; • ~~41 •~~ potential products we seek to develop may be covered by third- party patents or other exclusive rights; • a potential product may, on further study, be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria; • a potential product may not be capable of being produced in commercial quantities at an acceptable cost or at all; and • a potential product may not be accepted as safe and effective by physicians, veterinarians, patients, animal owners, key opinion leaders, and other decision- makers in the gastrointestinal health market, as applicable. While we are developing specific formulations, including flavors, methods of administration, new patents, and other strategies with respect to our current potential products, we may be unable to prevent competitors from developing substantially similar products and bringing those products to market earlier than we can. If such competing products achieve regulatory approval and commercialization prior to our potential products, our competitive position may be impaired. If we fail to develop and successfully commercialize other potential products, our business and future prospects may be harmed and we will be more vulnerable to any problems that we encounter in developing and commercializing our current potential products ~~. Mytesi faces significant competition from other pharmaceutical companies, both for its currently approved indication and for planned follow- on indications, and our operating results will suffer if we fail to compete effectively~~ . The development and commercialization of products for human gastrointestinal health is highly competitive, and our success depends on our ability to compete effectively with other products in the market. During the ongoing commercialization of Mytesi for its currently approved indication and during the future commercialization of Mytesi for any planned follow- on indications, if such follow- on indications receive regulatory approval, we expect to compete with major pharmaceutical and biotechnology companies that operate in the gastrointestinal space, such as Takeda Pharmaceuticals, ~~Allergan, Inc.,~~ Ironwood Pharmaceuticals, Inc., Synergy Pharmaceuticals Inc., **and** Sebela Pharmaceuticals, Inc ~~., and Salix Pharmaceuticals~~ . Many of our competitors and potential competitors in the human gastrointestinal space have substantially more financial, technical, and human resources and a greater ability to lower manufacturing costs, sales and marketing costs than we do. Many also have more experience in developing, manufacturing, regulating, and commercializing human gastrointestinal health products worldwide. For these reasons, we cannot be certain that we and Mytesi can compete effectively ~~. We may be unable to obtain, or obtain on a timely basis, regulatory approval for our existing or future human or animal prescription drug product candidates under applicable regulatory requirements, which would harm our operating results~~ . The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of human and animal health products are subject to extensive regulation. We are typically not permitted to market our prescription drug product candidates in the US until we receive approval of the product from the FDA through the filing of an NDA or NADA, as applicable. To gain approval to market a prescription drug, we must provide the FDA with safety and efficacy data from pivotal trials that adequately demonstrate that our prescription drug product candidates are safe and effective for the intended indications. Likewise, to gain approval to market an animal prescription drug for a particular species, we must provide the FDA with safety and efficacy data from pivotal trials that adequately demonstrate that our prescription drug product candidates are safe and effective in the target species (e. g., dogs, cats or horses) for the intended indications. In addition, we must provide manufacturing data evidencing that we can produce our product candidates in accordance with cGMPs. For the FDA, we must also provide data from toxicology studies, also called target animal safety studies, and in some cases, environmental impact data. In addition to our ~~42internal~~ -- **internal** activities, we will partially rely on contract research organizations (“ CROs ”) and other third parties to conduct our toxicology studies, biostatistical analysis, and certain other product development activities. The results of toxicology studies, other initial development activities, and / or any previous studies in humans or animals conducted by us or third parties may not be predictive of future results of pivotal trials or other future studies, and failure can occur at any time during the conduct of pivotal trials and other development activities by us or our CROs. Our pivotal trials may fail to show the desired safety or efficacy of our prescription drug product candidates despite promising initial data or the results in previous human or animal studies conducted by others. The success of a prescription drug product candidate in prior animal studies or in the treatment of humans does not ensure success in subsequent studies. Clinical trials in humans and pivotal trials in animals sometimes fail to show a benefit, even for drugs that are effective, because of statistical limitations in the design of the trials or other statistical anomalies. Therefore, even if our studies and other development activities are completed as planned, the results may not be sufficient to obtain the required regulatory approval for a product candidate. Regulatory authorities can delay, limit, or deny approval of any of our prescription drug product candidates for many reasons, including: • if they disagree with our interpretation of data from our pivotal studies or other development efforts; • if we are unable to demonstrate to their satisfaction that our product candidate is safe and effective for the target indication and, if applicable, in the target species; • if they require additional studies or change their approval policies or regulations; • if they do not approve the formulation, labeling, or specifications of our current and future product candidates; and • if they do not approve the manufacturing processes of our third- party contract manufacturers. Further, even if we receive the required approval, such approval may be for a more limited indication than we originally requested, and the

regulatory authority may not approve the labeling that we believe is necessary or desirable for successful commercialization. Any delay or failure in obtaining any necessary regulatory approval for the intended indications of our human or animal product candidates would delay or prevent the commercialization of such product candidates and would harm our business and our operating results. ~~The~~ **As previously announced, while the initial top line** results ~~of our earlier studies of Mytesi may~~ **from the OnTarget study showed that the clinical trial did** not ~~be predictive~~ **meet its primary estimand for the prespecified analysis** of **all tumor types and all targeted therapies, in the prespecified subgroup of patients with breast cancer, crofelemer showed statistically significant improvement in the monthly responder analysis. We are scheduling a meeting with FDA in Q2 2025 to review** ~~the~~ **these** results ~~in any future clinical trials~~ and **discuss possible pathways** ~~species- specific formulation studies, respectively, and we may not be successful in our efforts~~ to ~~develop~~ **make crofelemer available as efficiently as possible to breast cancer patients. If we cannot identify a reasonable pathway to make crofelemer available** ~~or~~ **for** ~~commercialize line extensions~~ **breast cancer patients based on such responder analysis, we may decide to pause, change or discontinue development** of ~~Mytesi~~ **other products within our supportive care business, which could prevent us from, or significantly delay, achieving profitability and could result in disruptions to our business including potential impairment charges, restructuring costs, or costs that are greater than expected**. Our human and animal product pipeline includes a number of potential indications of Mytesi, our lead prescription product. The results of our studies and other development activities and of any previous studies in humans or animals conducted by us or third parties may not be predictive of future results of these clinical studies and formulation studies, respectively. Failure can occur at any time during the conduct of these trials and other development activities. Even if our formulation / clinical studies and other development activities are completed as planned, the results may not be sufficient to pursue a particular line extension for Mytesi. Further, even if we obtain promising results from our clinical trials or species- specific formulation studies, as applicable, we may not successfully commercialize any line extension. Because line extensions are developed for a particular market, we may not be able to leverage our experience from the commercial launch of Mytesi in new markets. If we are not successful in developing and successfully commercializing these line extension products, we may not be able to grow our revenue, and our business may be harmed. ~~43Development~~ -- **Development** of prescription drug products is inherently expensive, time- consuming and uncertain, and any delay or discontinuance of our current or future pivotal trials would harm our business and prospects. Development of prescription drug products for human and animal gastrointestinal health remains an inherently lengthy, expensive, and uncertain process, and our development activities may not be successful. We do not know whether our current or planned pivotal trials for any of our product candidates will begin or conclude on time, and they may be delayed or discontinued for a variety of reasons, including if we are unable to: ~~•~~ address any safety concerns that arise during the course of the studies; ~~•~~ complete the studies due to deviations from the study protocols or the occurrence of adverse events; ~~•~~ add new study sites; ~~•~~ address any conflicts with new or existing laws or regulations; or ~~•~~ reach agreement on acceptable terms with study sites, which can be subject to extensive negotiation and may vary significantly among different sites. Further, we may not be successful in developing new indications for Mytesi and Canalevia- CA1, and Neonorm may be subject to the same regulatory regime as prescription drug products in jurisdictions outside the US. Any delays in completing our development efforts will increase our costs, delay our development efforts and approval process, and jeopardize our ability to commence product sales and generate revenue. Any of these occurrences may harm our business, financial condition, and prospects. In addition, factors that may cause a delay in the commencement or completion of our development efforts may also ultimately lead to the denial of regulatory approval of our product candidates, which, as described above, would harm our business and prospects. We will partially rely ~~on third parties to conduct our development activities. If these third parties do not successfully carry out their contractual duties, we may be unable to obtain regulatory approvals or commercialize our current or future human or animal product candidates on a timely basis or at all. We will partially rely~~ upon Biostatisticians to conduct our toxicology studies and for other development activities. We intend to rely on CROs to conduct one or more of our planned pivotal trials. These CROs are not our employees, and except for contractual duties and obligations, we have limited ability to control the amount or timing of resources that they devote to our programs or manage the risks associated with their activities on our behalf. We are responsible for ensuring that each of our studies is conducted in accordance with the development plans and trial protocols presented to regulatory authorities. Any deviations by our CROs may adversely affect our ability to obtain regulatory approvals, subject us to penalties, or harm our credibility with regulators. The FDA and foreign regulatory authorities also require us and our CROs to comply with regulations and standards, GCPs or GLPs, for conducting, monitoring, recording, and reporting the results of our studies to ensure that the data and results are scientifically valid and accurate. Agreements with CROs generally allow the CROs to terminate in certain circumstances with little or no advance notice. These agreements generally will require our CROs to reasonably cooperate with us at our expense for an orderly winding down of the CROs' services under the agreements. If the CROs conducting our studies do not comply with their contractual duties or obligations, if they experience work stoppages, do not meet expected deadlines, or if the quality or accuracy of the data they obtain is compromised, we may need to secure new arrangements with alternative CROs, which could be difficult and costly. In such an event, our studies may also need to be extended, delayed, or terminated as a result, or may need to be repeated. If any of the foregoing were to occur, regulatory approval, if required, and commercialization of our product candidates may be delayed, and we may be required to expend substantial additional resources. ~~44Even~~ -- **Even** if we obtain regulatory approval for planned follow- on indications of crofelemer, Canalevia, or our other product candidates, they may never achieve market acceptance. Further, even if we are successful in the ongoing commercialization of Mytesi ~~and~~ **,** Canalevia **- CA1 and our other product candidates**, we may not achieve commercial success. If we obtain necessary regulatory approvals for planned follow- on indications of crofelemer or our other product candidates, such products may still not achieve market acceptance and may not be commercially successful. Market acceptance of Mytesi, Canalevia, and any of our other products depends on a number of factors, including: ~~•~~ the safety of our products as demonstrated in our target animal studies; ~~•~~ the indications for which our products are approved or

marketed; ~~●–●~~ the potential and perceived advantages over alternative treatments or products, including generic medicines and competing products currently prescribed by physicians or veterinarians, as applicable, and, in the case of animal products, products approved for use in humans that are used extra- label in animals; ~~●–●~~ the acceptance by physicians, veterinarians, and companion animal owners, as applicable, of our products as safe and effective; ~~●–●~~ the cost in relation to alternative treatments and willingness on the part of physicians, veterinarians, patients, and animal owners, as applicable, to pay for our products; ~~●–●~~ the prevalence and severity of any adverse side effects of our products; ~~●–●~~ the relative convenience and ease of administration of our products; and ~~●–●~~ the effectiveness of our sales, marketing, and distribution efforts. Any failure by Mytesi ~~or~~ **,** Canalevia **, or our other products** to achieve market acceptance or commercial success would harm our financial condition and the results of operations ~~. Human and animal gastrointestinal health products are subject to unanticipated post- approval safety or efficacy concerns, which may harm our business and reputation~~ . The success of our commercialization efforts will depend upon the perceived safety and effectiveness of human and animal gastrointestinal health products, in general, and of our products, in particular. Unanticipated safety or efficacy concerns can subsequently arise with respect to approved prescription drugs products, such as Mytesi **and Gelclair** , or non- prescription products, such as Neonorm, which may result in product recalls or withdrawals or suspension of sales, as well as product liability and other claims. Any safety or efficacy concerns, recalls, withdrawals, or suspensions of sales of our products could harm our reputation and business, regardless of whether such concerns or actions are justified ~~. Future federal and state legislation may result in increased exposure to product liability claims, which could result in substantial losses~~ . Under current federal and state laws, companion and production animals are generally considered to be the personal property of their owners and as such, the owners' recovery for product liability claims involving their companion and production animals may be limited to the replacement value of the animal. Companion animal owners and their advocates, however, have filed lawsuits from time to time seeking non- economic damages such as pain and suffering and emotional distress for harm to their companion animals based on theories applicable to personal injuries to humans. If new legislation is passed to allow recovery for such non- economic damages, or if precedents are set allowing for such recovery, we could be exposed to increased product liability claims that could result in substantial ~~45losses~~ **losses** to us if successful. In addition, some horses can be worth millions of dollars or more, and product liability for horses may be very high. While we currently have product liability insurance, such insurance may not be sufficient to cover any future product liability claims against us ~~. If we fail to retain current members of our senior management or to identify, attract, integrate, and retain additional key personnel, our business will be harmed~~ . Our success depends on our continued ability to attract, retain, and motivate highly qualified management and scientific personnel. We are highly dependent upon our senior management, particularly Lisa A. Conte, our president and Chief Executive Officer. The loss of services of any of our key personnel would cause a disruption in our ability to develop our current or future product pipeline and commercialize our products and product candidates. Although we have offer letters with these key members of senior management, such agreements do not prohibit them from resigning at any time. To help attract, retain, and motivate qualified management and other personnel, we use share- based incentive awards such as employee stock options and restricted stock units. However, given the volatility in our stock price, it may be more difficult and expensive to recruit and retain employees, particularly senior management, through grants of stock or stock options. If our share- based compensation ceases to be viewed as a valuable benefit, our ability to attract, retain, and motivate qualified management and other personnel could be weakened, which could harm our results of operations and adversely affect the timing or outcomes of our current and planned studies, as well as the prospects for commercializing our products. In addition, competition for qualified personnel in the human gastrointestinal health field is intense because there are a limited number of individuals who are trained or experienced in the field. We will need to hire additional personnel as we expand our product development and commercialization activities. Even if we are successful in hiring qualified individuals, as we are a growing organization, we do not have a track record for integrating and retaining individuals. If we are not successful in identifying, attracting, integrating or retaining qualified personnel on acceptable terms, or at all, our business will be harmed. We are dependent on two suppliers for the raw materials used to produce the active pharmaceutical ingredients in Mytesi and Canalevia **- CA1** . The termination of either of these contracts would result in a disruption to product development and harm our business **for Mytesi, Canalevia- CA1 and Gelclair** . The raw material used to manufacture Mytesi and Canalevia- CA1 is CPL derived from the Croton lechleri tree, which is found in countries in South America, principally Peru. The ability of our contract suppliers to harvest CPL is governed by the terms of their respective agreements with local government authorities. Although CPL is available from multiple suppliers, we only have contracts with two suppliers to obtain CPL and arrange the shipment to our contract manufacturer. Accordingly, if our contract suppliers do not or are unable to comply with the terms of our respective agreements, and we are not able to negotiate new agreements with alternate suppliers on terms that we deem commercially reasonable, it may harm our business and prospects. The countries from which we obtain CPL could change their laws and regulations regarding the export of natural products or impose or increase taxes or duties payable by exporters of such products. Restrictions could be imposed on the harvesting of the natural products, or additional requirements could be implemented for the replanting and regeneration of the raw material. Such events could have a significant impact on our cost and ability to produce Mytesi, Canalevia- CA1, and anticipated line extensions. ~~We are dependent upon third- party contract~~ **Indena is a producer of the API used to** ~~manufacturers~~ **manufacture Canalevia- CA1 and** ~~, both for the supply of the active pharmaceutical ingredient in~~ Mytesi ~~and Canalevia- CA1~~ , as well as ~~for the supply of finished products for commercialization. We are in negotiations with Indena for the purification of the CPL received from our suppliers into the API used to manufacture Canalevia- CA1 and Mytesi, as well as~~ the botanical extract in Neonorm ~~. Indena has never manufactured either such ingredient on a commercial scale~~ . Glenmark is the current manufacturer of crofelemer, the active API in Canalevia- CA1 and Mytesi. As announced in October 2015, we have entered into an agreement with ~~Patheon~~ **Thermofisher** , a provider of drug development and delivery solutions, under which ~~Patheon~~ **Thermofisher** provides enteric- coated tablets to us for use in humans and animals. We also may contract with additional third parties for the formulation and supply of finished products, which we will use in our

planned studies and commercialization efforts. ~~46We~~ **We** are dependent upon our contract manufacturers for the supply of the API in Mytesi ~~and~~ **,** Canalevia- CA1 **and our other products** . We currently have sufficient quantities of the API used in Mytesi and Canalevia **- CA1** to support our projected sales efforts. We are working with our contract manufacturers to increase the API manufacturing capacity of the API to support the sales forecast for ~~2024~~ **2025** and beyond. If our contract manufacturer cannot manufacture sufficient quantities of the API in a timely manner, we could suffer losses due to lost sales opportunities. We currently have sufficient quantities of the botanical extract used in Neonorm and Equilevia to support planned commercialization efforts for Neonorm and Equilevia. If we are not successful in reaching agreements with third parties on terms that we consider commercially reasonable for manufacturing and formulation of Mytesi and Canalevia- CA1, or if our contract manufacturer and formulator are not able to produce sufficient quantities or quality of the Mytesi and Canalevia- CA1 API or finished product under their agreements, it could delay our plans and harm our business prospects ~~. For example, as a result of the outbreak in 2020 of SARS- CoV- 2, the virus that causes COVID- 19, which originated in Wuhan, China, and then spread globally, our suppliers and contract manufacturers could be disrupted by worker absenteeism, quarantines, or other travel or health- related restrictions or could incur increased costs associated with ensuring the safety and health of their personnel. If our suppliers or contract manufacturers are so affected, our supply chain could be disrupted, our product shipments could be delayed, our costs could be increased, and our business could be adversely affected~~ . The facilities used by our third- party contractors are subject to inspections, including by the FDA and other regulators, as applicable. We also depend on our third- party contractors to comply with cGMPs. If our third- party contractors do not maintain compliance with these strict regulatory requirements, they and we will not be able to secure or maintain regulatory approval for their facilities, which would have an adverse effect on our operations. In addition, in some cases, we also depend on our third- party contractors to produce supplies in conformity with our specifications, maintain quality control and quality assurance practices, and not employ disqualified personnel. If the FDA or a comparable foreign regulatory authority does not approve the facilities of our third- party contractors if so required, or if it withdraws any such approval in the future, we may need to find alternative manufacturing or formulation facilities, which could result in delays in our ability to develop or commercialize our products, if at all. We and our third- party contractors also may be subject to penalties and sanctions from the FDA and other regulatory authorities for any violations of applicable regulatory requirements. The EMA employs different regulatory standards than the FDA, so we may require multiple manufacturing processes and facilities for the same product candidate or any approved product. We are also exposed to risk if our third- party contractors do not comply with the negotiated terms of our agreements or if they suffer damage or destruction to their facilities or equipment. ~~If we are unable to establish sales capabilities on our own or through third parties, we may not be able to market and sell our current or future human products and product candidates, if approved, and generate product or other revenue.~~ We currently have limited sales, marketing, or distribution capabilities, and prior to Napo' s launch of Mytesi for the symptomatic relief of noninfectious diarrhea in adults with HIV / AIDS on antiretroviral therapy, and our launch of Neonorm for pre- weaned dairy calves and Canalevia **- CA1** for CID in dogs, we had no experience in the sale, marketing, and distribution of human or animal health products. There are significant risks involved in building and managing a sales organization, including our potential inability to attract, hire, retain, and motivate qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively oversee a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing, and distribution capabilities and entry into adequate arrangements with distributors or other partners would adversely impact the commercialization of Mytesi ~~and~~ **,** Canalevia- CA1 **, Gelclair, and / or any of our other products** . If we are not successful in commercializing Mytesi **Canalevia- CA1, Gelclair,** and / or ~~Canalevia- CA1~~ **any of our other products** , for their respective currently approved or conditionally approved indications or for any potential follow- on indications, either on our own or through one or more distributors, or in generating upfront licensing or other fees, including through the previously announced licensing arrangement between Napo Pharmaceuticals, Inc. and Napo Therapeutics S. p. A., we may never generate significant revenue and may continue to incur significant losses, which would harm our financial condition and results of operations. ~~47We will need to increase the size of our organization and may not successfully manage such growth.~~ As of December 31, ~~2023~~ **2024** , we had forty- nine employees. Our ability to manage our growth effectively will require us to hire, train, retain, manage, and motivate additional employees and to implement and improve our operational, financial, and management systems. These demands also may require the hiring of additional senior management personnel or the development of additional expertise by our senior management personnel. If we fail to expand and enhance our operational, financial, and management systems in conjunction with our potential future growth, it could harm our business and operating results. Canalevia- CA1 and our animal health prescription drug product candidates, if approved, may be marketed in the US only in the target animals and for the indications for which they are approved, and if we want to expand the approved animals or indications, it will need to obtain additional approvals, which may not be granted. We may market or advertise Canalevia- CA1 and our animal health prescription drug product candidates approved by regulatory authorities only in the specific species and for treatment of the specific indications for which they were approved, which could limit the use of the products by veterinarians and animal owners. We intend to develop, promote, and commercialize approved products for new animal treatment indications in the future, but we cannot be certain whether or at what additional time and expense we will be able to do so. If we do not obtain marketing approvals for new indications, our ability to expand our animal health business may be harmed. Under the Animal Medicinal Drug Use Clarification Act of 1994, veterinarians are permitted to prescribe extra- label uses of fully approved animal drugs and approved human drugs for animals under certain conditions. While veterinarians may in the future prescribe and use human- approved products or use our products for extra- label uses, we may not promote our animal health products for extra- label uses. We note that extra- label uses are uses for which the product has not received approval. If the FDA determines that any of our marketing activities constitute promotion of an extra- label use, we could be subject to regulatory enforcement, including seizure of any misbranded or mislabeled drugs, and civil or criminal penalties, any of which could have an adverse impact on our reputation and expose us to potential liability. We will continue to

spend resources ensuring that our promotional claims for our animal health products and product candidates remain compliant with applicable FDA laws and regulations, including materials we post or link to on our website. For example, in 2012, our Chief Executive Officer received an " untitled letter " from the FDA while at Napo regarding pre- approval promotion statements constituting misbranding of crofelemer, which was then an investigational drug. These statements were included in archived press releases included on Napo' s website. Napo was required to expend time and resources to revise its website to remove the links in order to address the concerns raised in the FDA' s letter. The misuse or extra- label use of Mytesi, Canalevia **- CA1 and Gelclair** and our human or animal prescription drug product candidates approved by regulatory authorities may harm our reputation or result in financial or other damages. If our human or animal prescription drug product candidates are approved by regulatory authorities, there may be increased risk of product liability if physicians, veterinarians, patients, animal owners or others, as applicable, attempt to use such products extra- label, including the use of our products for indications or in species for which they have not been approved. Furthermore, the use of an approved human or animal drug such as Mytesi ~~and~~ **,** Canalevia **- CA1 and Gelclair** for indications other than those indications for which such products have been approved may not be effective, which could harm our reputation and lead to an increased risk of litigation. If we are deemed by a governmental or regulatory agency to have engaged in the promotion of any approved human or animal product for extra- label use, such agency could request that we modify our training or promotional materials and practices, and we could be subject to significant fines and penalties, and the imposition of these sanctions could also affect our reputation and position within the gastrointestinal health industry. Any of these events could harm our reputation and our operating results. ~~We may be unable to obtain, or obtain on a timely basis, a renewal of conditional approval for Canalevia- CA1 or to eventually obtain full regulatory approval of Canalevia- CA1, which would harm our operating results.~~ On December 21, 2021, the FDA conditionally approved Canalevia- CA1 (crofelemer delayed- release tablets) for the treatment of CID in dogs under application number 141- 552. FDA' s conditional approval allows the Company ~~48to~~ **to** legally sell Canalevia- CA1 before proving it meets the " substantial evidence " standard of effectiveness for full approval. The Company may request renewal of the conditional approval annually for up to four more years, for a total of five years of conditional approval. To receive a renewal from FDA, the Company must show active progress toward proving " substantial evidence of effectiveness " for full approval. If the FDA grants all four annual renewals, the Company has up to four- and- a- half years to develop and submit the necessary data to complete the effectiveness requirement. If the Company does not submit all necessary information to support full approval of Canalevia- CA1 by this four- and- a- half- year deadline, the conditional approval terminates immediately. The Company would then be required to stop marketing the drug because it would be considered to be unapproved. If the Company submits the necessary information before the four- and- a- half- year deadline, the conditional approval period runs another six months, for a total of five years, while the FDA reviews the application for full approval. The conditional approval automatically terminates five years after the date of the initial conditional approval. If FDA does not fully approve the drug before the five- year termination date, the Company would then have to stop marketing the drug because it would be considered to be unapproved. ~~We may not maintain the benefits associated with MUMS designation, including market exclusivity.~~ Although we have received MUMS designation for Canalevia- CA1 for the treatment of CID in dogs, we may not maintain the benefits associated with MUMS designation. MUMS designation is a status similar to " orphan drug " status for human drugs. When we were granted MUMS designation for Canalevia- CA1 for the indication of CID in dogs, we became eligible for incentives to support the approval or conditional approval of the designated use. This designation does not allow us to commercialize a product until such time as we obtain approval or conditional approval of the product. Because Canalevia- CA1 has received MUMS designation for the identified particular intended use, we are eligible to obtain seven years of exclusive marketing rights upon approval (or conditional approval) of Canalevia- CA1 for that intended use and become eligible for grants to defray the cost of our clinical work. Each designation that is granted must be unique, i. e., only one designation can be granted for a particular API in a particular dosage form for a particular intended use. The intended use includes both the target species and the disease or condition to be treated. At some point, we could lose MUMS designation. The basis for a lost designation can include but is not limited to, our failure to engage with due diligence in moving forward with a ~~non- conditional~~ **nonconditional** approval. In addition, MUMS designation may be withdrawn for a variety of reasons such as where the FDA determines that the request for designation was materially defective, or if the manufacturer is unable to assure sufficient quantity of the prescription drug product to meet the needs of animals with the rare disease or condition. If this designation is lost, it could have a negative impact on the product and us, which includes but is not limited to, market exclusivity related to MUMS designation, or eligibility for grants as a result of MUMS designation ~~. The market for our human and animal products, and the gastrointestinal health market as a whole, is uncertain and may be smaller than we anticipate, which could lead to lower revenue and harm our operating results~~ . It is very difficult to estimate the commercial potential of any of our human or animal products because the gastrointestinal health market continues to evolve and it is difficult to predict the market potential for our products. The market will depend on important factors such as safety and efficacy compared to other available treatments, changing standards of care, preferences of physicians, as applicable, the willingness of patients, as applicable, to pay for such products, and the availability of competitive alternatives that may emerge either during the product development process or after commercial introduction. If the market potential for our human or animal products is less than we anticipate due to one or more of these factors, it could negatively impact our business, financial condition and results of operations. Further, the willingness of patients to pay for our products may be less than we anticipate, and may be negatively affected by overall economic conditions. **For** ~~49Insurance coverage for Mytesi for~~ its current approved indication **, Mytesi is currently reimbursed by almost all of commercial and Medicare insurance plans. Mytesi is currently covered by Medicaid in all 50 states. However, the nature or extent of coverage for Mytesi by any of these plans or programs** could ~~decrease~~ **change** or ~~end~~ **be terminated** , or Mytesi might not receive insurance coverage for any approved follow- on indications ~~, which could lead to lower revenue and harm our operating results. For its current approved indication, Mytesi is currently reimbursed by almost all of commercial and Medicare insurance plans.~~

~~Mytesi is currently covered by Medicaid in all 50 states. However, the nature or extent of coverage for Mytesi by any of these plans or programs could change or be terminated, or Mytesi might not receive insurance coverage for any approved follow- on indications~~ . Either outcome could lead to significantly lower revenue and significantly harm our operating **results. Gelclair' s commercial success significantly depends on obtaining favorable reimbursement and insurance coverage from third-party payers, including private insurance companies, Medicare, Medicaid, and other governmental programs. Even though Gelclair is FDA- approved and has demonstrated clinical benefits, insurers may limit reimbursement or require higher patient co- payments or other restrictions, potentially making Gelclair less accessible to patients. If we cannot secure adequate reimbursement or favorable coverage terms, healthcare providers and patients may be less likely to choose Gelclair, thereby adversely affecting its market adoption and our overall commercial performance and financial** results. We may engage in future acquisitions that increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities and subject us to other risks. We may evaluate various strategic transactions, including licensing or acquiring complementary products, technologies, or businesses. Any potential acquisitions may entail numerous risks, including increased operating expenses and cash requirements, assimilation of operations and products, retention of key employees, diversion of our management' s attention, and uncertainties in our ability to maintain key business relationships of the acquired entities. In addition, if we undertake acquisitions, we may issue dilutive securities, assume or incur debt obligations, incur large one- time expenses, and acquire intangible assets that could result in significant future amortization expenses. Moreover, we may not be able to locate suitable acquisition opportunities, and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business. ~~Certain of the countries in which we plan to commercialize our products in the future are developing countries, some of which have potentially unstable political and economic climates.~~ We may commercialize our products in jurisdictions that are developing and emerging countries. This may expose us to the impact of political or economic upheaval, and we could be subject to unforeseen administrative or fiscal burdens. At present, we are not insured against the political and economic risks of operating in these countries. Any significant changes to the political or economic climate in any of the developing countries in which we operate or plan to sell products either now or in the future may substantially affect our business, financial condition, trading performance, and prospects. ~~Fluctuations~~ **The evolving political landscape** in the **US presents potential risks to our operations, including regulatory** ~~exchange~~ -- **changes** ~~rate of foreign currencies~~ **, policy uncertainty, or economic disruptions. These developments** could ~~result in~~ **lead to unforeseen administrative or financial burdens that adversely impact our business. While we monitor such developments closely, we** ~~currency~~ **currently** ~~transaction losses~~ **do not maintain insurance coverage against political or regulatory risks. Any significant adverse changes in the US political or economic climate may materially impact our business operations, financial condition, and future prospects** . As we expand our operations, we expect to be exposed to risks associated with foreign currency exchange rates. We anticipate that we may commercialize Mytesi and Canalevia- CA1 and its line extensions in jurisdictions outside the US. As a result, we may also be further affected by fluctuations in exchange rates in the future to the extent that sales are denominated in currencies other than US dollars. We do not currently employ any hedging or other strategies to minimize this risk, although we may seek to do so in the future ~~. Laws and regulations governing global trade compliance could adversely impact our business~~ . The US Department of the Treasury' s Office of Foreign Assets Control (" OFAC ") and the Bureau of Industry and Security (" BIS ") at the US Department of Commerce administer certain laws and regulations that restrict US persons and, in some instances, non- US persons, in conducting activities, transacting business with or making investments in certain countries, governments, entities and individuals subject to US economic sanctions. In addition, engaging in sales activities to foreign governments introduces additional compliance risks, including risks specific to anti- bribery regulations, including the US Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U. K. Bribery Act 2010 and other similar statutory requirements prohibiting bribery and corruption in the jurisdictions in which we operate. The FCPA prohibits US corporations and their representatives from offering, promising, authorizing, or making payments to any foreign government official, government staff member, political party, or political candidate in an attempt to obtain or retain business abroad. The scope of the FCPA includes interactions with certain healthcare professionals in many countries. Other countries have enacted similar anti- corruption laws and / or regulations. ~~50Our~~ -- **Our** international operations subject us to these laws and regulations, which are complex, restrict our business dealings with certain countries, governments, entities, and individuals, and are constantly changing. Further restrictions may be enacted, amended, enforced, or interpreted in a manner that materially impacts our operations. Violations of these regulations are punishable by civil penalties, including fines, denial of export privileges, injunctions, asset seizures, debarment from government contracts, and revocations or restrictions of licenses, as well as criminal fines and imprisonment. We have established policies and procedures designed to assist with our compliance with such laws and regulations. However, there can be no assurance that our policies and procedures will prevent us from violating these regulations in every transaction in which we may engage or that any businesses that we may acquire have complied with such regulations, and such a violation could adversely affect our reputation, business, financial condition, results of operations and cash flows. ~~There are other gastrointestinal- focused human pharmaceutical companies, and we face competition in the marketplaces in which we operate or plan to operate.~~ Our commercial success in the human drug arena remains dependent on maintaining or establishing a competitive position in the market for the currently approved specialty indication of Mytesi as well as for planned Mytesi follow- on indications. In the IBS- D market, in particular, several competitors have commercially available products approved for our planned IBS- D indication. The availability of our competitors' products could limit the demand and the price we are able to charge for any drug candidate we develop. The inability to compete with existing or subsequently introduced drug candidates would have a material adverse impact on our business, financial condition, and prospects ~~. Our obligations to Streeterville are secured by a security interest in all of Napo' s NP- 300 assets, so if we default on those obligations, Streeterville could foreclose on our assets~~ . Our obligations under the secured promissory note issued to Streeterville Capital, LLC (" Streeterville ") are secured by a first priority security

interest in all existing and future NP- 300 technology held by Napo, including intellectual property, as provided in the Security Agreement, dated January 19, 2021, between Napo and Streeterville. As a result, if we default on our obligations under these agreements, Streeterville could foreclose on its security interests and liquidate some or all of these assets, which would harm our plans to develop and commercialize NP- 300, financial condition and results of operations and could require us to reduce or cease operations with respect to NP- 300. Our royalty interests require us to make minimum royalty payments, even if we do not sell a sufficient amount of products to cover such payments, which may strain our cash resources. Since March 2020, we have sold royalty interests to certain lenders that entitle such lenders to receive future royalties on sales of our products. These royalty interests require us to make minimum royalty payments beginning in 2021, even if we do not sell a sufficient amount of product to cover such payments, which may strain our cash resources. The total minimum royalty payments will be approximately $ ~~14~~ **27** . **0** ~~6 million in 2024, $ 19. 5 million in 2025, and $ 5. 3~~ million in 2026. Failure in our information technology systems, including cyber- attacks or other data security incidents, could significantly disrupt our operations. Our operations depend, in part, on the continued performance of our information technology systems. Our information technology systems are potentially vulnerable to physical or electronic break- ins, computer viruses, phishing attacks, and other types of disruptions. We have and continue to experience cyber- attacks of varying degrees. Our security measures may also be breached due to employee error, malfeasance, system errors or other vulnerabilities. Such breach or unauthorized access or attempts by outside parties to fraudulently induce employees or users to disclose sensitive information in order to gain access to our data could result in significant legal and financial exposure, and damage to our reputation that could potentially have an adverse effect on our business. Because the ~~51techniques~~ -- **techniques** used to obtain unauthorized access or sabotage systems change frequently, become more sophisticated, and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. Additionally, cyber- attacks could also compromise trade secrets and other sensitive information and result in such information being disclosed to others and becoming less valuable, which could negatively affect our business. Although we have information technology security systems, a successful cybersecurity attack or other data security incident could result in the misappropriation and / or loss of confidential or personal information, create system interruptions, deploy malicious software that attacks our systems, or result in financial losses. It is possible that a cybersecurity attack might not be noticed for some period of time. The occurrence of a cyber- security attack or incident could result in business interruptions from the disruption of our information technology systems or negative publicity resulting in reputational damage to our stockholders and other stakeholders and / or increased costs to prevent, respond to, or mitigate cybersecurity events. In addition, the unauthorized dissemination of sensitive personal information or proprietary or confidential information could expose us or other third parties to regulatory fines or penalties, litigation, and potential liability, or otherwise harm ~~our business. Global macroeconomic conditions may negatively affect us and may magnify certain risks that affect~~ our business. Our business is sensitive to general economic conditions, both inside and outside the US Slower global economic growth, credit market crises, high levels of unemployment, reduced levels of capital expenditures, government deficit reduction, changes in inflation and interest rate environments, sequestration and other austerity measures and other challenges affecting the global economy adversely affects us and our distributors, customers, and suppliers. It is uncertain how long these effects will last or whether economic and financial trends will worsen or improve. Changes in economic conditions, supply chain constraints, and steps taken by governments and central banks could lead to higher inflation than previously experienced or expected, which could, in turn, lead to an increase in costs. In an inflationary environment, we may be unable to raise the prices of our products sufficiently to keep up with the rate of inflation. Such uncertain economic times may have a material adverse effect on our revenues, results of operations, financial condition, and, if circumstances worsen, our ability to raise capital at reasonable rates. If slower growth in the global economy or in any of the markets we serve continues for a significant period, if there is significant deterioration in the global economy or such markets, or if improvements in the global economy don' t benefit the markets we serve, our business and financial statements could be adversely affected. Additionally, as a result of any future global economic downturn, our third- party payers may delay or be unable to satisfy their reimbursement obligations. Sales of our principal products are dependent, in part, on the availability and extent of reimbursement from third- party payers, including government programs such as Medicare and Medicaid and private- payer healthcare and insurance programs. A reduction in the availability or extent of reimbursement from government and / or private payer healthcare programs could have a material adverse effect on the sales of our products, our business, and the results of our operations. Current economic conditions may adversely affect the ability of our distributors, customers, suppliers, and service providers to obtain the liquidity required to pay for our products or to buy necessary inventory or raw materials and to perform their obligations under agreements with us, which could disrupt our operations, and could negatively impact our business and cash flow. Although we make efforts to monitor these third parties' financial condition and their liquidity, our ability to do so is limited, and some of them may become unable to pay their bills in a timely manner or may even become insolvent, which could negatively impact our business and results of operations. These risks may be elevated with respect to our interactions with third parties with substantial operations in countries where current economic conditions are the most severe, particularly where such third parties are themselves exposed to sovereign risk from business interactions directly with fiscally challenged government payers. At the same time, significant changes and volatility in the financial markets, in the consumer and business environment, in the competitive landscape, and in the global political and security landscape make it increasingly difficult for us to predict our revenues and earnings into the future. As a result, any revenue or earnings guidance or outlook that we have given or might give may be overtaken by events or may otherwise turn out to be inaccurate. Though we endeavor to give reasonable estimates of future revenues and earnings at the time we give such guidance, based on then- current conditions, there is a significant risk that such guidance or outlook will turn out to be, or to have been, incorrect. ~~52Unfavorable global economic conditions could adversely affect our business, financial condition, or results of operations.~~ Our business, financial condition, results of operations, or prospects could be adversely affected by general conditions in the global economy and in the global financial markets. A severe or prolonged

economic downturn, including as a result of the ~~COVID- 19 pandemic, the~~ ongoing war in Ukraine, interest rate fluctuations, rising inflation, recession, or other global financial or geopolitical crises, could result in a variety of risks to our business, including weakened demand for our product candidates, if approved, or our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers and contract manufacturing organizations (" CMO "), possibly resulting in supply or manufacturing disruption. Any of the foregoing could harm our business and we cannot anticipate all the ways in which such conditions could adversely impact our business. Substantially all of our revenue ~~for recent periods has been received from two customers. Substantially all of our revenue~~ has been derived from two customers. Except for the shelter- in- place mandate, we have not been made aware by our customers if they have experienced ~~other~~ issues ~~arising due to COVID- 19~~ that may materially impact our financial condition, liquidity or results of operations. We will continue to have dialogues with our customers. ~~The Company' s ability to attract and retain qualified members of our board of directors may be impacted due to new state laws, including recently enacted gender quotas. In September 2018, California enacted SB 826 requiring public companies headquartered in California to maintain minimum female representation on their boards of directors as follows: requiring public companies headquartered in California to maintain minimum female representation on their boards of directors as follows: by December 31, 2019, public company boards must have a minimum of one female director; by December 31, 2021, public company boards with five members must have at least two female directors, and public company boards with six or more members will be required to have at least three female directors. Additionally, on September 30, 2020, California enacted AB 979, requiring public companies with principal executive offices in California to each have at least one director from an underrepresented community based on ethnicity and sexual orientation by December 31, 2021. By December 31, 2022, each of these companies must have at least two directors from such underrepresented communities if such company has more than four but fewer than nine directors or at least three directors from underrepresented communities if the company has nine or more directors. Each of these measures has been challenged in court, and although judges of the California Superior Court ruled that AB 979 and SB 826 violate the California constitution in April 2022 and May 2022, respectively, the Secretary of State of the State of California has appealed such rulings, and the ultimate enforceability of these or similar laws remains uncertain. In addition, the Company is subject to the listing rules from Nasdaq related to board diversity and disclosure, which require all companies listed on Nasdaq' s US exchanges to disclose consistent, transparent diversity statistics regarding their board of directors publicly. Additionally, the rules require most Nasdaq- listed companies to have, or explain why they do not have, at least two diverse directors, including one who self- identifies as female and one who self- identifies as either an underrepresented minority or LGBTQ . Failure to achieve designated minimum gender and diversity levels in a timely manner exposes such companies to financial penalties and reputational harm. While we are currently in compliance with these regulations, we cannot assure that we can recruit, attract and / or retain qualified members of the board and meet gender and diversity quotas as a result of the California laws or Nasdaq rules, which may expose us to penalties and / or reputational harm. 53Evolving~~ -- **Evolving** expectations around corporate responsibility practices, specifically related to ESG matters, may expose us to reputational and other risks. Investors, stockholders, customers, suppliers, and other third parties are increasingly focusing on ESG and corporate social responsibility endeavors and reporting. Companies that do not adapt to or comply with the evolving investor or stakeholder expectations and standards or which are perceived to have not responded appropriately may suffer from reputational damage and result in the business, financial condition and / or stock price of a company being materially and adversely affected. Further, this increased focus on ESG issues may result in new regulations and / or third- party requirements that could adversely impact our business or certain stockholders reducing or eliminating their holdings of our stock. Additionally, an allegation or perception that we have not taken sufficient action in these areas could negatively harm our reputation. The growing use of AI systems to automate processes, analyze data, and support decision- making poses inherent risks. Flaws, biases, or malfunctions in systems powered by AI could lead to operational disruptions, data loss, or erroneous decision- making, that may impact business operations, financial condition, and reputation. Ethical and legal challenges may arise, including biases or discrimination in AI outcomes, non- compliance with data protection regulations, and lack of transparency. Furthermore, the deployment of AI systems could expose the Company to increased cybersecurity threats, such as data breaches and unauthorized access leading to financial losses, legal liabilities, and reputational damage. The Company also faces competitive risks if it fails to adopt AI or other machine learning technologies in a timely fashion. Risks Related to Intellectual ~~PropertyWe~~ -- **Property** ~~cannot be certain that our patent strategy will be effective in protecting against competition.~~ Our commercial success depends in large part on obtaining and maintaining patent, trademark, and trade secret protection of our human or animal products, both prescription and non- prescription, our current human or animal product candidates and any future human or animal product candidates, and their respective components, formulations, methods used to manufacture them and methods of treatment, as well as successfully defending our patents and other intellectual property rights against third- party challenges. Our ability to stop unauthorized third parties from making, using, selling, offering to sell, or importing our products or our product candidates is dependent upon the extent to which we have rights under valid and enforceable patents, trade secrets, and other similar intellectual property that cover these activities. The patent prosecution process is expensive and time- consuming, and we may not be able to prepare, file, and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of inventions made in the course of development and commercialization activities in time to obtain patent protection on them. We have a portfolio of US and foreign- issued patents and pending applications related to our products and product candidates. We have issued three US patents, which are listed in the FDA' s Orange Book for Mytesi. We plan to rely on certain of these issued patents as protection for Canalevia **- CA1** . The strength of patents in the field of pharmaceuticals and animal health involves complex legal and scientific questions and can be uncertain. We cannot be certain that pending applications will be issued as patents. For those patents that are already issued and even if other patents are successfully issued, third parties may challenge their validity, enforceability, or scope, which may result in such patents being narrowed, invalidated, or held unenforceable.

Furthermore, even if they are unchallenged, our patents may not adequately protect our intellectual property or prevent others from designing around their claims. If the patents we have are not maintained, their scope is significantly narrowed, or if we cannot obtain issued patents from pending applications, our business and prospects will be harmed. The Leahy- Smith America Invents Act, patent reform legislation enacted in 2011, could increase the uncertainties and costs surrounding the prosecution of any patent applications and the enforcement or defense of any patents that are issued. The Leahy- Smith Act introduced significant changes to US patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art, may affect patent litigation, and ~~54switch~~ **switch** the US patent system from a " first- to- invent " system to a " first- to- file " system. Under a " first- to- file " system, assuming the other requirements for patentability are met, the first inventor to file a patent application is generally entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The USPTO developed regulations and procedures to govern the administration of the Leahy- Smith Act, and many of the substantive changes to patent law associated with the Leahy- Smith Act, and in particular, the first- to- file provisions, became effective on March 16, 2013. Among some of the other changes to the patent laws are changes that limit where a patentee may file a patent infringement suit and that provide opportunities for third parties to challenge any issued patent in the USPTO. The Leahy- Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our patents and any other patents that are issued, all of which could harm our business and financial condition ~~. Obtaining and maintaining our patent protection depends on compliance with various procedural requirements, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non- compliance with these requirements~~. Periodic maintenance and annuity fees on any issued patent and, in certain jurisdictions, pending applications 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~~ **procedurals**, documentary, fee payment, and other similar provisions during the patent application process. While an inadvertent lapse can, in many cases, be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non- compliance events that could result in abandonment or lapse of a patent or patent application include 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 fail to maintain the patents and patent applications covering our prescription drug products, prescription drug product candidates, and non- prescription products, our competitors might be able to enter the market, which would harm our business ~~. Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, which would be costly and time- consuming and, if successfully asserted against us, delay or prevent the development and commercialization of our current or future products and product candidates~~. Our research, development, and commercialization activities may infringe, otherwise violate, or be claimed to infringe or otherwise violate patents owned or controlled by other parties. There may be patents already issued that we are unaware of that might be infringed by a product or one of our current or future prescription drug product candidates or non- prescription products. Moreover, it is also possible that patents may exist that we are aware of but that we do not believe are relevant to our current or future prescription drug product candidates or non- prescription products, which could nevertheless be found to block our freedom to market these products. Because patent applications can take many years to issue and may be confidential for 18 months or more after filing, there may be applications now pending of which we are unaware and which may later result in issued patents that may be infringed by our current or future prescription drug product candidates or non- prescription products. We cannot be certain that our products, current or future prescription drug product candidates or non- prescription products will not infringe these or other existing or future third- party patents. In addition, third parties may obtain patents in the future and claim that the use of our technologies infringes upon these patents. To the extent we become subject to future third- party claims against us or our collaborators, we could incur substantial expenses, and if any such claims are successful, we could be liable to pay substantial damages, including treble damages and attorney' s fees if we or our collaborators are found to be willfully infringing a third- party' s patents. If a patent infringement suit were brought against us or our collaborators, we or they could be forced to stop or delay research, development, manufacturing, or sales of the human or animal prescription drug or non- prescription product that is the subject of the suit. Even if we are successful in defending such claims, infringement and other intellectual property claims can be expensive and time- consuming to litigate and divert management' s attention from our business and operations. As a result of or in order to avoid potential patent infringement claims, we or our collaborators may be compelled to seek a license from a third party for which we would be required to pay license ~~55fees~~ **fees**, royalties, or both. Moreover, these licenses may not be available on acceptable terms or at all. Even if we or our collaborators were able to obtain such a license, the rights may be nonexclusive, which could allow our competitors access to the same intellectual property. Any of these events could harm our business and prospects ~~. Our proprietary position depends upon the botanical guidance of our drug approval and patents that are formulation or method- of- use patents, which do not prevent a competitor from using the same human or animal drug for another use~~. Composition- of- matter patents on the API in prescription drug products are generally considered to be the strongest form of intellectual property protection because such patents provide protection without regard to any particular method of use, manufacture, or formulation of the API used. The composition- of- matter patents for crofelemer, the API in Mytesi and Canalevia- CA1 have expired, and the issued patents and applications relevant to our products and product candidates cover methods of use for crofelemer and the botanical extract in Neonorm and Equilevia. Method- of- use patents protect the use of a product for the specified method, and formulation patents cover formulations of the API or botanical extract. These types of patents do not prevent a competitor from developing or marketing an identical product for an indication that is outside the scope of the patented method or from developing a different formulation that is outside the scope of the patented formulation. Moreover, with respect to method- of- use patents, even if competitors do not actively promote their product for our

targeted indications or uses for which we may obtain patents, physicians may recommend that patients use our products extra-label, and veterinarians may recommend that animal owners use these products extra- label, or animal owners may do so themselves. Although extra- label use may infringe or contribute to the infringement of method- of- use patents, the practice is common, and such infringement is difficult to prevent or prosecute. We ~~may be involved in lawsuits to protect or enforce our patents, which could be expensive, time- consuming, and unsuccessful, and third parties may challenge the validity or enforceability of our patents, and they may be successful. We~~ intend to rely upon a combination of regulatory exclusivity periods, patents, trade secret protection, and confidentiality agreements to protect the intellectual property related to Mytesi, our current prescription drug product candidates, non- prescription products, and our development programs. If the breadth or strength of protection provided by any patents, patent applications, or future patents we may own, license, or pursue with respect to any of our current or future product candidates or products is threatened, it could threaten our ability to commercialize any of our current or future human or animal product candidates or products. Further, if we encounter delays in our development efforts, the period of time during which we could market any of our current or future product candidates or products under any patent protection we obtain would be reduced. Given the amount of time required for the development, testing, and regulatory review of new product candidates or products, patents protecting such candidates might expire before or shortly after such product candidates or products are commercialized. The ~~United States Patent and Trademark Office (“~~ USPTO ~~”)~~ has issued a patent term extension certificate extending the term of US 7, 341, 744 by 1, 075 days under 35 U. S. C 156. With respect to requests for patent term extensions, the applicable authorities, including the USPTO and the FDA, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available and may refuse to grant extensions to patents, or may grant more limited extensions than requested. If this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data and launching their product earlier than might otherwise be the case. Even where laws provide protection, or we are able to obtain patents, costly and time- consuming litigation may be necessary to enforce and determine the scope of our proprietary rights, and the outcome of such litigation would be uncertain. Moreover, any actions we may take to enforce our intellectual property against our competitors could provoke them to bring counterclaims against us, and some of our competitors have substantially greater intellectual property portfolios than we have. To counter infringement or unauthorized use of any patents we may ~~56obtain~~ -- **obtain** , we may be required to file infringement claims, which can be expensive and time- consuming to litigate. In addition, if we or one of our future collaborators were to initiate legal proceedings against a third party to enforce a patent covering one of our products, current product candidates, or one of our future products, the defendant could counterclaim that the patent is invalid or unenforceable. In patent litigation in the US, defendant counterclaims alleging invalidity or unenforceability are commonplace, and challenges to the validity of patents in certain foreign jurisdictions are common as well. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non- enablement, or lack of statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with the prosecution of the patent withheld relevant material information from the USPTO or made a materially misleading statement during prosecution. Under the Hatch- Waxman Act, a competitor seeking to market a generic form of Mytesi before the expiration of any of the patents listed in the FDA’ s Orange Book for Mytesi could file an ANDA with a certification under 21 U. S. C. § 3559 (j) (2) (A) (iv) that each of these patents (except for those which the ANDA filer states it will market only after its expiration) is either invalid, unenforceable or not infringed. We may assert the patents in Hatch- Waxman litigation against the party filing the ANDA to keep the competing product off of the market until the patents expire, but there is a risk that we will not succeed. The party filing the ANDA may also counterclaim in the litigation that our patents are not valid or unenforceable, and the court may find one or more claims of our patents invalid or unenforceable. If this occurs, a competing generic product could be marketed prior to the expiration of our patents listed in the Orange Book, which would harm our business. Third parties may also raise similar validity claims before the USPTO in post- grant proceedings such as ex parte reexaminations, inter partes review, or post- grant review, or oppositions or similar proceedings outside the US, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent protection on one or more of our products or our current or future product candidates. Such a loss of patent protection could harm our business. We cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution or other basis for a finding of invalidity. Litigation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, public announcements of the results of hearings, motions, or other interim proceedings or developments could be made public. If securities analysts or investors perceive these results to be unsuccessful, it could have an adverse effect on the price of our common stock. Finally, we may not be able to prevent misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the US. ~~If we are unable to prevent disclosure of our trade secrets or other confidential information to third parties, our competitive position may be impaired.~~ We also rely on trade secret protection and confidentiality agreements to protect proprietary know- how that is not patentable or for which we have not filed patent applications, processes for which patents are difficult to enforce, and other elements of our product development processes that involve proprietary know- how, information or technology that is not covered by patents. Although we require all of our employees to assign their inventions to us and endeavor to execute confidentiality agreements with all of our employees, consultants, advisors, and any third parties who have access to our proprietary know- how, information, or technology, we cannot be certain that we have executed such agreements with all parties who may have helped to develop our intellectual property or had access to our proprietary information, or that our agreements will not be breached. We cannot

guarantee that our trade secrets and other confidential, proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. If we are unable to prevent disclosure of our intellectual property to third parties, we may not be able to maintain a competitive advantage in our market, which would harm our business. Any disclosure to or misappropriation of our confidential, proprietary information by third parties could enable competitors to quickly duplicate or surpass our technological achievements ~~. 57Changes in US patent law could diminish the value of patents in general, thereby impairing our ability to protect our products~~ . As is the case with other human or animal pharmaceutical product companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the human and animal health industries involves both technological and legal complexity. Therefore, obtaining and enforcing patents is costly, time- consuming, and inherently uncertain. In addition, the US has recently enacted and implemented wide- ranging patent reform legislation. The US 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 the US Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce patents that we have or that we might obtain in the future. ~~We may not be able to protect our intellectual property rights throughout the world, which could impair our business.~~ Filing, prosecuting and defending patents on human and animal drug products, product candidates and non- prescription products throughout the world would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we may obtain patent protection, but where patent enforcement is not as strong as that in the US. These products may compete with our products in jurisdictions where we do not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent **such** ~~them from so competing~~ **competition** . Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to animal health products, which could make it difficult for us to stop the infringement of our future patents, if any, or patents we have in licensed, or marketing of competing products in violation of our proprietary rights generally. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the US. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the US and abroad. Proceedings to enforce our future patent rights, if any, in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business ~~. Our business could be harmed if we fail to obtain certain registered trademarks in the US or in other countries~~ . Our registered and pending US trademarks include MYTESI ®, JAGUAR HEALTH ®, the Jaguar Health Logo ®, NAPO ®, Napo Logo ®, Napo Therapeutics, CANALEVIA, CANALEVIA- CA1, CANALEVIA- CA2, EQUILEVIA, NEONORM ®, JAGUAR ANIMAL HEALTH ®, and the Jaguar Animal Health Logo ®. We also own registered and pending applications for the CANALEVIA mark in a number of foreign countries. During trademark registration proceedings, we may receive rejections of our trademark applications. If so, we will have an opportunity to respond, but we may be unable to overcome such rejections. In addition, the USPTO and comparable agencies in many foreign jurisdictions may permit third parties to oppose pending trademark applications and to seek to cancel registered trademarks. If opposition or cancellation proceedings are filed against any of our trademark applications or any registered trademarks, our trademarks may not survive such proceedings. Moreover, any name we propose to use with our prescription drug product candidates in the US, including CANALEVIA and CANALEVIA- CA1, must be approved by the FDA, regardless of whether we have registered or applied to register as a trademark. The FDA typically conducts a review of proposed prescription drug product names, including an evaluation of potential for confusion with other product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. ~~58We~~ **We** may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties. We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology, pharmaceutical or animal health companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise improperly used or disclosed confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against any such claims. Even if we were successful in defending against any such claims, such litigation could result in substantial cost and be a distraction to our management and employees. Even if we receive any of the required regulatory approvals for our current or future prescription drug product candidates and non- prescription products, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expenses and delays. If the FDA or any other regulatory body approves any of our current or future prescription drug product candidates, or if necessary, our non- prescription products, the manufacturing processes, clinical development, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product may be subject to extensive and ongoing regulatory requirements. These requirements could include but are not limited to, submissions of efficacy and safety and other post- marketing information and reports, establishment registration, and product listing, compliance with new rules promulgated under the FSMA, as well as continued compliance with cGMPs, GLPs, and GCPs for any studies that we conduct post- approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our contract manufacturers or manufacturing processes, or failure to comply with regulatory requirements, are reportable events to

the FDA and may result in, among other things: ● restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, revised labeling, or voluntary or involuntary product recalls; ● additional clinical studies, fines, warning letters or holds on target animal studies; ● refusal by the FDA, or other regulators to approve pending applications or supplements to approved applications filed by us or our strategic collaborators related to the unknown problems, or suspension or revocation of the problematic product' s license approvals; ● product seizure or detention, or refusal to permit the import or export of products; and ● injunctions and / or the imposition of civil or criminal penalties. The FDA or other regulatory agency' s policies may change, and additional government regulations may be enacted that could prevent, limit, or delay regulatory approval of our product candidates or require certain changes to the labeling or additional clinical work concerning the safety and efficacy of the product candidates. We cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative action in the US or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, and we may not achieve or sustain profitability, which would harm our business. In addition, failure to comply with these regulatory requirements could result in significant penalties and delays. In addition, from time to time, we may enter into consulting and other financial arrangements with physicians or veterinarians, who prescribe or recommend our products once approved. As a result, we may be subject to state, federal, and foreign healthcare and / or veterinary medicine laws. If our financial relationships with veterinarians are found to be in violation of such laws that apply to us, we may be subject to penalties. ~~59Further~~ -- **Further**, our commercial supply is regulated by the FDA, which requires regular filings of annual reports and may include modifications by the Company to our approvals. Failure to gain agreement from the FDA on a timely basis could adversely affect our commercial supply of products. Lastly, if we obtain conditional approval for our current or future drug product candidates, this conditional approval is renewable annually for five years and may be withdrawn or terminated under certain circumstances either during or at the end of the five- year period. For example, even though we have obtained conditional approval for Canalevia- CA1, if we do not undertake substantial efforts to do additional clinical research each year for the next five years, the FDA could terminate such conditional approval by refusing to renew the conditional approval ~~. Any of our current or future prescription drug product candidates or non- prescription products may cause or contribute to adverse medical events that we would be required to report to regulatory authorities and if we fail to do so, we could be subject to sanctions that would harm our business~~. If we are successful in commercializing any of our current or future prescription drug product candidates or non- prescription products, certain regulatory authorities will require that we report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of our obligation to report would be triggered by the date we become aware of the adverse event as well as the nature of the event. We may fail to report adverse events we become aware of within the prescribed timeframe. We may also fail to appreciate that we have become aware of a reportable adverse event, especially if such an event is not reported to us as an adverse event or if it is an adverse event that is unexpected or removed in time from the use of our products. If we fail to comply with our reporting obligations, the regulatory authorities could take action including, but not limited to, criminal prosecution, seizure of our products, facility inspections, removal of our products from the market, recalls of certain lots or batches, or cause a delay in approval or clearance of future products. Legislative or regulatory reforms with respect to animal health may make it more difficult and costly for us to obtain regulatory clearance or approval of any of our current or future product candidates and to produce, market, and distribute our products after clearance or approval is obtained. From time to time, legislation is drafted and introduced in the US Congress or other jurisdictions in which we intend to operate that could significantly change the statutory provisions governing the testing, regulatory clearance or approval, manufacture, and marketing of regulated products. In addition, the FDA' s regulations and guidance are often revised or reinterpreted by the FDA and such other regulators in ways that may significantly affect our business and our products and product candidates. Similar changes in laws or regulations can occur in other countries. Any new regulations or revisions or reinterpretations of existing regulations in the US or in other countries may impose additional costs or lengthen review times of any of our current or future products and product candidates. We cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on our business in the future. Such changes could, among other things, require: ● changes to manufacturing methods; ● additional clinical trials or testing; ● new requirements related to approval to enter the market; ● recall, replacement, or discontinuance of certain products; and ● additional record keeping or the development of certain regulatory- required hazard identification plans. Each of these would likely entail substantial time and cost and could harm our financial results. In addition, delays in receipt of or failure to receive regulatory clearances or approvals for any future products would harm our business, financial condition, and results of operations ~~. 60We believe that our non- prescription products are not subject to regulation by regulatory agencies in the US, but there is a risk that regulatory bodies may disagree with our interpretation or may redefine the scope of their regulatory reach in the future, which would result in additional expense and could delay or prevent the commercialization of these products~~. The FDA retains jurisdiction over all animal prescription drug products. However, in many instances, the Federal Trade Commission will exercise primary or concurrent jurisdiction with the FDA on non- prescription products as to post- marketing claims made regarding the product. On April 22, 1996, the FDA published a statement in the Federal Register, 61 FR 17706, that it believes that the Dietary Supplement and Health Education Act (" DSHEA ") does not apply to animal health supplement products, such as our non- prescription products. Accordingly, the FDA' s Center for Veterinary Medicine only regulates those animal supplements that fall within the FDA' s definition of an animal drug, animal food, or animal feed additive. The Federal Food Drug and Cosmetic Act defines food as " articles used for food or drinks for man or other animals and articles used as components of any such article. " Animal foods are not subject to pre- market approval and are designed to provide a nutritive purpose to the animals that receive them. Feed additives are defined as those articles that are added to an animal' s feed or water, as illustrated by the guidance documents. Our non- prescription products are not added to food, are not ingredients in

food, nor are they added to any animal' s drinking water. Therefore, our non- prescription products do not fall within the definition of a food or feed additive. In light of the pronouncement by the FDA that the DSHEA was not intended to apply to animals, the FDA seeks to regulate such supplements as food or food additives depending on the intended use of the product. The intended use is demonstrated by how the article is included in a food or added to the animals' intake (i. e., through its drinking water). If the intended use of the product does not fall within the proscribed use, making the product a food, it cannot be regulated as a food. There is no intent to make our non- prescription products a component of animal food, either directly or indirectly. A feed additive is a product that is added to a feed for any reason, including the top dressing of an already prepared feed. Some additives, such as certain forage, are deemed to be Generally Recognized as Safe, or GRAS, and therefore, not subject to a feed Additive Petition approval prior to use. However, the substances deemed GRAS are generally those that are recognized as providing nutrients as food does. We do not believe that our non- prescription products fit within this framework either. Finally, a new animal drug refers to drugs intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in animals. Our non- prescription Neonorm Foal and Neonorm Calf products are not intended to diagnose, cure, mitigate, treat, or prevent disease and, therefore, do not fit within the definition of an animal drug. Additionally, because a previously marketed human formulation of the botanical extract in our non- prescription products was regulated as a human dietary supplement subject to the DSHEA (and not regulated as a drug by the FDA), we do not believe that the FDA would regulate the animal formulation used in our non- prescription products in a different manner. We do not believe that our non- prescription products fit the definition of an animal drug, food, or food additive and, therefore, are not regulated by the FDA at this time. However, despite many such unregulated animal supplements currently on the market, the FDA may choose in the future to exercise jurisdiction over animal supplement products, in which case, we may be subject to unknown regulations, thereby inhibiting our ability to launch or to continue marketing our non- prescription products. In the past, the FDA has redefined or attempted to redefine some non- prescription non- feed products as falling within the definition of drug, feed or feed additive and therefore subjected those products to the relevant regulations. We have not discussed with the FDA its belief that the FDA currently does not exercise jurisdiction over our non- prescription products. Should the FDA assert regulatory authority over our non- prescription products, we would take commercially reasonable steps to address the FDA' s concerns, potentially including but not limited to seeking registration for such products, reformulating such products to further distance such products from regulatory control, or ceasing the sale of such products. Further, the Animal and Plant Health Inspection Service, an agency of the USDA, may at some point choose to exercise jurisdiction over certain non- prescription products that are not intended for production animals. We do not believe we are currently subject to such regulation but could be in the future. If the FDA or other regulatory agencies, such as the USDA, try to regulate our non- prescription products, we could be required to seek regulatory approval for our non- prescription products, which would result in additional expense and could delay or prevent the commercialization of these products. ~~61Even if we receive the required regulatory approvals for our current or future prescription drug product candidates and non- prescription products, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expenses.~~ If the FDA or any other regulatory body approves any of our current or future prescription drug product candidates, or if necessary, our non- prescription products, the manufacturing processes, clinical development, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product is subject to extensive and ongoing regulatory requirements. These requirements could include but are not limited to, submissions of efficacy and safety and other post- marketing information and reports, establishment registration, and product listing, compliance with new rules promulgated under the FSMA, as well as continued compliance with cGMPs, GLPs, and GCPs for any studies that Napo conducts post- approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with ~~• our contract manufacturers or manufacturing processes, or failure to comply with regulatory requirements, are reportable events to the FDA and may result in, among other things: ● restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, revised labeling, or voluntary or involuntary product recalls; ●~~ additional clinical studies fines, warning letters or holds on studies; ~~●~~ • refusal by the FDA, or other regulators to approve pending applications or supplements to approved applications filed by Napo or Napo' s strategic collaborators related to the unknown problems or suspension or revocation of the problematic product' s license approvals; ~~• ● product seizure or detention, or refusal to permit the import or export of products; and ●~~ injunctions or the imposition of civil or criminal penalties. The FDA or other regulatory agency' s policies may change, and additional government regulations may be enacted that could prevent, limit, or delay regulatory approval of our product candidates, require certain labeling changes, or require additional clinical work concerning the safety and efficacy of the product candidates. We cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative action, either in the US or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, and we may not achieve or sustain profitability, which would harm our business. In addition, failure to comply with these regulatory requirements could result in significant penalties. In addition, from time to time, we may enter into consulting and other financial arrangements with physicians who prescribe or recommend our products once approved. As a result, we may be subject to state, federal, and foreign healthcare laws, including but not limited to anti- kickback laws. If our financial relationships with physicians or veterinarians are found to be in violation of such laws that apply to us, we may be subject to penalties. ~~Risks Related to Our Common StockOur failure to meet the continued listing requirements of The Nasdaq Capital Market could result in a delisting of our common stock.~~ Our common stock is listed on the Nasdaq Capital Market under the symbol " JAGX. " In order to maintain that listing, we must satisfy minimum financial and other requirements, including, without limitation, the minimum stockholders' equity requirement and the minimum bid price requirement. There can be no assurances that we will be successful in maintaining, or if we fall out of compliance, in regaining compliance with the continued listing requirements and maintaining the listing of our common stock on the Nasdaq Capital

Market. Delisting from Nasdaq could adversely affect our ability to raise additional financing through the public or private sale of equity securities, ~~62and~~ -- **and** we would incur additional costs under requirements of state " blue sky " laws in connection with any sales of our securities. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest, and fewer business development opportunities. If Nasdaq delists our common stock, the price of our common stock may decline, and our common stock may be eligible to trade on the OTC Bulletin Board, another over- the- counter quotation system, or on the pink sheets, which would negatively affect the liquidity of our common stock and an investor may find it more difficult to dispose of their common stock or obtain accurate quotations as to the market value of our common stock. On ~~January~~ **May** 23, ~~2023~~ **2024**, we effected a 1- for- ~~75~~ **60** reverse stock split of our outstanding voting common stock ~~. All share amounts and warrant or option exercise prices contained in this report reflect that adjustment~~. Additionally, in 2020, the SEC approved a Nasdaq rule change to expedite the delisting of securities of companies that have had one or more reverse stock splits with a cumulative ratio of one for 250 or more shares over the prior two- year period. Under the new rules, if a company falls out of compliance with the $ 1. 00 minimum bid price after completing reverse stock splits over the immediately preceding two years that cumulatively result in a ratio of one for 250 shares, the company will not be able to avail itself of any compliance periods. Nasdaq will instead require the issuance of a Staff delisting determination, which is appealable to a hearings panel. Our ability to remain listed on the Nasdaq Capital Market may be negatively impacted by this new Nasdaq rule. **On June 25, 2024, we received a letter from Nasdaq confirming that we have regained compliance with the bid price requirement under Listing Rule 5550 (a) (2). However, in application of Listing Rule 5815 (d) (4) (B), the Company will be subject to a mandatory panel monitor for a period of one year through June 25, 2025. If, within that one- year monitoring period, the Nasdaq Listing Qualifications staff (the " Staff ") finds that the Company again out of compliance with the bid price requirement, then, notwithstanding Rule 5810 (c) (2), the Company will not be permitted to provide the Staff with a plan of compliance with respect to that deficiency and the Staff will not be permitted to grant additional time for the Company to regain compliance with respect to that deficiency, nor will the Company be afforded an applicable cure or compliance period pursuant to Rule 5810 (c) (3). Instead, the Staff will issue a delist determination letter and the Company will have an opportunity to request a new hearing with the initial panel or a newly convened hearings panel if the initial panel is unavailable. The Company will have the opportunity to respond / present to the hearings panel as provided by Listing Rule 5815 (d) (4) (C) and the Company' s securities may at that time be delisted from Nasdaq. On March 24, 2025, we effected a 1- for- 25 reverse stock split of our outstanding voting common stock. All share amounts and warrant or option exercise prices contained in this report reflect that adjustment.** We continue to actively monitor our performance with respect to the listing standards and will consider available options to resolve any deficiency and maintain compliance with the Nasdaq rules. There can be no assurance that we will be able to maintain compliance or, if we fall out of compliance, regain compliance with any deficiency, or if we implement an option that regains our compliance, maintain compliance thereafter ~~. If our shares become subject to the penny stock rules, it would become more difficult to trade our shares~~. The SEC has adopted rules that regulate broker- dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than $ 5. 00, other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system. If we do not retain a listing on The Nasdaq Capital Market and if the price of our common stock is less than $ 5. 00, our common stock will be deemed a penny stock. The penny stock rules require a broker- dealer, before a transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document containing specified information. In addition, the penny stock rules require that before effecting any transaction in a penny stock not otherwise exempt from those rules, a broker- dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive (i) the purchaser' s written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common stock, and therefore, stockholders may have difficulty selling their shares. ~~The price of our common stock could be subject to volatility related or unrelated to our operations, and purchasers of our common stock could incur substantial losses.~~ We have experienced and may continue to experience significant volatility in the price of our common stock. From January ~~27~~ **2**, ~~2023~~ **2024**, through January ~~26~~ **30**, ~~2024~~ **2025**, the share price of our common stock ranged from a high of $ **540 to a low of $ 19.** 5 ~~. 04 to a low of $ 0. 09~~. The reason for the volatility in our stock is not well understood and may continue. Factors that may have contributed to such volatility include but are not limited to, those discussed previously in this " Risk Factors " section of this report and others, such as: ~~•~~ delays in the commercialization of Mytesi, Canalevia- CA1, or our other current or future prescription drug product candidates and non- prescription products; ~~•~~ any delays in, or suspension or failure of, our current and future studies; ~~• 63 •~~ announcements of regulatory approval or disapproval of any of our current or future product candidates or of regulatory actions affecting our company or our industry; ~~•~~ manufacturing and supply issues that affect product candidate or product supply for our studies or commercialization efforts; ~~•~~ quarterly variations in our results of operations or those of our competitors; ~~•~~ changes in our earnings estimates or recommendations by securities analysts; ~~•~~ the payment of licensing fees or royalties in shares of our common stock; ~~•~~ announcements by us or our competitors of new prescription drug products or product candidates or non- prescription products, significant contracts, commercial relationships, acquisitions or capital commitments; ~~•~~ announcements relating to future development or license agreements including termination of such agreements; ~~•~~ adverse developments with respect to our intellectual property rights or those of our principal collaborators; ~~•~~ commencement of litigation involving us or our competitors; ~~•~~ any major changes in our board of directors or management; ~~•~~ new legislation in the US relating to the prescription, sale, distribution or pricing of gastrointestinal health products; ~~•~~ product liability claims, other litigation or public concern about the safety of our

prescription drug product or product candidates and non- prescription products or any such future products; ● • market conditions in the human or animal industry, in general, or in the gastrointestinal health sector, in particular, including performance of our competitors; ● • future issuances of shares of common stock or other securities; • ● ~~uncertainties related to COVID- 19;~~ ● general economic conditions in the US and abroad; and ● • market speculation ~~regardingIn~~ -- **regarding any of the foregoing. In** addition, the stock market, in general, or the market for stocks in our industry, in particular, may experience broad market fluctuations, which may adversely affect the market price or liquidity of our common stock. Any sudden decline in the market price of our common stock could trigger securities class- action lawsuits against us. If any of our stockholders were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit, and the time and attention of our management would be diverted from our business and operations. We also could be subject to damages claims if we were found to be at fault in connection with a decline in our stock price ~~. 64A possible " short squeeze " due to a sudden increase in demand for our common stock that largely exceeds supply may lead to further price volatility in our common stock~~ . Investors may purchase shares of our common stock to hedge existing exposure in our common stock or to speculate on the price of our common stock. Speculation on the price of our common stock may involve long and short exposures. To the extent aggregate short exposure exceeds the number of shares of our common stock available for purchase in the open market, investors with short exposure may have to pay a premium to repurchase our common stock for delivery to lenders of our common stock. Those repurchases may dramatically increase the price of our common stock until investors with short exposure can purchase additional shares of common stock to cover their short position. This is often referred to as a " short squeeze. " A short squeeze could lead to volatile price movements in shares of our common stock that are not directly correlated to our company' s performance or prospects. Once investors purchase the shares necessary to cover their short position, the price of our common stock may decline. You may not be able to resell our common stock when you wish to sell it or at a price that you consider attractive or satisfactory. The listing of our common stock on The Nasdaq Capital Market does not assure that a meaningful, consistent, and liquid trading market exists. Although our common stock is listed on The Nasdaq Capital Market, its trading volume has been limited, and an active trading market for our shares may never develop or be sustained. If an active market for our common stock does not develop, you may be unable to sell your shares when you wish to sell them or at a price that you consider attractive or satisfactory. The lack of an active market may also adversely affect our ability to raise capital by selling securities in the future or impair our ability to license or acquire other product candidates, businesses, or technologies using our shares as consideration. ~~If securities or industry analysts do not publish research or reports about our company, or if they issue adverse or misleading opinions regarding us or our stock, our stock price and trading volume could decline.~~ The trading market for our common stock depends in part on the research and reports that industry or financial analysts publish about us or our business. We do not influence or control the reporting of these analysts. If one or more of the analysts who do cover us downgrade or provide a negative outlook on our company, our industry, or the stock of any of our competitors, the price of our common stock could decline. If one or more of these ~~analyst~~ **analysts** ~~' s~~ ceases coverage of our company, we could lose visibility in the market, which in turn could cause the price of our common stock to decline. ~~You may be diluted by conversions of outstanding shares of non- voting common stock, exercises of outstanding options and warrants, and issuances of securities pursuant to our ATM Agreement.~~ As of December 31, ~~2023~~ **2024** , we had (i) outstanding options to purchase an aggregate of ~~26~~ **30** , ~~262~~ **469** shares of our common stock at a weighted average exercise price of $ ~~599~~ **5, 885** . ~~12~~ **50** per share, (ii) outstanding options to purchase an aggregate of 1 ~~, 512 shares~~ **share** of our common stock issuable upon exercise of outstanding inducement options, with a weighted- average exercise price of $ ~~346~~ **311** . ~~17~~ **25** per share, (iii) ~~11~~ **3** , **045** ~~424, 807~~ shares of our common stock issuable upon exercise of warrants outstanding, with weighted- average exercise price of $ ~~538~~ **96** . ~~5~~ **00** , (iv) ~~2~~ **5** , **518** ~~708, 136~~ shares of our common stock issuable upon vesting of outstanding RSUs, (v) ~~37~~ **5** , ~~237~~ **644** shares of our common stock issuable to third parties upon exercise of those shares, and (vi) 9 shares of our non- voting common stock issuable at an equivalent share of voting common stock. The exercise of such options, warrants, **and** vesting of RSUs ~~, and conversion of the non- voting common stock~~ will result in further dilution of your investment. In addition, you may experience further dilution if we issue common stock in the future, including common stock issued pursuant to our existing At The Market Offering Agreement **dated December 10, 2021, by and between the Company and Ladenburg Thalmann & Co. Inc.** (**" Ladenburg ") (as amended,** the " ATM Agreement ") **, and securities issued upon exercise of the Rights pursuant to our stockholder rights plan** . Pursuant to the ATM Agreement ~~with Ladenburg Thalmann & Co. Inc. (" Ladenburg ")~~ , we may offer and sell ~~up to $ 75. 0 million of~~ our common stock from time to time ~~through Ladenburg as our sales agent~~ **pursuant to the terms of the ATM Agreement** . During the year ended December 31, ~~2023~~ **2024** , we sold ~~55~~ **388** , **634** ~~222, 089~~ shares of common stock pursuant to **the terms of** the ATM Agreement for net proceeds of $ ~~32~~ **30** . ~~1~~ **8** million. ~~65As~~ **As** a result of this dilution, you may receive significantly less in net tangible book value than the full purchase price you paid for the shares in the event of liquidation ~~. Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management~~ . Our third amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent changes in control or changes in our management without the consent of our board of directors. These provisions include the following: ● • a classified board of directors with three- year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors; ● • no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates; ● • the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors; ● • the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could adversely affect the rights of our common stockholders or be used to deter a possible acquisition of our company; ● • the ability of our board of directors to alter our bylaws without obtaining stockholder approval; ● • the required

approval of the holders of at least 75 % of the shares entitled to vote at an election of directors to adopt, amend, or repeal our bylaws or repeal the provisions of our third amended and restated certificate of incorporation regarding the election and removal of directors; ● a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders; ● the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors, the chief executive officer, the president, or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and ● advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer' s own slate of directors or otherwise attempting to obtain control of us. These provisions could inhibit or prevent possible transactions that some stockholders may consider attractive. We are also subject to the anti- takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation generally may not engage in a business combination with any holder of 15 % or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction ~~. 66Our amended and restated bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees~~ . Our amended and restated bylaws provide that unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, (iv) any action asserting a claim that is governed by the internal affairs doctrine or (v) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws. Any person purchasing or otherwise acquiring any interest in any shares of our capital stock shall be deemed to have notice of and to have consented to this provision of our amended and restated bylaws. This choice- of- forum provision may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits. Alternatively, if a court were to find this provision of our amended and restated bylaws inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could harm our business and financial condition. We ~~do not intend to pay dividends on our common stock, and your ability to achieve a return on your investment will depend on appreciation in the market price of our common stock. We~~ currently intend to invest our future earnings, if any, to fund our growth and not to pay any cash dividends on our common stock. Because we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market price of our common stock. We cannot be certain that our common stock will appreciate in price. ~~The requirements of being a public company, including compliance with the reporting requirements of the Exchange Act and the requirements of the Sarbanes- Oxley Act, may strain our resources, increase our costs, and distract management, and we may be unable to comply with these requirements in a timely or cost- effective manner.~~ Our initial public offering had a significant, transformative effect on us. Prior to our initial public offering, our business operated as a privately held company, and we were not required to comply with public reporting, corporate governance, and financial accounting practices and policies required of a publicly traded company. As a publicly traded company, we incur significant additional legal, accounting, and other expenses compared to historical levels. In addition, new and changing laws, regulations, and standards relating to corporate governance and public disclosure, including the Dodd- Frank Wall Street Reform and Consumer Protection Act and the rules and regulations thereunder, as well as under the Sarbanes- Oxley Act, the JOBS Act and the rules and regulations of the SEC and The Nasdaq Capital Market, may result in an increase in our costs and the time that our board of directors and management must devote to our compliance with these rules and regulations. These rules and regulations have substantially increased our legal and financial compliance costs and diverted management time and attention from our product development and other business activities. The Sarbanes- Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, Section 404 of the Sarbanes- Oxley Act, or Section 404, requires us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on and our independent registered public accounting firm potentially to attest to the effectiveness of our internal control over financial reporting. We have needed to expend time and resources on documenting our internal control over financial reporting so that we are in a position to perform such evaluation when required. As a smaller reporting company (" SRC "), we expect to avail ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404. However, we may no longer avail ourselves of this exemption when we cease to be an SRC. When our independent registered ~~67~~ **public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Our compliance with applicable provisions of Section 404 requires that we incur substantial accounting expenses and expend significant management time on compliance- related issues as we implement additional corporate governance practices and comply with reporting requirements. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources. We are a smaller reporting company and the reduced reporting requirements applicable to smaller reporting companies may make our common stock less attractive to investors. We are**

a smaller reporting company (“ SRC ”) and a non- accelerated filer, which allows us to take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not SRCs or non-accelerated filers, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes- Oxley Act of 2002, as amended, reduced disclosure obligations regarding executive compensation in our Annual Report and our periodic reports and proxy statements and providing only two years of audited financial statements in our Annual Report and our periodic reports. We will remain an SRC so long as (a) the aggregate market value of our outstanding common stock held by non- affiliates as of the last business day our most recently completed second fiscal quarter is less than $ 250 million or (b) (1) we have less than $ 100 million in annual revenues and (2) the aggregate market value of our outstanding common stock held by non- affiliates as of the last business day our most recently completed second fiscal quarter is less than $ 700 million. We cannot predict whether investors will find our common stock less attractive if we rely on certain or all of these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile and may decline.