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In addition to the other information in this Annual Report on Form 10-K, any of the factors described below could significantly and negatively affect our business, financial condition, results of operations or prospects. The trading price of our Class A Common Stock may decline due to these risks. Risks Related to Commercializing LINZESS, Apraglutide and Other Product Candidates We are highly dependent on the commercial success of LINZESS (linaclotide) in the U. S. for the foreseeable future. We and our partner, AbbVie, began selling LINZESS in the U. S. in December 2012. Revenues from our LINZESS collaboration constitute a significant portion of our total revenue, and we believe they will continue to do so for the foreseeable future. The commercial success of LINZESS depends on a number of factors, including: • the effectiveness of LINZESS as a treatment for adult patients with irritable bowel syndrome with constipation, or IBS-C, or chronic idiopathic constipation, or CIC, and . if approved. as a treatment for pediatric patients aged 6-17 years - old with functional constipation, or FC; • the size of the treatable patient population; • the effectiveness of the sales, managed markets and marketing efforts by us and AbbVie. including our ability to adapt our commercial model and market strategy to the evolving landscape; • the coverage and reimbursement levels set by governmental authorities, private health insurers and other third- party payors: • the adoption of LINZESS by physicians, which depends on whether physicians view it as safe and effective treatment for adult patients with IBS- C and CIC and , if approved, for pediatric patients aged ages 6-17 years - old with FC; ● our success in educating and activating adult IBS- C and CIC patients, and children and adolescents ages 6-17 years- old FC patients and their caregivers, to seek physician care for enable them to more effectively communicate their symptoms and treatment history to their physicians; • our ability to both secure and maintain adequate reimbursement for, and optimize patient access to, LINZESS and our ability to demonstrate that LINZESS is safer, more efficacious and / or more cost- effective than alternative therapies; • the effectiveness of our partners' distribution networks; • the occurrence of any side effects, adverse reactions or misuse, or any unfavorable publicity in these or other areas, associated with linaclotide; and • the development or commercialization of competing products or therapies that compete with LINZESS for the treatment of IBS-C or CIC, or their associated symptoms. Our revenues from the commercialization of LINZESS are subject to these and other factors, and therefore may be unpredictable from quarter- to- quarter . Our products may eause undesirable side effects or have other properties that could limit their commercial potential. Linaclotide has been prescribed to millions of patients since its launch in the U.S. and other territories beginning in December 2012. The most commonly reported adverse reaction since linaclotide became commercially available, as well as in the clinical trials for linaclotide in IBS-C and CIC, has been diarrhea. In the linaclotide Phase III IBS-C and CIC trials, severe diarrhea was reported in 2 % or less of the linaclotide-treated patients and its incidence was similar between the IBS-C and CIC populations. The number and type of patients treated with linaelotide could continue to grow if physicians prescribe linaclotide to more patients and as we and our partners conduct clinical trials, including in new indications, populations or formulations, as well as explore potential combination products, in existing and new territories. As patient experience increases and expands, we and others may identify previously unknown side effects, known side effects may be found to be more frequent and or severe than in the past, and we and others may detect unexpected safety signals for our products or any products perceived to be similar to our products. The foregoing, or the perception of the foregoing, may have the following effects, among others: ◆ sales of our products may be impaired; ◆ regulatory approvals for our products may be delayed, denied, restricted or withdrawn; • we or our partners may decide to, or be required to, change the products' label or send product warning letters or field alerts to physicians, pharmacists or hospitals; • reformulation of the products, additional nonclinical or clinical studies, changes in labeling or changes to or re-approvals of manufacturing facilities may be required; • we or our partners may be precluded from pursuing approval of linaelotide in new territories or from studying additional development opportunities to enhance our products' clinical profiles, including within new or existing indications, populations or formulations, as well as in potential combination products; • our or our products' reputation in the marketplace may suffer; and • government investigations or lawsuits, including class action suits, may be brought against us or our partners. Any of the above occurrences would harm or prevent sales of our products, increase expenses and impair our and our partners' ability to successfully commercialize our products. In addition, the U. S. FDA- approved label for LINZESS contains a boxed warning describing the risk of scriousdehydration in pediatric patients less than two years of age and a contraindication against its use in these patients. The safety and effectiveness of LINZESS in patients less than 18 years of age have not been established. These and other restrictions could limit the commercial potential of LINZESS. We and AbbVie have established a nonclinical and clinical post-marketing plan with the U. S. FDA to understand the safety and efficacy of LINZESS in pediatric patients. In September 2022, we announced positive topline data from a Phase III clinical trial evaluating linaelotide 72 meg in pediatric patients aged 6-17 years with FC, and in December 2022, we and AbbVie submitted a Supplemental New Drug Application, or sNDA, to the U. S. FDA seeking approval of a new indication of linaclotide for FC in pediatric patients aged 6-17 years. In February 2023, the U. S. FDA granted priority review to our sNDA and assigned a Prescription Drug User Free Act, or PDUFA, date of June 14, 2023. The Phase III clinical trial demonstrated acceptable safety in the pediatric population aged 6-17 years. The most common adverse event in the study was diarrhea, which occurred in 4.3 % of linaelotidetreated patients versus 1, 8 % in the placebo group. Additional clinical pediatric programs in IBS-C and FC are ongoing. There ean be no assurances, however, that the sNDA will be approved by the U. S. FDA, and if approved, whether there may be any significant unknown side effects that could limit the commercial potential of LINZESS in this pediatric population. We are subject to uncertainty relating to pricing and reimbursement policies in the U. S. which, if not favorable for our products, could

hinder or prevent our products' commercial success. Our and our partner's ability to commercialize our products successfully depends in part on the coverage and reimbursement levels set by governmental authorities, private health insurers and other third- party payors. In determining whether to approve reimbursement for our products and at what level, we expect that thirdparty payors will consider factors that include the efficacy, cost effectiveness and safety of our products, as well as the availability of other treatments including generic prescription drugs and OTC over-the-counter alternatives. Further, in order to obtain and maintain acceptable reimbursement levels and access for patients at copay levels that are reasonable and customary, we have offered, and expect to continue to face increasing pressure to offer, discounts or rebates from list prices or discounts 20to to third-party payors or other unfavorable pricing modifications. Obtaining and maintaining favorable reimbursement can be a time consuming and expensive process, and there is no guarantee that we or AbbVie, with respect to linaclotide in the U. S., will be able to negotiate or continue to negotiate pricing terms with third-party payors at levels that are profitable to us, or at all. Certain third- party payors also require prior authorization for, or even refuse to provide, reimbursement for our products, and others may do so in the future. Our business would be materially adversely affected if we and our partners are not able to receive approval for reimbursement of our products from third- party payors on a broad, timely or satisfactory basis; if reimbursement is subject to overly broad or restrictive prior authorization requirements; or if reimbursement is not maintained at satisfactory levels or becomes subject to prior authorization. In addition, our business could be adversely affected if government healthcare programs, private health insurers, including managed care organizations, or other reimbursing bodies or payors limit or reduce the indications for or conditions under which our products may be reimbursed. Moreover, as discussed further below, changes in insurance coverage or reimbursement levels by governmental authorities, private health insurers and other thirdparty payors, or in the type of such coverage held by patients, as well as the impacts to healthcare access or administration (including, for example, limitations on medications or procedures deemed "non-essential," reduced interaction between patients and physicians, and increased unemployment), due to the COVID-19 pandemic or otherwise may materially harm our business and commercialization efforts. We may experience pricing pressures in connection with the sale of our current and future products due to the healthcare reforms discussed below, as well as the trend toward initiatives aimed at reducing healthcare costs, the increasing influence of managed care, the scrutiny of pharmaceutical pricing, the ongoing debates on reducing government spending and additional legislative proposals. There has been significant scrutiny of pharmaceutical pricing and the resulting costs of pharmaceutical products that could cause significant operational and reimbursement changes for the pharmaceutical industry. There have been a number of federal and state efforts to address drug costs, which generally have focused on increasing transparency around drug costs or limiting drug prices, price increases or other related costs. Certain of these efforts have resulted in legislative and regulatory reforms. For example, and as discussed further below, the Inflation Reduction Act, or IRA, of 2022, which could have the effect of reducing the prices we can charge and increasing the discounts we provide for our products and product candidates. As another example, legislation enacted in 2021 revised the Medicaid drug rebate program in which we and other manufacturers participate so that Medicaid rebates were no longer capped at 100 % of the quarterly average manufacturer price, or AMP. We anticipate that our ability to increase prices on our products, including LINZESS, and our revenues, may be adversely affected by legislative and regulatory reforms such as the Medicaid drug rebate program revisions. Healtheare 27Healthcare reform efforts or any future legislation or regulatory actions aimed at controlling and reducing healthcare costs, including through measures designed to limit reimbursement, restrict access or impose unfavorable pricing modifications on pharmaceutical products, could impact our and our partners' ability to obtain or maintain reimbursement for our products at satisfactory levels, or at all, which could materially harm our business and financial results. We and our linaclotide partners are subject to uncertainty relating to pricing and reimbursement policies outside the U. S., as well as risks relating to the improper importation of linaclotide and sale of counterfeit versions of linaclotide. If such policies are not favorable, or if linaclotide is improperly imported or is counterfeited, our business and financial results could be adversely affected. In some foreign countries, particularly Canada, the countries of Europe, Japan and China, the pricing and payment of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take 6 to 12 months or longer after the receipt of regulatory approval and product launch. Reimbursement sources are different in each country, and each country may include a combination of distinct potential payors, including private insurance and governmental payors. Some countries may restrict the range of medicinal products for which their national health insurance systems provide reimbursement and control the prices of medicinal products for human use. To obtain favorable reimbursement for the indications sought or pricing approval in some countries, we and our partners may be required to conduct a clinical trial that compares the cost and clinical effectiveness of linaclotide to other available therapies. Further, several countries have implemented government measures to either freeze or reduce pricing of pharmaceutical products. Many third- party payors and governmental authorities also consider the price for which the same product is being sold in other countries to determine their own pricing and reimbursement strategy, so if linaclotide is priced low or gets limited reimbursement in a particular country, this could result in similarly low pricing and reimbursement in other countries. If reimbursement for linaclotide is unavailable in any country in which reimbursement is sought, limited in scope or amount, or if pricing is set at or reduced to unsatisfactory levels, our and our partners' ability to successfully commercialize linaclotide in such country would be impacted negatively. Furthermore, if these measures prevent us or any of our partners from selling linaclotide on a profitable basis in a particular country, they could prevent the commercial launch or continued sale of linaclotide in that country. 21CONSTELLA was first launched in certain European countries for the symptomatic treatment of moderate to severe IBS-C in adults in the second quarter of 2013 and our partner, AbbVie, is currently commercializing CONSTELLA in a number of European countries ; including the United Kingdom, Italy and Spain. LINZESS was first launched in Japan for the treatment of IBS-C in adults in the first quarter of 2017, and for the treatment of chronic constipation in adults in the third quarter of 2018, and our partner Astellas Pharma, Inc., or Astellas, is currently commercializing LINZESS in Japan. In addition, LINZESS was first launched in China for the treatment of IBS-C in adults in November 2019, and our

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partner AstraZeneca AB (together with its affiliates), or AstraZeneca, is currently commercializing LINZESS in China
(including Hong Kong and Macau). The pricing and reimbursement strategy is a key component of our partners'
commercialization plans for CONSTELLA in Europe and LINZESS in Japan and China. Our revenues may suffer if our
partners are unable to successfully and timely conclude reimbursement, price approval or funding processes and market
CONSTELLA in key member states of the E. U. or LINZESS in Japan or China, or if coverage and reimbursement for either
CONSTELLA or LINZESS is limited or reduced. If our partners are not able to obtain or maintain coverage, pricing or
reimbursement on acceptable terms or at all, or if such terms change in any countries in its territory, our partners may not be
able to, or may decide not to, sell either CONSTELLA or LINZESS in such countries. We and our partners also face the risk
that linaclotide is imported or reimported into markets with relatively higher prices from markets with relatively lower prices,
which would result in a decrease of sales and any payments we receive from the affected market. Additionally, third parties may
illegally produce, distribute and / or sell counterfeit or otherwise unfit or adulterated versions of linaclotide. In either case, we
and our partners may not be able to detect or, if detected, prevent or prohibit the sale of such products, which could result in
dangerous health consequences for patients, loss of confidence in us, our partners and our products, and adverse regulatory or
legal consequences. Any of the foregoing or other consequences could adversely impact our reputation, financial results and
business. We cannot give any assurance that apraglutide will be successful in clinical trials, and if successful, will receive
regulatory approval, which is necessary before it can be commercialized. 28Upon the closing of the VectivBio
Acquisition, we added apraglutide, VectivBio's lead investigational asset, a next generation, long-acting GLP- 2 analog
in development for the treatment of patients with SBS- IF and aGvHD, to our pipeline. Apraglutide will require
extensive clinical development, management of nonclinical, clinical and manufacturing activities, regulatory approval,
adequate manufacturing supply, and if approved, fully integrating apraglutide into the commercial infrastructure to
support with the appropriate sales, marketing, and market access efforts to generate sales in pursuit of revenue. We have
not yet completed a pivotal trial for this product candidate. We are not permitted to market or promote this product
candidate before we receive regulatory approval from the U. S. FDA, the EMA, or comparable foreign regulatory
authorities in the applicable jurisdiction, and we may never receive any such regulatory approval for apraglutide. To
obtain regulatory approvals for apraglutide, we must demonstrate with substantial evidence from adequate and well-
controlled clinical trials, and to the satisfaction of the U. S. FDA, EMA or comparable foreign regulatory authorities,
that such product candidates are safe and effective for their intended uses. However, we cannot be certain that
apraglutide will be successful in clinical trials. Further, results from clinical trials can be interpreted in different ways,
and apraglutide may not receive regulatory approyal even if we believe it is successful in clinical trials. Even if we do
receive such regulatory approval, we may be unable to successfully commercialize appraglutide within any approved
indications or develop apraglutide for the treatment of additional indications, which would materially adversely impact
our business and prospects. The regulatory approval processes in the U. S., in the E. U. and in other foreign jurisdictions
are lengthy, time consuming and inherently unpredictable. If we are ultimately unable to obtain regulatory approval for
apraglutide or our other product candidates, our business will be harmed. The time required to obtain regulatory
approval from the U. S. FDA, EMA and other comparable regulatory authorities is unpredictable, typically takes many
years following the commencement of clinical trials and depends upon numerous factors. In addition, regulatory
approval policies, regulations, or the type and amount of clinical data necessary to gain regulatory approval may change
during the course of a product candidate' s clinical development and may vary among jurisdictions, which may cause
delays in the regulatory approval of or may result in the decision not to approve apraglutide or other product candidates.
Regulatory approval is never guaranteed. Data obtained from nonclinical studies and clinical trials are susceptible to
varying interpretations, and regulatory authorities may not interpret our data as favorably as we do, which may further
delay, limit or prevent development efforts, clinical trials, or regulatory approval. Even if we believe the nonclinical or
clinical data for our product candidates are sufficient to support approval, such data may not be considered sufficient to
support approval by the U. S. FDA, EMA and other comparable regulatory authorities. Of the large number of drugs in
development, only a small percentage successfully complete the U. S. FDA, EMA or comparable regulatory approval
processes and are commercialized. Accordingly, it is possible that we will never obtain regulatory approval for
apraglutide or our other product candidates. The U. S. FDA, EMA or other comparable regulatory authorities may
delay, limit, or deny approval of our product candidates, including apraglutide, for many reasons, including the
following: • the U. S. FDA, EMA or other comparable foreign regulatory authorities may disagree with the design or
implementation of our clinical trials or with our interpretation of data from preclinical studies or clinical trials; • the
population studied in the clinical program may not be sufficiently broad or representative to assure safety or efficacy in
the full population for which we seek approval; • the data collected from our clinical trials may not be sufficient to
support the submission of a NDA, MMA, or other submission or to obtain regulatory approval in the U. S., Europe or
elsewhere; • participants in our clinical trials or individuals using drugs similar to our product candidates may
experience serious and unexpected drug- related side effects; • we may be unable to demonstrate to the U. S. FDA, EMA
or other comparable foreign regulatory authorities that a product candidate' s risk- to- benefit ratio for its proposed
indications is acceptable; • the U. S. FDA, EMA or the applicable foreign regulatory authority may disagree regarding
the formulation, labeling and / or the specifications of a product candidate; • the U. S. FDA, EMA or other comparable
foreign regulatory authorities may fail to approve the 29manufacturing processes, test procedures and specifications, or
facilities of third- party manufacturers with which we contract for clinical and commercial supplies; and • the
regulatory approval policies or regulations of the U. S. FDA, EMA, or other applicable comparable foreign regulations in
the E. U. and other jurisdictions may significantly change in a manner rendering our clinical data insufficient for
approval. In addition, apraglutide may be also regulated as a drug and device combination product by the U. S. FDA,
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EMA and comparable foreign regulatory authorities. Developing and obtaining regulatory approval for combination products can pose unique challenges because they involve components that are regulated under different types of regulatory requirements and potentially by different U. S. FDA centers or regulatory authorities. As a result, combination product candidates may raise regulatory, policy and review challenges. Differences in regulatory pathways for each component of a combination product can impact the regulatory processes for all aspects of product development and management, including clinical investigations, marketing applications, manufacturing and quality control, adverse event reporting, promotion and advertising, user fees and post- approval modifications. Although the U. S. FDA, EMA, and comparable foreign authorities have systems in place for the review and approval of combination products, we may experience additional delays in the development and commercialization of apraglutide due to regulatory timing constraints and uncertainties in the product development and approval process. Moreover, although we expect that the device component would be reviewed in connection with the review of the drug marketing application for appraglutide, if and when submitted, and that no separate marketing authorization or certification for the device component will be required, the U. S. FDA, EMA or comparable regulatory authorities may disagree and require that we obtain a separate marketing authorization or certification for the device component, which could further delay or prevent regulatory approval of apraglutide. This lengthy regulatory approval process, as well as the unpredictability of the results of clinical trials, may result in our failure to obtain regulatory approval to potentially market appaglutide or our other product candidates, which would significantly harm our business, results of operations, and prospects. Delays in the completion of clinical testing of any of our products or product candidates could result in increased costs and delay or limit our ability to generate revenues. Delays in the completion of clinical testing could significantly affect our product development costs and timing of data readouts and regulatory submissions and potential approvals. We do not know whether planned clinical trials will be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to: ● obtaining regulatory authorization to commence a clinical trial; • reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites; • manufacturing sufficient quantities of a product candidate for use in clinical trials; • obtaining institutional review board or ethics committee approval to conduct a clinical trial at a prospective site; • recruiting and enrolling patients to participate in clinical trials for a variety of reasons, including competition from other clinical trial programs for the treatment of similar conditions; and ● maintaining patients who have initiated a clinical trial but may be prone to withdraw due to side effects from the therapy, lack of efficacy or personal issues, or who are lost to further follow- up. Additionally, changes in regulatory requirements and guidance may occur, and we may need or otherwise determine to amend clinical trial protocols to reflect these changes. Each protocol amendment would require institutional review board or ethics committee review and approval, which may adversely impact the costs, timing or successful completion of the associated clinical trials. If we or our partners terminate or experience delays in the completion of any clinical trials, the commercial prospects for our products or product candidates may be harmed, and our ability to generate product revenues will be delayed. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval. 30Our failure to successfully develop and commercialize additional product candidates or approved products would impair our ability to grow and / or adversely affect our business. As part of our growth strategy, we intend to explore further linaclotide development opportunities as well as to advance the development of our other pipeline programs through internal or external opportunities. We and AbbVie are exploring development opportunities to enhance the clinical profile of LINZESS by studying linaclotide in new or existing indications, populations and formulations to assess its potential to treat various conditions. For example, we and AbbVie have established a nonclinical and clinical postmarketing plan with the U. S. FDA to understand the safety and efficacy of LINZESS in pediatric patients. In June 2023, the U. S. FDA approved LINZESS as a once-daily treatment for pediatric patients ages 6-17 years- old with FC. Additional clinical pediatric programs in IBS- C and FC are ongoing. These development efforts may fail or may not increase the revenues that we generate from LINZESS. Furthermore, they may result in adverse events, or perceived adverse events, in certain patient populations that are then attributed to the currently approved patient population, which may result in adverse regulatory action at the U. S. FDA or in other countries or harm linaclotide's reputation in the marketplace, each of which could materially harm our revenues from linaclotide. The strength of our company's pipeline will depend in large part on the outcomes of studies of assets in our pipeline, such as apraglutide, CNP- 104, IW-3300, and any other assets that we may acquire or license from third parties. Through the VectivBio Acquisition we added apraglutide to our pipeline. We are conducting a Phase III clinical trial, STARS, to assess the safety and efficacy of apraglutide in adult patients with SBS- IF, and expect to report topline results in March 2024. In October 2023, we presented positive final data from the STARS Nutrition Phase II study of apraglutide in patients with SBS- IF and colonin- continuity. We are also conducting open label extension studies to further evaluate the efficacy, safety and tolerability of apraglutide in SBS- IF and to support potential submissions of marketing applications for apraglutide in the U. S., European Union, or E. U., and Japan. We are also conducting a Phase II exploratory study, STARGAZE, to evaluate apraglutide in patients with steroid- refractory gastrointestinal aGvHD, and expect data in the first quarter of 2024. Through the COUR Collaboration Agreement, we and COUR are developing CNP- 104 for the treatment of PBC. COUR is currently conducting a clinical study to evaluate the safety, tolerability, pharmacodynamic effects and efficacy of CNP-104 in PBC patients, with topline data expected in the third quarter of 2024. We are also advancing IW- 3300, a GC- C agonist, for the potential treatment of visceral pain conditions, such as IC / BPS, and endometriosis. We may spend several years and make significant investments in developing any current or future product candidate, and failure may

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occur at any point. Our product candidates must satisfy rigorous standards of safety and efficacy before they can be
approved for sale by the U. S. FDA, EMA or comparable foreign authorities. To satisfy these standards, we must
allocate resources among development programs and we must engage in costly and lengthy research and development
efforts, which are subject to unanticipated delays and other significant uncertainties. Despite our efforts, our product
candidates may not offer therapeutic or other improvement over existing competitive drugs, be proven safe and effective
in clinical trials, or meet applicable regulatory standards. It is possible that none of the product candidates we develop
will be approved for commercial sale, which would impair our ability to grow. We have ongoing or planned nonclinical
and clinical trials, including for linaclotide, apraglutide, and our other product candidates. Many companies in the
pharmaceutical industry have suffered significant setbacks in clinical trials even after achieving promising results in
earlier nonclinical or clinical trials. Findings from completed nonclinical studies may not be replicated in later clinical
trials, and clinical trials may not be predictive of the results we may obtain in later- stage clinical trials or of the
likelihood of regulatory approval. Results from clinical trials and findings from nonclinical studies could lead to abrupt
changes in development activities, including the possible limitation or cessation of development activities associated with
a particular product candidate or program. We cannot be certain that apraglutide or our other product candidates will
be successful in clinical trials. Furthermore, our analysis of data obtained from nonclinical and clinical activities is
subject to confirmation and interpretation by the U. S. FDA, EMA and other applicable regulatory authorities, which
could delay, limit or prevent regulatory approval. The U. S. FDA, EMA or other regulatory authorities also may require
additional clinical trials, which may be costly or delay, limit, prevent or otherwise impact regulatory submission or
approval. Satisfaction of U. S. FDA, EMA or other applicable regulatory requirements is costly, time- consuming,
uncertain and subject to unanticipated delays. We cannot give any assurance that appaglutide or our other product
candidates will receive regulatory approval. Even if we do receive such regulatory approval, we may be unable to
successfully commercialize apraglutide or our other product candidates in any approved 31indications or develop such
product candidates for the treatment of additional indications, which would materially adversely impact our business
and prospects. The pricing of apraglutide and our other product candidates, if and when approved for marketing, will
depend in part on pricing and reimbursement strategies adopted by our competitors. The pricing of apraglutide and our
other product candidates, if and when approved for marketing, will depend, in part, on the pricing and reimbursement
strategies adopted by our competitors. For example, with respect to apraglutide, a marketed GLP- 2 product already
exists in the U. S., E. U. and other international markets, which may or may not be genericized within the coming years.
Additionally, another investigational GLP- 2 may be launched in advance of the potential approval of apraglutide in the
U. S. and EMA. Order of market entry and reimbursement decisions could place appraglutide at a competitive
disadvantage, possibly deny market exclusivity rights, and / or elevate the need for significant clinical differentiation to
support certain pricing decisions. If these or other factors impact the price we can charge for apraglutide, we may
reduce our revenue and results of operations could be affected. Similar competitive factors could apply to pricing and
reimbursement decisions for our other product candidates, if approved, in the future. We must work effectively and
collaboratively with AbbVie to market and sell LINZESS in the U.S., and we must adapt our commercial model and market
strategy to the evolving landscape for LINZESS to achieve its maximum commercial potential. We are working closely with
AbbVie to execute our joint commercialization plan for LINZESS. The commercialization plan includes an agreed upon
marketing campaign that targets the physicians who see patients who could benefit from LINZESS treatment. Our consumer
marketing campaign also-targets the adult men and women who suffer from IBS- C or CIC. Our commercialization plan also
includes an integrated call plan for our sales forces in an effort to optimize the education of key healthcare professionals
specific gastroenterologists and primary care physicians on whom our and AbbVie's sales representatives call, and the
frequency with which the representatives meet with them. In order to optimize the commercial potential of LINZESS, we and
AbbVie must execute upon this commercialization plan effectively and efficiently. In addition, we and AbbVie must continually
assess, modify and adapt our commercialization plan in a coordinated and integrated fashion, including evaluating and adjusting
as necessary the level and mix of marketing and promotion efforts, in response to changing business, market or other factors in
order to advance the commercial potential of LINZESS, such as the potential U. S. FDA approval of LINZESS in pediatric
patients <del>aged ages</del> 6- 17 years - old for FC. Further, we and AbbVie must continue to focus our combined sales and marketing
eampaign efforts on educating customers about the importance of relevant data and information for LINZESS in treating
both constipation and overall abdominal symptoms in adults with IBS-C and support CIC, an and effective physician taking a
measured approach to educating and raising awareness on the FC indication for pediatric patients ages 6 - 17 years
patient dialogue around IBS- old C, CIC and the potential for LINZESS as an appropriate therapy for such symptoms. We in
addition, we and AbbVie must ensure a highly targeted and efficient promotional mix combined with provide providing
our sales forces with the highest quality support, guidance, and oversight for them to continue to effectively promote
promoting LINZESS to key healthcare professionals gastroenterologists and primary care physicians. If we and AbbVie fail
to evolve with the changing commercial landscape successfully and perform these commercial functions in the highest quality
manner and in accordance with our joint commercialization plan and related agreements, LINZESS will not achieve its
maximum commercial potential and we may suffer financial harm. Our commercial efforts to further target and engage adult
patients with IBS-C or CIC may not effectively increase appropriate patient awareness or patient / physician dialogue and may
not increase the revenues that we generate from LINZESS. During 2022, in-person work practices for customer-facing
employees returned to near pre-COVID 19 levels. However, new strains or variants of the virus that cause outbreaks of
COVID-19 may present in the future risks to successful execution of the commercial operating plan for LINZESS due in part to
limitations on in-person work practices for our customer-facing employees. The virtual support we may provide to customers
may not be as effective as in-person efforts, and our in-person efforts may be limited and / or limited in their effectiveness. If
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this were to occur, 22or if we, AbbVie or any of our partners were unable to align on our strategy and development and
commercial efforts as a result of the COVID-19 pandemic or otherwise, we may not be able to maintain or increase the
revenues that we generate or our business may be otherwise materially harmed. We face competition and new products may
emerge that provide different or better alternatives for treatment of the conditions that our products are approved to treat. The
pharmaceutical industry and the markets in which we operate are intensely competitive. We compete in the marketing and sale
of our products, the development of new products or product candidates and the acquisition of rights to new products with
commercial potential. Certain of our competitors have substantially greater financial, technical and human resources than us.
Mergers and acquisitions in the pharmaceutical industry may result in even more resources being concentrated in our
competitors and enable them to compete more effectively. Competition may also increase further as a result of advances made in
the commercial applicability of technologies and greater availability of capital for investment in these fields. Additionally, new
developments, including the development of other drug technologies and methods of preventing the incidence of disease, occur
in the pharmaceutical and medical technology industries at a rapid pace. These developments may render our products obsolete
or noncompetitive. Linaelotide 32Linaelotide competes with certain prescription therapies and OTC over-the-counter
products, some of which including with products that have attained significant levels of market acceptance. The availability of
prescription competitors and OTC over-the-counter products could limit the demand, and the price we are able to charge, for
LINZESS unless we are able to achieve and maintain market acceptance among the medical community and patients and
differentiate LINZESS on the basis of its cost and / or actual or perceived benefits. For example, Takeda's AMITIZA
(lubiprostone) is approved by the U. S. FDA for sale in the U. S. for the treatment of IBS-C, CIC and opioid-induced
constipation; Bausch Health 's TRULANCE (plecanatide) is approved by the U. S. FDA for sale in the U. S. for the treatment
of adults with IBS- C and CIC; Takeda's MOTEGRITY (prucalopride) is approved by the U. S. FDA for sale in the U. S. for
the treatment of CIC in adults; and in April 2022, Ardelyx launched in the U.S. IBSRELA TM (tenapanor), a U.S. FDA-
approved treatment for IBS- C in adults ; and in August 2022, Vibrant Gastro Inc . Over launched Vibrant, a drug - free
capsule that the U.S. FDA granted marketing authorization for the treatment of CIC in adults who have not experienced
relief of the their - counter bowel symptoms by using laxative therapies at the recommended dosage for at least one
month. OTC laxatives such as MiraLAX ® and DULCOLAX ®, and lactulose, a prescription laxative treatment, are also
available for the treatment of constipation. Additionally, we believe other companies are developing products that could
compete with linaclotide, should they be approved by the U. S. FDA or foreign regulatory authorities and become commercially
available. In addition, there are other compounds in late- stage development and other potential competitors that are in earlier
stages of development that, if approved, may compete with linaclotide. If our current or potential competitors are successful in
completing drug development for their drug candidates and obtain approval from the U. S. FDA or foreign regulatory
authorities, they could limit the demand for linaclotide. In addition to competition from such prescription and over- the- counter
products, we may also face competition from multiple low-cost generic versions of such products when available in the U.S.
For example, an authorized generic version of AMITIZA was first launched in the U. S. in January of 2021 and multiple
versions are now of AMITIZA became available in the U. We S. by Endo International and Dash Pharmaceuticals in January
2021 and in October 2022, respectively, and we expect additional generic versions of AMITIZA to become available in the
future. In addition, any product candidates that we successfully develop and commercialize will compete with existing
drugs and new drugs that may become available in the future. Apraglutide, if successfully developed and approved, will
compete with companies that are commercializing or developing drugs for SBS, such as <del>early Takeda, which currently</del>
distributes the GLP-2 analog teduglutide, marketed as GATTEX ® (teduglutide) in the U.S. and REVESTIVE ®
(teduglutide for injection) in Europe, and Zealand Pharma A/S, which is developing the GLP-2 analog glepaglutide for
the treatment of SBS and which submitted an NDA to the U.S. FDA in December 2023. Hanmi Pharmaceutical is also
developing a GLP- 2 analog which is in a Phase 2 clinical trial. Products with other mechanisms of action may emerge as
future competition. Our products or product candidates may cause undesirable side effects or have other properties that
could delay or prevent their development, create unpredictable clinical trial results, impact its regulatory approval or
limit their commercial potential. Undesirable side effects caused by our products or product candidates, including
adverse events associated with our product candidates, could cause us or regulatory authorities to interrupt, delay or
halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the U.S.
FDA, EMA or other comparable foreign regulatory authorities. Additionally, with respect to our approved products, as
patient experience increases and expands, or if one or more of our product candidates receives marketing approval, we,
our partners, or others may later identify previously unknown side effects, known side effects may be found to be more
frequent and / or severe than in the past, or detect unexpected safety signals for our products or any products perceived
to be similar to our products. The foregoing, or the perception of the foregoing, may have the following effects, among
others: • sales of our products may be impaired; • regulatory approvals for our products may be delayed, denied,
restricted or withdrawn; • we or our partners may decide to, or be required to, change the products' labeling or send
product warning letters or field alerts to physicians, pharmacists or hospitals; ● reformulation of the products,
additional nonclinical or clinical studies, changes in labeling or changes to or re- approvals of manufacturing facilities
may be required; 33 • we or our partners may be precluded from pursuing approval of our products in new territories
or from studying additional development opportunities to enhance our products' clinical profiles, including within new
or existing indications, populations or formulations, as well as in potential combination products; • we may be required
to create a Risk Evaluation and Mitigation Strategy, or REMS, plan, or similar actions in other jurisdictions which could
include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for
healthcare providers or other elements to assure safe use; • our or our products' reputation in the marketplace may
suffer; and • government investigations or lawsuits, including class action suits, may be brought against us or our
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partners. Any of the above occurrences could prevent us from achieving or maintaining market acceptance of our
product candidates, if they are approved, and could significantly harm our business, results of operations, and prospects,
prevent sales of our products, increase expenses and impair our and our partners' ability to successfully commercialize
our products. Linaclotide has been prescribed to millions of patients since its launch in the U. S. and other territories
beginning in December 2012. The number and type of patients treated with linaclotide could continue to grow if
physicians prescribe linaclotide to more patients and as we and our partners conduct clinical trials, including in new
indications, populations or formulations, as well as explore potential combination products, in existing and new
territories. As the patient experience with linaclotide increases and expands, we and others may identify previously
unknown side effects, known side effects may be found to be more frequent or severe than in the past, and others may
detect unexpected safety signals for linaclotide or any products perceived to be similar to linaclotide. The most
commonly reported adverse reaction since linaclotide became commercially available, as well as in the clinical trials for
linaclotide in IBS- C and CIC, has been diarrhea. In the linaclotide Phase III IBS- C and CIC trials in adults, severe
diarrhea was reported in 2 % or less of the linaclotide- treated patients and its incidence was similar between the IBS-C
and CIC populations. In the linaclotide Phase III FC trial in pediatric patients ages 6-17 years-old, severe diarrhea was
reported in one linaclotide- treated patient. In addition, the U. S. FDA- approved labeling for LINZESS contains a boxed
warning describing the risk of serious dehydration in pediatric patients less than two years of age and a contraindication
against its use in these patients. The safety and effectiveness of LINZESS in patients with FC less than 6 years of age or
in patients with IBS- C less than 18 years of age have not been established. These and other restrictions could limit the
commercial potential of LINZESS. We and AbbVie have established a nonclinical and clinical post- marketing plan with
the U. S. FDA to understand the safety and efficacy of LINZESS in pediatric patients. In June 2023, the U. S. FDA
approved LINZESS as a once-daily treatment for pediatric patients ages 6-17 years- old with FC, making LINZESS the
first and only FDA- approved prescription therapy for FC in this patient population. Additional clinical pediatric
programs in IBS- C and FC are ongoing. There can be no assurances, however, whether there may be any significant
unknown side effects that could limit the commercial potential of LINZESS in this pediatric population. Patients treated
with apraglutide may experience well known class- specific adverse events, including, but not limited to, abdominal pain,
injection site reactions, nausea, headaches, abdominal distension, upper respiratory tract infection, vomiting and fluid
overload. There may be additional mechanistic side effects that only reveal themselves upon the completion of larger
studies. Additionally, apraglutide has been designed to have a long half- life, creating uncertainty about its long- term
safety profile. For example, the increased pleiotropic activity of apraglutide will need to be assessed in longer- term non-
clinical safety studies. Even 34Even though LINZESS is approved by the U. S. FDA for use in adult and certain pediatric
patients, post-approval development and regulatory requirements still remain, which may present additional challenges, and we
may not be successful in obtaining approval for additional indications for LINZESS that we are seeking or may seek in the
future. In August 2012, the U. S. FDA approved LINZESS as a once-daily treatment for adult men and women suffering from
IBS- C or CIC. Although we and AbbVie completed additional nonclinical and clinical studies in adults that were required by
the U. S. FDA in connection with the approval of LINZESS, LINZESS remains subject to ongoing U. S. FDA requirements,
including those governing the testing, manufacturing, labeling, packaging, storage, advertising, promotion, sale, distribution,
recordkeeping and submission of safety and other post- market information. The U. S. FDA- approved labeling for
LINZESS contains a boxed warning describing the risk of serious dehydration in pediatric patients less than two years of age
and a contraindication against its use in these patients. The safety and effectiveness of LINZESS in patients less than 18 years of
age have not been established. We and AbbVie have established a nonclinical and clinical post-marketing plan with the U. S.
FDA to understand the safety and efficacy of LINZESS in pediatric patients. In September-June 2022 2023, we announced
positive topline data from the U. S. FDA approved LINZESS as a once-daily treatment for Phase III clinical trial evaluating
linaclotide 72 meg in pediatric patients aged ages 6-17 years - old with FC, making LINZESS the first and in December 2022,
we and AbbVic submitted an and only sNDA to the U. S. FDA seeking - approval approved prescription therapy of a new
indication of linaclotide for FC in pediatric this patient population. The safety and effectiveness of LINZESS in patients
aged with FC less than 6 years of age or in patients with IBS - 17-C less than 18 years . In February 2023, the U. S. FDA
granted priority review to our sNDA and assigned a PDUFA date of age have June 14, 2023. We may not been established be
successful in obtaining U. S. FDA approval for this new indication of linaclotide for FC in 23pediatric patients aged 6-17 years
or any additional indications for linaelotide that we may seek in the future. Additional clinical pediatric programs in IBS- C and
FC are ongoing <mark>in support of post- approval requirements</mark> . Our ability to expand the indication or <del>label labeling</del> information
for LINZESS to pediatries will depend on, among other things, our successful completion of pediatric clinical programs. These
post- approval requirements impose resource and cost burdens and costs on us. Failure to effectively, appropriately and timely
conduct and complete the required studies relating to our products, monitor and report adverse events and meet our other post-
approval commitments would lead to negative regulatory action at the U. S. FDA, which could include withdrawal of regulatory
approval of our products for their currently approved indications and patient populations. Manufacturers Even though
linaclotide is approved for marketing in the U. S. and in a number of drug other countries, we or our partners may never
receive approval to commercialize linaclotide in additional parts of the world. In order to market any products outside of
the countries where linaclotide is currently approved, we or our partners must comply with numerous and varying
regulatory requirements of their- other facilities are subject to continual-jurisdictions regarding, among other things,
safety and efficacy. Approval procedures vary among jurisdictions and can involve product testing and administrative
review and periodic periods inspections by different from, and greater than, those in the U. S. FDA and the other countries
where linaclotide is approved. Potential risks include that the regulatory authorities: • may not deem linaclotide safe and
effective; • may not find the data from nonclinical studies and clinical trials sufficient to support approval; • may not
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approve of manufacturing processes and facilities; • may not approve linaclotide for compliance any or all indications or
patient populations for which approval is sought; • may require significant warnings or restrictions on use to the product label
labeling for linaclotide; or • may change their approval policies or adopt new regulations. If any of the foregoing were to
occur, our or our partners' receipt of regulatory approval in the applicable jurisdiction could be delayed or we or our partners
may never receive approval at all. Additionally Further, we regulatory approval in one jurisdiction does not ensure
regulatory approval in another, but a failure or <del>our partners cannot be certain of delay in obtaining regulatory approval in</del>
one jurisdiction may have a negative effect on the duration regulatory processes in others. If linaclotide is not approved for
all indications or patient extent to which the COVID-19 pandemic may impact operations populations of regulatory
authorities in jurisdictions around the world, and any reduction in resources dedicated to review and approval of products in
applicable jurisdictions could delay or with the labeling requested, this would limit the uses of linaclotide and have an adverse
effect on its commercial potential or require costly post- marketing studies. Related to Our Growth StrategyIf we
are unable to execute on our strategy to in-license or acquire externally developed products or product candidates, or engage in
other transactions with value creation potential, our business and prospects would be materially adversely affected. Our future
success is largely dependent on our ability to successfully execute on our growth strategy, which includes in-licensing or
otherwise acquiring the rights to externally developed gastrointestinal products or product candidates or engaging in other
transactions with value creation potential. The success of this strategy depends upon our ability to identify, select and acquire
promising assets, platforms or other opportunities. For example, in November 2021-through the VectivBio Acquisition, we
entered into a collaboration added appraglutide to our pipeline. There is no assurance that appraglutide will be successful in
<mark>clinical trials,</mark> and <del>license option agreement with <mark>if successful,that it will receive regulatory approval.For another</del></del></mark>
example,through the COUR <mark>Collaboration Agreement Pharmaceutical Development Company , we and Inc.,or-</mark>COUR <mark>are</mark>
developing relating to COUR's investigational therapy CNP- 104 for the a potential treatment of primary biliary
eholangitis, or PBC. Under this agreement, COUR will conduct an initial clinical trial for CNP-104 in PBC patients, and we have
been granted an option to acquire an exclusive license to research, develop, manufacture and commercialize products containing
CNP-104 in the U.S. for the treatment of PBC after reviewing the data from this study. There is no assurance that we will
exercise this the option following COUR's completion of this initial study, or for CNP-104, and if exercised, that we CNP-104
will be successful for the treatment of PBC complete subsequent clinical trials and receive regulatory approval. In
addition, the process of proposing, negotiating and implementing a license or acquisition is lengthy and complex and there is no
assurance we will be able to enter into similar transactions in the future. Pursuit of external opportunities is also a highly
competitive area and a number of other companies, including some with substantially greater financial, development, marketing
and sales resources, may compete with us for license or acquisition opportunities. We have limited resources to identify and
execute the acquisition or in-licensing of third-party products, product candidates, businesses or technologies and integrate
them into our current good infrastructure. Moreover, we expect to incur a variety of costs and devote resources to
potential acquisitions or in-licensing opportunities that are never completed, or we may fail to realize the anticipated
benefits of such efforts. If we are unable to successfully acquire the rights to additional products or product candidates
on terms that we find acceptable, or at all, or execute other value creating transactions, we will remain smaller, less
diversified and highly dependent on the commercial success of LINZESS, and our business and prospects would be
materially and adversely affected. In addition, such in-licenses, acquisitions or other transactions may entail numerous
operational and financial risks, including: ● development, regulatory and commercialization challenges; ● exposure to
unknown liabilities; • disruption of our business and diversion of our management's time and attention to develop
acquired products, product candidates, businesses or technologies: • incurrence of substantial debt, dilutive issuances of
securities or depletion of cash to pay for acquisitions; • higher than expected acquisition and integration costs; •
difficulty in combining the operations and personnel of any acquired businesses with our operations and personnel; •
increased amortization expenses; • impairment of relationships with key suppliers or customers of any acquired
businesses due to changes in management and ownership; and • inability to motivate key employees of any acquired
businesses. The development of product candidates in particular is a highly uncertain process, as we discuss further
below. Any product candidate that we in-license or acquire may require additional development efforts prior to
commercial sale, including extensive clinical testing and approval by the U. S. FDA, EMA and applicable foreign
regulatory authorities. We may also rely on our licensors and collaboration partners to conduct development activities
for certain of our product 36candidates, and while we may have oversight of such development activities, such licensees
or collaboration partners may not effectively develop any such product candidates. All product candidates are prone to
risks of failure typical of pharmaceutical product development, including the possibility that a product candidate will not
be shown to be sufficiently safe and effective for approval by regulatory authorities or competitors may develop
alternatives that render our potential product candidates obsolete or less attractive. It is possible that none of the
product candidates we may in-license or acquire will be approved for commercial sale or be otherwise commercially
viable, which would impair our ability to grow. Furthermore, we may have little or no insight or control over the
development and commercialization of any product that we in-license outside the licensed territory. If other licensees do
not effectively develop or commercialize any such product outside the licensed territory, our reputation or the reputation
of any such product may be impacted. We may be unable to maintain the benefits associated with orphan drug
designation, including market exclusivity, which may harm our business. In the U. S., orphan drug designation entitles a
party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-
fee waivers. In addition, if a product receives the first U.S. FDA approval for the indication for which it has orphan
designation, the product is entitled to orphan drug exclusivity, which means the U. S. FDA may not approve any other
application to market the same drug for the same indication for a period of seven years, except in limited circumstances,
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such as a showing of clinical superiority over the product with orphan exclusivity or where the manufacturer is unable to
assure sufficient product quantity. In the E. U., orphan drug designation entitles a company to financial incentives such
as reduction of fees or fee waivers and ten years of data and market exclusivity for the approved therapeutic indication
following marketing authorization of a medicinal product, including biological medicinal products. This period may be
reduced to six years if, at the end of the fifth year, the medicinal product no longer fulfills the orphan designation
criteria, including where it is shown that the product is sufficiently profitable not to justify maintenance of market
exclusivity. Because the extent and scope of patent protection for our products may in some cases be limited, orphan
drug designation is especially important for our product candidates for which orphan drug designation may be available.
For eligible drugs, we plan to rely on the exclusivity period under the Orphan Drug Act to maintain a competitive
position. If we do not obtain orphan drug exclusivity for our drug product candidates that does not have a broad patent
protection, our competitors may then sell the same drug to treat the same condition sooner than if we had obtained
orphan drug exclusivity and our revenue will be reduced. Even though we have orphan drug designation for apraglutide
in the U.S. and in the E.U., we may not be the first to obtain marketing approval for any particular orphan indication
due to the uncertainties associated with developing pharmaceutical products. Based on available preclinical and clinical
data, both the U. D. FDA and the EMA have granted apraglutide orphan drug designation for the treatment of SBS. The
U. S. FDA also granted orphan drug designation for apraglutide for the prevention of aGvHD. Orphan drug
applicability will be reassessed by health authorities upon completion of clinical studies and submission of our marketing
application. In the E. U., the orphan designation for apraglutide may not be maintained at the time of grant of the
marketing authorization if the EMA and COMP do not consider that there is sufficient confirmatory evidence to
support that the criteria orphan designation continue to be met. Even if we obtain orphan drug exclusivity for a product,
that exclusivity may not effectively protect the product from competition because different drugs with different active
moieties can be approved for the same condition. Even after an orphan drug is approved, the U. S. FDA or European
Commission can subsequently approve the same drug with the same active moiety for the same condition if the U.S.
FDA or EMA concludes that the later drug is safer, more effective, or makes a major contribution to patient care.
Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug
any advantage in the regulatory review or approval process. If we are unable to successfully partner with other
companies to develop and commercialize products and / or product candidates, our ability to grow would be impaired
and our business would be adversely affected. As part of our business strategy, we may partner with pharmaceutical,
biotechnology or other companies to develop and commercialize products or product candidates. Although we have
entered into such arrangements with respect to the development and commercialization of linaclotide worldwide and of
apraglutide in Japan, there can be no assurance that we will be able to do so in the future with respect to other products
or product candidates that we either 37develop internally or in-license or that we will be able to gain the interest of
potential partners; establish and maintain development, manufacturing <del>practices</del>-, marketing, sales or distribution
relationships on acceptable terms; that such relationships, if established, will be successful or on favorable terms; or that
we will gain market acceptance or for such products or product candidates. The process of proposing, negotiating and
implementing a partnership arrangement is lengthy and complex. If we enter into any partnering arrangements with third
parties, any revenues we receive will depend upon the efforts of such third parties. If we are unable to establish successful
partnering arrangements when advantageous, we may not gain access to the financial resources and industry experience
necessary to develop, commercialize or successfully market our products or product candidates, may be forced to curtail, delay or
stop a development program or one or more of our other development programs, delay commercialization, reduce the scope of
our planned sales or marketing activities or undertake development or commercialization activities at our own expense, and
therefore may be unable to generate revenue from products or product candidates or do so to their full potential. Delays in Risks
Related to the completion VectivBio Acquisition We may be unable to successfully integrate the business and personnel of
elinical testing-VectivBio, and may not realize the expected benefits and anticipated synergies of any such acquisition. In
December 2023, we completed the VectivBio Acquisition. We may not realize the expected benefits from such acquisition
because of integration difficulties our or other challenges. The success of the VectivBio Acquisition will depend, in
part, on our ability to realize all or some of the expected benefits from the acquisition and anticipated synergies from
integrating its business with our existing business. The integration process may be complex, costly and time-consuming
and we may not ultimately realize the return on our investment. Risks we may face in connection with the Vectiv Bio
Acquisition include, among others: • failure to successfully implement our business plans for the combined
business, including the development of apraglutide for SBS-IF; • failure of the VectivBio Acquisition to further our
business strategy as we expected, including the development and, if approved, the commercialization of appraglutide for
SBS-IF; • unexpected losses of key employees, customers or suppliers, and the complexities associated with integrating
personnel from another company; • unanticipated issues in conforming VectivBio's standards, processes, procedures and
controls with our operations; • coordinating products- product candidate and process development; • increasing the
scope,geographic diversity and complexity of or our operations; ● diversion of management's attention from other
business concerns; • adverse effects on our or VectivBio's existing business relationships; • unanticipated changes in
applicable laws and regulations; • unanticipated expenses and liabilities associated with the VectivBio Acquisition; and •
other difficulties in the assimilation of VectivBio operations, technologies, product candidates could result in increased costs
and systems delay or limit our ability to generate revenues. Delays in the completion of clinical testing could significantly
affect our product development costs and timing of data readouts and regulatory submissions and potential approvals. We do may
have unanticipated or larger than anticipated liabilities for patent and trademark infringement claims, violations of
laws,commercial disputes,taxes and other known and unknown types of liabilities. There may be liabilities that we
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<mark>underestimated or did</mark> not <del>know whether planned clinical trials will <mark>discover in the course of performing our due diligence</mark></del>
investigation.38If we experience difficulties with the integration process or if the business of VectivBio deteriorates, the
anticipated benefits, cost savings, growth opportunities and other synergies of the VectivBio Acquisition may not be
realized fully or completed on schedule, if at all or may take longer to realize than expected. If any The commencement and
completion of clinical trials can the above risks occur, our business, financial condition, results of operations and cash flows
may be materially delayed for a number of reasons, including delays related to: ◆ the ongoing COVID-19 pandemic, including
restrictions on activities imposed by government authorities in response; obtaining regulatory approval to commence a clinical
trial; reaching agreement on acceptable terms with prospective CROs and adversely trial sites, the terms of which can be
subject to extensive negotiation and may vary significantly among different CROs and trial sites; ● manufacturing sufficient
quantities of a product candidate for use in clinical trials; • obtaining institutional review board approval to conduct a clinical
trial at a prospective site; recruiting and enrolling patients to participate in clinical trials for a variety of reasons, including
competition from other clinical trial programs for the treatment of similar conditions; and • maintaining patients who have
initiated a clinical trial but may be prone to withdraw due to side effects from the therapy, lack of efficacy or personal issues, or
who are lost to further follow-up. The COVID-19 pandemic has impacted enrollment in we may fail to meet the expectations
<mark>of investors our- or clinical trials-analysts,</mark> and <del>may impact clinical trial enrollment or <mark>our stock participation in the future, for</mark></del>
example due to suspension of in-person procedures required for enrollment or lower or discontinued patient participation
compared to pre-price may decline - COVID- 19 pandemic levels as a result of new strains or variants. Clinical trials may also
be delayed or discontinued as a result of ambiguous or negative interim results or assessments. In addition, a clinical trial may be
suspended or terminated by us, an institutional review board overseeing the clinical trial at a clinical trial site (with respect to that
site), the U.S.FDA, or other regulatory authorities due to a number of factors, including: • failure to conduct the clinical trial in
accordance with regulatory requirements or the study protocols;27 • inspection of the clinical trial operations or trial sites by
the U.S.FDA or other regulatory authorities resulting in the imposition of a clinical hold; • unforeseen safety issues; or • lack of
adequate enrollment or funding to continue the clinical trial. Additionally, changes in regulatory requirements and guidance may
occur, and we may need or otherwise determine to amend clinical trial protocols to reflect these changes. Each protocol
amendment would require institutional review board review and approval, which may adversely impact the costs, timing or
successful completion of the associated clinical trials. If we or our partners terminate or experience delays in the completion of
any clinical trials, the commercial prospects for our products or product candidates may be harmed, and our ability to generate
product revenues will be delayed. In addition, many of the factors that cause, or lead to, a delay in the commencement or
completion of clinical trials may also ultimately lead to the denial of regulatory approval. Risks Related to Our Dependence on
Third PartiesBecause we work with partners to develop, manufacture and commercialize linaclotide, we and our partners are
dependent upon third parties, and our and our partners' relationships with those third parties, in our and our partners' efforts to
obtain regulatory approval for, and to commercialize, linaclotide, as well as to comply with regulatory and other obligations with
respect to linaclotide. AbbVie played a significant role in the conduct of the clinical trials for linaclotide and in the subsequent
collection and analysis of data, and AbbVie holds the new drug application, or NDA, for LINZESS. AbbVie also continues to play
a significant role in the conduct of our pediatric program for linaclotide. In addition, we are commercializing LINZESS in the
U.S. with AbbVie. AbbVie is also responsible for the development, regulatory approval and commercialization of linaclotide in
countries worldwide other than Japan and China (including Hong Kong and Macau). AbbVie is commercializing LINZESS in
Mexico and Saudi Arabia and CONSTELLA in Canada as well as in certain countries including in Europe. Astellas and
AstraZeneca are responsible for development and commercialization of LINZESS in Japan and China (including Hong Kong
and Macau), respectively. Each of our partners for linaclotide also is responsible for active pharmaceutical ingredient, or
API, finished drug product and finished goods manufacturing (including bottling and packaging) for its respective territories and
distributing the finished goods to wholesalers. We and / or our partners have commercial supply agreements with independent
third parties to manufacture the linaclotide API. The integration of our efforts with our partners' efforts is subject to the
uncertainty of the markets for pharmaceutical products in each partner's respective territories, and accordingly, these
relationships must evolve to meet any new challenges including those arising out of the COVID-19 pandemie, that arise in
those regions. These integrated functions may not be carried out effectively and efficiently if we fail to communicate and
coordinate with our linaclotide partners, and vice versa. Our linaclotide partnering strategy imposes obligations, risks and
operational requirements on us as the central node in our global network of partners. If we do not effectively communicate with
each partner and ensure that the entire network is making integrated and cohesive decisions focused on the global brand for
linaclotide, linaclotide will not achieve its maximum commercial potential. Further, we have limited ability to control the amount
or timing of resources that our partners devote to linaclotide particularly in light of the impact of the COVID-19 pandemic on
our partners' operations. If any of our partners fails to devote sufficient time and resources to linaclotide, or if its performance is
substandard or otherwise hindered, it will delay the potential submission or approval of regulatory applications for linaclotide, as
well as the manufacturing and commercialization of linaclotide in the particular territory. A material breach by any of our
partners of our collaboration or license agreement with such partner, or a significant disagreement between us and a partner, could
also delay the regulatory approval and commercialization of linaclotide, potentially lead to costly litigation, and could have a
material adverse impact on our financial condition. Moreover, although we have non-compete restrictions in place with each of
our linaclotide partners, they may have competitive products or relationships with other commercial entities, some of which may
compete with us. If any of our partners competes with us or assists our competitors, it could harm our competitive position. In
addition, adverse event reporting requires significant coordination with our partners and third parties. We are the holder of the
global safety database for linaclotide responsible for coordinating the safety surveillance and adverse event reporting efforts
worldwide with respect to linaclotide; each of Astellas, AstraZeneca and AbbVie is responsible 28for -- for reporting adverse
event information from its territory to us. If we fail to perform such activities and maintain the global safety database for
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linaclotide or if our partners do not report adverse events related to linaclotide, or fail to do so in a timely manner, we may not
receive the information that we or our partners are required to report to the U.S.FDA or a foreign regulatory authority regarding
such products. Furthermore, we or our partners may fail to adequately monitor, identify or investigate adverse events, or to report
adverse events to the U.S.FDA or foreign regulatory authority accurately and within the prescribed timeframe. If we or our
partners are unsuccessful in any of the foregoing due to poor process, execution, systems, oversight, communication, adjudication
or otherwise, then we may suffer any number of consequences, including the imposition of additional restrictions on the use of
linaclotide, removal of linaclotide from the market, criminal prosecution, the imposition of civil monetary penalties, seizure of such
products, or delay in approval of future products, We-39We rely entirely on contract manufacturers, our partners and other third
parties to manufacture linaclotide, apraglutide, and our other product candidates and to distribute linaclotide. If they are unable
to comply with applicable regulatory requirements unable to source sufficient raw materials experience manufacturing or
distribution difficulties, or are otherwise unable to manufacture and distribute sufficient quantities to meet demand, our
development and commercialization efforts may be materially harmed. We have no internal manufacturing or distribution
capabilities. Instead, we rely on a combination of contract manufacturers and our partners to manufacture API, finished drug
product and finished goods for linaclotide, apraglutide, and our other product candidates. For linaclotide, each of our
partners is responsible for API, finished drug product and finished goods manufacturing (including bottling and
packaging) for its respective territories and distributing the finished goods to wholesalers. We and / or our partners have
commercial supply agreements with independent third parties to manufacture linaclotide API.For apraglutide, we design
and develop the manufacturing process together with CDMOs for the manufacture for human use. Should we, or any of
our partners or any third- party manufacturers we or our partners engage, experience setbacks or challenges in our
manufacturing efforts, our development and commercialization efforts may be materially harmed. Each of our partners
and the third- party manufacturers we or our partners engage,must comply with GMP , and other applicable stringent
regulations - regulatory requirements enforced by the U. S. FDA, EMA and other foreign regulatory authorities in other
jurisdictions. These requirements include, among other things, quality control, quality assurance and the maintenance of
records and documentation, which occur in addition to our and our partners' own quality assurance releases . If we or a
regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or
frequency, or problems with a facility where the product is manufactured, a regulatory agency may impose restrictions on that
product or the manufacturer, including withdrawal of the product from the market or suspension of manufacturing. If we, our
partners or the manufacturing facilities for our products fail to comply with applicable regulatory requirements, a regulatory
agency may take the following actions, among others: • issue warning letters or untitled letters: • impose civil or criminal
penalties; • suspend or withdraw regulatory approval; • suspend any ongoing clinical trials; • refuse to approve pending
applications or supplements to applications submitted by us or our partners; • impose restrictions on operations, including costly
new manufacturing requirements; or • seize or detain products or require us to initiate a product recall. Even though linaclotide
is approved for marketing..... partners' own quality assurance releases. Manufacturers of our products may be unable to comply
with these GMP requirements and with other regulatory requirements. We have little control over compliance with these
regulations and standards by our partners and the third- party manufacturers we or our partners engage. In addition, we expect
that apraglutide may be regulated by the U. S. FDA as a drug- device combination product. Our third- party
manufacturers may not be able to comply with GMP regulations applicable to drug- device combination products,
including applicable provisions of the U. S. FDA's drug GMP regulations and device GMP requirements embodied in
the Quality System Regulation, or similar regulatory requirements outside the U.S. Our partners and the third-party
manufacturers we or our partners engage may experience problems with their respective manufacturing and distribution
operations and processes, including, for example, quality issues, such as product specification and stability failures, procedural
deviations, improper equipment installation or operation, utility failures, contamination, natural disasters and public health
epidemics, including the COVID-19 pandemic. In addition, the raw materials necessary to make API for our products and
product candidates are acquired from a limited number of sources. Any delay or disruption in the 40the availability of raw
materials or a change in raw material suppliers could result in production disruptions, delays or higher costs with consequent
adverse effects on us. The manufacture of pharmaceutical products requires significant expertise and capital investment,
including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical
products often encounter difficulties in commercial production. These problems include difficulties with production costs and
yields, quality control, including stability of the product and quality assurance testing, and shortages of qualified personnel, as
well as compliance with federal, state and foreign regulations and the challenges associated with complex supply chain
management. Even if our partners or the third- party manufacturers we or our partners engage do not experience problems and
commercial manufacturing is achieved, their maximum or available manufacturing capacities may be insufficient to meet
commercial demand. Finding alternative manufacturers or adding additional manufacturers requires a significant amount of time
and involves significant expense. New manufacturers would need to develop and implement the necessary production techniques
and processes, which along with their facilities, would need to be inspected and approved by the regulatory authorities in each
applicable territory. If our partners or the third- party manufacturers we or our partners engage fail to adhere to applicable GMP
or other regulatory requirements, experience delays or disruptions in the availability of raw materials or experience
manufacturing or distribution problems, we will suffer significant consequences, including product seizures or recalls, 29loss-
loss of product approval, fines and sanctions, reputational damage, shipment delays, inventory shortages, inventory write- offs
and other product- related charges and increased manufacturing costs. If we experience any of these results, or if maximum or
available manufacturing capacities are insufficient to meet demand, our and our partners' development or commercialization
efforts may be materially harmed. If any of our linaclotide partners undergoes a change of control or in management, this may
adversely affect our collaborative relationship or the success of the commercialization of linaclotide in the U.S. or in the other
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countries where it is approved, or the ability to achieve regulatory approval, launch and commercialize linaclotide in other territories. We work jointly and collaboratively with partners on many aspects of the development, manufacturing and / or commercialization of linaclotide. In doing so, we have established relationships with several key members of the management teams of our linaclotide partners in functional areas such as development, quality, regulatory, drug safety and pharmacovigilance, operations, marketing, sales, field operations and medical science. Further, the success of our collaborations is highly dependent on the resources, efforts and skills of our partners and their key employees. As we and our partners develop and commercialize linaclotide in the U. S. and the other countries where it is approved, and develop, launch and commercialize linaclotide in other parts of the world, the drug's success becomes more dependent on us maintaining highly collaborative and well aligned partnerships. In May 2020, AbbVie announced the completion of its acquisition of Allergan plc. Our collaboration, now with AbbVie, for the development and commercialization of linaclotide in North America, and our license, now to AbbVie. to develop and commercialize linaclotide in all countries worldwide other than China (including Hong Kong and Macau) and Japan, remain in effect. In connection with this transaction, we continue to engage with AbbVie to reestablish relationships and confirm alignment, including on our development and commercialization strategy for linaclotide. Any failure to do so could adversely affect the development and commercialization of linaclotide. If any of our linaclotide partners undergoes a change of control or in management, we would similarly need to reestablish many relationships and confirm alignment, including on our development and commercialization strategy for linaclotide. Further, in connection with any change of control or change in management, there is inherent uncertainty and disruption in operations, which could result in distraction, inefficiencies, and misalignment of priorities. As a result, in the event of a change of control or in management at one of our linaclotide partners, we cannot be sure that we will be able to successfully execute on our development and commercialization strategy for linaclotide in an effective and efficient manner and without disruption or reduced performance. Finally, any change of control or in management may result in a reprioritization of linaclotide within a partner's portfolio, or such partner may fail to maintain the financial or other resources necessary to continue supporting its portion of the development, manufacturing or commercialization of linaclotide. If any of our linaclotide partners undergoes a change of control and the acquirer either (i) is unable to perform such partner's obligations under its collaboration or license agreement with us or (ii) does not comply with the divestiture or certain other provisions of the applicable agreement, we have the right to terminate the collaboration or license agreement and reacquire that partner's rights with respect to linaclotide. If we elect to exercise these rights in such circumstances, we will need to either establish the capability to develop, manufacture and commercialize linaclotide 41linaclotide in that partnered territory on our own or we will need to establish a relationship with a new partner. We have assembled a team that represents the functional areas necessary to support the commercialization of LINZESS in the U. S. If AbbVie was subject to a change of control that allowed us to further commercialize LINZESS in the U. S. on our own, and we chose to do so, we would need to enhance each of these functional aspects, as well as develop others, to replace the capabilities that AbbVie was previously providing to the collaboration. Any such transition might result in a period of reduced efficiency or performance by our operations and commercialization teams, which could adversely affect our ability to commercialize LINZESS. We do not have certain operational capabilities outside of the U. S. If AbbVie, Astellas or AstraZeneca was subject to a change of control that allowed us to continue linaclotide's development or commercialization anywhere outside of the U.S. on our own, and we chose to do so rather than establishing a relationship with a new partner, we would need to build operational capabilities in the relevant territory. In any of these situations, the development and commercialization of linaclotide could be negatively impacted. 30Risks -- Risks Related to Regulatory, Legal and Compliance MattersWe face potential product liability exposure, and, if claims brought against us are successful, we could incur substantial liabilities. The use of our product candidates in clinical trials and the sale of our approved products, including the sale of linaclotide, expose us to product liability claims. If we do not successfully defend ourselves against product liability claims, we could incur substantial liabilities. In addition, regardless of merit or eventual outcome, product liability claims may result in: • decreased demand for approved products; ● impairment of our business reputation; ● withdrawal of clinical trial participants; ● initiation of investigations by regulators; ● litigation costs; ● distraction of management's attention from our primary business; ● substantial monetary awards to patients or other claimants; • loss of revenues; and • the inability to commercialize our product candidates. We currently have product liability insurance coverage for the commercial sale of our products and for the clinical trials of our product candidates which is subject to industry- standard terms, conditions and exclusions. Our insurance coverage may not be sufficient to reimburse us for expenses or losses associated with claims. Moreover, insurance coverage is becoming increasingly expensive, and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. On occasion, large judgments have been awarded in lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims could cause our stock price to decline and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business. We will incur significant liability if it is determined that we are promoting any "off-label" uses of our products. Physicians are permitted to prescribe drug products and medical devices for uses that are not described in the product's labeling and that differ from those approved by the U.S. FDA or other applicable regulatory agencies. Such "off-label" uses are common across medical specialties. Although the U. S. FDA and other regulatory agencies do not regulate a 42a physician's choice of treatments, the U. S. FDA and other regulatory agencies do restrict manufacturer communications on off- label use. Companies are not permitted to promote drugs or medical devices for off- label uses or to promote unapproved drugs or medical devices. Accordingly, we do not permit promotion of any product that we develop, license, commercialize, promote, co-promote or otherwise partner prior to approval or for any indication, population or use not described in or consistent with such product's labeling. The U. S. FDA and other regulatory and enforcement authorities actively enforce laws and regulations prohibiting promotion of off- label uses and the promotion of products for which marketing approval has not been obtained. A company that is found to have promoted offlabel uses or have engaged in improper pre-approval promotion will be subject to significant liability, including civil and

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administrative remedies as well as criminal sanctions. Even if it is later determined that we were not in violation of these laws,
we may be faced with negative publicity, incur significant expenses defending our actions and have to divert significant
management resources from other matters. Notwithstanding the regulatory restrictions on off-label promotion, the U. S. FDA
and other regulatory authorities allow companies to engage in truthful, non- misleading, and non- promotional disease
awareness and scientific exchange concerning their products , investigational assets and therapeutic areas of interest . We
intend to engage in disease awareness and medical and scientific exchange and education activities and communicate with
healthcare providers in compliance with all applicable laws, regulatory guidance and industry best practices. Although we
believe we have put 31 in place a robust compliance program, which is designed to ensure that all such activities are
performed in a legal and compliant manner, we cannot be certain that our program will address all areas of potential exposure
and the risks in this area cannot be entirely eliminated. If we fail to comply with healthcare and other regulations, we could face
substantial penalties and our business, operations and financial condition could be adversely affected. The marketing of
pharmaceutical and biopharmaceutical products that we promote and related arrangements with healthcare providers,
third- party payors, patients and other third parties in the healthcare industry are subject to marketed in the U.S. and / or
eovered by federal healthcare programs, and, as a wide range of result, certain federal and state healthcare laws and regulations
pertaining to product promotion, fraud within the U.S. and abuse, privacy in foreign jurisdictions in which we operate.
These laws and regulations price reporting and payment are applicable to, and may constrain affect, our business and / or
financial arrangements. These Within the U. S., federal laws and regulations include: ● federal healthcare program anti-
kickback laws, which prohibit, among other things, persons from offering, soliciting, receiving or providing remuneration,
directly or indirectly, to induce either the referral of an individual for, or the purchasing or ordering of, a good or service for
which payment may be made under federal healthcare programs such as Medicare and Medicaid; • federal false claims laws
which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, information
or claims for payment from Medicare, Medicaid, or other third- party payors that are false or fraudulent, and which may apply
to use manufacturers for reasons including providing coding and billing advice to customers or engaging in prohibited off-
label promotional activities; • the federal Health Insurance Portability and Accountability Act of 1996, which prohibits
executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and
which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health
information on certain types of entities, which include many healthcare providers with whom we interact and health plans with
which we may interact; • the Federal Food, Drug, and Cosmetic Act, which among other things, strictly regulates drug product
and medical device marketing, prohibits manufacturers from marketing such products prior to approval or for off-label use and
regulates the distribution of samples: • the 21st Century Cures Act, which amends Section 114 of the Food and Drug
Administration Modernization Act of 1997 to define healthcare economic information and the circumstances under
which healthcare economic information may be disseminated; • federal laws, including the Medicaid Drug Rebate Program,
that require pharmaceutical manufacturers to report certain calculated product prices to the government or provide certain
discounts or rebates to government 43government authorities or private entities, often as a condition of reimbursement under
government healthcare programs; and • the so- called "federal sunshine" law, which requires pharmaceutical and medical
device companies to monitor and report certain financial interactions with physicians, certain non-physician practitioners and
teaching hospitals to the federal government for re-disclosure to the public; and -and There are also state law equivalents of
<mark>certain of</mark> the above federal laws, <del>such as <mark>many of which differ from each other in significant ways and often are not</del></del></mark>
preempted by federal laws, thus complicating compliance efforts, which laws include anti-kickback and false claims laws
which may apply to items or services reimbursed by any third-party payor, including commercial insurers, state transparency
laws, state laws limiting interactions between pharmaceutical manufacturers and members of the healthcare industry, and state
laws governing the privacy and security of health information in certain circumstances -. Other laws and regulations have
also been enacted by various states to regulate the sales and marketing practices of pharmaceutical or biopharmaceutical
manufacturers. The laws and regulations generally limit financial interactions between manufacturers and health care
providers; require manufacturers to comply with the pharmaceutical industry's voluntary compliance guidelines and
the relevant compliance guidance promulgated by the U. S. federal government; and / or require disclosure to the
<mark>government and / or public of financial interactions (so- called " sunshine laws "). State laws <del>many</del>- <mark>may also require</mark></mark>
disclosure of which differ from each pharmaceutical pricing information and marketing expenditures. Certain state and
local laws require other--- the in significant ways-registration of pharmaceutical sales representatives. Many of these laws
and regulations contain ambiguous requirements or require administrative guidance for implementation. Outside the U.
S., our activities may be subject to healthcare laws. For example, the provision of benefits or advantages to physicians to
induce or encourage the prescription, recommendation, endorsement, purchase, supply, order, or use of medicinal
products is prohibited in the E. U. The provision of benefits or advantages to physicians is also governed by the national
anti- bribery laws of E. U. Member States, and by Bribery Act 2010 in the United Kingdom Infringement of these laws
could result in substantial fines and imprisonment. Payments made to physicians in certain E. U. Member States must be
publicly disclosed, and in the United Kingdom a public consultation on the introduction of equivalent transparency
requirements is currently underway. Moreover, agreements with physicians often must be the subject of prior
notification and approval by the physician's employer, his or her competent professional organization, and / or the
<mark>regulatory authorities of the individual E. U. Member States and the United Kingdom. These requirements</mark> are <del>not</del>
preempted by federal provided in the national laws, thus complicating compliance efforts self- regulatory industry codes, or
professional codes of conduct applicable in the E. U. Member States and the United Kingdom, Failure to comply with
these requirements could result in reputational risk, public reprimands, administrative penalties, fines, or imprisonment
. We also are subject to the FCPA U.S. Foreign Corrupt Practices Act which prohibits corporations and individuals from
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paying, offering to pay, or authorizing the payment of anything of value to any foreign government official, government staff
member, political party, or political candidate in an attempt to obtain or retain business or to otherwise influence a person
working in an official capacity, related to any ex- U. S. activities, as well as other similar anti- bribery laws in any other country
in which we may do business. In addition We are subject to stringent and changing U. S. and foreign laws, we regulations,
rules, contractual obligations, policies and other obligations related to data privacy and security. Our actual or
perceived failure to comply with such obligations could lead to regulatory investigations or actions; litigation; fines and
penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; disruptions of our
operating results and business; and other adverse business consequences. We may be subject to privacy and security laws in
the various jurisdictions, both inside and outside the U.S., in which we operate , and / or obtain or store personally identifiable
information, such as the E. U. GDPR, the United Kingdom's GDPR and the Swiss Federal Act on Data Protection, or
FADP. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an
increasing focus on privacy and data protection issues with the potential to affect our business. For example, the GDPR, which
took effect in May 2018, applies to the processing of personal data in the EEA. The GDPR increases obligations with
respect to clinical trials conducted in the EEA, by certain companies that process data in relation to (i) offering goods or
services to, or (ii) monitoring the behavior of, individuals located in the EEA. As such, we would be subject to the GDPR
for data processing associated, 44for example, with conducting clinical trials in the EEA or entering into research
collaborations in the EEA. The GDPR imposes stringent obligations for processing of personal data, such as setting high
standards for consent, requiring the provision of detailed processing notices, facilitating the exercise of data subject
rights and requiring reporting certain data breaches to regulators and affected individuals, as well as establishing
standards for how we document our relationships with third parties that process GDPR- covered personal data on our
behalf. The FADP also applies to the collection and processing of personal data by companies located in Switzerland, or
in certain circumstances, by companies located outside of Switzerland. The FADP has been revised and adopted by the
Swiss Parliament and took effect on September 1, 2023. The revisions to the FADP may result in increased costs of
compliance, risks of noncompliance and penalties for noncompliance. The GDPR, United Kingdom's GDPR and FADP
also increase the scrutiny applied to transfers of personal data from the EEA, UK, and Switzerland, respectively
(including from clinical trial sites in the EEA) to countries that are considered by the European Commission, United
Kingdom or Switzerland, respectively, to lack an adequate level of data protection, such as the U. S. In July 2020 the
Court of Justice of the E. U. (CJEU) invalidated the E. U.- U. S. Privacy Shield Framework, under which personal data
could be transferred from the EEA to U. S. entities that had self- certified under the Privacy Shield scheme. The
framework has been replaced by the E. U.- U. S. Data Privacy Framework for which the European Commission adopted
am adequacy decision in July 2023. While we do not currently rely upon this framework, we expect there to be legal
challenges to this framework in the future, which could draw into question the legitimacy of other cross- border transfer
mechanism, including the standard contractual clauses on which we rely to transfer personal data from the EEA to the
U. S. and other jurisdictions. As supervisory authorities issue further guidance on personal data export mechanisms or
where the standard contractual clauses cannot be used, we could incur additional compliance costs, complaints, and / or
regulatory investigations and, if we are unable to otherwise transfer personal data among jurisdictions in which we
operate, our services and geographical location or segregation of our relevant systems and operations could be affected.
In addition, in the U. S., we are subject to the California Consumer 32Privacy -- Privacy Act, or CCPA, as amended by the
California Privacy Rights Act, or CPRA, which became effective on January 1, 2023 (the CPRA, together with CCPA, the
California Privacy Law). The California Privacy Law gives California consumers (defined to include all California residents)
certain rights regarding personal information collected about them; the California Privacy Law also imposes certain obligations
and limitations on companies regarding the collection, use, selling or sharing (as defined in the California Privacy Law) of
personal information collected from or about California consumers. The compliance obligations imposed by the GDPR, United
Kingdom's GDPR, FADP, the California Privacy Law, and other applicable privacy laws, have required us to revise our
operations. Breaches of applicable data protection requirements may result in substantial fines and other regulatory penalties, as
well as confer a private right of action on data subjects (in the case of the GDPR, UK GDPR and FADP) and consumers (in
the case of the California Privacy Law) and their representatives for breaches of certain data protection requirements. We
expect to be subject to additional privacy laws at both the U. S. state level and abroad as many jurisdictions either recently have
data privacy legislation or are considering enacting such legislation to which we may become subject. Achieving and sustaining
compliance with applicable international, federal and state privacy, security, fraud and reporting laws may prove time-
consuming and costly. If our operations, or the operations of third parties upon which we rely, are found to be in violation
of any of the laws described above or any other laws, rules or regulations that apply to us, we will be subject to penalties,
including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. For example,
under the GDPR and the United Kingdom's GDPR, penalties for noncompliance could be up to 20 million Euros or 4 %
of our total worldwide annual revenue of the preceding financial year, whichever is greater. Any penalties, damages,
fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial
results. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, rules
or regulations, we cannot be certain that our program will address all areas of potential exposure and the risks in this area cannot
be entirely eliminated, particularly because the requirements and government interpretations of the requirements in this space
are constantly evolving. Any action against us for violation of these laws, rules or regulations, even if we successfully defend-
-- successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from
the operation of our business, as well as damage our business or reputation. Healthcare 45Healthcare reform and other
governmental and private payor initiatives may have an adverse effect upon, and could prevent, our products' or product
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candidates' commercial success. The U. S. government and individual states have been aggressively pursuing healthcare reform
designed to impact delivery of, and / or payment for, healthcare, which include initiatives intended to reduce the cost of
healthcare. For example, in March 2010, the U. S. Congress enacted the PPACA Patient Protection and Affordable Care Act,
as modified by the Health Care and Education Reconciliation Act, or the ACA, which, among other things, expanded healthcare
coverage through Medicaid expansion and the implementation of the individual health insurance mandate; included changes to
the coverage and reimbursement of drug products under government healthcare programs; imposed an annual fee on
manufacturers of branded drugs; and expanded government enforcement authority. We face uncertainties because there have
been, and may be additional, federal legislative and administrative efforts to repeal, substantially modify or invalidate some or
all of the provisions of the ACA. Such efforts may lead to fewer Americans having more comprehensive health insurance
compliant with the ACA, even in the absence of legislative repeal. For example, tax reform legislation was enacted at the end of
2017 that eliminated the tax penalty for individuals who do not maintain sufficient health insurance coverage beginning in 2019.
The ACA has also been subject to judicial challenge. Beyond the ACA, there have been ongoing legislative and administrative
and other health care reform efforts, which could have an adverse effect on our products' or product candidates'
commercial success. Some healthcare reform efforts affect pricing or payment for drug products or the healthcare industry
more generally. Drug pricing and payment reform was a focus of the Trump Administration and has been a focus of the Biden
Administration. For example, under the Trump Administration, federal legislation increased the size of the discount on
brand- name drugs that pharmaceutical manufacturers are required to offer Medicare beneficiaries who are in the
Medicare Part D coverage gap, or "donut hole," from 50 percent to 70 percent. As another example, under the Biden
Administration, federal legislation enacted in 2021 eliminates a statutory cap on Medicaid drug rebate program rebates
effective January 1, 2024. As another example, the IRA contains various drug pricing and payment provisions. Among other
provisions, the IRA imposes a yearly cap ($ 2,000 in 2025) on out- of- pocket prescription drug costs prices in Medicare Part
Parts B and D . In addition , <del>implements a new the IRA requires</del> Medicare <del>Part D manufacturer discount drug program in</del>
2025, requires manufacturers to negotiate pay a rebate to the federal government if prices for single certain high - source cost
drugs and biologicals , including both physician- administered products covered under Medicare Part B benefit and nearly
all-self- administered drugs covered drugs under the Medicare Part D increase faster benefit. CMS annually selects a
specified number of negotiation- eligible drugs from those drugs with the highest total Medicare Part B or D
expenditures over a preceding 12- month period. Eligible drugs generally include single source brand- name drugs or
biological products that have been on the market without therapeutically- equivalent generic or biosimilar alternatives
for a specified number of years with certain exceptions (e.g., orphan drugs indicated for only one rare disease or
condition and drugs with less than $ 200 million in annual Medicare expenditures). CMS will publish the negotiated
price, known as the MFP for each of the selected products. Manufacturers of selected drugs would be required to offer
the drug for Medicare recipients at the MFP. Manufacturers who fail to negotiate or offer the MFP can face significant
civil money penalties or excise tax liability on sales of that drug. The first drugs were selected in 2023 and the MFP for
the those drugs will take effect rate of inflation and, in 2026, creates a., Only Medicare Part D drug drugs price negotiation
are selected for the first two years of the program under which (i. e., MFPs that take effect in 2026 and 2027). Depending
on the share of prices for certain high Medicare spend spending each year drugs and biologicals without generic or biosimilar
competition will be limited by a cap that is defined attributed to LINZESS or any other product candidate that we develop
and whether or not those drugs become eligible for Medicare negotiation, those drugs and our revenue may be adversely
impacted by reference to, among other things -- this provision, a specified non-federal average manufacturer price. The effect
of IRA on our business and the healthcare industry in general is not yet known. Some of the health Health care reform changes
efforts have been and may continue to be subject to scrutiny and legal challenge. For example, with respect to the ACA, tax
reform legislation was enacted that eliminated the tax penalty established for individuals who do not maintain mandated
health insurance coverage beginning in 2019 and, in 2021, the U. S. Supreme Court dismissed the latest judicial
challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. As
another example, revisions to regulations under the federal anti-kickback statute that would remove protection for traditional
Medicare Part D discounts offered by 33pharmaceutical -- pharmaceutical manufacturers to pharmacy benefit managers and
health plans. The revisions were challenged in court and, Pursuant pursuant to court order, the removal was delayed, and the
IRA further delayed recent legislation imposed a moratorium on implementation of the rule until January 1, 2032. Certain
pharmaceutical manufacturers and organizations have filed lawsuits challenging the IRA drug price negotiation
program. Adoption of new healthcare reform legislation at the federal or state level could negatively affect demand for, or
pricing of, our products or product candidates if approved for sale. In addition, other legislative changes have been adopted that
could have an adverse effect upon, and could prevent, our products' or product candidates' commercial success. For example,
the Budget Control Act of 2011, as amended, or the Budget Control Act, includes provisions intended to reduce the federal
deficit, including reductions in Medicare payments to providers through 2031-2032 (except May 1, 2020 to March 31, 2022).
Any significant spending reductions affecting Medicare, Medicaid or other publicly funded or subsidized health programs, or
any significant taxes or fees imposed as part of any broader deficit reduction effort or legislative replacement to the Budget
Control Act, or otherwise, could have an adverse impact on our anticipated product revenues. In 46In addition to governmental
efforts in the U. S., foreign jurisdictions as well as private health insurers and managed care plans are likely to continue
challenging manufacturers' ability to obtain reimbursement, as well as the level of reimbursement, for pharmaceuticals and
other healthcare- related products and services. These cost- control initiatives could significantly decrease the available coverage
and the price we might establish for our products, which would have an adverse effect on our financial results. The Food and
Drug Administration Amendments Act of 2007 also provides the U. S. FDA enhanced post-marketing authority, including the
authority to require post-marketing studies and clinical trials, labeling changes based on new safety information, and
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compliance with REMS <del>risk evaluation and mitigation strategies</del> approved by the U. S. FDA <del>. We and AbbVie have established</del>
a nonclinical and clinical post-marketing plan with the U. S. FDA to understand the safety and efficacy of LINZESS in
pediatries. The U. S. FDA's exercise of this authority has resulted (and is expected to continue to result) in increased
development- related costs following the commercial launch of our products and product candidates, and could result in
potential restrictions on the sale and / or distribution of our products, even in such products' approved indications and patient
populations. The VectivBio Acquisition increases our Risks Related to the Separation of CyclerionWe may be exposed-
exposure to <del>claims</del>-doing business in foreign jurisdictions, Following the VectivBio Acquisition, we retained VectivBio's
legacy headquarters in Basel, Switzerland and liabilities, as a result of the separation of Cyclerion, On April 1, 2019, we
now have employees and operations distributed all of the outstanding shares of Cyclerion Therapeutics, Inc., or Cyclerion,
common stock to Ironwood stockholders in connection foreign jurisdictions. Operating in foreign jurisdictions exposes us to
additional risks such as: fluctuations in currency exchange rates; compliance with different legal and regulatory
environments; foreign regulatory regimes applicable to clinical trials and obtaining approvals for product candidates;
compliance with applicable data privacy laws and regimes such as the <del>separation</del>-E. U. GDPR, the United Kingdom' s
GDPR and the Swiss Federal Act on Data Protection; risk relating to the political and economic status of our soluble
guanylate cyclase foreign governments; differences in the manner in which different cultures do business; difficulties in
staffing , or the Separation. In connection with the distribution, we entered into a separation agreement and various other
agreements, including a tax matters agreement and an anal managing foreign operations; differences employee matters
agreement. These agreements governed the separation and distribution as well as the relationship between us and Cyclerion,
including with respect to potential tax- related losses associated with the separation and distribution. The separation agreement
provides for indemnification obligations designed to make Cyclerion financially responsible for many liabilities that may exist
relating to its business activities, whether incurred prior to or after the distribution, including any pending or future litigation, but
we cannot guarantee that Cyclerion will be able to satisfy its indemnification obligations. It is also possible that a court would
disregard the allocation agreed to between us and Cyclerion and require us to assume responsibility for obligations allocated to
Cyclerion. Third parties could also seek to hold us responsible for any of these liabilities or obligations, and the indemnity rights
we have under the separation agreement may not be sufficient to fully cover all of these liabilities and obligations. Even if we
are successful in obtaining indemnification, we may have to bear costs temporarily. In addition, our indemnity obligations to
Cyclerion, including those related to assets or liabilities allocated to us, may be significant. These risks could negatively affect
our business, financial reporting; and condition or results of operations operating difficulties; If the distribution of the
shares..... of the distribution was conditioned upon, among other things, our receipt factors. The realization of any of these
risks, if severe enough, could have an adverse effect opinion from an outside tax advisor that the distribution will qualify as a
transaction that is generally tax-free to both us and our stockholders for U. S. federal income tax purposes under Sections 355
and 368 (a) (1) (D) of the Internal Revenue Code. The private letter ruling and opinion were based on and relied on, among
other things, certain facts and assumptions, as well as certain representations, statements and undertakings from us and
Cyclerion (including those relating to the past and future conduct of us and Cyclerion). If any of these facts, assumptions,
representations, statements or our undertakings is consolidated financial position, results or becomes, inaccurate or
incomplete, or if we or Cyclerion breach any of operations our respective covenants relating to the distribution, the IRS private
letter ruling and cash flows any tax opinion may be invalid...... the fair market value of such shares. Risks Related to
Intellectual PropertyLimitations on our ability to obtain patent protection and / or the patent rights relating to our products and
our product candidates may limit our ability to prevent third parties from competing against us. Our success depends on our
ability to obtain and maintain sufficient patent protection for our products and product candidates, preserve our trade secrets.
prevent third parties from infringing upon our proprietary rights and operate without infringing upon the proprietary rights of
others. The strength of patents in the pharmaceutical industry involves complex legal and scientific questions and can be
uncertain. Patent applications in the U.S. and most other countries are confidential for a period of time until they are published,
and publication of discoveries in scientific or patent literature typically lags actual discoveries by several months or more. As a
result, we cannot be certain that we were the first to conceive inventions covered by our patents and pending patent applications
or that we were the first to file patent applications for such inventions. In addition, we cannot be certain that our patent
applications will be granted, that any issued patents will adequately protect our intellectual property, or that such patents will not
be challenged, narrowed, invalidated or circumvented. We have several issued patents in the U. S. related to LINZESS,
including a LINZESS composition of matter and methods of use patent (U. S. Patent 7, 304, 036) expiring in 2026. Additional
U. S. patents related to LINZESS include multiple patents relating to our commercial, room temperature stable formulations of
the 72 mcg, 145 mcg and 290 mcg doses of linaclotide and methods of using these formulations, the latest of which expires in
the early 2030s, as well as other patents covering processes for making LINZESS, formulations thereof, and molecules related to
LINZESS. In addition, we have exclusive rights to apraglutide including issued composition of matter and method of use
patents in the U. S. in lead indications. We aim to maintain a strong and broad estate of patents in the U. S. and other
geographic areas. To this end, we have exclusively licensed 57 patents and 3 pending patent applications in the U. S., E.
U., Japan, China and other jurisdictions protecting apraglutide. We also own one patent and 36 pending patent
applications worldwide that cover apraglutide, including ultrapure compositions, methods of manufacture and methods
of use in various diseases including aGvHD. Although 47Although none of these issued patents currently is subject to a patent
reexamination or review, we cannot guarantee that they will not be subject to reexamination or review by the U.S. Patent and
Trademark Office, or the USPTO, in the future. We believe in the strength of our LINZESS and apraglutide patent portfolio
and that we have sufficient freedom to operate; however, if any of our present or future patents is challenged, narrowed,
invalidated or circumvented, or our pending patent applications are not granted, our ability to prevent third parties from
competing with LINZESS or apraglutide could be limited and our business and financial results may be materially harmed.
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Furthermore, the America Invents Act, which was signed into law in 2011, has made several major changes in the U. S. patent
statutes. These changes permit third parties to challenge our patents more easily and create uncertainty with respect to the
interpretation and practice of U. S. patent law. Moreover, the U. S. Supreme Court has ruled on several patent cases that narrow
the scope of patent protection available and weakening the rights of patent owners in certain circumstances. Depending on the
impact of these decisions and other actions by the U. S. Congress, the federal courts, the USPTO, and their foreign counterparts,
the laws and regulations governing patents may change, or their interpretation or implementation may change, in unpredictable
ways that could impact, potentially adversely, our ability to obtain new patents or to enforce and defend patents that we have
already obtained or that we might obtain in the future. For example, such changes may increase the costs and complexity
associated with obtaining, enforcing or defending our patents, including in abbreviated new drug application, or ANDA;
litigation, 35We We also rely upon unpatented trade secrets, unpatented know- how and continuing technological innovation to
develop and maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with our
employees and our partners and consultants. We also have agreements with our employees and selected consultants that obligate
them to assign their inventions to us. It is possible, however, that technology relevant to our business will be independently
developed by a person that is not a party to such an agreement. Furthermore, if the employees and consultants that are parties to
these agreements breach or violate the terms of these agreements, we may not have adequate remedies, and we could lose our
trade secrets through such breaches or violations. Additionally, our trade secrets could otherwise become known or be
independently discovered by our competitors. In addition, the laws of certain foreign countries do not protect proprietary rights
to the same extent or in the same manner as the U. S., and, therefore, we or our partners may encounter problems in protecting
and defending our intellectual property in certain foreign jurisdictions. If we are sued for infringing intellectual property rights
of third parties, it will be costly and time consuming, and an unfavorable outcome in such litigation could have a material
adverse effect on our business. Our commercial success depends on our ability, and the ability of our partners, to develop,
manufacture, market and sell our products and use our proprietary technologies without infringing the proprietary rights of third
parties. Numerous U. S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in
the fields in which we and our partners are developing products. As the biotechnology and pharmaceutical industry expands and
more patents are issued, the risk increases that our potential products may give rise to claims of infringement of the patent rights
of others. There may be issued patents of third parties of which we are currently unaware that may be infringed by LINZESS,
apraglutide, or our product candidates. Because patent applications can take many years to issue, there may be currently
pending applications which may later result in issued patents that LINZESS, apraglutide, or our product candidates may
infringe. We may be exposed to, or threatened with, litigation by third parties alleging that LINZESS, apraglutide, or our
product candidates infringe their intellectual property rights. If LINZESS, apraglutide, or one of our product candidates is
found to infringe the intellectual property rights of a third party, we or our partners could be enjoined by a court and required to
pay damages and could be unable to develop or commercialize LINZESS, apraglutide, or the applicable product candidate
unless we obtain a license to the intellectual property rights. A license may not be available to us on acceptable terms, if at all. In
addition, during litigation, the counterparty could obtain a preliminary injunction or other equitable relief which could prohibit
us from making, using or selling our products, pending a trial on the merits, which may not occur for several years. There
48There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and
pharmaceutical industries generally. If a third party claims that we or our partners infringe its intellectual property rights, we
may face a number of issues, including, but not limited to: • infringement and other intellectual property claims which,
regardless of merit, may be expensive and time- consuming to litigate and may divert our management's attention from our core
business: • substantial damages for infringement, which we may have to pay if a court decides that the product at issue
infringes on or violates the third party's rights, and, if the court finds that the infringement was willful, we could be ordered to
pay treble damages and the patent owner's attorneys' fees; • a court prohibiting us from selling our product unless the third
party licenses its rights to us, which it is not required to do; • if a license is available from a third party, we may have to pay
substantial royalties, fees or grant cross-licenses to our intellectual property rights; and • redesigning our products so they do
not infringe, which may not be possible or may require substantial monetary expenditures and time. 36We If we fail to comply
with our obligations or have disagreements over contract interpretation in agreements under which we license
intellectual property and other rights from third parties or otherwise experience disruptions to our business relationship
with our licensor, the scope of our intellectual property or technology rights could be narrowed and we could lose license
rights that are important to our business. Licensing of intellectual property is of critical importance to our business and
involves complex legal, business, and scientific issues. Disputes may arise regarding intellectual property subject to a
licensing agreement, including but not limited to: • the scope of rights granted under the license agreement and other
interpretation- related issues; • the extent to which our technology and processes infringe intellectual property of the
licensor that is not subject to the licensing agreement; • the sublicensing of patent and other rights; • our diligence
obligations under the license agreement and what activities satisfy those diligence obligations; • the ownership of
inventions and know- how resulting from the joint creation or use of intellectual property by our licensors, our
collaborators and us; ● the priority of invention of patented technology; and ● the fulfilment of our obligations under
the license. In addition, certain provisions in such agreements may be susceptible to multiple interpretations. The
resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of
our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other
obligations under the relevant agreement, either of which could harm our business, financial condition, results of
operations and prospects. If our licenses or material relationships or any in-licenses upon which our licenses are based
are terminated or breached, we may: • lose our rights to develop and market product candidates; • lose patent
protection for product candidates; 49 • experience significant delays in the development or commercialization of product
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candidates; • not be able to obtain any other licenses on acceptable terms, if at all; or • incur liability for damages. Apraglutide is among the assets that are subject to licensing agreements with third parties. If disputes over intellectual property and other rights that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize apraglutide. We are currently a party to and may in the future be party to license agreements. For example, we are a party to an amended and restated intellectual property license agreement with Ferring pursuant to which we have exclusive rights to apraglutide including issued composition of matter and method of use patents in the U. S. in lead indications, or the Ferring Agreement. The Ferring Agreement imposes, and other current or future license agreements may impose. various diligence, milestone payment, royalty, and other obligations on us. These milestone, royalty, and other payments associated with the license, will make it less profitable for us to develop appraglutide or other product candidates that are the subject of current or future licenses. If we fail to comply with our obligations under the Ferring Agreement, or we are subject to a bankruptcy, we may be required to make certain payments to Ferring, we may lose the exclusivity of our license, or Ferring may have the right to terminate the license. If the Ferring Agreement is terminated, we could lose intellectual property rights that are important to our business, be liable for damages to the licensor or be prevented from developing and commercializing our appaglutide. Termination of the agreement or reduction or elimination of our rights under the agreement may also result in us being required to negotiate a new or reinstated agreement with less favorable terms, and it is possible that we may be unable to obtain any such additional license at a reasonable cost or on reasonable terms and will be unable to develop and commercialize apraglutide. These or similar risks may apply to other license agreements, including future license agreements. In some cases, patent prosecution of our licensed technology is controlled solely by the licensor. If our licensor fails to obtain or maintain a patent or other protection for the proprietary intellectual property we license from them, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, and our competitors could market competing products using the intellectual property. In certain cases, we control the prosecution of patents resulting from licensed technology. In the event we breach any of our obligations related to such prosecution, we may incur significant liability to our licensing partners. We have received notices of Paragraph IV certifications related to LINZESS in conjunction with ANDAs filed by generic drug manufacturers, and we may receive additional notices from others in the future. We have, and may continue to, become involved in legal proceedings to protect or enforce intellectual property rights relating to our products and our product candidates, which could be expensive and time consuming, and unfavorable outcomes in such proceedings could have a material adverse effect on our business. Competitors may infringe the patents relating to our products and our product candidates or may assert that such patents are invalid. To counter ongoing or potential infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time- consuming. Litigation with generic manufacturers has become increasingly common in the biotechnology and pharmaceutical industries. In addition, in an infringement or invalidity proceeding, a court or patent administrative body may determine that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. Generic drug manufacturers were first able to file ANDAs for generic versions of LINZESS in August 2016. When filing an ANDA for one of our products, a generic drug manufacturer may choose to challenge one or more of the patents that cover such product and seek to commercialize generic versions of one or more LINZESS doses. As such, we have brought, and may bring in the future, legal proceedings against generic drug manufacturers. We and AbbVie have received Paragraph IV certification notice letters regarding ANDAs submitted to the U. S. FDA by generic drug manufacturers requesting approval to engage in commercial manufacture, use, sale and offer for sale of linaclotide capsules (72 mcg, 145 mcg and 290 mcg), proposed generic versions of our U. S. FDA- approved drug LINZESS 50LINZESS. We filed patent infringement lawsuits against five companies making such ANDA filings and subsequently entered into settlement agreements with each of these filers. Frequently, innovators receive multiple ANDA filings. Consequently, we may receive additional notice letters regarding ANDAs submitted to the U.S. FDA (and we may receive amendments to those notice letters), but we may not become aware of these filings for several months after any such submission due to procedures specified under applicable U. S. FDA regulations. After evaluation, we have in the past filed, and may, in the future, file patent infringement lawsuits or take other action against companies making ANDA filings. If a patent infringement suit has been filed within 45 days of receipt of a notice letter, the U. S. FDA is not permitted to approve any ANDA that is the subject of such lawsuit for 30 months from the date of the NDA holder's and patent owner's receipt of the ANDA filer's notice letter, or until a court decides that the relevant patents are invalid, unenforceable and / or not infringed. Additionally, the validity of the patents relating to our products and our product candidates may be challenged by third parties pursuant to administrative procedures introduced by the America Invents Act, specifically interpartes review, or IPR, and / or post grant review, or PGR, before the USPTO. Generic drug manufacturers may challenge our patents through IPRs or PGRs instead of or in addition to ANDA legal proceedings. Patent litigation (including any lawsuits that we file against generic drug manufacturers in connection with the receipt of a notice letter), IPRs and PGRs involve complex legal and factual questions and we may need to devote significant resources to such legal proceedings. We can provide no assurance concerning the duration or the outcome of any such patent- related lawsuits or administrative proceedings, including any settlements or other resolutions thereof which could, in addition to other risks, result in a shortening of exclusivity periods. An adverse result in any litigation or defense proceedings could put one or more of the patents relating to our products and our product candidates at risk of being invalidated or interpreted narrowly, or could otherwise result in a loss of patent protection for the product or product candidate at issue, and could put our patent applications at risk of not issuing, which would materially harm our business. Upon any loss of patent protection for one of our products, or upon an "at-risk" launch (despite pending patent infringement litigation, before any court decision or while an appeal of a lower court decision is pending) by a manufacturer of a generic version of one of our patented products, our revenues for that product could be significantly reduced in a short period of time, which would materially

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and adversely affect our business. Interference or derivation proceedings brought by the USPTO may be necessary to determine
the priority of inventions with respect to the patents relating to our products and our product candidates and patent applications
or those of our partners. An unfavorable outcome could require us to cease using the technology or to attempt to license rights to
it from the prevailing party. Our business could be harmed if a prevailing party does not offer us a license on terms that are
acceptable to us. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and
distraction of our management and other employees. In addition, we may not be able to prevent, alone or with 37our -- our
partners, misappropriation of our proprietary rights, particularly in countries where the laws may not protect those rights as fully
as in the U. S. Furthermore, because of the substantial amount of discovery required in connection with intellectual property
litigation, as well as the potential for public announcements of the results of hearings, motions or other interim proceeding or
developments, there is a risk that some of our confidential information could be compromised by disclosure during this type of
litigation. Risks Related to Our Finances and Capital RequirementsWe incurred significant losses from our inception in 1998
through the year ended December 31, 2018, and we may incur losses in future periods. In recent years, we have focused
primarily on developing, manufacturing and commercializing linaclotide, as well as developing our other product candidates.
For example, in June 2023, we acquired VectivBio and added appraglutide, a next generation long- acting GLP- 2 analog.
in development for the treatment of patients with SBS- IF, to our pipeline. We have financed our business to date primarily
through the issuance of equity, our collaboration and license arrangements, and debt issuances, including our June August 2015
2019 issuance of our 2-the $ 200. 25 % omillion aggregate principal amount of Convertible Senior Notes that matured,
bearing and- an were repaid interest of 0. 75 % and due in full on June 15, 2022-2024, or the 2022-2024 Convertible Notes,
<mark>the $ 200. and our August 2019 issuance of our</mark> 0 <del>. 75</del> % <mark>million aggregate principal amount of</mark> Convertible Senior Notes <del>duc</del>
2024, bearing or the 2024 Convertible Notes, and an our interest of 1.50 % and Convertible Senior Notes due in 2026, or
the 2026 Convertible Notes (together with the 2024 Convertible Notes, the Convertible Senior Notes), and our four-year $
500. 0 million secured revolving credit facility, or the Revolving Credit Facility. We currently derive a significant portion
51portion of our revenue from our LINZESS collaboration with AbbVie for the U. S. We believe that the revenues from the
LINZESS collaboration will continue to constitute a significant portion of our total revenue for the foreseeable future. Such
revenue is highly dependent on LINZESS demand and other factors such as fluctuations in retail chains' and wholesalers'
buying patterns and inventory levels, pricing and reimbursement. Our collaborative arrangements revenue outside of the U.S.
has and may continue to fluctuate as a result of the timing and amount of royalties from sales of linaclotide in the markets in
which it is currently approved, or any other markets where linaclotide receives approval, as well as clinical and commercial
milestones received and recognized under our current and future strategic partnerships outside of the U. S. Prior to the year
ended December 31, 2019, we incurred net losses in each year since our inception in 1998. As of December 31, 2022-2023, we
had an accumulated deficit of approximately $ 696-1. 4-7 million billion. We cannot be certain that sales of our products, and
the revenue from our other commercial activities will not fall short of our projections or be delayed. Further, we expect to
continue to incur substantial expenses in connection with our efforts to commercialize linaclotide, research and develop our
product candidates, and access externally developed products or product candidates. Because of the numerous risks and
uncertainties associated with developing and commercializing pharmaceutical products, as well as those related to our
expectations for our products and our other activities, we are unable to predict the extent of any future losses. Failure to achieve
sustainable net income and maintain positive cash flows would have an adverse effect on stockholders' equity and working
capital. We may need additional funding and may be unable to raise capital when needed, which could cause us to delay, reduce
or eliminate our corporate or product development or commercialization efforts. We have previously raised funds to finance our
operations through capital raising activities, including the sale of shares of our Class A Common Stock in public offerings and
convertible and other debt issuances. However, marketing and selling gastrointestinal drugs, purchasing commercial quantities
of pharmaceutical products, developing product candidates, conducting clinical trials and accessing externally developed
products or product candidates are expensive and uncertain. Circumstances, our strategic imperatives, or opportunities to create
or acquire new programs, as well as maturities, redemptions or repurchases of our outstanding debt securities, could require us
to, or we may choose to, seek to raise additional funds. The amount and timing of our future funding requirements will depend
on many factors, including, but not limited to: • the level of underlying demand for our products by prescribers and patients in
the countries in which they are approved; • the costs associated with commercializing our products in the U. S.; • the costs of
establishing, maintaining and / or expanding sales, marketing, distribution, and market access capabilities for our products; 38-0
the regulatory approval of linaclotide within new indications, populations and formulations, as well as the associated
development and commercial milestones and royalties; • the rate of progress, the cost of our clinical trials and the other costs
associated with our development programs, including our clinical trial of apraglutide in adult patients with SBS- IF, post-
approval nonclinical and clinical studies of linaclotide in pediatrics and our investment to enhance the clinical profile of
LINZESS within IBS- C and CIC, as well as to study linaclotide in additional indications, populations and formulations to
assess its potential to treat various conditions; • the costs and timing of in-licensing additional products or product candidates
or acquiring other complementary companies or assets; • the achievement and timing of milestone payments and royalties due
or payable under our collaboration and license agreements; • the status, terms and timing of any collaboration, licensing, co-
commercialization or other arrangements; • the timing of any regulatory approvals of apraglutide and our other product
candidates; 52 • whether the holders of our Convertible Senior Notes hold the notes to maturity without conversion into our
Class A Common Stock or cash and whether we are required to repurchase any of our Convertible Senior Notes prior to
maturity upon a fundamental change, as defined in each of the indentures governing the Convertible Senior Notes; and •
whether we seek to redeem, repurchase or retire all or part of our outstanding debt through cash purchases and / or exchanges, in
open market purchases, privately negotiated transactions, by tender offer or otherwise. Additional funding may not be available
on acceptable terms or at all. If adequate funds are not available, we may be required to delay or reduce the scope of our
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commercialization efforts, delay, reduce or eliminate one or more of our development programs or delay or abandon potential
strategic opportunities. Our ability to pay principal of and interest on our outstanding debt securities will depend in part on the
receipt of payments from AbbVie under our collaboration agreement for North America. In August 2019, we issued $ 200.0
million aggregate principal amount of our 2024 Convertible Notes bearing an annual interest rate of 0, 75 % and $ 200, 0 million
aggregate principal amount of our 2026 Convertible Notes bearing an annual interest rate of 1. 50 %, and we used a portion of
the proceeds from this offering to repurehase $ 215. 0 million aggregate principal amount of the 2022 Convertible Notes. The
2022 Convertible Notes matured and were repaid in full on June 15, 2022. Semi- annual payments on each of our 2024
Convertible Senior Notes and 2026 Convertible. Notes began in December 2019, In addition, in May 2023, we entered into
the Revolving Credit Facility. As of December 31, 2023, the outstanding principal balance on December 15, 2019 the
Revolving Credit Facility was $ 300.0 million. We expect that for the next few years, at a minimum, the net quarterly
payments from AbbVie will be a significant source of cash flows from operations. If the cash flows derived from the net
quarterly payments that we receive from AbbVie under the collaboration agreement for North America are insufficient on any
particular payment date to fund the interest payment on our outstanding indebtedness, at a minimum, we will be obligated to pay
the amounts of such shortfall out of our general funds. The determination of whether AbbVie will be obligated to make a net
quarterly payment to us in respect of a particular quarterly period is a function of the revenue generated by LINZESS in the U.
S. as well as the development, manufacturing and commercialization expenses incurred by each of us and AbbVie under the
collaboration agreement for North America. Accordingly, since we cannot guarantee that our company will maintain net income
or positive cash flows, we cannot provide assurances for any particular quarterly period that (i) we will have the available funds
to fund the interest payment on our outstanding indebtedness, at a minimum, in the event that there is a deficiency in the net
quarterly payment received from AbbVie, (ii) there will be a net quarterly payment from AbbVie at all or (iii) we will not also
be required to make a true- up payment to AbbVie under the collaboration agreement for North America. 390ur -- Our
indebtedness could adversely affect our financial condition or restrict our future operations. As of December 31, 2022-2023, we
had total indebtedness of $ 400-700. 0 million and available cash and cash equivalents of $ 656-92. 2 million. Our We incurred
significant new indebtedness , combined in connection with the VectivBio Acquisition. In May 2023, we entered into the
Revolving Credit Facility, which includes a $ 10.0 million letter of credit subfacility. In June 2023, we borrowed $ 400.0
million to fund a portion of the consideration paid to purchase VectivBio's outstanding ordinary shares in connection
with the VectivBio Acquisition. As of December 31, 2023, we have repaid $ 100. 0 million of the outstanding principal
balance. The agreement governing the Revolving Credit Facility, our or the Revolving Credit Agreement, contains
certain covenants applicable to us and certain of our subsidiaries that may, under certain circumstances, impose
significant operating and financial restrictions on us, including, without limitation, limitations on additional
indebtedness, liens, various fundamental changes, dividends and distributions, investments (including acquisitions),
transactions with affiliates, asset sales, prepayment of junior financing, changes in business and other financial
limitations customary in senior secured credit facilities. The Revolving Credit Agreement also includes cross- default
features providing that defaults under certain other indebtedness would result in a default under the Revolving Credit
Agreement. In addition, the Revolving Credit Agreement requires us to maintain a maximum consolidated secured net
leverage ratio of 3, 00 to 1, 00 and a minimum interest coverage ratio of 3, 00 to 1, 00, in each case at the end of each
fiscal quarter. The Revolving Credit Agreement allows us to elect to increase the permitted maximum consolidated
secured net leverage ratio to 3. 50 to 1. 00 for four fiscal quarters in the event we consummate an acquisition for
consideration in excess of $ 50 million, subject to certain limitations on how often this election can be made. Additionally,
the lenders under the Revolving 53Credit Agreement will be permitted to accelerate all outstanding borrowings and
other obligations and contractual, terminate outstanding commitments and exercise, could have important consequences on
our business, including: • limiting our ability to obtain additional financing to fund future working capital, capital expenditures
or other specified remedies upon general corporate purposes, including product development, commercialization efforts,
research and development activities, strategic arrangements, acquisitions and refinancing of our outstanding debt; • requiring a
substantial portion of our eash flows to be dedicated to debt service payments instead of other-- the occurrence purposes,
thereby reducing the amount of eash flows available for working capital customary events of default. In addition, while none
of capital expenditures, corporate transactions and other -- the indentures governing general corporate purposes; • increasing
our..... indebtedness or, in the case of our Convertible Senior Notes ; in connection with a transaction involving us that
constitutes a fundamental change under the indentures governing the Convertible Senior Notes, or to fund our liquidity needs,
we may be forced to refinance all or a portion of our indebtedness on or before the maturity dates thereof, sell assets, reduce or
delay currently planned activities or curtail operations, seek to raise additional capital or take other actions. We may not be able
to execute any of these actions on commercially reasonable terms or at all. This, together with any of the factors described
above, could materially and adversely affect our business, financial condition and results of operations. In addition, while none
of the indentures governing our Convertible Senior Notes includes - include covenants restricting the operation of our business
except in certain limited circumstances, in the event of a default under any of the Convertible Senior Notes, the applicable
noteholders or the trustee under the indenture governing the applicable Convertible Senior Notes may accelerate our payment
obligations under such Convertible Senior Notes, which could have a material adverse effect on our business, financial condition
and results of operations. We are also required to offer to repurchase the Convertible Senior Notes upon the occurrence of a
fundamental change, which could include, among other things, any acquisition of our company (other than an acquisition in
which at least 90 % of the consideration is Class A Common Stock listed on The Nasdaq Global or Global Select Market or The
New York Stock Exchange), subject to the terms of each of the indenture governing the Convertible Senior Notes. The
repurchase price must be paid in cash, and this obligation may have the effect of discouraging, delaying or preventing an
acquisition of our company that would otherwise be beneficial to our security holders. Each of the indentures governing our
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Convertible Senior Notes also includes cross- default features providing that certain failures to pay for outstanding indebtedness
would result in a default under the indentures governing our Convertible Senior Notes. In the event of such default, the trustee
or noteholders could elect to declare all amounts outstanding to be immediately due and payable under the applicable indenture,
which could have a material adverse effect on our business, financial condition and results of operations. To the extent we
become subject to such covenants, our ability to comply with such covenants in future periods will depend on our
ongoing financial and operating performance, which in turn will be subject to economic conditions and to financial,
market and competitive factors, many of which are beyond our control. The note hedge warrant ability to comply with
these covenants in future periods will also depend on our ability to successfully implement our overall business strategy
and realize the anticipated benefits of the VectivBio Acquisition, including synergies, cost savings, innovation and
operational efficiencies. Our significant indebtedness, combined with our other financial obligations and contractual
commitments, could have important consequences on our business, including: • limiting our ability to obtain additional
financing to fund future working capital, capital expenditures or other general corporate purposes, including product
development, commercialization efforts, research and development activities, strategic arrangements, acquisitions and
refinancing of our outstanding debt; • requiring a substantial portion of our cash flows to be dedicated to debt service
payments instead of other purposes, thereby reducing the amount of cash flows available for working capital, capital
expenditures, corporate transactions entered into and other general corporate purposes; increasing our vulnerability to
adverse changes in general economic, industry and competitive conditions; • limiting our flexibility in planning for and reacting
to changes in the industry in which we compete; placing us at a disadvantage compared to other, less leveraged competitors or
competitors with comparable debt at more favorable interest rates; and • increasing our cost of borrowing. If we do not generate
sufficient cash flows from operations or if future borrowings are not available to us in an amount sufficient to service pay our
indebtedness, including payments of principal when due on our outstanding indebtedness or, in the case of in connection with our
2022 a transaction involving us that constitutes a fundamental change under the indentures governing the Convertible
<mark>Senior Notes , or under our Revolving Credit Facility, or to fund our liquidity needs, we may be forced to refinance all or </mark>
a portion of our indebtedness on or before the maturity dates thereof, sell assets, reduce or delay currently planned
activities or curtail operations, seek to raise additional capital or take other actions. We may not be able to execute any of
these actions on commercially reasonable terms or at all. This, together with any of the factors described above, could
materially and adversely affect our business, financial condition and results of operations. 54The capped call transactions
entered into in connection with our 2024 Convertible Notes and our 2026 Convertible Notes may affect the value of our Class A
Common Stock, In connection with the issuance of our 2022 Convertible Notes, we entered into convertible note hedge
transactions, or the Convertible Note Hedges, and separate note hedge warrant transactions, or the Note Hedge Warrants, with
certain financial institutions. In June 2022, the Convertible Note Hedges terminated unexercised upon expiry. The 40Note
Hedge Warrants are exercisable at a strike price of $ 18.82 over the 150 trading day period beginning on September 15, 2022.
Additionally, in connection with the issuance of our 2024 Convertible Notes and our 2026 Convertible Notes, we entered into
capped call transactions, or the Capped Calls, with certain financial institutions. These transactions are expected generally to
reduce the potential dilution upon any conversion of our 2024 Convertible Notes or our 2026 Convertible Notes, as applicable,
or offset any cash payments we are required to make in excess of the principal amount of converted Convertible Senior Notes, as
the case may be. In connection with these transactions, the financial institutions likely purchased our Class A Common Stock in
secondary market transactions and entered into various OTC over- the- counter derivative transactions with respect to our Class
A Common Stock. These entities or their affiliates are likely to modify their hedge positions from time to time prior to
conversion or maturity of the 2024 Convertible Notes and the 2026 Convertible Notes, as applicable, by purchasing and selling
shares of our Class A Common Stock or other instruments they may wish to use in connection with such hedging. Any of these
activities could adversely affect the value of our Class A Common Stock and, as a result, the number of shares and the value of
the Class A Common Stock noteholders will receive upon conversion of the 2024 Convertible Notes, or the 2026 Convertible
Notes, as applicable. In addition, under certain circumstances the counterparties have the right to terminate the Capped Calls and
settle the Note Hedge Warrants on terms set forth in the applicable confirmations, which may result in us not receiving all or
any portion of the anticipated benefit of the Capped Calls. If the price of our Class A Common Stock increases such that the
hedge transactions settle in our favor, we could also be exposed to credit risk related to the counterparties to the Capped Calls,
which would limit or eliminate the benefit of such transactions to us. Our quarterly and annual operating results may fluctuate
significantly. We expect our operating results to be subject to frequent fluctuations. Our net income (loss) and other operating
results will be affected by numerous factors, including: • the level of underlying demand and price for our products in the
countries in which they are approved; • retail chains' and wholesalers' buying patterns , pricing and reimbursement and
inventory levels with respect to our products; • the costs associated with commercializing our products in the U. S.; • the
achievement and timing of milestone payments and royalties due or payable under our collaboration and license agreements; •
our execution of any collaboration, partnership, licensing or other strategic arrangements, and the timing of payments we may
make or receive under these arrangements; • any impairments of assets or goodwill, and associated write-downs; • any
variations in the level of expenses related to our development programs; ● addition or termination of clinical trials; ● any impact
on taxes or changes in tax rules; • regulatory developments affecting our products and product candidates; • any material
lawsuit in which we may become involved; and • the impact of the COVID-19 pandemie or other public health epidemies
emergencies, including containment or mitigation measures, or natural disasters. H-55If our operating results fall below the
expectations of investors or securities analysts for any of the foregoing reasons or otherwise, the price of our Class A Common
Stock could decline substantially. Furthermore, any quarterly or annual fluctuations in our operating results may, in turn, cause
the price of our stock to fluctuate substantially. 410ur -- Our ability to use net operating loss and tax credit carryforwards and
certain built- in losses to reduce future tax payments is limited by provisions of the Internal Revenue Code, and it is possible
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that our net operating loss and tax credit carryforwards may expire before we generate sufficient taxable income to use such carryforwards, or that certain transactions or a combination of certain transactions may result in material additional limitations on our ability to use our net operating loss and tax credit carryforwards. Prior to the year ended December 31, 2019, we incurred significant net losses since our inception. To the extent that we do not generate federal and state taxable income in the future, unused net operating loss and tax credit carryforwards will carry forward to offset future taxable income, if any, until the date, if any, on which such unused carryforwards expire. Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, contain rules that limit the ability of a company that undergoes an ownership change, which is generally any change in ownership of more than 50 % of its stock over a three-year period, to utilize its net operating loss and tax credit carryforwards and certain built- in losses recognized in years after the ownership change. These rules generally operate by focusing on ownership changes involving stockholders owning directly or indirectly 5 % or more of the stock of a company and any change in ownership arising from a new issuance of stock by the company. Generally, if an ownership change occurs, the yearly taxable income limitation on the use of net operating loss and tax credit carryforwards and certain built- in losses is equal to the product of the applicable long - term tax exempt rate and the value of the company's stock immediately before the ownership change. Certain future equity offerings or strategic transactions, if any, could potentially result in a 50 % or greater change of control. If we do not generate sufficient taxable income prior to the expiration, if any, of the applicable carryforwards or if the carryforwards are subject to the limitations described above, we may be unable to offset our taxable income with losses, or our tax liability with credits, before such losses and credits expire and therefore would incur larger federal or state income tax liability. We have completed several financings since our inception which may have resulted in a change in control as defined by Section 382, or could result in a change in control in the future. any tax opinion may be invalid. Moreover, the opinion is not binding on the IRS or any courts. Accordingly, notwithstanding receipt of the 56IRS -- IRS private letter ruling and the opinion, the IRS could determine that the distribution and certain related transactions should be treated as taxable transactions for U.S.federal income tax purposes. If the distribution, together with certain related transactions, fails to qualify as a transaction that is generally tax- free under Sections 355 and 368 (a) (1) (D) of the Internal Revenue Code,in general, for U.S. federal income tax purposes, we would recognize taxable gain with respect to Cyclerion's distributed common stock and our stockholders who received shares of Cyclerion common stock in the distribution would be subject to tax as if they had received a taxable distribution equal to the fair market value of such shares General Risk FactorsPublic health emergencies, epidemies, or pandemics, such as the COVID-19 pandemic, impact our business. The COVID-19 pandemic has impacted, and may continue to impact, our business and operations in a number of ways. Factors Factors We that will influence the impact on our business and operations include the duration and extent of the pandemie, the duration and extent of imposed or recommended containment and mitigation measures, periodic spikes in infection rates, new strains or variants of the virus that cause outbreaks of COVID-19, the rate of vaccinations, the availability and efficacy of vaccines for new strains or variants and vaccine mandates and the general economic consequences of the pandemic. Addressing the impacts of the COVID-19 pandemic has required, and may continue to require significant time and has diverted, and may divert in the future, the attention of our management, other employees and our board of directors. During 2022, in-person work practices for customer-facing employees returned to near pre-COVID 19 levels. However, new strains or variants of the virus that cause outbreaks of COVID-19 may present risks to successful execution of the commercial operating plan for LINZESS due in part to limitations on in-person work practices for our customer facing employees. Should we be unable to evolve with any further changes in the commercial landscape, we may be unable to maintain or grow our revenues from the commercialization of LINZESS or successfully commercialize future products. In addition, headquarters employees have the option to work primarily remotely. If our employees are unable to work from home effectively, or if the COVID-19 pandemic otherwise impacts employees' ability to work, for example due to containment and mitigation measures related to the COVID-19 pandemic, illness, lack of resources or inadequate technology, or restrictions, closures or other limits on school and other childcare options, our business will be materially harmed. Specifically, new or continuing limits on the ability of our customer-facing employees to meet with physicians and patients to visit healthcare providers and pharmacists (including due to continued or future remote working arrangements, containment and mitigation measures that limit access to customers or other restrictions related to the COVID-19 pandemie) may have an extended negative impact on LINZESS sales. In addition, changes in insurance coverage or reimbursement levels by governmental authorities, private health insurers and other third- party payors, or changes in the type of such coverage held by patients (including changes from commercial insurance to Medicaid) or the loss of coverage by some patients, due to the impacts of the COVID- 19 42pandemie (including the related increase in unemployment in the U. S.) may negatively impact our revenue from LINZESS. Moreover, continuing impacts to healthcare access or administration (including, for example, limitations on medications or procedures deemed "non-essential" and reduced interaction between patients and physicians) due to the COVID-19 pandemic may impact demand for LINZESS and materially harm our business and eommercialization efforts. Revenue from LINZESS sales or the progression of our trials will be affected should the COVID-19 pandemic cause significant disruptions to manufacturing operations or supply of LINZESS to the U.S. or API, finished drug product or finished goods for linaclotide or our product candidates, for example due to impacts of the COVID-19 pandemic on personnel involved in the manufacturing and supply chain, international travel and shipping restrictions, inability of vendors to provide services, closed manufacturing sites, or any other disruptions in the international supply chain. In addition, the COVID-19 pandemic has impacted enrollment in our clinical trials, and may impact clinical trial enrollment or participation in the future compared to pre- COVID-19 pandemic levels. In addition, the COVID-19 pandemic has impacted enrollment in our clinical trials and may impact clinical trial enrollment or participation in the future, for example, due to suspension of in-person procedures required for enrollment or lower or discontinued patient participation compared to pre-COVID-19 pandemic levels as a result of new strains or variants The spread of COVID-19 continues to disrupt the U. S. healthcare and healthcare regulatory system. Capital markets in the U. S. and around the world may be negatively impacted and can potentially harm our

business, including our ability to obtain future financing. The COVID-19 pandemic, including containment and mitigation measures, has impacted our business and operations, and could have a material adverse impact on our financial condition and results of operations in the future, including for an extended period of time. We may not be able to manage our business effectively if we lose any of our current management team or if we are unable to attract, motivate and retain key personnel. We may not be able to attract, motivate or retain qualified management and scientific, clinical, operations and commercial personnel due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses, particularly in the greater-Boston area. If we are not able to attract, motivate and retain necessary personnel to accomplish our business objectives, we will experience constraints that will significantly impede the achievement of our objectives. We are highly dependent on the drug research, development, regulatory, commercial, financial and other expertise of our management, particularly Thomas A. McCourt, our chief executive officer; Sravan K. Emany, our senior vice president, chief financial officer; Andrew Davis, our senior vice president, chief business officer; John Minardo, our senior vice president, chief legal officer and secretary; Jason Rickard, our senior vice president, chief operating officer; and Michael Shetzline, our senior vice president, chief medical officer and head of research and drug development. Transitions in our senior management team or other key employees, or the unavailability of any such persons for any reason, can be inherently difficult to manage and may disrupt our operations or business or otherwise harm our business, for example due to the diversion of our board and management's time and attention and a decline in employee morale. In addition to the competition for personnel, the Boston area in particular is characterized by a high cost of living. As such, we could have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment efforts, which may or may not be successful. We also have scientific and clinical advisors who assist us in formulating our product development, clinical strategies and our global supply chain plans, as well as sales and marketing advisors who have assisted us in our commercialization strategy and brand plan for our products. These advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us, or may have arrangements with other companies to assist in the development and commercialization of products that may compete with ours. Security breaches and other disruptions to our information technology structure could compromise our information, disrupt our business and expose us to liability, which would cause our business and reputation to suffer. In the ordinary course of our business, we collect, process and store sensitive data, including intellectual property, our proprietary business information and that of our suppliers and business partners, as well as personally identifiable information of our patients, clinical trial participants and employees. We also rely to a large extent on 43 information rechnology systems to operate our business, including to deliver our products. We have outsourced elements of our confidential information processing and information technology structure, and as a result, we are managing independent vendor relationships with third parties who may or could have access to our confidential information. Similarly, our business partners and other third- party providers possess certain of our sensitive data. The secure maintenance of this information is critical to our operations and business strategy. Despite our security measures, our large and complex information technology and infrastructure (and those of our partners, vendors and third- party providers) may be vulnerable to attacks by hackers or breached due to employee, partner, vendor or third-party error, malfeasance or other disruptions. We, our partners, vendors and other third- party providers could be susceptible to third party attacks on our, and their, information security systems, which attacks are of ever-increasing levels of sophistication and are made by groups and individuals with a wide range of motives and expertise, including organized criminal groups, hacktivists, nation states and others. While we have invested in information technology and security and the protection of confidential information, there can be no assurance that our efforts will prevent service interruptions or security 57security breaches. Further, while some or all of our workforce, and those of our partners, vendors and other third-party providers, work remotely as a result of the COVID-19 pandemic or otherwise, we may have greater vulnerability to cyberattacks or other losses of confidential information, as well as interruptions in information technology systems. Any such interruptions, losses or breaches would substantially impair our ability to operate our business and would compromise our, or our partners, vendors and other third- party providers, networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, disrupt our operations, negatively impact our financial condition and damage our reputation, any of which could adversely affect our business. While we maintain cyber liability insurance, this insurance may not be sufficient to cover the financial or other losses that may result from an interruption or breach of our (or our partners', vendors' and third- party providers') systems. Anti- takeover provisions under our charter documents and Delaware law could delay or prevent a change of control which could negatively impact the market price of our Class A Common Stock. Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control. These provisions include the following: • Our board of directors has the right to elect directors 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. • Our board of directors may issue, without stockholder approval, shares of preferred stock. The ability to authorize preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us. • Stockholders must provide advance notice to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders' meeting. These provisions may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect such acquirer's own slate of directors or otherwise attempting to obtain control of our company. • Our stockholders may not act by written consent. As a result, a holder, or holders, controlling a majority of our capital stock are not able to take certain actions outside of a stockholders' meeting. • Special meetings of stockholders may be called only by the chairman of our board of directors, our chief executive officer or a majority of our board of directors. As a result, a holder, or holders, controlling a majority of our capital stock are not able to call a special meeting. • A super-majority (80 %) of the outstanding shares of Class

A Common Stock are required to amend our bylaws, which make it more difficult to change the provisions described above. In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit certain business combinations with stockholders owning 15 % or more of our outstanding voting stock. These and other provisions in our certificate of incorporation and our bylaws and in the Delaware General Corporation 44Law -- Law could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors. If we identify a material weakness in our internal control over financial reporting, it could have an adverse effect on our business and financial results and our ability to meet our reporting obligations could be negatively affected, each of which could negatively affect the trading price of our Class A Common Stock. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Accordingly, a material weakness increases the risk that the financial information we report contains material errors. We regularly review and update our internal controls, disclosure controls and procedures, and corporate governance policies. In addition, we are required under the Sarbanes-Oxley Act of 2002 to report annually on our internal 58internal control over financial reporting. Our system of internal controls, however well-designed and operated, is based in part on certain assumptions and includes elements that rely on information from third parties, including our partners. Our system can provide only reasonable, not absolute, assurances that the objectives of the system are met. If we, or our independent registered public accounting firm, determine that our internal controls over financial reporting are not effective, or we discover areas that need improvement in the future, these shortcomings could have an adverse effect on our business and financial results, and the price of our Class A Common Stock could be negatively affected. Further, we are dependent on our partners for information related to our results of operations. Our net profit or net loss generated from the sales of LINZESS in the U.S. is partially determined based on amounts provided by AbbVie and involves the use of estimates and judgments, which could be modified in the future. We are highly dependent on our linaclotide partners for timely and accurate information regarding any revenues realized from sales of linaclotide in their respective territories, and in the case of AbbVie for the U. S., the costs incurred in developing and commercializing it in order to accurately report our results of operations. Our results of operations are also dependent on the timeliness and accuracy of information from any other licensing, collaboration or other partners we may have, as well as our and our partners' use of estimates and judgments. If we do not receive timely and accurate information or if estimated activity levels associated with the relevant collaboration or partnership at a given point in time are incorrect, whether the result of a material weakness or not, we could be required to record adjustments in future periods. Such adjustments could have an adverse effect on our financial results, which could lead to a decline in our Class A Common Stock price. If we cannot conclude that we have effective internal control over our financial reporting, or if our independent registered public accounting firm is unable to provide an unqualified opinion regarding the effectiveness of our internal control over financial reporting, investors could lose confidence in the reliability of our financial statements, which could lead to a decline in our stock price. Failure to comply with reporting requirements could also subject us to sanctions and / or investigations by the SEC, The Nasdaq Stock Market or other regulatory authorities. We expect that the price of our Class A Common Stock will fluctuate substantially. The market price of our Class A Common Stock may be highly volatile due to many factors, including: • the commercial performance of our products in the countries in which they are approved, as well as the costs associated with such activities; • any third- party coverage and reimbursement policies for our products; • market conditions in the pharmaceutical and biotechnology sectors; • developments, litigation or public concern about the safety of our products or our potential products; • announcements of the introduction of new products by us or our competitors; • announcements concerning product development, including clinical trial results or timelines, or intellectual property rights of us or others: 45 • actual and anticipated fluctuations in our quarterly and annual operating results; ● deviations in our operating results from any guidance we may provide or the estimates of securities analysts; • sales of additional shares of our Class A Common Stock or sales of securities convertible into Class A Common Stock or the perception that these sales might occur; • any conversions of our Convertible Senior Notes into Class A Common Stock or activities undertaken by the counterparties to the Capped Calls; • additions or departures of key personnel; 59