Directors' Report and Financial Statements

GH Research PLC

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The Directors present their report and audited consolidated and company financial statements (the "Annual Report") of GH Research PLC ("the Company", "we", "us" and "our"), a public limited company incorporated in Ireland, and its subsidiary undertaking, GH Research Ireland Ltd, a private limited company incorporated in Ireland, ("the Subsidiary"), with the Company and its Subsidiary being together ("the Group") for the year ended December 31, 2024.

These Consolidated Financial Statements for the year ended December 31, 2024 have been prepared in accordance with IFRS Accounting Standards as adopted by the European Union and with those parts of the Companies Act 2014 applicable to companies applying IFRS. The Company Financial Statements have been prepared in accordance with Irish Generally Accepted Accounting Practice (accounting standards issued by the UK Financial Reporting Council, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland and Irish company law).

The Company was incorporated as a public limited company under the laws of Ireland on March 29, 2021. Its principal activity is a holding company for the subsidiary. The financial information presented prior to the incorporation of the Company relates solely to the Subsidiary.

Principal activities, business review and future developments

We are a clinical-stage biopharmaceutical company dedicated to transforming the lives of patients by developing a practice-changing treatment in depression. Our initial focus is on developing our novel and proprietary mebufotenin therapies for the treatment of patients with treatment-resistant depression, or TRD.

Our portfolio currently includes GH001, our proprietary inhalable mebufotenin product candidate and GH002, our proprietary intravenous mebufotenin product candidate. While GH001 is currently delivered via a vaporization device produced by a third party, we are developing a proprietary aerosol delivery device, which is currently in clinical investigation in Europe. We have completed two Phase 1 healthy volunteer clinical trials for GH001 (GH001-HV-101 and GH001-HV-103), in which administration of GH001 via inhalation was observed to be well tolerated at the investigated single dose levels and in an individualized dosing regimen, or IDR, with intra-subject dose escalation within a single day. We have also completed a Phase 1/2 clinical trial in patients with TRD (GH001-TRD-102) and have recently completed the double-blind phase of a randomized, double-blind, placebo-controlled Phase 2b trial in patients with TRD (GH001-TRD-201). Based on observed clinical activity in these clinical trials, we believe that administration of GH001 has the potential to induce ultra-rapid remissions as measured by the Montgomery–Åsberg Depression Rating Scale, or MADRS in TRD patients.

Patients with major depressive disorder, or MDD, who have not adequately responded to therapy clearly have harder-to-treat depression, generally referred to as TRD. There is no consensus definition for TRD, but in the context of clinical trials, failure of at least one pharmacotherapy, one pharmacotherapy and one psychotherapy, or two pharmacotherapies has been used, the latter group having been referred to by regulatory authorities as patients with TRD. The Sequenced Treatment Alternatives to Relieve Depression, or STAR*D study, a collaborative study funded by the U.S. National Institute of Mental Health, demonstrated that approximately 37% of patients with MDD did not achieve a response despite two treatment steps. Based on this result we estimate that there are approximately nine million TRD patients in the United States and Europe who would be candidates for treatment. TRD has a greater economic and societal cost than non-TRD MDD. For instance, direct medical costs are approximately two- to threefold higher for TRD patients compared to non-TRD MDD patients.

Despite the significant unmet medical need in TRD and the substantial patient population, there are only two pharmacotherapies specifically approved for TRD in the United States: esketamine, as well as a combination of olanzapine and fluoxetine, an antipsychotic and antidepressant, respectively, both of which have shown mixed efficacy in clinical trials and are associated with potential side effects. Outside of pharmacotherapies, psychotherapies are also employed in the treatment of TRD, but involve a lengthy time commitment and are subject to large variability in availability, administration and effectiveness. Multiple forms of somatic intervention, such as transcranial magnetic stimulation, or rTMS, electroconvulsive therapy, or ECT, vagal nerve stimulation, or VNS, and deep brain stimulation, or DBS, are another common treatment approach for TRD, although these treatments are often deemed invasive and/or onerous, and there are limited data supporting long-term therapeutic benefit. Despite the range of treatments available for TRD, there is a large unmet medical need for new therapies to

bring more patients into rapid and durable remissions and to reduce the associated social and economic burden.

Our goal is to develop and successfully commercialize novel and proprietary mebufotenin therapies for patients with TRD that are highly effective, rapidly acting, well tolerated and conveniently administered. We believe that various distinguishing features of our mebufotenin product candidates, including our lead product candidate GH001, will allow us to achieve those goals.

We believe that GH001, if approved, may provide significant benefits for the treatment of patients with TRD. We aim to achieve the following goals:

- maximization of ultra-rapid and durable remissions;
- single visit initial treatment, without additional mandated visits for psychotherapeutic intervention; and
- convenient and infrequent re-treatment.

Based on these features, we believe that GH001 could have the potential to provide an attractive alternative to currently available therapies and other therapies currently in development for the treatment of TRD.

We are developing our mebufotenin product candidates, GH001 and GH002, in our focus area of psychiatric and neurological disorders.

With our lead product candidate GH001, we have completed two Phase 1 clinical trials in healthy volunteers (GH001-HV-101 and GH001-HV-103), a Phase 1/2 trial in TRD (GH001-TRD-102) and two Phase 2a proof-of-concept trials, one in BDII and one in PPD. We are currently investigating GH001 in a multi-center, randomized, double-blind, placebo-controlled Phase 2b trial (GH001-TRD-201) in TRD. We have recently completed enrollment of the double-blind phase of the trial. In addition, this trial includes a 6-month open-label extension which is on track for completion of last patient visit in the first quarter of 2025. For our completed trials, we purchased a vaporization device from a third-party manufacturer with which we administered GH001. In 2021, we, with a contract development and manufacturing organization, or CDMO, initiated the development of a proprietary aerosol delivery device for GH001 for use in our pivotal clinical trial program and for commercial use. Based on our development progress, we submitted an investigational new drug application, or IND, for GH001, delivered with this proprietary device, to the U.S. Food and Drug Administration, or FDA, in August of 2023. In September 2023, at the end of the 30-day statutory IND review period, the FDA advised us that it had placed our IND on clinical hold, and in October 2023, with a formal clinical hold letter, the FDA requested that we provide (i) an inhalation toxicology study in a non-rodent species and an additional inhalation toxicology study in rats, related to respiratory tract histology findings from a previously completed inhalation toxicology study in rats, (ii) additional device design verification information and (iii) updates to our investigator brochure. We are conducting a Phase 1 healthy volunteer clinical pharmacology trial (GH001-HV-106) using our proprietary device in the United Kingdom.

GH002 is our second mebufotenin product candidate, formulated for administration via a proprietary intravenous injection approach. We have completed a randomized, double-blind, placebo-controlled, dose-ranging clinical pharmacology trial of GH002 in healthy volunteers (GH002-HV-105). We anticipate developing GH002 within our focus area of psychiatric and neurological disorders.

Principal Risks and Uncertainties

Due to the nature of the Company's business there are a wide range of factors, many of which are outside of the Company's control, which could materially affect the Company's future operations and financial performance. Management believes the following risks may significantly impact the Company:

Risk Factors Summary

Our ability to implement our business strategy is subject to numerous risks, as more fully described in this section. These risks include, among others:

- We are a clinical-stage biopharmaceutical company and we have incurred significant losses since our inception. We expect that we will continue to incur significant losses for the foreseeable future;

- We will need substantial additional funding, which may not be available on acceptable terms, or at all. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product discovery and development programs or commercialization efforts;

- Preliminary, top-line or interim data from our clinical trials that we announce or publish from time to time may change as more data become available, and are subject to audit and verification procedures that could result in material changes in the final results or could otherwise harm our business, financial condition, results of operation and prospects;

- It may take considerable time and expense to resolve the clinical hold that has been placed by the FDA on the study we proposed in our IND for GH001, and no assurance can be given that the FDA will remove the clinical hold, which could have a material adverse effect on our clinical development efforts or could otherwise harm our business, financial condition, results of operation and prospects;

- Drug and drug-device combination product development is a highly uncertain undertaking and involves a substantial degree of risk;

- GH001 and GH002 are investigational mebufotenin therapies based on a novel technology, which makes it difficult to predict the time and cost of development and of subsequently obtaining regulatory approval. To our knowledge, no such therapies have been approved in the United States or the EU for commercialization;

- Developing our proprietary aerosol delivery device for GH001 is a costly and uncertain process, and any failure of, or delay in, the development or manufacturing of the device may have a material adverse effect on our business and results of operations;

- Clinical development involves a lengthy, complex and expensive process, with an uncertain outcome. The outcome of nonclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and the results of our currently completed clinical trials, which to date have only been conducted in Europe, and of our ongoing and future clinical trials, may not satisfy the requirements of the FDA, EMA or other comparable foreign regulatory authorities;

- Our product candidates or use of our product candidates through participation in our clinical trials, may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit their commercial potential or result in significant negative consequences;

- GH001 and GH002, and any other product candidates we may develop, are subject to controlled substance laws and regulations in the territories where the product will be marketed, such as the United States, the EU, the United Kingdom, or UK, and the rest of Europe, as well as the United Nations, or UN, international drug control treaties, and failure to comply with these laws and regulations, or the cost of compliance with these laws and regulations, may adversely affect the results of our business operations, both during clinical development and post-approval, and our financial condition. In addition, during the review process of GH001 and GH002, and prior to approval, the FDA, EMA and/or other comparable foreign regulatory authorities may require additional data, including with respect to whether GH001 or GH002 have abuse or misuse potential. This may delay approval and any potential rescheduling process;

- Mebufotenin is currently classified as a Schedule I drug in the United States and any product containing this substance, such as GH001 and GH002, must be rescheduled to be marketed. There can be no assurance that the Drug Enforcement Administration, or DEA, will make a favorable scheduling decision. Even assuming categorization as a Schedule II or lower controlled substance (i.e., Schedule III, IV or V) at the federal level, such substances would also require scheduling determinations under state laws and regulations;

- The potential reclassification of mebufotenin by the DEA in the United States could create additional regulatory burdens on our operations and negatively affect our results of operations;

- Our commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, patients, third-party payors and other members of the medical community;

- We currently have no marketing and sales organization and have no experience as a company in commercializing products, and we may have to invest significant resources to develop these capabilities. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, if approved, we may not be able to generate product revenue;

- Our business and commercialization strategy depends on our ability to identify, qualify, prepare, certify, and support third-party clinics or treatment centers offering any of our product candidates, if approved. If we are unable to do so, our commercialization prospects would be limited and our business, financial condition, and results of operations would be harmed;

- We rely on patents, applications for patents and other intellectual property rights to protect our GH001 and GH002 product candidates, the prosecution, enforcement, defense and maintenance of which may be challenging and costly. Failure to adequately prosecute, maintain, enforce or protect these rights could harm our ability to compete and impair our business;

- We rely on third parties to assist in conducting our nonclinical studies and clinical trials. If they do not perform satisfactorily, we may not be able to initiate new clinical trials, successfully complete clinical trials, obtain regulatory approval or commercialize our product candidates, or such approval or commercialization may be delayed, and our business could be substantially harmed;

- The development and manufacture of our active pharmaceutical ingredients, product candidates and medical devices required to deliver such product candidates is complex, and we may encounter difficulties during further development or in production. We currently rely completely on third parties to develop, formulate and manufacture our nonclinical study and clinical trial supplies. The development and commercialization of any of our active pharmaceutical ingredients, product candidates and medical devices required to deliver such product candidates could be stopped, delayed or made less profitable if those third parties fail to provide us with sufficient quantities of such drug supplies or fail to do so at acceptable quality levels, including in accordance with rigorously enforced regulatory requirements or contractual obligations, and our operations could be harmed as a result;

- We depend heavily on our executive officers, principal consultants and others, and the loss of their services would materially harm our business;

- In relation to our Form 20-F which is filed with the U.S. SEC ("Securities and Exchange Commission), we previously identified and remediated material weaknesses in our internal control over financial reporting. If we experience additional material weaknesses or otherwise fail to maintain an effective system of internal controls in the future, our ability to accurately or timely report our financial condition or results of operations may be adversely affected; and

- We believe that we were a passive foreign investment company, or a PFIC, for our 2024 taxable year, and we anticipate that we will likely be a PFIC in 2025 and potentially also in future years,

which could subject U.S. investors in our ordinary shares to significant adverse U.S. federal income tax consequences.

Risks Related to Our Financial Position and Need for Additional Capital

We are a clinical-stage biopharmaceutical company and we have incurred significant losses since our inception. We expect that we will continue to incur significant losses for the foreseeable future.

Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval or become commercially viable. We have no products approved for commercial sale and have not generated any revenue to date, and we will continue to incur significant research and development and other expenses related to our clinical development and ongoing operations. As a result, we are not profitable and have incurred losses in each period since our inception. Since our inception, we have devoted substantially all of our financial resources and efforts to research and development, including nonclinical studies, technical development and our clinical trials. Our financial condition and operating results, including net losses, may fluctuate significantly from quarter to quarter and year to year. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance. Additionally, net losses and negative cash flows have had, and will continue to have, an adverse effect on our shareholders' equity and working capital. Our net losses were $39.0 million and $35.6 million for the years ended December 31, 2024 and 2023. As of December 31, 2024, we had an accumulated deficit of $106.4 million. We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, our product candidates in our initial and any additional indications as well as for other product candidates.

We anticipate that our expenses will increase substantially if and as we:

- continue to develop and conduct clinical trials, including in expanded geographies such as the United States, for our GH001 and GH002 product candidates for our initial indications and any additional indications;
- continue both the technical development and expansion of our external manufacturing capabilities for our current product candidates GH001 and GH002 and of the medical devices required to deliver these product candidates, such as our proprietary aerosol delivery device for GH001;
- initiate and continue research and development, including technical, nonclinical, clinical, and discovery efforts for any future product candidates;
- seek to identify additional product candidates;
- seek regulatory approvals for our product candidates GH001 and GH002, including the medical devices required to deliver these product candidates, such as our proprietary aerosol delivery device for GH001, or any other product candidates that successfully complete clinical development;
- progress any nonclinical programs and any other work that may be required to lift the clinical hold imposed by the FDA on the study we proposed in our IND for GH001;
- add operational, financial and management information systems and personnel, including personnel to support our product candidate and device development and help us comply with our obligations as a public company;
- hire and retain additional personnel, such as clinical, quality control, scientific, commercial, sales, marketing and administrative personnel;
- continue to prepare, file, prosecute, maintain, protect and enforce our intellectual property rights and claims;

- establish sales, marketing, distribution, manufacturing, supply chain and other commercial infrastructure in the future to commercialize various products for which we may obtain regulatory approval;

- comply with ongoing regulatory requirements for products approved for commercial sale, if ever;

- adapt to ongoing changes in global economic conditions, including but not limited to changes in tariffs and trade barriers, heightened inflation, disruptions in global supply chains and labor markets and geopolitical risks and global hostilities, including any direct or indirect economic impacts resulting from conflicts in Eastern Europe and the Middle East and any resulting conflicts in such regions, or increased tensions between China and Taiwan;

- acquire or in-license other product candidates, medical devices to deliver our product candidates, and other technologies; and

- incur increased costs as a result of operating as a public company.

Our expenses could increase beyond our expectations if we are required by the FDA or other comparable foreign regulatory authorities, to perform clinical trials in addition to those that we currently expect, or if there are any delays in establishing appropriate manufacturing arrangements for our product candidates or for the medical devices required to deliver our product candidates, or if there are any delays in completing our clinical trials or the development of any of our product candidates or of the medical devices required to deliver our product candidates.

We will need substantial additional funding, which may not be available on acceptable terms, or at all. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product discovery and development programs or commercialization efforts.

We expect to continue to spend substantial amounts to continue the technical, nonclinical and clinical development of our current and future programs. If we are able to gain marketing approval for product candidates that we develop, including any indication for which we are developing or may develop our GH001 and GH002 product candidates, we may require additional amounts of cash in order to launch and commercialize such product candidates and the medical devices required to deliver such product candidates to the extent that such launch and commercialization is not the responsibility of a future collaborator that we may contract with in the future. In addition, other unanticipated costs may arise in the course of our development efforts. Because the design and outcome of our planned and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of any product candidates we develop, and changing circumstances, some of which may be beyond our control, such as heightened inflation and interest rates, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned.

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing our GH001 and GH002 product candidates, additional mebufotenin delivery approaches and the medical devices required to deliver these therapies, such as our proprietary aerosol delivery device for GH001, for our initial and any additional indications as well as other product candidates we may develop;

- the timing and uncertainty of, and the costs involved in, obtaining marketing approvals for our GH001 and GH002 product candidates including the medical devices required to deliver these therapies for our initial and any additional indications, and other product candidates we may develop and pursue;

- the duration of the clinical hold imposed by the FDA on the study we proposed in our IND for GH001, including the progression of, and associated costs from, any nonclinical programs and any other work necessary to lift the clinical hold, as well as discussions with the FDA and the outcomes and resolution of such discussions;

- the number of future product candidates that we may pursue and their development requirements;
- the number of jurisdictions in which we plan to seek regulatory approvals;
- if approved, the costs of commercialization activities for GH001 and GH002 for any approved indications, or any other product candidate that receives regulatory approval to the extent such costs are not the responsibility of any future collaborators, including the costs and timing of establishing product sales, marketing, distribution, and manufacturing capabilities;
- subject to receipt of regulatory approval, revenue, if any, received from commercial sales of GH001 and GH002 and the respective medical devices for any approved indications or any other product candidates;
- if approved, the establishment and maintenance of coverage and adequate reimbursement from third-party payors for GH001, GH002, or any other product candidates;
- the extent to which we may in-license or acquire rights to other products, product candidates, medical devices or technologies;
- our headcount growth and associated costs as we expand our research and development, increase our office space, and establish a commercial infrastructure;
- the costs of preparing, filing and prosecuting patent applications and maintaining and protecting our intellectual property rights, including enforcing and defending intellectual property-related claims;
- the effect of competing product and market developments; and
- the ongoing costs of operating as a public company.

We cannot be certain that additional funding will be available on acceptable terms, or at all. We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Any of our current or future license agreements may be terminated if we are unable to meet the payment or other obligations under the agreements.

Raising additional capital may cause dilution to holders of our ordinary shares, restrict our operations or require us to relinquish rights to our technologies or product candidates.

We expect our expenses to continue to increase in connection with our planned operations. Until such time, if ever, that we can generate substantial product revenues, we expect to finance our cash needs through a combination of public or private equity offerings, debt financings, convertible debt financings, strategic collaborations and licensing arrangements. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans.

To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest may be diluted, and the terms of these securities could include liquidation or other preferences and anti-dilution protections that could adversely affect your rights as a shareholder. Debt financing, if available, may result in fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, creating liens, redeeming shares or declaring dividends, that could adversely impact our ability to conduct our business. In addition, securing financing could require a substantial amount of time and attention from our management and may divert a disproportionate amount of their attention away from day-to-day activities, which may adversely affect our management's ability to oversee the development of our product candidates.

If we raise additional funds through strategic collaborations or marketing, distribution, licensing and royalty arrangements with third parties, we may have to relinquish valuable rights to our intellectual

property or technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us or issue and sell our shares, which may result in dilution to our shareholders. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

We are in the early stages of clinical drug development and have a limited operating history and no products approved for commercial sale, which may make it difficult to evaluate our current business and predict our future success and viability. Since the number of patients included in our clinical trials is small and the follow-up is short, the results from such clinical trials may be less reliable than results achieved in larger clinical trials with longer follow-up, which may hinder our efforts to obtain regulatory approval for GH001, GH002 or any other product candidates.

We are a clinical-stage biopharmaceutical company with a limited operating history, focused on novel therapies which may be able to induce ultra-rapid and durable remissions in patients with depression and in other indications within our focus area of psychiatric and neurological disorders. We commenced operations in 2018, have no products approved for commercial sale, and have not generated any revenue from product sales. Drug development is a highly uncertain undertaking and involves a substantial degree of risk. The results of clinical trials with smaller sample sizes, shorter follow-up and no concurrent control group, such as our completed Phase 1 clinical trial of GH001 in 22 healthy volunteers (GH001-HV-101), our completed Phase 1/2 clinical trial of GH001 in 16 patients with Treatment-Resistant Depression, or TRD (GH001-TRD-102), both with seven days follow-up, our completed Phase 1 clinical trial of GH001 in 46 healthy volunteers (GH001-HV-103) with thirty days follow-up, our Phase 2a proof-of-concept clinical trials of GH001 for the treatment of patients with bipolar II disorder, or BDII, and a current depressive episode (GH001-BD-202) and for the treatment of patients with postpartum depression, or PPD (GH001-PPD-203), and our Phase 1 clinical trial of GH002 in 64 healthy volunteers (GH002-HV-105) can each be disproportionately influenced by various biases associated with the conduct of small, uncontrolled, short-term clinical trials, such as the potential failure of the smaller sample size to accurately depict the features of the broader patient population, and the potential failure of shorter studies to accurately depict long-term safety and efficacy results, which limits the ability to generalize the results, thus making the clinical trial results less reliable than clinical trials with a larger number of patients and longer follow-up. As a result, there may be less certainty that such product candidate would achieve a statistically significant effect in any future clinical trials. If we conduct any future clinical trials of GH001 or GH002, we may not achieve a statistically significant result or the same level of statistical significance, if any, that we might have anticipated based on the results observed in our initial clinical trials. To date, our completed clinical trials have been conducted only in Europe, and we have not initiated nor completed a pivotal clinical trial, obtained marketing approval for any product candidates, manufactured a commercial scale product or arranged for a third party to do so on our behalf, or conducted sales and marketing activities necessary for successful product commercialization. Our short operating history as a company makes any assessment of our future success and viability subject to significant uncertainty. We will encounter risks and difficulties frequently experienced by early-stage biopharmaceutical companies in rapidly evolving fields, and we have not yet demonstrated an ability to successfully overcome such risks and difficulties. If we do not address these risks and difficulties successfully, our business will suffer.

Due to the significant resources required for the development of our programs, and depending on our ability to access capital, we must prioritize development of certain product candidates. Moreover, we may expend our limited resources on programs that do not yield a successful product candidate or fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

We currently have two product candidates in clinical development. The development of these programs and product candidates, of the medical devices required to deliver these product candidates and of any potential future programs and product candidates require significant capital investment. Due to the significant resources required for the development of our programs and product candidates, we must focus our programs and product candidates on specific diseases and disease pathways and decide which product candidates to pursue and advance and the amount of resources to allocate to each. Our drug development strategy is to clinically test and seek regulatory approval for our product

candidates in indications in which we believe there is the most evidence that we will be able to efficiently generate proof-of-concept data. We then intend to expand to clinical testing and seek regulatory approvals in other psychiatric and neurological disorders. However, even if any of our product candidates are able to gain regulatory approval in one indication, there is no guarantee that we will be able to expand to other indications, and we may expend significant resources in seeking such approvals.

In addition, we may focus resources on pursuing indications outside of psychiatric and neurological disorders based on the same strategic approach (e.g., mechanistic rationale, the availability of translational tools, clinical development path, commercial opportunity) we utilize in determining on which of our discovery programs to focus. Our decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular product candidates or particular medical devices to deliver those product candidates, or therapeutic areas may not lead to the development of any viable commercial product and may divert resources away from better opportunities. Additionally, we have in the past and may in the future reprioritize product candidate development plans and activities and delay or terminate development of any product candidates we identify. Similarly, our potential decisions to delay, terminate, or collaborate with third parties in respect of certain programs, product candidates, or medical devices to deliver those product candidates may subsequently also prove to be suboptimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the viability or market potential of any of our programs or product candidates or misread trends in the biopharmaceutical industry, in particular for psychiatric and neurological disorders, our business, financial condition, and results of operations could be materially adversely affected. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other product candidates or other diseases and disease pathways that may later prove to have greater commercial potential than those we choose to pursue, or relinquish valuable rights to such product candidates through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to invest additional resources to retain sole development and commercialization rights.

Failure of the U.S. federal government to manage its fiscal matters or to raise or further suspend the debt ceiling may expose us to increased financial and operational risk.

Congressional disagreement over the U.S. federal budget and the maximum amount of debt the federal government is permitted to have outstanding, often referred to as the debt ceiling, has previously caused the U.S. federal government to shut down for periods of time. Generally, if effective legislation to fund government operations and manage the level of federal debt is not enacted by the applicable deadline, the federal government may suspend its investments for certain government accounts, among other available options, in order to prioritize payments on its obligations. A failure by the U.S. Congress to pass spending bills or address the debt ceiling at any point in the future would increase the risk of default by the United States on its obligations, the risk of a lowering of the U.S. federal government's credit rating and the risk of other economic dislocations. Any such failure could also result in negative consequences for the Company. Potential impacts to our business may include:

- devaluation in U.S. government bond investments held by the Company;
- inability to access capital markets, or increased difficulty in doing so; or
- government shutdown, or reduced operation, of agencies such as the FDA, which could impede our ability to progress our planned IND and/or other U.S. operations.

Exchange rate fluctuations may materially affect our results of operations and financial condition.

Due to the international scope of our operations, our assets, earnings and cash flows are influenced by movements in exchange rates of several currencies, particularly the euro, the U.S. dollar and the pound sterling. Our consolidated financial results are presented in U.S. dollars, while the results of GH Research Ireland Ltd, our subsidiary, are prepared in euro. Changes in exchange rates between the U.S. dollar and the euro will affect the translation of our GH Research Ireland Ltd's financial results into U.S. dollars in reporting our consolidated results.

The majority of our operating expenses are paid in euro and pound sterling. Further potential future revenue may be derived from abroad, particularly from the United States. As a result, our business and

the price of our ordinary shares may be affected by fluctuations in foreign exchange rates between the euro, the U.S. dollar and the pound sterling, which may also have a significant impact on our results of operations and cash flows from period to period. Currently, we do not have any exchange rate hedging arrangements in place. See note 19 in the notes to our consolidated financial statements appearing elsewhere in this Annual Report for a description of foreign exchange risks.

In addition, the possible abandonment of the euro by one or more members of the EU could materially affect our business in the future. Despite measures taken by the EU to provide funding to certain EU member states in financial difficulties and by a number of European countries to stabilize their economies and reduce their debt burdens, it is possible that the euro could be abandoned in the future as a currency by countries that have adopted its use. This could lead to the reintroduction of individual currencies in one or more EU member states, or in more extreme circumstances, the dissolution of the EU. The effects on our business of a potential dissolution of the EU, the exit of one or more EU member states from the EU or the abandonment of the euro as a currency, are impossible to predict with certainty and any such events could have a material adverse effect on our business, financial condition and results of operations.

We have broad discretion over the use of our cash, cash equivalents and marketable securities, and may not use them effectively.

Our management has broad discretion to use our cash, cash equivalents and marketable securities to fund our operations and could spend these funds in ways that do not improve our results of operations or enhance the value of our ordinary shares. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our ordinary shares to decline and delay the development of our product candidates. Pending our use to fund operations, we may invest our cash, cash equivalents and marketable securities in a manner that does not produce income or that loses value.

Risks Related to Research and Development and the Biopharmaceutical Industry

Preliminary, top-line or interim data from our clinical trials that we announce or publish from time to time may change as more data become available, and are subject to audit and verification procedures that could result in material changes in the final results or could otherwise harm our business, financial condition, results of operation and prospects.

From time to time we have, and in the future may continue to, publicly disclose preliminary, top-line, or interim data from our clinical trials, which is based on an analysis of then-available data. For example, on February 3, 2025, we announced efficacy data from such phase relating to our ongoing open-label extension phase of our randomized, double-blind, placebo-controlled Phase 2b trial for GH001 in TRD (GH001-TRD-201), as of January 22, 2025, and which did not include data relating to the safety profile for GH001 in TRD (GH001-TRD-201). However, the open-label extension phase of this trial is not yet complete, including our safety analysis for such phase. Consequently, ultimate results could differ materially from the data we have announced. In addition, because we have not completed a safety analysis, notwithstanding efficacy results for the open-label extension phase of our randomized, double-blind, placebo-controlled Phase 2b trial for GH001 in TRD (GH001-TRD-201), this trial may ultimately fail to show the desired safety profile, which could have a material adverse impact on our business, operations and financial results. Any such results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial, and in the case of the open-label extension phase of our Phase 2b trial for GH001 in TRD (GH001-TRD-201), also completing an initial safety analysis. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the preliminary or top-line results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. For example, even if the efficacy results of (GH001-TRD-201) continue to be positive, if the safety profile is not ultimately shown to be adequate, we may not be able to further develop GH001 in TRD. This difference may be more pronounced because of the small sample size and short duration of our clinical trials. Preliminary or top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously reported. We may also conduct planned interim analyses as part of our clinical trials before they are complete. Planned interim analyses from clinical trials that we may

complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. As a result, interim analyses, as well as preliminary or top-line data, should be viewed with caution until the final data are available. In addition, the data received from an interim analysis could prompt us to alter the trial design, or even to halt the clinical trial altogether. Finally, we may report interim, preliminary or top-line data of only certain endpoints rather than all endpoints. Adverse changes between interim, preliminary or top-line data and final data, or between the initially planned trial design and any subsequently altered elements of the trial design due to our analysis of interim, preliminary or top-line data, could significantly harm our business and prospects. Additional disclosure of interim, preliminary or top-line data, or of changes to the trial design, by us or by our competitors could result in volatility in the price of our ordinary shares.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the ability to initiate further clinical studies, the approvability or commercialization of the particular product candidate and our Company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is typically selected from a more extensive amount of available information. You or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product candidate or our business. If the interim, preliminary or top-line data that we report differ from late, final or actual results, if we alter the trial design due to our analysis of interim, preliminary or top-line data, or if others, including the FDA, EMA or other comparable foreign regulatory authorities, disagree with the conclusions reached, our ability to initiate further clinical studies or obtain approval for, and commercialize our product candidates, may be harmed, which could harm our business, financial condition, results of operations and prospects.

It may take considerable time and expense to resolve the clinical hold that has been placed by the FDA on the study we proposed in our IND for GH001, and no assurance can be given that the FDA will remove the clinical hold, which could have a material adverse effect on our clinical development efforts or could otherwise harm our business, financial condition, results of operation and prospects.

On September 29, 2023, we announced that we were notified by the FDA that the study we proposed in our IND for GH001 has been placed on clinical hold. In October 2023, we received the formal clinical hold letter from the FDA, requesting that we provide (i) an inhalation toxicology study in a non-rodent species and an additional inhalation toxicology study in rats, related to respiratory tract histology findings from a previously completed inhalation toxicology study in rats, (ii) additional device design verification information and (iii) updates to our investigator brochure. On January 10, 2025, we announced the completion of the requested inhalation toxicology studies. We are working to respond to the FDA's requests, but there are no assurances that the FDA will accept the results of such nonclinical studies or other responses (including device design verification information) we may provide, and the FDA may require us to conduct additional nonclinical studies or other work or have additional questions. While we do not believe the respiratory tract histology findings from our completed inhalation toxicology studies in rats to be necessarily predictive of respiratory tract toxicology in other species or humans, we may see similar findings in nonclinical studies completed in other species, if conducted, or even in humans. If the FDA does not accept the results of our nonclinical studies or our conclusions from those studies, or disagrees with other responses we may provide, requires us to conduct additional trials or studies and/or finds the device design verification information we provide to be unsatisfactory, it may take a further considerable period of time, the length of which is not certain at this time, and expense for us to fully address the FDA's concerns. Any such delays and/or increases in expense caused by the additional nonclinical studies or device design verification information we intend to submit could be exacerbated by a need to find, or develop, an alternative device to deliver GH001. Further, comparable foreign regulatory authorities may also have questions or requests or may initiate the equivalent of a clinical hold, in each case prompted by the clinical hold by the FDA or by the nonclinical studies or any other work we may initiate, which may similarly take considerable time and expense for us to address. Even if we are able to fully respond to the FDA's current concerns, the FDA may subsequently make additional requests that we would need to fulfill prior to the lifting of the clinical hold. It is possible that we will be unable to fully address the FDA's concerns and, as a result, the clinical hold

may never be lifted and we may never be able to initiate clinical trials for GH001 in the United States. It is also possible that the clinical hold may be lifted as to the clinical trial of GH001 we proposed in our IND but that future clinical trials of GH001 are placed on clinical hold by the FDA. These matters could have a material adverse effect on our clinical development efforts or could otherwise harm our business, financial condition, results of operation and prospects.

Drug and drug-device combination product development is a highly uncertain undertaking and involves a substantial degree of risk.

We have no products approved for commercial sale. To generate revenues from the sales of any approved products that are significant or large enough to achieve profitability, we must succeed, either alone or with third parties, in developing, obtaining regulatory approval for, manufacturing and marketing therapies with significant commercial success. Our ability to generate revenue and achieve profitability depends on many factors, including:

- completing research and technical, nonclinical and clinical development of our product candidates and the medical devices required to deliver these product candidates, such as our proprietary aerosol delivery device for GH001;
- obtaining regulatory approvals and marketing authorizations for product candidates, including the medical devices required to deliver these product candidates for which we successfully complete clinical development and clinical trials;
- progressing any nonclinical programs and any other work that may be required to lift the clinical hold on the study we proposed in our IND for GH001;
- developing a sustainable and scalable manufacturing process for our product candidates and the medical devices required to deliver these product candidates, as well as establishing and maintaining commercially viable supply relationships with third parties that can provide adequate products and services to support clinical activities and commercial demand of our product candidates and medical devices;
- identifying, assessing, acquiring and/or developing new product candidates;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- successfully getting our product candidates rescheduled under the federal Comprehensive Drug Abuse Prevention and Control Act of 1970, also known as the Controlled Substances Act, or CSA, and comparable state laws by the DEA and other applicable regulatory agencies inside and outside the United States;
- launching and successfully commercializing product candidates and the medical devices required to deliver these product candidates for which we obtain regulatory approval, either by collaborating with a partner or, if launched independently, by establishing a sales, marketing and distribution infrastructure;
- obtaining and maintaining an adequate price for our product candidates and devices in the countries where our products are commercialized;
- obtaining coverage and adequate reimbursement for our product candidates and medical devices from payors;
- obtaining market acceptance of our product candidates as viable treatment options;
- addressing any competing technological and market developments;
- receiving milestone and other payments under any future collaboration arrangements;
- maintaining, protecting, expanding and enforcing our portfolio of intellectual property rights, including patents, trade secrets and know-how;

- attracting, hiring and retaining qualified personnel; and
- complying with laws and regulations, including laws applicable to controlled substances, data privacy and pre-commercial activities.

For example, our initial inhalation toxicity study in rats showed respiratory tract histology findings, contributing to the clinical hold on our GH001 IND, and leading the FDA to request an inhalation toxicology study in a non-rodent species and an additional inhalation toxicology study. Because of the numerous risks and uncertainties associated with drug and drug-device combination product development, we are unable to predict the timing or amount of our expenses, or when we will be able to generate any meaningful revenue or achieve or maintain profitability, if ever.

GH001 and GH002 are investigational mebufotenin therapies based on a novel technology, which makes it difficult to predict the time and cost of development and of subsequently obtaining regulatory approval. To our knowledge, no such therapies have been approved in the United States nor the EU for commercialization.

We have concentrated our research and development efforts on GH001 and GH002 for the treatment of psychiatric or neurological disorders and our future success depends on our successful development of these product candidates. Our risk of failure is high. We may experience problems or delays in developing GH001 and GH002. Any such problems or delays would cause unanticipated costs, and any development problems may not be solved. For example, we or another party may uncover a previously unknown risk associated with GH001 and/or GH002 that may be more problematic than we currently believe, and this may prolong the period of observation required for obtaining, or result in the failure to obtain, regulatory approval or may necessitate additional clinical testing.

In addition, the product specifications and the clinical trial requirements of the FDA, the European Commission, the EMA, and other regulatory authorities and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of such product candidate. The regulatory approval process for novel product candidates such as ours is unclear and can be more expensive and take longer than for other, better known or more extensively studied therapies. For example, because our GH001 and GH002 product candidates contain mebufotenin, which is categorized as a Schedule I controlled substance under the CSA, a Schedule 1 drug under the UK's Misuse of Drugs Regulations 2001, and is similarly categorized by most states, foreign governments and the UN Convention on Psychotropic Substances, 1971, the development towards regulatory approval of GH001 and GH002 is especially challenging and uncertain. The high technical complexity of the development of drug-device combination products further increases risks and uncertainties towards regulatory approval of our product candidates. This risk and uncertainty is particularly high in the area of drug-device combination products for inhaled delivery of the drug component, such as with GH001. In the past, drug-device combination products have experienced significant delays due to technical challenges faced in achieving the tight technical performance specifications required for regulatory approval, or due to specific adverse events associated with inhaled delivery. We anticipate that GH001 and the device required to deliver GH001 will require significant additional development work to allow regulatory approval. It is uncertain whether this development work will be successful. A similar context and similar risks apply to our GH002 product candidate. To our knowledge, no mebufotenin therapies have received FDA approval nor received marketing authorization from the European Commission. As a result, it is difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for GH001 and GH002 in either the United States or the EU. Approvals by the European Commission may not be indicative of what the FDA may require for approval and vice versa.

Our business substantially depends upon the successful development of our GH001 and GH002 product candidates. Failure to successfully develop GH001 and/or GH002 would prevent us from obtaining regulatory approval for, and successful commercialization of, GH001 and/or GH002 and our business may be materially harmed.

We currently have no products approved for sale and invest the majority of our efforts and financial resources in the development of our lead product candidates, GH001 and GH002, for the treatment of psychiatric or neurological disorders. Successful continued development and ultimate regulatory approval of GH001 and GH002 for our initial and any additional indications is critical to the future success of our business. We will need to raise sufficient funds for, and successfully enroll and complete,

our clinical development programs of our GH001 and GH002 product candidates for the treatment of TRD and potentially other psychiatric and neurological disorders.

Before we can generate any revenue from sales of GH001 and GH002 or any other approved product, we must undertake additional technical, nonclinical and clinical development, regulatory review and approval in one or more jurisdictions for the product candidates and the medical devices required to deliver these product candidates. To date, our completed clinical trials have been conducted exclusively in Europe. We plan to pursue clinical trials in additional European countries and the United States for all of our clinical programs. We do not expect that we need to submit separate Investigational Device Exemption applications, or IDEs, or other comparable applications, with the FDA for the medical devices, including our proprietary aerosol delivery device, that we use to deliver our product candidates, and we have not done so, though there can be no assurance that IDEs or comparable applications will not be necessary in the future. We do expect separate applications to EU national member state and UK competent authorities will be required for our proprietary aerosol delivery device for GH001, and may be required for other medical devices that we use to deliver our product candidates. Application requirements outside of the United States, the EU and the UK are less well understood at this time and separate applications may be needed. If the FDA or another comparable foreign regulatory authority were to conclude that any such medical device requires an IDE submission or a comparable application, it could delay or prevent us from utilizing such medical device in future trials. Even if we were to submit an IDE or a comparable application for the medical device, the FDA or other comparable foreign regulatory authorities may not grant necessary approvals requested by us in a timely manner, or at all. In addition, if one or more of our product candidates are approved, we must ensure access to sufficient commercial manufacturing capacity for the product candidates and the medical devices required to deliver these product candidates and conduct significant marketing efforts in connection with any commercial launch, as well as obtaining pricing and reimbursement authorizations in individual European and other countries. These efforts will require substantial investment, and we may not have the financial resources to continue development of our product candidates or commercialization of any products.

We may experience setbacks that could delay or prevent regulatory approval of our product candidates, including the medical devices to deliver our product candidates, such as our proprietary aerosol delivery device for GH001, or our ability to commercialize any products, including:

- delay or failure in establishing acceptable performance characteristics, quality manufacturing standards and manufacturing capabilities for our product candidates or for the medical devices required to deliver our product candidates;

- negative or inconclusive results from our nonclinical studies or clinical trials or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional nonclinical testing or clinical trials or abandon a program;

- product or device-related side effects experienced by subjects in our clinical trials or by individuals using drugs or therapeutics similar to our product candidates;

- delays in submitting INDs (or IDEs, if applicable) in the United States or comparable foreign applications or delays or failure in obtaining the necessary approvals from regulators or institutional review boards, or IRBs, to commence a clinical trial, including Schedule I research protocols required by the DEA, or a suspension or termination of a clinical trial once commenced;

- if the FDA, EMA or other comparable foreign regulatory authorities do not find the earlier technical, nonclinical and clinical trial work sufficient, then we may need to conduct additional technical development work or nonclinical or clinical trials beyond what we had previously planned. For example, our previously completed nonclinical data and device design verification information submitted with our GH001 IND was deemed by the FDA to contain insufficient information to assess risks to human subjects, and the FDA therefore requested additional nonclinical toxicology studies and other work (including acceptable device design verification information) before the FDA may lift the clinical hold and allow us to initiate clinical studies in the United States, such as the study we proposed in our IND for GH001. Any significant technical development, nonclinical or clinical trial delays could also shorten any periods during

which we may have the exclusive right to commercialize our drug candidates and medical devices or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our drug candidates and medical devices and may harm our business and results of operations;

- conditions imposed by the FDA, EMA or other comparable foreign regulatory authorities regarding the scope or design of our clinical trials;

- the FDA, EMA or other comparable foreign regulatory authorities may disagree with our clinical trial design, including with respect to dosing levels administered in our planned clinical trials, or the medical devices used to deliver our product candidates in the clinical trials, which may delay or prevent us from initiating our clinical trials with our originally intended trial design and the originally planned medical devices;

- delays in contracting with clinical trial sites or enrolling subjects in clinical trials, the inability to identify clinical trial sites willing to host our clinical trials and the required scheduled drug DEA researcher registration and Schedule I research protocol in the United States and similar licenses in other jurisdictions to be obtained and maintained by our clinical investigators;

- delays or interruptions in the supply of materials necessary for the conduct of our clinical trials;

- regulators, IRBs or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;

- the FDA has in relation to our clinical hold required, and it or the EMA or other comparable foreign regulatory authorities may in the future require, us to submit additional data such as long-term toxicology studies, additional device design verification information or additional data for our product candidates or the medical devices required to deliver our product candidates;

- delays in reaching, or failure to reach, agreement on acceptable terms with prospective trial sites and prospective contract research organizations, or CROs, which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;

- the number of subjects required for clinical trials of any product candidates may be larger than we anticipate, or subjects may drop out of these clinical trials or fail to return for post-treatment follow-up at a higher rate than we anticipate;

- our third-party contractors for nonclinical studies or clinical trials may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all, or may deviate from the clinical trial protocol or take actions that could cause clinical trial sites or clinical investigators to drop out of the trial, which may require that we add new clinical trial sites or investigators;

- due to the impact of a pandemic, epidemic, outbreak of an infectious disease or a similar event, we may experience some delays and interruptions to our technical development efforts, nonclinical studies, clinical trials and/or regulatory approvals, we may experience delays or interruptions to our manufacturing supply chain, or we could suffer delays in reaching, or we may fail to reach, agreement on acceptable terms with third-party service providers on whom we rely;

- greater-than-anticipated clinical trial costs, including as a result of delays or interruptions that could increase the overall costs to finish our clinical trials as our fixed costs are not substantially reduced during delays;

- we may elect to, or regulators, IRBs, Data Safety Monitoring Boards, or DSMBs, or ethics committees may require that we or our investigators, suspend or terminate clinical research or trials for various reasons, including non-compliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;

- we may not have the financial resources available to begin and complete the planned trials, or the cost of clinical trials of any product candidates may be greater than we anticipate;

- the supply or quality of our product candidates, medical devices required to deliver our product candidates, or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate to initiate or complete a given clinical trial;

- inability to compete with other therapies;

- poor efficacy of our product candidates during clinical trials;

- failure to demonstrate an acceptable benefit/risk profile for our product candidates;

- inability to provide sufficient design, testing, manufacturing and quality information for the medical devices required to deliver our product candidates, including information to support their use and compatibility with the drug constituent of our product candidates;

- unfavorable FDA, EMA or other comparable foreign regulatory authority inspection and review of clinical trial sites or manufacturing facilities;

- if the DEA, or any state or other jurisdiction, delays rescheduling or fails to reschedule mebufotenin to Schedule II, III, IV or V, or delays classifying or fails to classify our product candidates to Schedule II, III, IV or V;

- unfavorable product labeling associated with any product approvals and any requirements for a Risk Evaluation and Mitigation Strategy, or REMS, that may be required by the FDA or comparable requirements in other jurisdictions to ensure the benefits of an individual product outweigh its risks;

- unfavorable acceptance of our product candidates or clinical trial data by the patient or medical communities or third-party payors;

- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;

- delays and changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around clinical testing generally or with respect to our technology in particular; or

- varying interpretations of data by the FDA, EMA or other comparable foreign regulatory authorities.

We do not have complete control over many of these factors, including certain aspects of technical drug product and device development, nonclinical development, clinical development and the regulatory submission process, potential threats to our intellectual property rights and our manufacturing, marketing, distribution and sales efforts or that of any future collaborator.

GH001 is designed to deliver mebufotenin to the patient via inhalation of an aerosol into the lungs. This aerosol is defined by specific properties to be pharmaceutically acceptable, such as its purity, and to achieve efficient uptake of mebufotenin into the systemic circulation, such as its particle size distribution. The generation of this mebufotenin aerosol requires a drug product and a device with specific performance characteristics and properties, and it is therefore anticipated that GH001 and the specific device will be considered a drug-device combination product by the FDA, EMA or other comparable foreign regulatory authorities. For GH002, which is our intravenous mebufotenin formulation, such classification will depend on our final choice for its commercial presentation. Products that are considered to be drug-device combination products will require review and coordination by the drug and device centers within the FDA, or other comparable foreign regulatory authorities or notified bodies prior to initiation of clinical trials and prior to marketing approval, which may delay such trials or marketing approval. Under FDA regulations, combination products are subject to current good manufacturing practice, or cGMP, requirements applicable to both drugs and medical devices, including the Quality System, or QS, and regulations applicable to medical devices. Combination products are also subject to the Medical Device Regulation 2017/745, or MDR, which requires coordination between the drug and the device regulatory laws and regulators. Problems associated with the drug product or device component of the combination product candidate may delay or prevent initiation of clinical trials

or marketing approval. For example, in current and previous clinical trials, GH001 has been vaporized using a device we purchased on the market from a single third-party manufacturer, Storz & Bickel, Tuttlingen. We do not have a commercial supply agreement with Storz & Bickel, Tuttlingen. If the FDA, EMA or other comparable foreign regulatory authorities refuse to accept the use of this third-party device in our planned clinical trials then initiation of additional clinical trials could be significantly delayed or prevented. We also have not established licensing agreements with any alternative provider of a device which would be suitable to generate a pharmaceutically acceptable aerosol from GH001. In 2021, we initiated the development of a proprietary aerosol delivery device for GH001 for use in our pivotal clinical trial program and for commercial use. This development is not yet completed and if we fail to develop, manufacture, license, or acquire a device which would be suitable to generate a pharmaceutically acceptable aerosol from GH001, which achieves sufficient uptake of mebufotenin into the systemic circulation, or if we fail to get sufficient supplies of the third-party manufactured device or any alternative device or if the device is unavailable to us for any reason then initiation of additional clinical trials or receipt of marketing approval could be significantly delayed or prevented. If the manufacturer of the third-party device makes modifications, or if we elect to change a device component, or license an alternative device component, we will need to perform validation testing and obtain FDA, or other comparable foreign regulatory authority or notified body approval prior to using the modified or alternative device or device component. Similar testing and validation would be required for our development of any proprietary devices. If the FDA or other comparable foreign regulatory or notified body fails to approve use of those modified or alternative medical devices or take significant enforcement action against the manufacturer, we would not be able to continue or initiate clinical trials, receive marketing approval or we may have to suspend marketing our products in certain jurisdictions.

In addition, of the large number of drugs in development in the biopharmaceutical industry, only a small percentage result in the submission of a marketing application, such as a new drug application, or NDA, to the FDA, EMA or other comparable foreign regulatory authority, and even fewer are approved for commercialization. Furthermore, even if we do receive regulatory approval for GH001 or GH002, including the medical devices required for their administration, such as our proprietary aerosol delivery device for GH001, for any indication, any such approval may be subject to limitations on the indications or uses or patient populations for which we may market the product. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development programs, we cannot assure that we will successfully develop or commercialize GH001 or GH002 including the medical devices required for their administration, for any indication.

Developing our proprietary aerosol delivery device for GH001 is a costly and uncertain process, and any failure of, or delay in, the development or manufacturing of the device may have a material adverse effect on our business and results of operations.

The development process for our proprietary GH001 aerosol delivery device is incomplete. As a clinical-stage biopharmaceutical company, we do not have significant experience in manufacturing medical devices, or in working with a contract development and manufacturing organization, or CDMO, to manufacture medical devices, and as such we may not develop a device that is satisfactory either for our purposes or for necessary regulatory approvals. Further, a significant number of components in our proprietary aerosol delivery device for GH001 are manufactured in China, subjecting us to certain geopolitical risks, and other risks related to our supply chain, in manufacturing our device. See "Risks Related to Employee Matters, Managing Our Business and Operations—Our business is subject to economic, political, regulatory and other risks associated with international operations."

The regulatory pathway relating to approval of our device is highly complex as a result of the novelty of our device and the absence of established regulatory guidance applicable to our device presentation. The FDA, EMA, or other comparable foreign regulatory authorities, as applicable, may not accept our interpretation of existing guidance, which may impact the timelines for regulatory approval or result in a failure to obtain regulatory approval of our device at all.

Even if we ultimately develop a device that is suitable to generate a pharmaceutically acceptable aerosol and which achieves sufficient uptake of mebufotenin into the systemic circulation, and even if such device is approved, or exempt from approval requirements, as the case may be, by the FDA, EMA, or other comparable foreign regulatory authorities, there can be no assurance that we will be able to adequately manufacture such device in sufficient quantities, or at costs acceptable to us, or that third-party payors will adequately reimburse for them, to achieve our pre-commercial and commercial goals.

Any such inability to adequately manufacture our device could materially delay our clinical trials or otherwise materially impact our business.

Further, our future success may depend in part on our ability to enhance our proprietary aerosol delivery device as well as develop or acquire new technologies to keep pace with technological developments, evolving industry standards and responses to changes in patient needs and expectations. A failure to adequately develop enhancements and improvements to our proprietary aerosol delivery device or acquire new devices that will address changing technologies and patient requirements adequately, or to introduce such devices on a timely basis, may have a material adverse effect on our clinical trials, business, financial condition and results of operations.

Clinical development involves a lengthy, complex and expensive process, with an uncertain outcome. The outcome of nonclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and the results of our currently completed clinical trials, which to date have only been conducted in Europe and our ongoing and future clinical trials, may not satisfy the requirements of the FDA, EMA or other comparable foreign regulatory authorities.

To obtain the requisite regulatory approvals to commercialize any product candidates and medical devices required for their administration, we must demonstrate through extensive nonclinical studies and clinical trials that our product candidates are safe and effective in humans. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. In particular, in the United States where we hope to advance our product development efforts in the future, the general approach for FDA approval of a new drug is dispositive data from two adequate and well-controlled Phase 3 clinical trials of the relevant drug in the relevant patient population, using the relevant device. Phase 3 clinical trials typically involve hundreds of patients, have significant costs and take years to complete. A product candidate can fail at any stage of testing, even after observing promising signs of activity in earlier nonclinical studies or clinical trials. The results of nonclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Clinical trials with smaller sample sizes can be disproportionately influenced by various biases associated with the conduct of small clinical trials, making the clinical trial results less reliable than clinical trials with a larger number of patients. In addition, initial success in clinical trials may not be indicative of results obtained when such trials are completed. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through nonclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to a lack of efficacy or emergence of unacceptable safety issues, notwithstanding promising results in earlier studies and trials. Also, a number of companies developing drug-device combination products, especially in the area of inhaled delivery of the drug component, have historically suffered significant setbacks due to technical, performance or manufacturing issues of the device component in their combination product. Most product candidates that commence clinical trials are never approved as products and there can be no assurance that any of our future clinical trials will ultimately be successful or support further clinical development of GH001, GH002 or any other product candidates. Product candidates that appear promising in the early phases of development may fail to reach the market for several reasons, including:

- nonclinical studies or clinical trials may show the product candidates to be ineffective or less effective than expected (e.g., a clinical trial could fail to meet its primary endpoint(s)) or to have unacceptable side effects or toxicities;
- failure to reflect similarly efficacious activity in subsequent clinical trials with larger patient populations;
- failure to use clinical endpoints that applicable regulatory authorities would consider clinically meaningful;
- manufacturing issues or formulation issues with the product candidate or device that cannot be resolved;
- failure to receive the necessary regulatory approvals;

- manufacturing issues, formulation issues, pricing or reimbursement issues or other factors that make a product candidate or device uneconomical; and

- intellectual property and proprietary rights of others and their competing products and technologies that may prevent one of our product candidates from being commercialized.

In particular, our nonclinical studies or clinical trials may show that our product candidates have unacceptable side effects or toxicities. In this context, our completed inhalation toxicology studies in rats showed certain respiratory tract histology findings. While these findings did not affect approval of our ongoing clinical trials in Europe, they prompted the FDA to request additional nonclinical studies to be completed before the FDA will consider allowing us to initiate clinical studies in the United States.

To date, we have assessed the intensity of psychoactive effect using a metric we devised, peak experience, or PE. We believe PE may correlate with clinical outcomes, but PE is a subjective metric, it can be inherently difficult to evaluate, and its psychometric validation has not yet been completed. It is uncertain if regulatory agencies will accept use of this metric to guide dosing in the context of the individualized dosing regimen, or IDR, in our pivotal program. In addition, differences in trial design between early-stage clinical trials and later-stage clinical trials make it difficult to extrapolate the results of earlier clinical trials to later clinical trials.

Moreover, our completed initial Phase 1 clinical trial of GH001 in healthy volunteers (GH001-HV-101), our completed Phase 1/2 clinical trial of GH001 in patients with TRD (GH001-TRD-102) and our completed Phase 2a proof-of-concept clinical trials of GH001 in BDII and a current depressive episode (GH001-BD-202) and in PPD (GH001-PPD-203) are open-label studies, where both the patient and investigator know whether the patient is receiving the product candidate or either an existing approved drug or placebo. Most typically, open-label clinical trials test only the product candidate and sometimes do so at different dose levels. Open-label clinical trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. For example, prior major depressive disorder, or MDD, studies have exhibited a high placebo effect. In addition, open-label clinical trials may be subject to an "investigator bias," where those assessing and reviewing the psychological and physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. Therefore, it is possible that positive results observed in open-label trials will not be replicated in later placebo-controlled or active-controlled trials. Additionally, the trial design differences and placebo effects that may be possible in clinical research for the indications we are studying may make it difficult to extrapolate the results of earlier clinical trials to later clinical trials or to interpret the clinical data in any of our trials. Furthermore, even in a placebo-controlled or active-controlled trial, it is possible that patients and/or investigators will be able to discern if the administered dose is our product candidate or a placebo or the active control due to the psychoactive effects of mebufotenin, a phenomenon also known as functional unblinding. Therefore, placebo-controlled or active-controlled trials with our product candidates, such as our completed Phase 1 clinical trial of GH001 in healthy volunteers (GH001-HV-103), our ongoing Phase 2b clinical trial of GH001 in TRD (GH001-TRD-201) and our completed Phase 1 clinical trial of GH002 in healthy volunteers (GH002-HV-105) may be subject to similar limitations as open-label trials. Finally, our clinical trials to date have been short in duration, and our results may not be predictive of long-term safety and efficacy.

The standards that the FDA, EMA and other comparable foreign regulatory authorities use when regulating us require judgment and can change, which makes it difficult to predict with certainty how they will be applied. Although we are initially focusing our efforts on development of small molecule drug products and the medical devices required for delivery of these products, we may pursue development of other products, e.g., biological products, each of which could make us subject to additional regulatory requirements. Any analysis we perform of data from technical development, nonclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent initiation of clinical studies or regulatory approval. Our clinical trials have exclusively been conducted in Europe. The FDA's acceptance of data from clinical trials outside of the United States is subject to certain conditions. If the FDA or other comparable foreign regulatory authorities do not accept earlier technical, nonclinical or clinical data, we may need to conduct additional technical development, nonclinical studies or clinical trials. For example, our nonclinical data and device design verification information submitted with our GH001 IND was deemed by the FDA to contain insufficient information to assess risks to human subjects, and the FDA therefore requested additional

nonclinical toxicology studies and other work (including acceptable device design verification information) before the FDA may lift the clinical hold and allow us to initiate clinical studies in the United States, such as the study we proposed in our IND for GH001.

We may also encounter unexpected delays or increased costs due to new government regulations. Examples of such regulations include future legislation or administrative action, or changes in policy by the FDA, EMA or other comparable foreign regulatory authority during the period of product development and regulatory review. It is impossible to predict whether legislative changes will be enacted, or whether regulations, guidance or interpretations of the FDA, EMA or other comparable foreign regulatory authority will be changed, or what the impact of such changes, if any, may be. In particular, in the United States, where we plan to develop our candidates in the future, the FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data to support approval. The opinion of the Advisory Committee, although not binding on the FDA, may have a significant impact on our ability to obtain approval of any product candidates that we develop.

Successful completion of clinical trials is a prerequisite to submitting a marketing application to the FDA or other comparable foreign regulatory authorities for each product candidate and any relevant device required to deliver such product candidate, and, consequently, the ultimate approval and commercial marketing of any product candidates and medical devices. We may experience negative or inconclusive results, or regulators may be unwilling to accept nonclinical or clinical data obtained in foreign jurisdictions, which may result in our deciding, or our being required by regulators, to conduct additional clinical studies or trials or abandon some or all of our product development programs, which would have a material adverse effect on our business.

Even if we obtain regulatory approval with respect to GH001 for TRD, we may not be able to complete clinical development or obtain regulatory approval for additional indications, such as bipolar II disorder and postpartum depression, or we may be required to conduct trials in addition to those that we plan to conduct, which could limit our ability to realize the maximum market potential of GH001 or increase the costs of developing GH001 for any additional indications.

Given GH001's proposed mechanisms of resetting human brain functional connectivity, or FC, and serotonergic agonism, we believe that it represents a compelling therapeutic option for multiple psychiatric and neurological disorders other than TRD. Through collaborations with academic institutions and CROs we have begun to explore and intend to continue to explore the benefits of GH001 in additional psychiatric or neurological indications, the first of which have been BDII and PPD. However, there can be no assurance that, even if we obtain approval for GH001 for our initial indication, TRD, we will obtain approval for any other indication, including for BDII or PPD. The ability to obtain approval for any of these additional indications will require additional clinical development. If we fail to obtain and maintain required approvals for these additional or broadened indications, or if regulatory approvals are delayed, we will not realize the maximum market potential of GH001. Additionally, the FDA, EMA or other comparable foreign regulatory authorities may require us to conduct clinical trials, beyond those that we plan to conduct, and/or other tests, before seeking regulatory approval. For example, based on our existing nonclinical and clinical data for GH001, we believe that we can proceed to Phase 2a clinical trials in additional indications without first completing Phase 1 clinical trials, as we did with our Phase 2a proof-of-concept trials of GH001 in BDII and PPD. However, there can be no assurance that the FDA, EMA or other comparable foreign regulatory authorities will agree with such assessment. If we were required to conduct additional clinical trials and/or other tests, our costs for developing GH001 for any additional indications would be substantially higher and the timing of any regulatory approval, if any, would be substantially extended, which could adversely affect our results of operations.

We may not be able to submit INDs or IND amendments, or comparable foreign applications, to commence additional clinical trials on the timelines we expect, and even if we are able to do so, the FDA, EMA or comparable foreign regulatory authorities may not permit us to proceed.

In November 2022, we announced that we submitted clinical trial applications in several European countries for a multi-center, randomized, double-blind, placebo-controlled Phase 2b trial of GH001 in TRD (GH001-TRD-201), and in August 2023, we submitted an IND for GH001 with the FDA, with the

purpose to initiate a Phase 1 healthy volunteer clinical pharmacology trial, where GH001 is administered using our proprietary aerosol delivery device (GH001-HV-106). However, we may not be able to submit INDs or comparable foreign applications for GH001, or for our other product candidates, on the timelines we expect. For example, we may experience delays with IND-enabling studies. Moreover, we cannot be sure that submission of an IND or a comparable foreign application will result in the FDA, EMA or a comparable foreign regulatory authority allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate clinical trials. For example, we announced in September 2023 that the FDA placed our IND for GH001 on clinical hold. See "Risks Related to Research and Development and the Biopharmaceutical Industry—It may take considerable time and expense to resolve the clinical hold that has been placed by the FDA on the study we proposed in our IND for GH001, and no assurance can be given that the FDA will remove the clinical hold, which could have a material adverse effect on our clinical development efforts or could otherwise harm our business, financial condition, results of operation and prospects" above for further information on certain of the risks associated with this clinical hold. Additionally, even if such regulatory authorities ultimately agree with the design and implementation of the clinical trials set forth in an IND or in a comparable foreign application, we cannot guarantee that such regulatory authorities will not change their requirements in the future. These considerations also apply to new clinical trials we may submit as amendments to existing INDs or to a new IND, or to comparable existing or new foreign applications. Any failure to submit INDs or comparable foreign applications on the timelines we expect or to obtain permission for our trials to proceed may prevent us from completing our clinical trials or commercializing our products on a timely basis, if at all.

Our product candidates or use of our product candidates through participation in our clinical trials, may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.

Undesirable adverse drug reactions that could potentially be caused by GH001, GH002 or any other product candidate, and that have been observed in previously completed clinical trials, such as hypertension, tachycardia, nausea, vomiting, sensory disturbance, headache, flashbacks, referred to as the re-experiencing of some of the effects induced by mebufotenin intake at some point after the drug's acute effects have worn off, or that may potentially occur in ongoing or future studies, based on toxicities observed in completed nonclinical toxicity studies, such as serotonin syndrome, convulsions or respiratory adverse events, could cause us or regulatory authorities to not initiate, interrupt, delay or halt clinical trials and could result in more restrictive labeling than anticipated, a requirement that we implement a REMS to ensure that the benefits outweigh the risks or the delay or denial of regulatory approval by the FDA, EMA or comparable foreign regulatory authorities. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics, even death. There can be no assurance that serious side effects, including deaths, will not occur even in the controlled setting of a clinical trial. In addition, many compounds that have initially shown promise in clinical or earlier stage testing are later found to cause undesirable or unexpected side effects that prevented further development of the compound. Additionally, the composition of our product candidates or learnings in nonclinical studies or clinical trials may result in contraindications or warnings, including "Boxed Warnings", for any product candidates for which we may obtain regulatory approval.

If unacceptable side effects arise in the development of our product candidates, foreign regulatory authorities, or, in the future, the FDA, EMA, the IRBs, DSMBs or independent ethics committees at the institutions in which our trials are conducted could refuse to allow us to initiate, or may suspend or terminate our nonclinical studies or clinical trials, or the FDA, EMA or other comparable foreign regulatory authorities could order us to cease nonclinical studies or clinical trials or deny approval of our product candidates for any or all targeted indications.

Treatment-emergent side effects that are deemed to be drug-related could also affect subject recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Undesirable side effects in one of our clinical trials for our product candidates in one indication could adversely affect enrollment in clinical trials, regulatory approval and commercialization of our product candidates in other indications. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, clinical trials of our product candidates are conducted in carefully defined sets of healthy volunteers and patients who have agreed to be enrolled in clinical trials. Consequently, it is possible that our clinical trials, or those of any future collaborator, may fail to identify undesirable side effects. Clinical trials by their nature utilize a sample of the potential patient population. With a limited number of patients, rare and severe side effects of our product candidates may only be uncovered with a significantly larger number of patients' use of the product candidate. If our product candidates, including the medical devices to deliver such product candidates, such as our proprietary aerosol delivery device for GH001, receive marketing approval and we or others identify undesirable side effects caused by such product candidates (or any other similar products) after such approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit their approval of such product candidates or medical devices;
- regulatory authorities may require the addition of labeling statements, such as a "Boxed Warning" or contraindications;
- we may be required to change the way such product candidates are distributed or administered, or change the labeling of the product candidates or medical devices;
- the FDA may require a REMS to mitigate risks, which could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools, and regulatory authorities in other jurisdictions may require comparable risk mitigation plans;
- we may be subject to regulatory investigations and government enforcement actions;
- the FDA, EMA or a comparable foreign regulatory authority may require us to conduct additional technical development work or clinical trials or costly post-marketing testing and surveillance to establish and monitor the safety and efficacy of the product;
- we could be sued and held liable for injury caused to individuals exposed to or taking our product candidates or operating our medical devices; and
- our reputation may suffer.

In addition, patients who participate in our trials may take antidepressants or other medications to treat depression and/or mood disorders, or other medications that may interact with our product candidates, and participation in our clinical trials currently requires patients to suspend most of such existing medications or treatments for the duration of the trial. If a patient chooses to resume his or her existing medications, there is no guarantee such medications will produce the same therapeutic effect, if any, as may have been experienced prior to suspending such medication. Further, the impact of cycling off and/or back on to existing medications could have undesirable side effects or lead to severe mental health trauma. Any such negative reactions of a patient participating in one of our clinical trials may decrease the willingness of patients to participate in our trials, affect the timing or outcome of our clinical trials, product candidate development and approval process, or create negative public perception around our product candidates, which in turn may significantly impact our ability to successfully commercialize our product candidates.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidates, could negatively impact the perception of our other product candidates, could substantially increase the costs of commercializing our product candidates, if approved, and significantly impact our ability to successfully commercialize our product candidates and generate revenues.

If we encounter difficulties enrolling patients in our future clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the study until its conclusion.

Patient enrollment is affected by many factors, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- in the case of clinical trials focused on rare disease, the small size of the patient population and the potential of a patient being undiagnosed or misdiagnosed;
- the proximity of patients to trial sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials and clinicians' and patients' perceptions as to the potential advantages and risks of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications that we are investigating;
- reluctance of physicians to encourage patient participation in clinical trials;
- our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

In addition, our clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, including product candidates studying N-methyl-D-aspartate antagonists, neurosteroids, and mebufotenin and other serotonergic psychedelics such as psilocybin and N,N-dimethyltryptamine. This competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site, or which may lead to a bias in recruitment between the competing trials, potentially affecting the outcome of those trials.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays or might require us to abandon one or more clinical trials altogether. Delays in patient enrollment may result in increased costs, affect the timing or outcome of the planned clinical trials, product candidate development and approval process and jeopardize our ability to seek and obtain the regulatory approval required to commence product sales and generate revenue, which could prevent completion of these trials, adversely affect our ability to advance the development of our product candidates, cause the value of our company to decline and limit our ability to obtain additional financing if needed.

We are also required to register certain clinical trials and post the results of certain completed clinical trials on a government-sponsored database, such as www.ClinicalTrials.gov in the United States and a similar system in the EU, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

The markets for GH001, GH002 and any other product candidates that we are developing or we may develop, for TRD or for any additional indications, may be smaller than we expect.

Our estimates of the potential market opportunity for GH001, GH002 and any other product candidates that we are developing or we may develop, for TRD or for any additional indications, include several key assumptions based on our industry knowledge, industry publications and third-party research reports. There can be no assurance that any of these assumptions are, or will remain, accurate. If the actual market for GH001, GH002 and any other product candidates that we are developing or we may develop, for TRD or for any additional indications, is smaller than we expect, our revenue, if any, may be limited and it may be more difficult for us to achieve or maintain profitability.

We may not be successful in our efforts to identify or discover additional product candidates in the future.

Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development or commercialization for a number of reasons, including:

- our inability to design such product candidates with the pharmacological or pharmacokinetic properties that we desire; or
- potential product candidates may, on further study, be shown to have harmful side effects or other characteristics that indicate that they are unlikely to be medicines that will receive marketing approval and achieve market acceptance.

Research programs to identify new product candidates require substantial technical, financial and human resources. If we are unable to identify suitable compounds for nonclinical and clinical development, we will not be able to obtain product revenue in future periods, which likely would result in significant harm to our financial position and adversely impact the market price of our publicly traded ordinary shares.

We may conduct clinical trials for our product candidates in the United States, Europe or other jurisdictions, and the FDA, EMA and applicable foreign regulatory authorities may not accept data from trials conducted outside those respective jurisdictions.

We may choose to conduct one or more of our clinical trials in the United States, Europe or in other foreign jurisdictions. The acceptance of study data from nonclinical studies and clinical trials conducted outside any such jurisdiction may be subject to certain conditions for acceptance. For example, in cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; and (ii) the trials were performed by clinical investigators of recognized competence and pursuant to Good Clinical Practices, or GCP, regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory bodies, such as the EMA, have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA, EMA or any applicable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. The FDA may not ultimately accept our data given the limited sample size in our completed and existing trials. For example, our clinical trials have exclusively been conducted in Europe. If the FDA, EMA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our product candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

A Breakthrough Therapy Designation or a Fast Track Designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or approval process, and does not increase the likelihood that our product candidates will receive marketing approval.

We do not currently have a Breakthrough Therapy Designation for any of our product candidates, but we may seek a Breakthrough Therapy Designation for any product candidate that we plan to develop in the United States if we believe the qualifying criteria for such a designation can be met. A Breakthrough Therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as Breakthrough Therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens.

The FDA has discretion to determine whether the criteria for a Breakthrough Therapy has been met and whether to grant a Breakthrough Therapy Designation to a product candidate. Accordingly, even if

we believe a product candidate we develop meets the criteria for designation as a Breakthrough Therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of Breakthrough Therapy Designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even after granting Breakthrough Therapy Designation to our product candidates, the FDA may later decide that the drugs no longer meet the conditions for qualification and withdraw the designation.

We do not currently have Fast Track Designation or acceptance of an accelerated assessment in the EU for any of our product candidates, but we may seek such a designation for the product candidates we plan to develop in the United States and the EU, if we believe the qualifying criteria for such a designation/ assessment have been met. If a product is intended for the treatment of a serious or life-threatening condition and nonclinical or clinical data demonstrate the potential to address an unmet medical need for this condition, the product sponsor may apply for Fast Track Designation or accelerated assessment. The FDA and the EMA each have broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation/assessment, we cannot assure that the FDA or EMA would decide to grant it. Even if we do receive Fast Track Designation and or an accelerated assessment, we may not experience a faster development process, review or approval compared to conventional FDA or EMA procedures. The FDA or EMA may withdraw the Fast Track Designation or accelerated assessment, respectively, if either agency believes that the designation or pathway is no longer supported by data from our clinical development program. Many drugs that have received Fast Track Designation and/or accelerated assessment have failed to obtain regulatory approval.

We may seek orphan drug designation for one or more of our product candidates in the United States, but we may be unable to obtain or maintain such a designation or the benefits associated with orphan drug status, including marketing exclusivity, which may cause our revenue, if any, to be reduced.

Because we are considering developing GH001 and/or GH002 for indications we believe to be rare, we may elect to pursue orphan designations for our candidates as applicable in the jurisdictions where development activities are planned.

In the United States, under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States for that drug or biologic. Orphan drug designation must be requested and granted by the FDA before a new drug application, or NDA, is submitted. In the United States, orphan drug designation entitles a party to financial incentives such as tax advantages and user fee waivers. After the FDA grants orphan drug designation, it will disclose publicly the generic identity of the drug and its potential orphan use. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. Such a designation may also be revoked by the FDA in certain circumstances, such as if the agency finds that the applicant's request for designation request omitted material information required under the Orphan Drug Act and its implementing regulations.

If a product that has orphan drug designation subsequently receives the first FDA approval for a particular active ingredient for the disease for which it has such designation, the product is entitled to orphan product exclusivity. This means that the FDA may not approve any other marketing applications for the same drug and the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan exclusivity or if the FDA finds that the holder of the orphan exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan product to meet the needs of patients with the disease or condition for which the drug was designated. Furthermore, the FDA can waive orphan exclusivity if the applicant is unable to manufacture sufficient supply of the product subject to a period of orphan drug marketing exclusivity.

We may seek orphan drug designation for one or more of our product candidates in the EU, but we may be unable to obtain or maintain such a designation or the benefits associated with

orphan drug status, including marketing exclusivity, which may cause our revenue, if any, to be reduced.

In the EU, orphan designation might be granted by the EMA for a medicine that (i) is intended for the treatment, prevention or diagnosis of a disease that is life-threatening or chronically debilitating; (ii) with a prevalence in the EU of not more than five in 10 thousand or it must be unlikely that marketing of the medicine would generate sufficient returns to justify the investment needed for its development; and (iii) no satisfactory method of diagnosis, prevention or treatment of the condition concerned can be authorized, or, if such a method exists, the medicine must be of significant benefit to those affected by the condition.

In the EU, orphan designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The benefit of orphan designation in the EU is scientific advice, and extended market exclusivity, or an additional two years on top of the eight years of market exclusivity for an innovative product. Such a designation may also be revoked by the EMA in certain circumstances, such as if the criteria are no longer met, which might for example occur by a competitor product becoming available in the market. Our inability to obtain or maintain such a designation or the benefits associated with orphan drug status could adversely affect our ability to achieve or sustain profitability.

Obtaining and maintaining regulatory approval of our product candidates and medical devices required to deliver such product candidates in one jurisdiction does not mean that we will be successful in obtaining or maintaining regulatory approval of our product candidates and medical devices required to deliver such product candidates in other jurisdictions.

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

Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we or any partner we work with fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Even if we, or any future collaborators, obtain regulatory approvals for our product candidates and medical devices to deliver such product candidates, the terms of approvals and ongoing regulation of our products may limit how we manufacture and market our products, which could impair our ability to generate revenue.

Once regulatory approval has been granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation. We, and any future collaborators, must therefore comply with requirements concerning advertising and promotion for any of our product candidates for which we or they obtain regulatory approval. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we and any future collaborators will not be able to promote any products we develop for indications or uses for which they are not approved.

In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive regulatory requirements, including under FDA authorities ensuring that quality control and manufacturing procedures conform to cGMPs, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We, our contract manufacturers, any future collaborators and their contract manufacturers would be subject to periodic unannounced inspections by regulatory authorities to monitor and ensure compliance with cGMPs. Despite our efforts to inspect and verify regulatory compliance, one or more of our third-party manufacturing vendors may be found on regulatory inspection to be not in compliance with cGMP requirements, which may result in shutdown of the third-party vendor or invalidation of drug product lots or processes. In some cases, a product recall may be warranted or required, which would materially affect our ability to supply and market our drug products.

Accordingly, assuming we, or any future collaborators, receive regulatory approval for one or more of our product candidates, we, and any future collaborators, and our and their contract manufacturers will continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance and quality control.

If we, or any future collaborators, are not able to comply with post-approval regulatory requirements, we, or any future collaborators, could have the regulatory approvals for our products withdrawn by regulatory authorities and our, or any future collaborators', ability to market any future products could be limited, which could adversely affect our ability to achieve or sustain profitability. Further, the cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

Changes in regulatory requirements, regulatory guidance or regulatory interpretations or unanticipated events during our nonclinical studies and clinical trials of our product candidates may occur, which may result in changes to nonclinical studies and clinical trial protocols or the need for additional nonclinical studies and clinical trials, which could result in increased costs to us and could delay our development timelines.

Changes in regulatory requirements, regulatory guidance or regulatory interpretations or unanticipated events during our nonclinical studies and clinical trials may force us to amend nonclinical studies and clinical trial protocols or the applicable regulatory authority may impose additional nonclinical studies and clinical trial requirements. Any changes in regulatory requirements, regulatory guidance or regulatory interpretations applicable to novel product candidates such as ours may be more likely to occur than any such changes applicable to other, better known or more extensively studied therapies. Amendments or changes to our clinical trial protocols would generally require resubmission to the applicable regulatory authority and IRBs for review and approval, which may adversely impact the cost, timing or successful completion of clinical trials. These decisions may increase costs, and cause us not to meet expected timelines and, correspondingly, our business and financial prospects could be adversely affected. Similarly, amendments to our nonclinical studies may adversely impact the cost, timing or successful completion of those nonclinical studies. If we experience delays completing, or if we terminate, any of our nonclinical studies or clinical trials, or if we are required to conduct additional nonclinical studies or clinical trials, the development pathway, and ultimately the commercial prospects, for our product candidates may be harmed and our ability to generate product revenue from resulting products, if any, will be delayed.

We could be subject to product liability lawsuits based on the use of our product candidates in clinical testing or, if obtained, following our products' marketing approval and commercialization. Product liability lawsuits brought against us or any of our future collaborators could divert our resources and attention, require us to cease clinical testing, cause us to incur substantial liabilities or limit commercialization of our product candidates.

We are exposed to potential product liability risks that are inherent in the research, development, manufacturing, marketing and use of biopharmaceutical products. Currently, we have no products that have been approved for commercial sale; however, the use of our product candidates and medical devices to deliver such product candidates by us and any collaborators in clinical trials may expose us to liability claims. We will face an even greater risk if product candidates and medical devices to deliver such product candidates are approved by regulatory authorities and introduced commercially. Product liability claims may be brought against us, our suppliers, or our partners if any product candidate or medical devices to deliver such product candidates we develop allegedly causes injury or are found to

be otherwise unsuitable for human use during product testing, manufacturing, marketing or sale. Any such product liability claim may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts. Such claims could be made by participants enrolled in our clinical trials, patients, healthcare providers, biopharmaceutical companies, our collaborators or others using, administering or selling any of our future approved products. If we cannot successfully defend ourselves against any such claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources.

Regardless of the merits or eventual outcome, product liability claims may result in:

- decreased demand for any of our future approved products;
- injury to our reputation;
- initiation of investigations by regulators;
- withdrawal of clinical trial participants;
- termination of clinical trial sites or entire trial programs;
- significant litigation costs;
- substantial monetary awards to, or costly settlements with, patients or other claimants;
- product recalls or a change in the indications for which any approved drug products may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize our product candidates.

Although the clinical trial process is designed to identify and assess potential side effects, clinical development does not always fully characterize the safety and efficacy profile of a new medicine, and it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If our product candidates were to cause adverse side effects during clinical trials or after approval, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates. If any of our product candidates are approved for commercial sale, we will be highly dependent upon consumer perceptions of us and the safety and quality of our products. We could be adversely affected if we are subject to negative publicity associated with illness or other adverse effects resulting from physicians' or patients' use or misuse of our products or any similar products distributed by other companies.

We maintain product liability insurance coverage limited to clinical trial liability, and this insurance may not fully cover potential liabilities that we may incur. The cost of any product liability litigation or other proceeding, even if resolved in our favor, could be substantial. We will need to increase our insurance coverage if we commercialize any product that receives regulatory approval. In addition, insurance coverage is becoming increasingly expensive. If we are unable to maintain sufficient insurance coverage at an acceptable cost or to otherwise protect against potential product liability claims, it could prevent or inhibit the development and commercial production and sale of our product candidates, which could harm our business, financial condition, results of operations and prospects.

We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours, which may

negatively impact our ability to successfully market or commercialize any product candidates we may develop and ultimately harm our financial condition.

The development and commercialization of new drug products is highly competitive. We may face competition with respect to any product candidates that we seek to develop or commercialize from biopharmaceutical companies worldwide. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing and commercialization.

Specifically, we face competition from 501(c)(3) non-profit medical research organizations, including the Usona Institute. Such non-profits may be willing to provide treatment at cost or for free, undermining our potential market for GH001, GH002 and any other product candidates we may develop. In addition, a number of for-profit biotechnology companies or institutions are specifically pursuing the development of mebufotenin or other tryptamines, such as psilocybin and N,N-dimethyltryptamine, to treat mental health illnesses, including TRD. These competitors include ATAI Life Sciences, Beckley Psytech, COMPASS Pathways, Cybin and Mindmed. In addition, an increasing number of companies are stepping up their efforts in discovery of new psychoactive compounds. It is also probable that the number of companies seeking to develop psychoactive products and therapies for the treatment of mental health illnesses, such as depression, will increase. If any of our competitors are granted an NDA for their therapies before us and manage to obtain approval for a broader indication, and thus access a wider patient population, we may face more intensified competition from such potential therapies and increased difficulties in winning market acceptance of our GH001 and GH002 product candidates or any other product candidates. All of these risks are heightened because mebufotenin, which is a known naturally occurring substance and therefore not subject to patent protection, may be deemed an appropriate substitute for GH001 and GH002.

We also face competition from larger and smaller pharmaceutical, biopharmaceutical and biotechnology companies who have developed or are developing therapies for the treatment of MDD and TRD, including Axsome Therapeutics and Sage Therapeutics, and will face future competition for any other indications we may seek to treat with our GH001 and GH002 product candidates. There are a number of companies that currently market and sell products or therapies, or are pursuing the development of products or therapies, for the treatment of depression, including antidepressants such as selective serotonin reuptake inhibitors, or SSRIs, and serotonergic norepinephrine reuptake inhibitors, or SNRIs, antipsychotics, cognitive behavioral therapy, or CBT, esketamine and ketamine, repeat transcranial magnetic stimulation, or rTMS, electroconvulsive therapy, or ECT, vagus nerve stimulation, or VNS, deep brain stimulation, or DBS, N-methyl-D-aspartate antagonists, neurosteroids, and other serotonergic psychedelics such as psilocybin and N,N-dimethyltryptamine, among others. Many of these pharmaceutical, biopharmaceutical and biotechnology competitors have established markets for their therapies and have substantially greater financial, technical, human and other resources than we do and may be better equipped to develop, manufacture and market superior products or therapies. In addition, many of these competitors have significantly greater experience than we have in undertaking nonclinical studies and human clinical trials of new therapeutic substances and in obtaining regulatory approvals of human therapeutic products. Accordingly, our competitors may succeed in obtaining FDA, EMA or other comparable foreign regulatory authority approval for alternative or superior products. In addition, many competitors have greater name recognition and more extensive collaborative relationships. Smaller and earlier-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies.

If any of these competitors or competitors for our other product candidates receive FDA, EMA or other comparable foreign regulatory authority approval before we do, our product candidates would not be the first treatment on the market, and our market share may be limited. In addition to competition from other companies targeting our target indications, any products we may develop may also face competition from other types of therapies.

Many of our current or potential competitors, either alone or with their strategic partners, have:

- greater financial, technical and human resources than we have at every stage of the discovery, development, manufacture and commercialization of products;

- more extensive experience in nonclinical studies, conducting clinical trials, obtaining regulatory approvals, and in manufacturing, marketing and selling drug products;
- more developed intellectual property portfolios;
- products that have been approved or are in late stages of development; and
- collaborative arrangements in our target markets with leading companies and research institutions.

Mergers and acquisitions in the biopharmaceutical industry may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Furthermore, currently approved products could be discovered to have application for treatment of our targeted disease indications or similar indications, which could give such products significant regulatory and market timing advantages over our product candidates. Our competitors also may obtain FDA, EMA or other comparable foreign regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product exclusivity from the FDA for indications that we are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, products or technologies developed by our competitors may render our potential product candidates uneconomical or obsolete and we may not be successful in marketing any product candidates we may develop against competitors.

In addition, we could face litigation or other proceedings with respect to the scope, ownership, validity and/or enforceability of our patents relating to our competitors' products and our competitors may allege that our products infringe, misappropriate or otherwise violate their intellectual property. The availability of our competitors' products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize.

Our inhalable GH001 mebufotenin product candidate is delivered via inhalation of aerosols produced by a vaporization device which is subject to device regulations in the United States and other jurisdictions. The FDA, EMA or other comparable foreign regulatory authorities, may not accept this device for clinical trials.

In current and previous clinical trials, GH001 has been vaporized using a device we have purchased on the market from a third party. This device has been used in previous trials, conducted by other parties with other products or product candidates, in Europe and the United States. However, there can be no assurance that the FDA or other comparable foreign regulatory authorities will allow it to be used with GH001 in future trials. In addition, we may decide in future clinical trials to use a different device than the one we have used previously, and the FDA or other comparable foreign regulatory authorities could similarly object to the use of any such device with GH001. For example, in 2021, we initiated the development of a proprietary aerosol delivery device for GH001 for use in our pivotal clinical trial program and for commercial use. Based on this proprietary device's development progress, in August 2023 we submitted an IND for GH001 in TRD to be delivered with such device, which was placed on clinical hold by the FDA, requesting, among other aspects, additional device design verification information before clinical trials with this device may be initiated. We are in the process of preparing this information but we would also need to carry out additional development work and conduct additional studies, including bridging studies, to bridge our prior device to any new device we may decide to use, prior to using the new device in future clinical trials. Any delays as a result of changing medical devices to deliver our product candidates would have a material adverse effect on our business.

We do not have a commercial supply agreement with the third-party manufacturer of the device we currently use in clinical trials, nor have we established license agreements with any alternative provider of a device that would be suitable to generate a pharmaceutically acceptable aerosol from GH001. There can be no assurance that the development of our proprietary aerosol delivery device will lead to

a device that is suitable for our purpose, either in terms of efficacy or safety. If the FDA, EMA or other comparable foreign regulatory authorities refuse to accept the use of our proprietary aerosol device for GH001 in our planned clinical trials and if we fail to develop, manufacture, license, or acquire an alternative device which would be suitable to generate a pharmaceutically acceptable aerosol from GH001, or if we fail to get sufficient supplies of the current third-party device or any alternative device, then initiation of additional clinical trials or marketing approval could be significantly delayed or prevented.

Additional time may be required to obtain regulatory approval for GH001 because it is administered as a combination product.

GH001 is administered via inhalation of an aerosol produced by a vaporization device. This device is necessary to produce the aerosol and we therefore expect it to be regulated by the FDA as a drug-device combination product that requires coordination within the FDA, EMA or other comparable foreign regulatory authorities or notified bodies for review of their device and drug components. For GH002, which is our intravenous mebufotenin formulation, such classification will depend on our final choice for its commercial presentation. Medical products containing a combination of new drugs, biological products or medical devices may be regulated as "combination products" in the United States and Europe. A combination product generally is defined as a product comprised of components from two or more regulatory categories (e.g., drug/device, device/biologic, drug/biologic). Each component of a combination product is subject to the requirements established by the FDA for that type of component, whether a new drug, biologic or device. In order to facilitate pre-market review of combination products, the FDA designates one of its centers to have primary jurisdiction for the pre-market review and regulation of the overall product based upon a determination by the FDA of the primary mode of action of the combination product. Where approval of the drug and device is sought under a single application, there could be delays in the approval process due to the increased complexity of the review process. The EMA has a parallel review process in place for combination products, the potential effects of which in terms of approval and timing could independently affect our ability to market our combination products in Europe.

Risks Related to Controlled Substances

GH001 and GH002, and any other product candidates we may develop, are subject to controlled substance laws and regulations in the territories where the product will be marketed, such as the United States, the EU, the UK and the rest of Europe, as well as the UN international drug control treaties, and failure to comply with these laws and regulations, or the cost of compliance with these laws and regulations, may adversely affect the results of our business operations, both during clinical development and post-approval, and our financial condition. In addition, during the review process of GH001 and GH002, and prior to approval, the FDA, EMA and/or other comparable foreign regulatory authorities may require additional data, including with respect to whether GH001 and GH002 have abuse or misuse potential. This may delay approval and any potential rescheduling process.

In the United States, mebufotenin is classified under the federal CSA and regulations as a controlled substance or scheduled substance, specifically as a Schedule I substance. The DEA regulates drug substances and chemical compounds as Schedule I, II, III, IV or V substances. Schedule I substances by definition have a high potential for abuse, have no currently "accepted medical use" in the United States, lack accepted safety for use under medical supervision, and may not be prescribed, marketed or sold in the United States. Pharmaceutical products approved for medical use in the United States may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest potential for abuse or dependence and Schedule V substances the lowest relative risk of abuse among such substances. Schedule I and II drugs are subject to the strictest controls under the CSA, including manufacturing and procurement quotas, security requirements and import/export restrictions. In addition, prescribing and dispensing of Schedule II drugs is further restricted. For example, Schedule II prescriptions must contain a written signature or authorized e-signature and may not be refilled without a new prescription. Further, most, if not all, state laws in the United States classify mebufotenin as a Schedule I controlled substance. For any product containing mebufotenin to be available for commercial marketing in the United States, mebufotenin must be rescheduled to Schedule II, III, IV or V, or the DEA must reschedule a specific dosage form or product containing mebufotenin to Schedule II, III, IV or V.

Similar rescheduling would be required in the various states and jurisdictions through scheduling-related legislative or administrative action.

Rescheduling determinations by the DEA to a schedule that would authorize the drug to be marketed (i.e., Schedule II, III, IV or V) are dependent on FDA approval of a substance or a specific formulation of a substance. Therefore, while mebufotenin is a Schedule I controlled substance, products approved by the FDA for medical use in the United States that contain mebufotenin would meet the statutory criteria to be placed in Schedule II, or another schedule, since approval by the FDA satisfies the "accepted medical use" requirement. If and when GH001 or GH002 receives FDA approval, the DEA will need to issue a proposed rulemaking to place mebufotenin in a schedule other than Schedule I in order for it to be prescribed to patients in the United States. This scheduling determination will be dependent on FDA approval and influenced by the FDA's recommendation as to the appropriate schedule. During the review process, and prior to approval, the FDA may determine that it requires additional data, either from nonclinical or clinical studies, including with respect to whether, or to what extent, the substance has the potential for abuse. This may introduce a delay into the approval and any potential rescheduling process because the scheduling process generally does not begin until approval. That delay would be dependent on the quantity of additional data required by the FDA. The scheduling determination will require the DEA to conduct notice and comment rulemaking. Such action will be subject to public comment and requests for an administrative hearing which could affect the timing and scheduling of these substances.

Mebufotenin is currently classified as a Schedule I drug in the United States and any product containing this substance, such as GH001 and GH002 must be rescheduled to be marketed. There can be no assurance that the DEA will make a favorable scheduling decision. Even assuming categorization as a Schedule II or lower controlled substance (i.e., Schedule III, IV or V) at the federal level, such substances would also require scheduling determinations under state laws and regulations.

If approved by the FDA, and if the finished dosage form of GH001 or GH002 is listed by the DEA as a Schedule II, III, or IV controlled substance, its manufacture, importation, exportation, domestic distribution, storage, sale, prescribing, and dispensing will continue to be subject to a significant degree of regulation by the DEA. In addition, the final scheduling process may take significantly longer than the 90-day deadline set forth in the CSA regarding an interim rule, especially if there are objections to such scheduling, thereby delaying the launch of our GH001 or GH002 product candidates in the United States. Furthermore, the FDA, DEA or any comparable foreign regulatory authority could require us to generate more clinical or other data than we currently anticipate to establish whether or to what extent the substance has an abuse, misuse or dependence potential, which could increase the cost and/or delay the launch of GH001, GH002 or any other product candidates containing controlled substances. In addition, product candidates containing controlled substances are subject to regulations relating to manufacturing, storage, distribution, prescribing, and dispensing, including:

- DEA registration and inspection of facilities. Facilities conducting research, manufacturing, distributing, importing or exporting, or dispensing controlled substances must be registered (licensed) to perform these activities and have the security, control, record keeping, reporting and inventory procedures required by the DEA to prevent drug loss and diversion. All these facilities must renew their registrations annually, except dispensing facilities (e.g. pharmacies), which must renew every three years. The DEA conducts periodic inspections of certain registered establishments that handle controlled substances. Failure to obtain or maintain the necessary registrations may result in delay of the importation, manufacturing or distribution of GH001 or GH002. Furthermore, importation of controlled substances is subject to additional permits or approvals, which must be obtained prior to each importation. Failure to comply with the CSA and implementing regulations promulgated by the DEA, particularly non-compliance resulting in theft, loss or diversion, can result in regulatory action that would have a material adverse effect on our business, financial condition and results of operations. The DEA and the U.S. Department of Justice may seek civil penalties, refuse to renew necessary registrations, or initiate proceedings to restrict, suspend or revoke those registrations. In certain circumstances, violations could lead to criminal proceedings.

- State-controlled substances laws. Individual U.S. states have also established controlled substance laws and regulations. Though state-controlled substances laws often mirror federal law,

because the states are separate jurisdictions, they will need to separately reschedule GH001 or GH002. While some states automatically schedule or reschedule a drug based on federal action, other states schedule drugs through rule making or a legislative action. State scheduling may delay commercial sale of any product for which we obtain federal regulatory approval and adverse scheduling would have a material adverse effect on the commercial attractiveness of such product. We or our partners must also obtain separate state registrations, permits or licenses in order to be able to obtain, handle, and distribute controlled substances for clinical trials or commercial sale, and failure to meet applicable regulatory requirements could lead to enforcement and sanctions by the states in addition to those from the DEA or otherwise arising under federal law.

- Clinical trials. Because our GH001 and GH002 product candidates contain mebufotenin, to conduct clinical trials with GH001 and GH002 in the United States prior to approval, each of our research sites must submit a research protocol to the DEA and obtain and maintain a DEA Schedule I researcher registration that will allow those sites to handle and dispense GH001 and GH002 and to obtain the product from our importer. If the DEA delays or denies the grant of a researcher registration or approval of the research protocol to one or more research sites, the clinical trial could be significantly delayed, and we could lose clinical trial sites. The importer for the clinical trials must also obtain a Schedule I importer registration and an import permit for each import.

- Post-Approval Importation. If GH001 or GH002 is approved and classified as a Schedule II, III or IV substance, an importer can import it for commercial purposes if it obtains an importer registration and applies for and receives an import permit (Schedule II) or files an import declaration (Schedule III or IV) for each import shipment. The DEA provides annual assessments/estimates to the UN International Narcotics Control Board, which guides the DEA in the amounts of controlled substances that the DEA authorizes to be imported. The failure to identify an importer or obtain the necessary import authority, including specific quantities, could affect the availability of GH001 or GH002 and have a material adverse effect on our business, results of operations and financial condition. In addition, an application for a Schedule II importer registration must be published in the Federal Register, and there is a notice and comment period to receive public comments. It is always possible that adverse comments may delay the grant of an importer registration. If GH001 or GH002 is approved and classified as a Schedule II controlled substance, federal law may prohibit the import of the substance for commercial purposes. If GH001 or GH002 is listed as a Schedule II substance, we will not be allowed to import the drug for commercial purposes unless the DEA determines that domestic supplies are inadequate or there is inadequate domestic competition among domestic manufacturers for the substance as defined by the DEA. Moreover, the DEA has not registered any companies to import Schedule I controlled substances, including mebufotenin, for commercial purposes, only for scientific and research needs. Therefore, if neither GH001 or GH002, nor its drug substance could be imported, GH001 and GH002 would have to be wholly manufactured in the United States, and we would need to secure a manufacturer that would be required to obtain and maintain a separate DEA registration for that activity.

- Manufacture in the United States. If, because of a Schedule II (and possibly Schedule III) classification or voluntarily, we were to conduct manufacturing or repackaging/relabeling in the United States for commercial purposes, mebufotenin will be subject to an annual aggregate production quote established by the DEA and our contract manufacturers would be subject to the DEA's annual and semi-annual manufacturing and procurement quota requirements. Additionally, regardless of the scheduling of GH001 or GH002, the active ingredient in the final dosage form is currently a Schedule I controlled substance and would be subject to such quotas as this substance could remain listed on Schedule I during the clinical trials. The annual and semi-annual quota allocated to us or our contract manufacturers for the active ingredient in GH001 or GH002 may not be sufficient to complete clinical trials or meet commercial demand. Consequently, any delay or refusal by the DEA in establishing our, or our contract manufacturers', procurement and/or production quota for controlled substances could delay or stop our clinical trials or product launches, which would have a material adverse effect on our business, financial position and results of operations.

- Distribution in the United States and the UK. If GH001 or GH002 is scheduled as Schedule II, III, IV or V, we would also need to identify wholesale distributors with the appropriate DEA registrations and authority to distribute GH001, GH002 and any other product candidates. These distributors would need to maintain Schedule II, III, IV or V distribution registrations. This limitation in the ability to distribute GH001 or GH002 more broadly may limit commercial uptake and could

negatively impact our prospects. The failure to obtain, or delay in obtaining, or the loss of any of those registrations could result in increased costs to us. If GH001 or GH002 is classified as a Schedule II drug, participants in our supply chain may have to maintain enhanced security including specially constructed vaults at manufacturing and distribution facilities. This additional security may also discourage some pharmacies from carrying the product. In addition, GH001 and/or GH002 could be required to be administered at our trial sites or other certified healthcare settings, which could limit commercial uptake. Furthermore, state and federal enforcement actions, regulatory requirements, and legislation intended to reduce prescription drug abuse, such as the tracking of prescribing and dispensing of controlled substances through a state prescription drug monitoring program, may make physicians less willing to prescribe, and pharmacies to dispense, certain controlled substances, especially Schedule II products. Similarly, the Medicines and Healthcare products Regulatory Agency, or MHRA, considers that all Schedule 1 drugs under the UK's Misuse of Drugs Regulations 2001 (which Schedule includes mebufotenin) have no therapeutic benefit, and can only be imported, exported, produced, supplied, possessed and the like under a license issued by the UK government's Home Office. Mebufotenin may never be rescheduled under the Misuse of Drugs Regulations 2001, or reclassified under the UK's Misuse of Drugs Act 1971 (under which it is a Class A controlled substance).

The potential reclassification of mebufotenin by the DEA in the United States could create additional regulatory burdens on our operations and negatively affect our results of operations.

If mebufotenin, rather than just a specific FDA-approved formulation, is rescheduled under the CSA as a Schedule II or lower controlled substance (i.e., Schedule III, IV or V), the ability to conduct research on mebufotenin would most likely be improved. However, rescheduling mebufotenin may materially alter enforcement policies across many federal and state agencies, primarily the FDA and DEA. The FDA is responsible for ensuring public health and safety through regulation of food, drugs, supplements, and cosmetics, among other products, through its enforcement authority pursuant to the Federal Food, Drug, and Cosmetic Act, or FDCA. The FDA's responsibilities include regulating the ingredients as well as the marketing and labeling of drugs sold in interstate commerce. Because it is currently illegal under federal law to produce and sell mebufotenin, and because there are no federally recognized medical uses, the FDA has historically deferred enforcement related to mebufotenin to the DEA. If mebufotenin were to be rescheduled to a federally controlled, yet legal, substance, the FDA would likely play a more active regulatory role. The DEA would continue to be active in regulating manufacturing, distribution and dispensing of such substances. The potential for multi-agency enforcement post-rescheduling, including state agencies, e.g., Boards of Pharmacy, could threaten or have a materially adverse effect on our business.

GH001 and GH002 contain controlled substances, the use of which may generate public controversy. Adverse publicity or public perception regarding mebufotenin and psychedelics generally or our current or future product candidates using mebufotenin may negatively influence the success of these therapies.

Therapies containing controlled substances may generate public controversy. Political and social pressures and adverse publicity could lead to delays in approval of, and increased expenses for, GH001, GH002 and any other product candidates we may develop. Opponents of these therapies may seek restrictions on marketing and withdrawal of any regulatory approvals. In addition, these opponents may seek to generate negative publicity in an effort to persuade the medical community to reject these therapies. For example, we may face media-communicated criticism directed at our clinical development program. Adverse publicity from mebufotenin misuse may adversely affect the commercial success or market penetration achievable by our GH001 and GH002 product candidates. Anti-psychedelic protests have historically occurred and may occur and generate media coverage. Political pressures and adverse publicity could lead to delays in, and increased expenses for, and limit or restrict the introduction and marketing of, GH001, GH002 or any other product candidates.

If GH001, GH002 or any other product candidates are approved for commercial sale, we will be highly dependent upon consumer perceptions of the safety and quality of our therapies. We may face limited adoption if third-party therapy sites, therapists, and patients are unwilling to try such a novel treatment. Even if therapies containing controlled substances become widely accepted by physicians and patients, our success will depend in large part on our ability to educate and train physicians and

patients, and to successfully demonstrate the safety, tolerability, ease of use, efficacy, cost effectiveness and other advantages of therapies containing controlled substances. There has been a history of negative media coverage regarding psychedelic substances, including mebufotenin, which may affect the public's perception of our therapies. In addition, mebufotenin elicits intense psychological experiences, and this could deter patients from choosing this course of treatment. We could be adversely affected if we were subject to negative publicity or if any of our therapies or any similar therapies distributed by other companies prove to be, or are asserted to be, harmful to patients. Because of our dependence upon consumer perception, any adverse publicity associated with illness or other adverse effects resulting from patients' use or misuse of our therapies or any similar therapies distributed by other companies could have a material adverse impact on our business, prospects, financial condition and results of operations.

Future adverse events in research into depression and mental health diseases on which we focus our research efforts, or the pharmaceutical industry more generally, could also result in greater governmental regulation, stricter labeling requirements and potential regulatory delays in the testing or approvals of our therapies. Any increased scrutiny could delay or increase the costs of obtaining regulatory approval for GH001, GH002 or any other product candidates.

Mebufotenin is listed as a Schedule I controlled substance under the CSA in the United States, and comparable controlled substance legislation in other countries and the UN Convention on Psychotropic Substances, 1971, and any significant breaches in our compliance with these laws and regulations, or changes in the laws and regulations may result in interruptions to our development activity or business continuity.

Mebufotenin is categorized as a Schedule I controlled substance under the CSA, a Schedule 1 drug under the UK's Misuse of Drugs Regulations 2001 and is similarly categorized by most states, foreign governments and the UN Convention on Psychotropic Substances, 1971. Even assuming that GH001, GH002 or any other product candidates containing mebufotenin in specific formulations or dosage forms are approved and scheduled by regulatory authorities to allow their commercial marketing, the active pharmaceutical ingredients in such product candidates would likely continue to be Schedule I, or the state or foreign equivalent. Violations of any federal, state or foreign laws and regulations could result in significant fines, penalties, administrative sanctions, convictions or settlements arising from civil proceedings conducted by either the federal government or private citizens, or criminal charges and penalties, including, but not limited to, disgorgement of profits, cessation of business activities, divestiture, or prison time. This would have a material adverse effect on us, including on our reputation and ability to conduct business, the potential listing of our ordinary shares, our financial position, operating results, profitability or liquidity or the market price of our ordinary shares. In addition, it is difficult for us to estimate the time or resources that would be needed for the investigation or defense of any such matters or our final resolution because, in part, the time and resources that may be needed are dependent on the nature and extent of any information requested by the applicable authorities involved, and such time or resources could be substantial. It is also illegal to aid or abet such activities or to conspire or attempt to engage in such activities. An investor's contribution to and involvement in such activities may result in federal civil and/or criminal prosecution, including, but not limited to, forfeiture of his, her or its entire investment, fines and/or imprisonment.

Various federal, state, provincial and local laws govern our business in the jurisdictions in which we operate or currently plan to operate, and to which we export or currently plan to export our products, including laws relating to health and safety, the conduct of our operations, and the production, storage, sale and distribution of our products. Complying with these laws requires that we comply concurrently with complex federal, state, provincial and/or local laws. These laws change frequently and may be difficult to interpret and apply. To ensure our compliance with these laws, we will need to invest significant financial and managerial resources. It is impossible for us to predict the cost of such laws or the effect they may have on our future operations. A failure to comply with these laws could negatively affect our business and harm our reputation. Changes to these laws could negatively affect our competitive position and the markets in which we operate, and there is no assurance that various levels of government in the jurisdictions in which we operate will not pass legislation or regulation that adversely impacts our business.

In addition, even if we or third parties were to conduct activities in compliance with U.S. state or local laws or the laws of other countries and regions in which we conduct activities, potential

enforcement proceedings could involve significant restrictions being imposed upon us or third parties, while diverting the attention of key executives. Such proceedings could have a material adverse effect on our business, revenue, operating results and financial condition as well as on our reputation and prospects, even if such proceedings conclude successfully in our favor. In the extreme case, such proceedings could ultimately involve the criminal prosecution of our key executives, the seizure of corporate assets, and consequently, our inability to continue business operations. Strict compliance with state and local laws with respect to mebufotenin does not absolve us of potential liability under U.S. federal law, the laws of EU member states or of the UK, nor provide a defense to any proceeding which may be brought against us. Any such proceedings brought against us may adversely affect our operations and financial performance.

Despite the current status of mebufotenin as a Schedule I controlled substance in the United States, there may be changes in the status of mebufotenin under the laws of certain U.S. states. The legalization of mebufotenin without regulatory oversight may lead to the setup of clinics without proper therapeutic infrastructure or adequate clinical research, which could put patients at risk and bring reputational and regulatory risk to the entire industry, making it harder for us to achieve regulatory approval. Furthermore, the legalization of mebufotenin could also impact our commercial sales if we receive regulatory approval as it would reduce the barrier to entry and could increase competition.

Risks Related to the Commercialization of our Product Candidates

Any product candidate for which we obtain marketing approval will be subject to extensive post-marketing regulatory requirements and could be subject to post-marketing restrictions or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.

Even if the FDA or a comparable foreign regulatory authority approves any of our product candidates and the medical devices required to deliver such product candidates, we will be subject to ongoing regulatory requirements in the applicable jurisdictions for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information. In addition, we will be subject to continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-approval.

Manufacturers and their facilities are required to comply with extensive regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates and the medical devices required to deliver such product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. In the United States, the FDA may also require a REMS as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, we will have to comply with requirements including submissions of safety and other post-marketing information and reports and registration.

In the United States, the FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information or other restrictions; imposition of post-market studies or clinical trials to assess

new safety risks; or imposition of distribution restrictions or other restrictions under a REMS. Other potential consequences include, among other things:

- restrictions on the manufacturing of our products, the approved manufacturers or the manufacturing process;
- withdrawal of the product from the market or voluntary product recalls;
- requirements to conduct post-marketing studies or clinical trials;
- fines, restitution or disgorgement of profits or revenues;
- warning or untitled letters from the FDA or comparable notice of violations from comparable foreign regulatory authorities;
- suspensions of any of our ongoing clinical trials;
- refusal by the FDA or other comparable foreign regulatory authorities to approve pending applications or supplements to approved applications filed by us or suspension or withdrawal of marketing approvals;
- product seizure or detention or refusal to permit the import or export of products; and
- consent decrees, injunctions or the imposition of civil or criminal penalties.

Regulatory authorities strictly regulate marketing, labeling, advertising and promotion of products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. However, in the United States, companies may share truthful and not misleading information that is not inconsistent with the labeling. The FDA and other comparable foreign regulatory authorities actively enforce the laws and regulations prohibiting the promotion of off-label uses and a company that is found to have improperly promoted off-label uses may be subject to significant liability. Violations of the FDCA relating to the promotion of prescription drugs may also lead to investigations alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws. Accordingly, to the extent we receive marketing approval for one or more of our product candidates, we and our third-party partners will continue to expend time, money and effort in all areas of regulatory compliance, including promotional and labeling compliance, manufacturing, production, product surveillance and quality control.

The policies of the FDA or other comparable foreign regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow to, or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Our commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, patients, third-party payors and other members of the medical community.

Even if any of the product candidates we develop receives marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors, such as Medicare and Medicaid programs and managed care organizations in the United States, and others in the medical community. In addition, the availability of coverage and adequacy of reimbursement by third-party payors may be affected by existing and future healthcare reform measures designed to reduce the cost of healthcare. If the product candidates we develop do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable.

The degree of market acceptance of any product candidate, if approved for commercial sale, will depend on a number of factors, including:

- efficacy and potential advantages compared to alternative treatments;
- the ability to offer our products, if approved, for sale at competitive prices;
- relative convenience and ease of administration compared to alternative treatments;
- perceptions by the medical community, physicians, and patients, regarding the safety and effectiveness of our products and the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the size of the market for such product candidate, based on the size of the patient subsets that we are targeting, in the territories for which we gain regulatory approval;
- the recommendations with respect to our product candidates in guidelines published by various scientific organizations applicable to us and our product candidates;
- the strength of sales, marketing and distribution support;
- the timing of any such marketing approval in relation to other product approvals;
- any restrictions on concomitant use of other medications;
- support from patient advocacy groups;
- media coverage regarding psychedelic substances;
- the ability to obtain sufficient third-party coverage and adequate reimbursement from government and third-party payors; and
- the prevalence and severity of any side effects.

If government and other third-party payors do not provide coverage and adequate reimbursement levels for any products we commercialize, market acceptance and commercial success would be reduced.

The successful commercialization of our product candidates in the United States will depend in part on the extent to which third-party payors, including governmental authorities and private health insurers, provide coverage and adequate reimbursement levels, as well as implement pricing policies favorable for our product candidates. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory approval. In the United States and in other countries, patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. The availability of coverage and adequacy of reimbursement for our products by third-party payors, including government healthcare programs (e.g., Medicare, Medicaid, TRICARE), managed care providers, private health insurers, health maintenance organizations and other organizations is essential for most patients to be able to afford medical services and biopharmaceutical products such as our product candidates. Third-party payors decide which medications they will pay for and establish reimbursement levels.

In the United States, the principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services, or HHS. CMS decides whether and to what extent our products will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree. Factors payors consider in determining reimbursement are based on whether the product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;

- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Our ability to successfully commercialize our product candidates will depend in part on the extent to which coverage and adequate reimbursement for our products and related treatments will be available from third-party payors. Moreover, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. If coverage and adequate reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment.

In the United States, no uniform policy for coverage and reimbursement for products exists among third-party payors. Therefore, coverage and reimbursement for our products can differ significantly from payor to payor. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payor will pay for the product. One payor's determination to provide coverage for a product does not assure that other payors will also provide coverage and reimbursement for the product. Third-party payors may also limit coverage to specific products on an approved list, or formulary, which might not include all of the FDA-approved products for a particular indication. We cannot be sure that coverage and reimbursement will be available for, or accurately estimate the potential revenue from, our product candidates.

A decision by a third-party payor not to cover or not to separately reimburse for our medical products or therapies using our products could reduce physician utilization of our products once approved. Assuming there is coverage for our product candidates, or therapies using our product candidates by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. We cannot be sure that coverage and reimbursement in the United States will be available for our current or future product candidates, or for any procedures using such product candidates, and any reimbursement that may become available may not be adequate or may be decreased or eliminated in the future.

Further, increasing efforts by third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our product candidates. In order to secure coverage and reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost effectiveness of our products, in addition to the costs required to obtain FDA, EMA or other comparable foreign regulatory approvals. Additionally, we may also need to provide discounts to purchasers, private health plans or government healthcare programs. Our product candidates may nonetheless not be considered medically necessary or cost-effective. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit. We expect to experience pricing pressures from third-party payors in connection with the potential sale of any of our product candidates.

Our business and commercialization strategy depends on our ability to identify, qualify, prepare, certify, and support third-party clinics or treatment centers offering any of our product candidates, if approved. If we are unable to do so, our commercialization prospects would be limited and our business, financial condition, and results of operations would be harmed.

Our commercial success with GH001, GH002 or any other product candidates, if approved, will be dependent upon our ability to identify, qualify, prepare, certify, and support third-party clinics or treatment centers that administer our product candidates. We expect that GH001, GH002 and any other product candidates will be administered in qualified third-party clinics or treatment centers by certified healthcare providers. Because we intend to work with third-party centers and providers who agree to adhere to our treatment protocols, possibly under a REMS in the United States or a Risk Management

Program, or RMP, in Europe with restricted distribution methods, we may face limitations on the number of sites available to administer GH001, GH002 or other product candidates. Moreover, sites may have difficulty satisfying the requirements of any REMS or RMP. Any limitations on the sites available to administer GH001, GH002 or other product candidates could make it impracticable or impossible for some potential patients to access our product candidates, if approved, which could limit the overall size of our potential patient population and harm our future results of operations.

If we are unable to establish or collaborate with a sufficient network of third-party clinics or treatment centers certified under applicable standards, including regional, national, state or other applicable standards as needed to administer GH001, GH002 or any other product candidate, including the certifications that such third-party clinics or treatment centers may require under a potential REMS in the United States or RMP in Europe, it would have a material adverse effect on our business and ability to grow and would adversely affect our results of operations and commercialization efforts.

Given the novel nature and scheduled drug aspect of our treatment, third-party clinics or treatment centers may face additional financial and administrative burdens in order to deliver any approved therapy, including adhering to a REMS in the United States or an RMP in Europe. The process for a third-party clinic or treatment center to comply with a REMS can be costly and time-consuming, which could delay a third-party clinic or treatment centers' ability to administer our product candidates and materially adversely affect our commercialization trajectory. Furthermore, third-party clinics or treatment centers will need to ensure that they have the necessary infrastructure and equipment in order to deliver GH001, GH002 or any other product candidates, such as adequate ancillary equipment and sufficient treatment rooms. This may deter third-party clinics or treatment centers from providing GH001, GH002 or any other product candidates and reduce our ability to expand our network and generate revenue.

Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.

In some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. Some countries have a separate decision-making process in addition to whether the government or state insurers will reimburse the price for the product. The requirements governing drug pricing vary widely from country to country. For example:

- in the EU, member states can restrict the range of medicinal products for which their national health insurance systems provide reimbursement and, in most EU countries, the prices of medicinal products for human use must be approved by national health authorities, before they may be supplied;

- a common criterion relied upon by almost all EU Member States for pricing decisions is international reference pricing (the methodology and weight to be attached varies between countries), whereas in the UK, international reference pricing is not a criterion relied upon formally for pricing decisions;

- in the UK and many EU member states, prices of branded medicines must be notified or approved prior to product launch;

- reimbursement decisions in EU/European Economic Area, or EEA, and the UK are typically based on various forms of health technology assessment, including cost effectiveness determinations. From 2025, the EU's Health Technology Assessment Regulation (Regulation (EU) 2021/2282), or HTA Regulation, will start to come into effect providing for a common assessment of clinical effectiveness to be taken into account by national reimbursement authorities across EU/EEA. This will not have direct effect in the UK, but may in practice be influential; and

- additionally public procurement tenders are widely used for purchasing of medicinal products by hospitals.

Even if we obtain approval of any of our product candidates in the United States or Europe, we may never obtain approval or commercialize such products in other countries, which would limit our ability to realize their full market potential.

In order to market any products in the United States or EU, we must establish and comply with numerous and varying regulatory requirements regarding safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approvals outside of where our clinical trials currently have been conducted could result in significant delays, difficulties and costs for us and may require additional nonclinical studies or clinical trials which would be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. Satisfying these and other regulatory requirements is costly, time-consuming, uncertain and subject to unanticipated delays. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our ability to realize the full market potential of our products will be harmed.

We currently have no marketing and sales organization and have no experience as a company in commercializing products, and we may have to invest significant resources to develop these capabilities. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, if approved, we may not be able to generate product revenue.

We have no internal sales, marketing or distribution capabilities, nor have we commercialized a product. If any of our product candidates ultimately receives regulatory approval, we expect to establish a marketing and sales organization with technical expertise and supporting distribution capabilities to commercialize each such product in major markets, which will be expensive and time consuming. We have no prior experience as a company in the marketing, sale and distribution of biopharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. We may also choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. We may not be able to enter into collaborations or hire consultants or external service providers to assist us in sales, marketing and distribution functions on acceptable financial terms, or at all. In addition, our product revenues and our profitability, if any, may be lower if we rely on third parties for these functions than if we were to market, sell and distribute any products that we develop ourselves. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we are not successful in commercializing our products, either on our own or through arrangements with one or more third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

Risks Related to Ongoing Regulatory and Legal Compliance

Changes and uncertainties in the tax system in the countries in which we have operations could materially adversely affect our financial condition and results of operations, and reduce net returns to our shareholders.

We plan to conduct business globally and may file income tax returns in multiple jurisdictions in the future. Our consolidated effective income tax rate could be materially adversely affected by several factors, including: changing tax laws, regulations and treaties, or the interpretation thereof; tax policy initiatives and reforms under consideration (such as those related to the Organization for Economic Co-Operation and Development's, or OECD, Base Erosion and Profit Shifting, or BEPS, Project, the

OECD's Pillar One and Pillar Two initiatives (as discussed below) and other initiatives); the practices of tax authorities in jurisdictions in which we operate; the resolution of issues arising from tax audits or examinations and any related interest or penalties. Such changes may include (but are not limited to) the taxation of operating income, investment income, dividends received or (in the specific context of withholding tax) dividends paid.

We are unable to predict what tax reform may be proposed or enacted in the future or what effect such changes would have on our business, but such changes, to the extent they are brought into tax legislation, regulations, policies or practices in jurisdictions in which we operate, could increase the estimated tax liability that we have expensed to date and paid or accrued on our balance sheets, and otherwise affect our financial position, future results of operations, cash flows in a particular period and overall our effective tax rates in the future in countries where we have operations, reduce post-tax returns to our shareholders and increase the complexity, burden and cost of tax compliance. On October 7, 2021, the Irish Government approved Ireland's adherence to the OECD BEPS 2.0 plan, under the OECD Inclusive Framework, to reform international tax rules. The OECD BEPS 2.0 plan consists of two distinct limbs; Pillar One and Pillar Two. On December 20, 2021, as part of the BEPS 2.0 plan, the OECD published the draft Global Anti-Base Erosion Model Rules (Pillar Two), or GloBE Rules, which are aimed at ensuring that Multinational Enterprises, or MNEs, with revenue of more than €750 million annually will be subject to a global minimum 15% effective tax rate. A directive to implement the GloBE Rules in the EU was adopted by the Council of the EU on December 15, 2023. Pillar Two was implemented into Irish law with effect for periods beginning on or after December 31, 2023. On October 11, 2023, the OECD released a package of documents in relation to Amount A of Pillar One, including a Multilateral Convention. Amount A of Pillar One, if implemented in its current form, would re-allocate certain profits of large multi-national groups to the jurisdictions where their customers and users are located and would apply to groups with revenues of above €20 billion and profitability exceeding 10% (or, if a group is below those thresholds but has a particular segment of its business as disclosed in its consolidated financial statements, a Disclosed Segment, which exceeds those thresholds, the rules may apply to that Disclosed Segment). In order for this Multilateral Convention to enter into force, it must be ratified by at least 30 jurisdictions including the headquarters of jurisdictions of at least 60% of MNEs that are currently expected to be within the scope of Amount A.

Tax authorities may disagree with our positions and conclusions regarding certain tax positions, or may apply existing rules in an unforeseen manner, resulting in unanticipated costs, taxes or non-realization of expected benefits.

A tax authority may disagree with tax positions that we have taken or will take, which could result in increased tax liabilities. For example, The Office of the Revenue Commissioners of Ireland, or Revenue, or another tax authority could challenge our potential future allocation of income by tax jurisdiction and the amounts paid between potential future affiliated companies pursuant to potential future intercompany arrangements and transfer pricing policies, including amounts to be paid with respect to our intellectual property development. Similarly, a tax authority could assert that we are subject to tax in a jurisdiction where we believe we have not established a taxable connection, often referred to as a "permanent establishment" under international tax treaties, and such an assertion, if successful, could increase our expected tax liability in one or more jurisdictions. Additionally, a tax authority could assert that we are tax resident in a jurisdiction where we believe we are not. A change of tax residency could subject us to a higher tax rate or an exit tax.

A tax authority may take the position that material tax liabilities, interest and penalties are payable by us, for example where there has been a technical violation of contradictory laws and regulations that are relatively new and have not been subject to extensive review or interpretation, in which case we expect that we might contest such assessment. High-profile companies can be particularly vulnerable to aggressive application of unclear requirements. Many companies must negotiate their tax bills with tax inspectors who may demand higher taxes than applicable law appears to provide. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could increase our anticipated effective tax rate, where applicable.

We exercise significant judgment when determining tax filing positions. The tax rules and regulations are very complex and there can be no assurance that management's interpretation and application of these rules and regulations to determine tax filing positions will be accepted by the tax authorities. If the tax authorities reject a tax filing position taken by the Company, it could have a material

adverse effect on our financial position and operating results. There is a risk that the tax authorities could impose additional taxable income or disallow the deductibility of expenses on intercompany transactions resulting in higher tax obligations in one or more tax jurisdictions. Management's experience has been that the tax authorities can be aggressive in taking positions that would increase taxable income and/or disallow deductible expenses. If the tax authorities are successful in increasing taxable income and/or disallowing deductible expenses in one or more jurisdictions, it could result in the Company experiencing a higher effective tax rate that could be material. Management regularly consults with professional tax advisors when establishing tax filing positions and believes that the tax filing positions taken are in accordance with tax regulations; however, there is always a risk that the tax authorities could disagree with the tax filing positions taken resulting in additional taxes, interest and penalty becoming due and such amounts could be material.

We may be unable to use tax losses and tax credit carry-forwards and certain built-in losses to reduce future tax payments or benefit from favorable Irish tax legislation.

As an Irish incorporated and tax resident company, we are subject to Irish corporate taxation on our worldwide profits. Due to the nature of our business, we have generated losses since inception and therefore have not paid any Irish corporation tax. As of December 31, 2024, we had unused tax losses of $102.8 million. Subject to any relevant utilization criteria and restrictions (including those that can restrict the use of carried forward losses where there is a change of ownership of more than half of our ordinary shares and a major change in the nature, conduct or scale of the trade) and subject to the related expenses giving rise to the losses being tax deductible, we expect these to be eligible for carry-forward and utilization against future operating profits.

As a company that carries out extensive research and development activities, we seek to benefit from the Irish research and development tax credit for certain expenditure on research and development activities, plant and machinery and buildings as set out in the Taxes Consolidation Act 1997 of Ireland and the Taxes Consolidation Act 1997 (Prescribed Research and Development Activities Regulations) 2004. Credit is given at 25% of allowable expenditure for accounting periods ending on or before December 31, 2023 and 30% of allowable expenditure for accounting periods commencing after January 1, 2024, subject to satisfying the applicable conditions.

We may benefit from Ireland's Knowledge Development Box regime in the future. The Irish Finance Act 2022 amended the regime, such that an eligible company is entitled to a corporate tax deduction equal to 20% of its qualifying profits. Qualifying profits are profits directly attributable to the exploitation of certain types of intellectual property (patents, copyrighted computer software) that have been developed by the Irish company through qualifying research and development, or R&D, activities undertaken by the Irish company. In effect, such qualifying profits would be taxed at 10% where the conditions of the regime are met. The availability of the relief is fact dependent and we will consider the applicability of this relief as our activities progress.

When taken in combination with the research and development tax credit, we expect a long-term rate of Irish corporation tax lower than the statutory rate to apply to us. If, however, there are unexpected adverse changes to the Irish research and development tax credit regime or the Knowledge Development Box regime, or for any reason we are unable to qualify for such regimes, or we are unable to use tax losses and tax credit carry-forwards and certain built-in losses to reduce future tax payments then our business, results of operations and financial condition may be adversely affected. This may impact our ongoing requirement for investment and the timeframes within which additional investment is required.

We may become subject to U.S. federal and state forfeiture laws which could negatively impact our business operations.

Violations of any U.S. federal laws and regulations could result in significant fines, penalties, administrative sanctions, convictions or settlements arising from civil proceedings conducted by either the federal government or private citizens, or criminal charges, including, but not limited to, seizure of assets, disgorgement of profits, cessation of business activities or divestiture. As an entity that conducts business involving mebufotenin, we are potentially subject to federal and state forfeiture laws (criminal and civil) that permit the government to seize the proceeds of criminal activity. Civil forfeiture laws could provide an alternative for the federal government or any state (or local police force) that wants to discourage residents from conducting transactions with mebufotenin-related businesses but believes

criminal liability is too difficult to prove beyond a reasonable doubt. Also, an individual can be required to forfeit property considered to be the proceeds of a crime even if the individual is not convicted of the crime, and the standard of proof in a civil forfeiture matter is lower than the standard in a criminal matter. Depending on the applicable law, whether federal or state, rather than having to establish liability beyond a reasonable doubt, the federal government or the state, as applicable, may be required to prove that the money or property at issue is proceeds of a crime only by either clear and convincing evidence or a mere preponderance of the evidence.

Investors located in jurisdictions where mebufotenin remains illegal may be at risk of prosecution under conspiracy, aiding and abetting, and money laundering statutes, and be at further risk of losing their investments or proceeds under forfeiture statutes. Many jurisdictions remain fully able to take action to prevent the proceeds of mebufotenin businesses from entering their state. Our investors and prospective investors should be aware of these potentially relevant laws in considering whether to invest in us.

We are subject to anti-corruption laws, as well as export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, be precluded from manufacturing GH001 and GH002 and developing and selling GH001, GH002 or any other product candidates outside the United States or be required to develop and implement costly compliance programs, which could adversely affect our business, results of operations and financial condition. Our directors and managers might also be subject to criminal penalties, including jail time.

Our operations are subject to anti-corruption laws, including the Criminal Justice (Corruption Offences) Act 2018 of Ireland, or Criminal Justice Act, the U.S. Foreign Corrupt Practices Act, or FCPA and other anti-corruption laws that apply in countries where we do business and may do business in the future. The Criminal Justice Act, FCPA and these other laws generally prohibit us, our officers, and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage.

The Criminal Justice Act, the FCPA and these other laws generally prohibit us and our employees and intermediaries from authorizing, promising, offering, or providing, directly or indirectly, a financial or other advantage to government officials or other persons to induce them to improperly perform a relevant function or activity (or reward them for such behavior).

Under the Criminal Justice Act, for example, we may also be liable for failing to prevent a person associated with us from committing a bribery offense. We, along with those acting on our behalf and our commercial partners, operate in a number of jurisdictions that pose a high risk of potential Criminal Justice Act or FCPA violations, and we participate in collaborations and relationships with third parties whose corrupt or illegal activities could potentially subject us to liability under the Criminal Justice Act, FCPA or local anti-corruption laws, even if we do not explicitly authorize or have actual knowledge of such activities. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

Compliance with the FCPA in particular, is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

In the future, we may operate in jurisdictions that pose a high risk of potential Criminal Justice Act, FCPA or UK Bribery Act violations, and we may participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the Criminal Justice Act, FCPA or local anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. If we expand our operations, we will need to dedicate

additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the federal government of the United States and authorities in member states of the EU, including applicable export control regulations, economic sanctions on countries and persons, customs requirements and currency exchange regulations (collectively referred to herein as the Trade Control laws). In addition, various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our international presence, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from manufacturing GH001 or GH002 and developing and selling GH001, GH002 or any other product candidates outside of the United States, and the EU, which could limit our growth potential and increase our development costs.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the Criminal Justice Act, the FCPA or other legal requirements, including Trade Control laws. If we are not in compliance with the Criminal Justice Act, the FCPA and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which would have an adverse impact on our business, financial condition, results of operations and liquidity. The SEC also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions. Any investigation of any potential violations of the Criminal Justice Act, the FCPA, other anti-corruption laws or Trade Control laws by Irish, U.S. or other authorities could also have an adverse impact on our reputation, our business, results of operations and financial condition.

Our relationships with healthcare providers and physicians and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Although we do not currently have any products on the market, upon commercialization of our product candidates, if approved, we will be subject to additional healthcare statutory and regulatory requirements and oversight by federal and state governments in the United States as well as foreign governments in the jurisdictions in which we conduct our business. Healthcare providers and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare providers, third-party payors, customers and others may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. In particular, the research of our product candidates, as well as the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business or financial arrangements.

The applicable federal, state and foreign healthcare laws and regulations laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual, or the purchase, lease, order, arrangement or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity can be found guilty of violating the statute without actual knowledge of the statute or specific intent to violate it. The term remuneration has been interpreted broadly to include anything of value. Further, courts have found that if "one purpose" of remuneration is to induce referrals, the federal Anti-Kickback Statute is violated. Violations

are subject to significant civil and criminal fines and penalties for each violation, plus up to three times the remuneration involved, imprisonment and exclusion from government healthcare programs. In addition, a claim submitted for payment to any federal healthcare program that includes items or services that were made as a result of a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims act, or the FCA. The Anti-Kickback Statute has been interpreted to apply to arrangements between biopharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers, among others, on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but they are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor;

- the federal civil and criminal false claims laws, including the FCA, and civil monetary penalty laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, false, fictitious or fraudulent claims for payment to, or approval by Medicare, Medicaid, or other federal healthcare programs; knowingly making, using or causing to be made or used, a false record or statement material to a false, fictitious or fraudulent claim or an obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding, decreasing or concealing an obligation to pay money to the federal government. A claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim under the FCA. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. The FCA also permits a private individual acting as a "whistleblower" to bring qui tam actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery or settlement. When an entity is determined to have violated the FCA, the government may impose civil fines and penalties for each false claim, plus treble damages, and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private), and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false, fictitious or fraudulent statement or representation, or making or using any false writing or document knowing the same to contain any materially false fictitious or fraudulent statement or entry in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA fraud provisions without actual knowledge of the statute or specific intent to violate it;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose, among other things, certain requirements relating to the privacy, security and transmission of individually identifiable health information on certain covered healthcare providers, health plans and healthcare clearinghouses, known as covered entities, as well as their respective "business associates," those independent contractors or agents of covered entities that create, receive, maintain, transmit or obtain protected health information in connection with providing a service on behalf of a covered entity as well as their covered subcontractors. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions. In addition, there may be additional federal, state and non-U.S. laws which govern the privacy and security of health and other personal information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts;

- the federal Physician Payments Sunshine Act, created under the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or, collectively, the ACA, and its implementing regulations, which require manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to CMS information related to direct or indirect payments and other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician providers, including physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives, and teaching hospitals, as well as ownership and investment interests held by the physicians and their immediate family members;

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

- analogous U.S. state, local and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers, and may be broader in scope than their federal equivalents; state and foreign laws that require biopharmaceutical companies to comply with the biopharmaceutical industry's voluntary compliance guidelines and other relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers, marketing expenditures or drug pricing; state and local laws that require the registration of biopharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health and other personal information, some of which may be more stringent than those in the United States (such as the EU's General Data Protection Regulation (Regulation (EU) 2016/679), or GDPR, which became effective in May 2018, or the UK's General Data Protection Regulation, or UK GDPR) in certain circumstances, and may differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

The distribution of biopharmaceutical products is subject to additional requirements and regulations, including extensive record keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of biopharmaceutical products.

If the FDA, EMA or a comparable foreign regulatory authority approves any of our product candidates, we will be subject to an expanded number of these laws and regulations and will need to expend resources to develop and implement policies and processes to promote ongoing compliance. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Ensuring business arrangements comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert a company's attention from the business.

It is possible that governmental and enforcement authorities will conclude that our business practices, including our arrangements with physicians and other healthcare providers, some of whom may receive share options as compensation for services provided, may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other government regulations that apply to us, we may be subject to significant sanctions, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, reputational harm, exclusion from participation in federal and state funded healthcare programs, contractual damages and the curtailment or restricting of our operations, as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws. Further, if any of the physicians or other healthcare providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to similar penalties. Any action for violation of these laws, even if successfully defended, could cause us to incur significant legal expenses and divert management's attention from

the operation of the business. In addition, the approval and commercialization of any product candidate we develop outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws. All of these could harm our ability to operate our business and our financial results.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

Our actual or perceived failure to comply with applicable health information and data protection laws and regulations, standards and other requirements could lead to governmental enforcement actions, including civil or criminal penalties, private litigation, and adverse publicity and could negatively affect our operating results and business.

We and any potential collaborators may be subject to U.S. and foreign federal, state and local laws and regulations that address privacy and data security. In the United States, numerous federal and state laws and regulations, including state data breach notification laws, state health and personal information privacy laws, and federal and state consumer protection laws, govern the collection, use, processing, storage, transmission, disclosure, destruction and protection of health-related and other personal information. In addition, we may obtain health information from third parties, including research institutions from which we obtain clinical trial data, which are subject to privacy and security requirements under HIPAA, as amended by HITECH. To the extent that we act as a business associate we may also be subject to the privacy and security provisions of HIPAA, as amended by HITECH, which restricts the use and disclosure of patient-identifiable health information, mandates the adoption of certain standards relating to the privacy and security of patient-identifiable health information, and requires the reporting of certain security breaches to healthcare provider customers with respect to such information. Additionally, many states have enacted similar laws that may impose more stringent requirements on entities like ours. Depending on the facts and circumstances, we could be subject to significant civil, criminal, and administrative penalties if we obtain, use, or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Additionally, in June 2018, the State of California enacted the California Consumer Privacy Act of 2018, or CCPA, which came into effect on January 1, 2020, and provides new data privacy rights for California consumers (as that term is defined in the legislation) and new operational requirements for companies that process information of California residents, which may increase our compliance costs and potential liability. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action and statutory damages for data breaches that is expected to increase data breach litigation. While there is currently an exception under the CCPA for protected health information that is subject to HIPAA and clinical trial regulations, as currently written, the CCPA may nevertheless impact certain of our business activities depending on how the CCPA will be interpreted, and exemplifies the vulnerability of our business to the evolving regulatory environment related to personal information. In addition, the California Privacy Rights Act of 2020, or CPRA, which went into effect on January 1, 2023, imposes additional obligations on companies covered by the legislation and significantly modifies the CCPA, including by expanding consumers' rights with respect to certain sensitive personal information. The CPRA also creates a new state agency that is vested with authority to implement and enforce the CCPA and CPRA. Some observers have noted that the CCPA and CPRA could mark the beginning of a trend toward more stringent state privacy legislation in the United States, which could increase our potential liability and adversely affect our business. Other states, such as Nevada and Oklahoma and the U.S. federal government are considering comprehensive privacy laws, and on January 1, 2023, the Virginia Consumer Data Protection Act, or CDPA, became effective. The CDPA contains provisions that require businesses subject to the legislation to conduct data protection assessments in certain circumstances and that require opt-in consent from Virginia consumers to process certain sensitive personal information. In addition, Colorado enacted the Colorado Privacy Act,

or the CoPA, and Connecticut enacted the Connecticut Data Privacy Act, each of which took effect on July 1, 2023, and Utah enacted the Consumer Privacy Act, which became effective on December 31, 2023. Several other states, including New Hampshire, Delaware, and Nebraska, have also enacted privacy laws that have taken effect in 2024 or will take effect in 2025. The CDPA, CoPA and such other proposed legislation, if enacted, may add additional complexity, variation in requirements, restrictions and potential legal risk, require additional investment of resources in compliance programs, impact strategies and the availability of previously useful data and could result in increased compliance costs and/or changes in business practices and policies.

The collection, use, storage, disclosure, transfer, or other processing of personal data (including health data processed in the context of clinical trials) regarding EU data subjects in the EEA and/or carried out in the context of our establishment in any EEA member state, is subject to the GDPR, and any legislation which amends, extends, consolidates, re-enacts or replaces the GDPR from time to time.

The GDPR is wide-ranging in scope and imposes numerous additional requirements on companies that process personal data of individuals residing in Europe, including imposing special requirements in respect of the processing of health and other sensitive data, requiring that consent of individuals to whom the personal data relates is obtained in certain circumstances, requiring additional disclosures to individuals regarding data processing activities, requiring that appropriate safeguards are implemented to protect the security and confidentiality of personal data, creating mandatory data breach notification requirements in certain circumstances, and requiring that certain measures (including contractual requirements) are put in place when engaging third-party data processors. The GDPR permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to EUR 20 million or 4% of annual global revenue, whichever is greater, and up to the greater of GBP 17.5 million or 4% of annual global revenue in the case of noncompliance with the UK GDPR. The GDPR and the UK GDPR also provide individuals with various rights in respect of their personal data, including rights of access, erasure, portability, rectification, restriction and objection, and confer a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR and UK GDPR. The GDPR and UK GDPR requirements apply not only to third-party transactions, but also to transfers of information between us and our subsidiaries, including employee information.

The GDPR and the Irish Data Protection Act 2018 also impose strict rules on the transfer of personal data to countries outside the EEA, including the United States, unless the parties to the transfer have implemented safeguards to protect the transferred personal information. The Court of Justice of the EU, or CJEU, recently raised questions about whether the European Commission's Standard Contractual Clauses, one of the primary mechanisms used by companies to import personal information from Europe, complies with the GDPR. While the CJEU upheld the validity of the Standard Contractual Clauses, the CJEU ruled that the underlying data transfers must be assessed on a case-by-case basis by the data controller to determine whether the personal information will be adequately protected. Further, the European Commission recently proposed updates to the Standard Contractual Clauses. At present, there are few if any viable alternatives to the Standard Contractual Clauses and there is uncertainty regarding how to ensure that transfers of personal information from Europe to the United States might be adequately protected so as to comply with the GDPR. As such, any transfers by us, or our vendors, of personal information from Europe may not comply with European data protection laws and may increase our exposure to the GDPR's heightened sanctions for violations of its cross-border data transfer restrictions. Loss of our ability to transfer personal information from the EEA may also require us to increase our data processing capabilities in those jurisdictions at significant expense.

Further, the UK's withdrawal from the EU and EEA on January 31, 2020, has created uncertainty with regard to data protection regulation in the UK. As of January 1, 2021, we are also subject to the UK GDPR and UK Data Protection Act of 2018, which retains the GDPR in the UK's national law. In particular, the collection, use, storage, disclosure, transfer, or other processing of personal data (including health data processed in the context of clinical trials) regarding data subjects in the UK and/or carried out in the context of the activities of our establishment in the UK is subject to the UK GDPR and the UK Data Protection Act of 2018. With respect to transfers of personal data from the EEA, on June 28, 2021, the European Commission issued an adequacy decision in respect of the UK's data protection framework, enabling data transfers from EU member states to the UK to continue without requiring organizations to put in place contractual or other measures in order to lawfully transfer personal data

between the territories. While this adequacy decision will automatically expire on June 27, 2025, (unless renewed by the European Commission before then), the European Commission may unilaterally revoke the adequacy decision at any point, and if this occurs it could lead to additional costs and increase our overall risk exposure. Other countries have also passed or are considering passing laws requiring local data residency or restricting the international transfer of data.

In addition, Europe and other foreign jurisdictions have enacted laws, regulations, standards and common practices that relate to the privacy of clinical trial data, including as a condition to approve clinical trials. These requirements are evolving and uncertain and they may result in delays to our ability to launch clinical trials or limit the jurisdictions in which we may conduct clinical trials.

The GDPR and UK GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR and the UK GDPR. While we have taken steps to comply with the GDPR and UK GDPR and implementing legislation in applicable EEA member states, including by seeking to establish appropriate lawful bases for the various processing activities we carry out as a controller or joint controller, reviewing our security procedures and those of our vendors and collaborators, and entering into data processing agreements with relevant vendors and collaborators, we cannot be certain that our efforts to achieve and remain in compliance have been, and/or will continue to be, fully successful.

The regulatory framework for data privacy and security issues in the United States and abroad is rapidly evolving and likely to remain uncertain for the foreseeable future. Compliance with applicable privacy and data protection laws and regulations is a rigorous and time-intensive process and could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose certain data, or in some cases, impact our ability to operate in certain jurisdictions. Despite our efforts to bring our practices into compliance with these laws and regulations, we may not be successful in our efforts to achieve compliance due to internal or external factors, such as resource allocation limitations or a lack of vendor cooperation. In addition, because the interpretation and application of privacy and data protection laws are still uncertain, it is possible that these laws and other actual or alleged legal obligations, such as contractual or self-regulatory obligations, may be interpreted and applied in a manner inconsistent with our data management practices. Our failure or perceived failure to comply with these laws, regulations and obligations could result in government investigations, proceedings and enforcement actions (which could include civil, criminal and administrative penalties), public statements against us by government entities, private parties, consumer advocacy groups or others, private litigation, contractual penalties, monetary damages and/or adverse publicity, and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

Ongoing healthcare legislative and regulatory reform measures may have a material adverse effect on our business and results of operations.

Changes in U.S. and foreign regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; (iv) additional record keeping requirements; or (v) discounts or other price reductions on our products. If any such changes were to be imposed, they could adversely affect the operation of our business.

In the United States and in some foreign jurisdictions, there have been, and likely will continue to be, a number of legislative initiatives and regulatory changes regarding the healthcare system directed at broadening the availability of healthcare, improving the quality of healthcare, and containing or lowering the cost of healthcare. For example, in March 2010, the ACA was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. biopharmaceutical industry.

While there have been numerous judicial, administrative, executive and legislative challenges to certain aspects of the ACA, the ACA remains in effect. It is possible that the ACA will be subject to additional challenges. It is unclear how any such challenges will impact the ACA and our business.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. For example, on August 2, 2011, the Budget Control Act of 2011 imposed, subject to certain temporary suspension periods, 2% reductions in Medicare payments to providers per fiscal year starting April 1, 2013, and, due to subsequent legislative amendments to the statute, will remain in effect through 2032, unless additional Congressional action is taken. In December 2020, CMS issued a final rule implementing significant manufacturer price reporting changes under the Medicaid Drug Rebate Program, including an alternative rebate calculation for line extensions that is tied to the price increases of the original drug, and Best Price reporting related to certain value-based purchasing arrangements. Under the American Rescue Plan Act of 2021, effective January 1, 2024, the statutory cap on Medicaid Drug Rebate Program rebates that manufacturers pay to state Medicaid programs was eliminated. Elimination of this cap may, in some cases, require pharmaceutical manufacturers to pay more in rebates than they receive on the sale of products.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, CMS may develop new payment and delivery models, such as bundled payment models. There has been heightened governmental scrutiny over the manner in which manufacturers set prices for their products, which has resulted in several presidential executive orders, Congressional inquiries, and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, reduce the costs of drugs under Medicare, and reform government program reimbursement methodologies for drug products. For example, the FDA released a final rule in September 2020 providing guidance for states to build and submit importation plans for drugs from Canada, and the FDA authorized the first such plan in Florida in January 2024, which has been extended until July 6, 2025.

Recently, several healthcare reform initiatives culminated in the enactment of the Inflation Reduction Act, or the IRA, in August 2022, which will, among other things, allow HHS to directly negotiate the selling price of a statutorily specified number of drugs and biologics each year that CMS reimburses under Medicare Part B and Part D. The negotiated price may not exceed a statutory ceiling price. Only high-expenditure single-source drugs that have been approved for at least 7 years (11 years for single-source biologics) can qualify for negotiation, with the negotiated price taking effect two years after the selection year. For 2026, the first year in which negotiated prices become effective, CMS selected 10 high-cost Medicare Part D products, and the negotiated maximum fair price for each such product has been announced. CMS has selected 15 additional Medicare Part D drugs for negotiated maximum fair pricing in 2027. For 2028, an additional 15 drugs, which may be covered under either Medicare Part B or Part D, will be selected, and for 2029 and subsequent years, 20 Part B or Part D drugs will be selected. A drug or biological product that has an orphan drug designation for only one rare disease or condition will be excluded from the IRA's price negotiation requirements, but will lose that exclusion if it has designations for more than one rare disease or condition, or if is approved for an indication that is not within that single designated rare disease or condition, unless such additional designation or such disqualifying approvals are withdrawn by the time CMS evaluates the drug for selection for negotiation. The IRA also imposes Medicare Part D and Part B drugs whose prices have increased at a rate greater than the rate of inflation, and in November 2024, CMS finalized regulations for the Medicare Part B and Part D inflation rebates. The IRA also eliminated, beginning in 2025, the coverage gap under Medicare Part D by significantly lowering the enrollee maximum out-of-pocket cost and requiring manufacturers, in order for their drugs to be reimbursed by Medicare Part D, to subsidize, through a newly established manufacturer discount program, 10% of Part D enrollees' prescription costs for brand drugs below the out-of-pocket limit, and 20% once the out-of-pocket limit has been reached. The IRA permits the Secretary of HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. Manufacturers that fail to comply with the IRA may be subject to various penalties, some significant, including civil monetary penalties. The IRA also extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. These provisions may be subject to legal challenges. For example, the provisions related to the negotiation of selling prices of high-expenditure single-source drugs and biologics have been challenged in multiple lawsuits brought by pharmaceutical manufacturers. Thus, while it is unclear

how the IRA will be implemented, it will likely have a significant impact on the biopharmaceutical industry and the pricing of our products and product candidates.

At the state level in the United States, legislatures are increasingly enacting laws and implementing regulations designed to control pharmaceutical and biologic product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legally mandated price controls on payment amounts by third-party payors or other restrictions on coverage or access could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our product candidates that we successfully commercialize or put pressure on our product pricing.

In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize our product candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy. National governments and health service providers have different priorities and approaches to the delivery of healthcare and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our product candidate, restrict or regulate post-approval activities and affect our ability to commercialize any products for which we obtain marketing approval. In international markets, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. In April 2023, the European Commission proposed a legislative package to revise EU pharmaceutical legislation. This proposal, which comprises a directive and regulation, will have to go through the EU legislative process but, if passed, could change the periods applicable to data exclusivity in Europe, with the effect of potentially reducing the period of data exclusivity available to the Company in Europe.

Legislation changes may also affect the legal requirements under which we perform our technical, nonclinical and clinical development of our product candidates and the medical devices required to deliver such product candidates, and they may affect how the FDA, EMA and comparable foreign regulatory agencies review and approve new drug products, drug-device combination products or medical devices. For example, on April 5, 2017, the European Parliament passed the MDR, which repeals and replaces the EU Medical Devices Directive and the Active Implantable Medical Devices Directive. Unlike directives, which must be implemented into the national laws of the EEA member states, the regulations would be directly applicable, i.e., without the need for adoption of EEA member state laws implementing them, in all EEA member states and are intended to eliminate current differences in the regulation of medical devices among EEA member states. The MDR, among other things, is intended to establish a uniform, transparent, predictable and sustainable regulatory framework across the EEA for medical devices and ensure a high level of safety and health while supporting innovation.

The MDR became fully applicable on May 26, 2021, after a three-year transition period. This regulation, among other things:

- strengthens the rules on placing medical devices on the market and reinforce surveillance once they are available;
- establishes explicit provisions on manufacturers' responsibilities for the follow-up of the quality, performance and safety of medical devices placed on the market;
- improves the traceability of medical devices throughout the supply chain to the end-user or patient through a unique identification number;

- sets up a central database to provide patients, healthcare professionals and the public with comprehensive information on products available in the EU; and

- strengthens rules for the assessment of certain high-risk medical devices, such as implants, which may have to undergo an additional check by experts before they are placed on the market.

These modifications may have a significant effect on the way we can develop our product candidates and the medical devices required to deliver such product candidates, and may delay our development significantly.

On March 20, 2023, Regulation (EU) 2023/607 entered into force, which extended the transitional provisions of the MDR as follows:

- 2026 for class III custom made devices;

- 2027 for class III and class IIb implantable devices;

- 2028 for other class IIb, class IIa and class Is, Im devices; and

- 2028 for class I up classified devices.

The transitional provisions allow time for devices CE marked under the Directives to transition and become CE marked under the MDR.

In the UK, medical devices currently continue to be regulated by laws equivalent to the EU directives which preceded the MDR. The UK Government is planning to introduce new UK Medical Device Regulations, although these are unlikely to become law prior to 2025. In the meantime, manufacturers whose medical devices have a CE marking, which certifies their compliance with MDR, will be able to continue placing their devices in the market in Great Britain until June 30, 2028, or June 30, 2030, depending on device classification and applicable legislation. The new UK Medical Device Regulations, when enacted, are likely to impose an additional regulatory burden for any products we intend to market in Great Britain, whereas we expect that Northern Ireland will remain subject to the MDR.

In addition, the EU adopted the Clinical Trials Regulation, or Regulation 536/2014, or CTR, in April 2014, which became applicable on January 31, 2022. The CTR is directly applicable in all the EU member states, and repeals the Clinical Trials Directive. The CTR outlines a transitional timeline:

- for the period beginning on January 31, 2022 and ending on January 31, 2023, all clinical trial applications could be made either under the Clinical Trials Directive or under the CTR;

- from January 31, 2023, all initial clinical trial applications must be submitted under the CTR alone; and

- from January 31, 2023 to January 31, 2025, ongoing clinical trials authorized under the Clinical Trials Directive can remain under the Clinical Trials Directive or can transition to the CTR. However, as of January 31, 2023, no new national clinical trial applications can be submitted under the Clinical Trials Directive 2001/20/EC. Consequently, if the sponsor chose to submit the clinical trial application under the Clinical Trials Directive during the one-year transition period which ended on January 31, 2023, a new EU member state can only be added to the clinical trial after January 31, 2023, once the entire clinical trial has been transferred to CTIS. Further, substantial amendments to trials authorized under the Clinical Trials Directive are permitted until January 31, 2025; and by January 31, 2025, all ongoing clinical trials will be required to have transitioned to the CTR.

The CTR harmonizes the assessment and supervision processes for clinical trials throughout the EU via a Clinical Trials Information System, which will notably contain a centralized EU portal and database.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States or in any other jurisdictions. If we or any

third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

In the United States, inadequate funding for the FDA and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes, including changes to the FDA's priorities or processes. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable. See "Risks Related to Our Financial Position and Need for Additional Capital - Failure of the U.S. federal government to manage its fiscal matters or to raise or further suspend the debt ceiling may expose us to increased financial and operational risk."

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. federal government has shut down several times and certain regulatory agencies, such as the FDA have had to furlough critical employees and stop critical activities. If a prolonged government shutdown occurs, or if the FDA is otherwise hindered by inadequate funding, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, in our operations as a public company, future government shutdowns or similar funding issues could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

EU drug marketing and reimbursement regulations may materially affect our ability to market and receive coverage for our products in the EU member states.

We ultimately intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the EU, the pricing of drugs is subject to governmental control and other market regulations which could put pressure on the pricing and usage of our product candidates. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. In addition, market acceptance and sales of our product candidates will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for our product candidates and may be affected by existing and future healthcare reform measures.

Much like the federal Anti-Kickback Statute prohibition in the United States, 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 also prohibited in the EU. The provision of benefits or advantages to physicians is governed by the national anti-bribery laws of EU member states, and in respect of the UK (which is no longer a member of the EU), the UK Bribery Act of 2010. Infringement of these laws could result in substantial fines and imprisonment.

Payments made to physicians in certain EU member states must be publicly disclosed. 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 regulatory authorities of the individual EU member states. These requirements are provided in the national laws, industry codes or professional codes of conduct, applicable in the EU member states. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

In addition, in most foreign countries, including those in the EU, the UK and the EEA, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. For example, the EU provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. Reference pricing used by various EU member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. In some countries, we may be required to conduct a clinical study or other studies that compare the cost effectiveness of any of our product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval. There can be no assurance that any country that has price controls or reimbursement limitations for biopharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the EU do not follow price structures of the United States and generally prices tend to be significantly lower. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If pricing is set at unsatisfactory levels or if reimbursement of our products is unavailable or limited in scope or amount, our revenues from sales and the potential profitability of any of our product candidates in those countries would be negatively affected.

If we or any third parties working with mebufotenin whom we engage fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We, and third parties working on our behalf, are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations and the operations of third parties operating on our behalf may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In particular, there is limited toxicology data on mebufotenin, and the risk of contamination and injury is higher as we and third parties working on our behalf work with mebufotenin in its aerosolized form. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain employer's liability insurance to cover us for costs and expenses we may incur due to injuries to our employees, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Environmental laws and regulations may impair our research, development or production efforts. In addition, failure to comply with these laws and regulations may result in substantial fines, penalties or other sanctions.

Risks Related to Intellectual Property

We rely on patents, applications for patents and other intellectual property rights to protect our GH001 and GH002 product candidates, the prosecution, enforcement, defense and maintenance of which may be challenging and costly. Failure to adequately prosecute, maintain, enforce or protect these rights could harm our ability to compete and impair our business.

Our commercial success depends in part on obtaining and maintaining patents and other forms of intellectual property rights relating to GH001, GH002 and any future product candidates, methods used to manufacture the underlying therapeutic substances, compositions and methods for treating patients using those substances and therapies and medical devices used to deliver such substances and

therapies, or licensing such rights from third parties. Failure to obtain, maintain, protect, enforce or extend adequate patent and other intellectual property rights could materially adversely affect our ability to develop and market GH001, GH002 and any future product candidates, and medical devices to deliver such product candidates. We also rely on trade secrets and know-how to develop and maintain our proprietary and intellectual property position. Any failure to protect our trade secrets and know-how could similarly adversely affect our operations and prospects.

We cannot be certain that patents will be issued or granted with respect to our or any of our future licensors' pending and future patent applications, or that any of our or our future licensors' issued or granted patents will not later be found to be invalid or unenforceable. The patent position of companies like ours is generally uncertain because it involves complex legal and factual considerations and has, in recent years, been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights is highly uncertain. The standards applied by the European Patent Office, the United States Patent and Trademark Office, or USPTO, and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in pharmaceutical patents. Consequently, patents may not issue from our pending patent applications, and even if they do issue, such patents may not issue in a form that effectively prevents others from developing or commercializing competing therapies. As such, we do not know the degree of future protection that we will have on our proprietary therapies. This risk is further heightened with respect to our GH001 and GH002 product candidates given that the molecule mebufotenin is a known naturally occurring substance.

The patent prosecution process is expensive, complex and time-consuming, and we and any of our third-party licensors, licensees, or collaboration partners may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or our licensors, licensees or collaboration partners will fail to identify patentable aspects of inventions made in the course of research, development or commercialization activities before it is too late to pursue patent protection on them. In addition, although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors, and other third parties, any of these parties may breach these agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not published until and unless granted. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. Similarly, we cannot be certain that for any in-licensed patents or pending patent applications, the named applicant(s) would be the first to make the inventions claimed in such patents or pending patent applications or that the named applicant(s) would be the first to file for patent protection for such inventions.

Moreover, in some circumstances, we may not have the right to control the preparation, filing, prosecution, maintenance, enforcement and defense of patents and patent applications covering technology that we license from or license to third parties, and may be reliant on our licensors, licensees or collaboration partners to do so. Therefore, these patents and applications may not be prepared, filed, prosecuted, maintained, enforced or defended in a manner consistent with the best interests of our business. If any of our current or future licensors, licensees or collaboration partners fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If any of our licensors, licensees or collaboration partners are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patents and other intellectual property rights, such rights could be compromised and our right to develop and commercialize our product candidates that are subject to such license rights could be adversely affected.

The patent examination process may also require us or our licensors, licensees or collaboration partners to narrow the scope of the claims of our or our licensors', licensees' or collaboration partners' pending and future patent applications, which may limit the scope of patent protection that may be obtained. We cannot assure you that all of the potentially relevant prior art relating to our or any of our licensors', licensees' or collaboration partners' patents and patent applications has been found. If such

prior art exists, it can invalidate a patent or prevent a patent from issuing from a pending patent application.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our or any of our licensors', licensees' or collaboration partners' patents may be challenged in the courts or patent offices in the United States and abroad. Even if patents do successfully issue and even if such patents cover GH001, GH002 and any other product candidates, third parties may initiate an opposition, interference, re-examination, post-grant review, inter partes review, nullification or derivation proceedings in court or before patent offices, or similar proceedings challenging the validity, enforceability or scope of such patents. For example, various third parties have filed opposition papers challenging our issued EP patents, directed to mebufotenin or a pharmaceutically acceptable salt thereof for use in treating patients diagnosed with MDD and to the crystalline salt mebufotenin HBr. Any such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated, or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and therapies, or limit the duration of patent protection of our technology and product candidates.

Our and our licensors', licensees' or collaboration partners' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology in the relevant country. In addition, patents and other intellectual property rights will not protect our technology, GH001, GH002 or any other product candidates or medical devices to deliver such product candidates if third parties, including our competitors, design around our protected technology, GH001, GH002 or any other product candidates or medical devices to deliver such product candidates without infringing, misappropriating or otherwise violating our owned or in-licensed patents or other intellectual property rights. Moreover, some of our patents and patent applications may be co-owned with third parties in the future. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including our competitors, and our competitors could market competing therapies and technology. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against third parties, and such cooperation may not be provided to us. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Because patent applications are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we or our licensors, licensees or collaborators were or will be the first to file any patent application related to a product candidate. Furthermore, if U.S. patent applications of third parties have an effective filing date before March 16, 2013, an interference proceeding can be initiated by such third parties to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If U.S. patent applications of third parties have an effective filing date on or after March 16, 2013, a derivation proceeding can be initiated by such third parties to determine whether our invention was derived from theirs. Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing our invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license. In addition, we may be subject to third-party challenges regarding our exclusive ownership of our intellectual property. If a third party were successful in challenging our exclusive ownership of any of our intellectual property, we may lose our right to use such intellectual property, such third party may be able to license such intellectual property to other third parties, including our competitors, and our competitors could market competing therapies and technology. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Furthermore, our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. For example, we may develop, acquire or license intellectual property rights that have been generated through the use of U.S. government funding. As a result, the U.S. government may have certain rights, or march-in rights, to such patent rights and technology. When new technologies are developed with U.S. government funding, the U.S. government generally obtains certain rights in any resulting patents, including a non-exclusive, worldwide, irrevocable license authorizing the U.S. government to use the inventions for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise march-in

rights to use or allow third parties to use our technology. The U.S. government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. The U.S. government also has the right to take title to these inventions if the grant recipient fails to disclose the invention to the government or fails to file an application to register the intellectual property within specified time limits. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any exercise by the government of such rights could harm our competitive position, business, financial condition, results of operations and prospects.

We may be involved in lawsuits or administrative proceedings to protect or enforce our patents or other intellectual property rights, and issued patents covering one or more of our product candidates could be found invalid or unenforceable if challenged in court.

Competitors or other third parties may infringe, misappropriate or otherwise violate our patents, the patents of our licensors or our other intellectual property rights. To protect our competitive position, we may from time to time need to resort to litigation in order to enforce or defend any patents or other intellectual property rights owned by or licensed to us, or to determine or challenge the scope or validity of patents or other intellectual property rights of third parties. Enforcement of intellectual property rights is difficult, unpredictable and expensive, and many of our or our licensors' or collaboration partners' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions and better sustain the costs of such actions than we or our licensors or collaboration partners can. Accordingly, despite our or our licensors' or collaboration partners' efforts, we or our licensors or collaboration partners may not prevent third parties from infringing upon, misappropriating or otherwise violating intellectual property rights we own or control, particularly in countries where the laws may not protect those rights as fully as in the UK, EU and the United States. We may also fail in enforcing our rights, in which case our competitors and other third parties may be permitted to use our therapies or other technologies without payment to us.

In addition, litigation involving our patents carries the risk that one or more of our patents will be narrowed, held invalid (in whole or in part, on a claim-by-claim basis) or held unenforceable. Such an adverse court ruling could allow third parties to commercialize our therapies or other technologies, and then compete directly with us, without payment to us.

If we were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that our patent is invalid or unenforceable. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the European Patent Office, or the USPTO, or made a misleading statement during prosecution. In patent litigation in the United States or in Europe, defendant counterclaims alleging invalidity or unenforceability are commonplace. A claim for a validity challenge may be based on failure to meet any of several statutory requirements, for example, lack of novelty, obviousness, lack of written description or non-enablement. Such proceedings could result in the revocation of, cancellation of, or amendment to our patents in such a way that they no longer cover GH001, GH002 or any other product candidates or medical devices to deliver such product candidates. The outcome following legal assertions of invalidity and unenforceability during patent litigation or other proceedings is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware during prosecution. If a defendant or third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on GH001, GH002 or one or more of any other product candidates or medical devices to deliver such product candidates. Such a loss of patent protection could have a material adverse impact on our business financial condition, results of operations, and prospects. Further, litigation could result in substantial costs and diversion of management resources, regardless of the outcome, and this could harm our business and financial results.

We may also be subject to claims challenging the inventorship or ownership of our patents and other intellectual property. It is possible that we do not perfect our ownership of all patents, patent applications and other intellectual property. This possibility includes the risk that we do not identify all inventors, or identify incorrect inventors, which may lead to claims disputing inventorship or ownership of our patents, patent applications and other intellectual property by former employees or other third

parties. There is also a risk that we do not establish an unbroken chain of title from inventors to us. Errors in inventorship or ownership can sometimes also impact priority claims. If we were to lose the ability to claim priority for certain patent filings, intervening art or other events may preclude us from being issued patents. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to monetary damages, we may lose valuable intellectual property rights. Such an outcome could significantly harm our business and financial results.

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

Periodic maintenance, renewal, annuity and various other governmental fees on any issued or applied-for patents are due to be paid to the European Patent Office, the USPTO and foreign patent agencies in several stages over the lifetime of a patent. The European Patent Office, the USPTO and various foreign governmental patent agencies also require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In certain circumstances, we may rely on our collaboration partners, law firms or other professionals to pay these fees due to the USPTO and comparable foreign patent agencies and to take the necessary action to comply with such requirements with respect to our intellectual property. While instances of inadvertent non-compliance can, in many cases, be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of a patent or patent application, resulting in a partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our service providers, licensors or collaboration partners fail to maintain the patents and patent applications covering our product candidates, our patent protection could be reduced or eliminated and third parties, including our competitors, might be able to enter the market with similar or identical therapies or technologies, which would have a material adverse effect on our business, financial condition, results of operations, and prospects. In addition, if we fail to apply for or otherwise fail to obtain applicable patent term extensions or adjustments as a result of such non-compliance, we will have a more limited time during which we can enforce our granted patent rights. Further, if we are responsible for patent prosecution and maintenance of patent rights in-licensed to us, any of the foregoing could expose us to liability to the applicable patent owner.

If we do not obtain protection under the Hatch-Waxman Act and similar foreign legislation for extending the term of patents covering each of our product candidates, our business may be materially harmed.

In the United States, if all maintenance fees are paid on time, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but there can be no assurance that any such extensions will be obtained, and the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates, their manufacture or use are obtained, once the patent life has expired, we may be open to competition from competitive therapies or technologies. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates and concomitant therapies might expire before or shortly after such candidates and concomitant therapies are commercialized. As a result, our owned and in-licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing therapies similar or identical to ours.

Depending upon the timing, duration and conditions of FDA marketing approval of GH001, GH002 and any other future product candidates and medical devices to deliver such product candidates, one or more U.S. patents that we may own or license in the future may be eligible for a limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the normal expiration for a patent covering an approved product as compensation for effective patent term loss during product development and the FDA regulatory review process. The patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product

approval, is limited to the approved indication (or any additional indications approved during the period of extension) and only one patent per approved drug may be extended and only those claims covering the approved drug, a method for using it, or a method of manufacturing it may be extended. Patent term extension, or other related rights such as supplementary protection certificates, may also be available in certain foreign jurisdictions, including the EU, upon regulatory approval of any product candidates we develop. However, we may not receive an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product will not be lengthened and third parties, including our competitors, may obtain approval to market competing therapies sooner than we expect. As a result, our revenue from applicable therapies could be materially reduced and our business, financial condition, results of operations, and prospects could be materially harmed.

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

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

- others may be able to make compositions that are the same as or similar to GH001, GH002 and any other product candidate compositions, or may be able to make medical devices to deliver such compositions, that are not covered by the claims of the patents that we own or license;
- the patents of third parties may have an adverse effect on our business;
- we or our licensors or collaboration partners might not have been the first to conceive or reduce to practice the inventions covered by the issued patent or pending patent application that we own or license;
- we or our licensors or collaboration partners might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing, misappropriating or otherwise violating our intellectual property rights;
- it is possible that current and future pending patent applications we own or in-license will not lead to issued patents;
- issued patents that we own or in-license may not provide us with any competitive advantage, or may be held invalid or unenforceable as a result of legal challenges by third parties;
- issued patents that we own or in-license may not have sufficient term or geographic scope to provide meaningful protection;
- our competitors might conduct research and development activities in countries that provide a safe harbor from patent infringement claims for certain research and development activities or in countries where we do not have patent rights and then use the information learned from such activities to develop competitive therapies for sale in our major commercial markets;
- third parties performing manufacturing or testing for us using our therapies or technologies could use the intellectual property of others without obtaining a proper license;
- we may not develop additional technologies that are patentable; and

- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property, or otherwise develop similar know-how.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We may be subject to claims by third parties asserting that we or our employees, consultants or advisors have misappropriated their intellectual property, including trade secrets, or claiming ownership of what we regard as our own intellectual property.

Many of our consultants, advisors and employees, including our senior management, were previously employed at other biotechnology or pharmaceutical companies, including our competitors and potential competitors. Some of these individuals executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although we intend that our consultants, advisors and employees do not use proprietary information or know-how of their former employers while working for us, we may be subject to claims that we or these individuals have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such individual's former employer. Litigation may be necessary to defend against these claims, regardless of their merit, and we cannot predict whether we would prevail in any such actions. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages, our development and commercialization efforts may be prevented or delayed, and we could be required to obtain a license from such third party to commercialize our therapies or other technologies. Such a license may not be available on commercially reasonable terms or at all. Even if we successfully prosecute or defend against such claims, litigation could result in substantial costs and distract our management from its day-to-day activities, and may cause negative publicity.

In addition, we may be subject to claims by our current or former employees or contractors asserting an ownership right in our intellectual property as a result of the work they performed on our behalf. While it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own, and we cannot be certain that our agreements with such parties will be upheld in the face of a potential challenge. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, for which we may not have an adequate remedy, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Intellectual property rights of third parties could adversely affect our ability to compete or commercialize our product candidates. Third parties may allege that we are infringing, misappropriating or otherwise violating their intellectual property rights such that we could be required to litigate or obtain licenses from third parties in order to develop or market our product candidates, which could be costly and have a negative impact on the success of our business.

Our commercial success depends, in part, upon our ability and the ability of our current and future collaborators to develop, manufacture, market, and sell any product candidates and devices to deliver such product candidates that we may develop and use our proprietary technologies without infringing, misappropriating or otherwise violating the intellectual property and proprietary rights of third parties. The various markets in which we plan to operate are subject to frequent and extensive litigation regarding patents and other intellectual property rights. In the future, we may become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to GH001, GH002 or any other product candidates or medical devices to deliver such product candidates. If the outcome of any such proceeding or litigation is adverse to us, it may affect our ability to compete effectively.

Additionally, our competitive position may suffer if patents issued to third parties, or other third-party intellectual property rights, cover our therapies or elements thereof, our manufacture or uses relevant

to our development plans, the targets of GH001, GH002 or any other product candidates, or medical devices to deliver such product candidates, or other attributes of GH001, GH002 or any other product candidates. In such cases, we may not be in a position to develop or commercialize such product candidates or devices to deliver such product candidates unless we successfully pursue litigation to nullify or invalidate the third-party intellectual property right concerned, or enter into a license agreement with the intellectual property right holder, which may not be available on commercially reasonable terms or at all. In the event that a patent has not expired at the time of approval of such product candidate(s) and the patent owner were to bring an infringement action against us, we may have to argue that our product candidates or the manufacture or use of the underlying therapeutic substances or devices to deliver such product candidates do not infringe a valid claim of the patent in question. Alternatively, if we were to challenge the validity of any issued U.S. patent in court, we would need to overcome a statutory presumption of validity that attaches to every U.S. patent. This means that in order to prevail, we would need to present clear and convincing evidence as to the invalidity of the patent's claims. The same applies to certain other jurisdictions. Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, or priority. In the event that a third party successfully asserts its patent against us such that such third party's patent is found to be valid and enforceable and infringed by our product candidates, unless we obtain a license to such patent, under which we would most likely be required to pay various types of fees, milestones, royalties or other amounts, and which may not be available on commercially reasonable terms or at all, we could be prevented from continuing to develop or commercialize our product candidates without an effective redesign, which may not be feasible from a technical perspective, or in a timely manner from a commercial perspective, either of which could have a material adverse effect on our business.

It is possible that we have failed, and in the future may fail, to identify relevant patents or applications that may be asserted against us. For example, certain U.S. patent applications filed after November 29, 2000, can remain confidential until and unless issued as patents, provided that inventions disclosed in the applications have not and will not be the subject of a corresponding application filed outside the United States. In general, patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our therapies could have been filed by others without our knowledge. Furthermore, we operate in a highly competitive field, and given our limited resources, it is unreasonable to monitor all patent applications in the areas in which we are active. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our therapies or the use of our therapies.

Third-party intellectual property right holders, including our competitors, may actively bring infringement, misappropriation or violation claims against us based on existing or future intellectual property rights, regardless of their merit. We may not be able to successfully settle or otherwise resolve such infringement claims. If we are unable to successfully settle future claims on terms acceptable to us, we may be required to engage or continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in marketing our therapies. Moreover, we may face patent infringement claims from nonpracticing entities that have no relevant drug revenue and against whom our own patent portfolio may thus have no deterrent effect.

If we are unsuccessful in defending any such claim, in addition to being forced to pay damages, we or our licensees may be temporarily or permanently prohibited from commercializing any of our product candidates or devices to deliver such product candidates that were held to be infringing. If possible, we might be forced to redesign GH001, GH002 or any other product candidates or medical devices to deliver such product candidates so that we no longer infringe the intellectual property rights of third parties, or we may be required to seek a license to any such technology that we are found to infringe, which license may not be available on commercially reasonable terms or at all. Even if we or our licensors or collaboration partners obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors or collaboration partners and it could require us to make significant licensing and royalty payments. In addition, we could be found liable for significant monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent or other intellectual property right. We could also be required to indemnify collaborators or contractors against such claims. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar material adverse effect on

our business, financial condition, results of operations, and prospects. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

In addition, if the breadth or strength of protection provided by our or our licensors' or collaboration partners' patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

Intellectual property litigation could cause us to spend substantial resources, distract our personnel from their normal responsibilities, harming our reputation and our business operations.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to continue our clinical trials, continue our internal research programs or in-license needed technology. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our ordinary shares. Such litigation or proceedings could substantially increase our operating losses and reduce our resources available for development and commercialization activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. Uncertainties resulting from the initiation and continuation of patent litigation or other intellectual property proceedings could have a material adverse effect on our ability to compete in the marketplace.

We may not be successful in obtaining or maintaining necessary rights to GH001, GH002 or any other product candidates or any medical devices to deliver such product candidates through acquisitions and in-licenses.

In the future, our programs may require the use of intellectual property or proprietary rights held by third parties, and the growth of our business will likely depend in part on our ability to acquire, in-license, maintain and use these intellectual property and proprietary rights.

For our GH001 inhaled product candidate, for current and previous clinical trials, we acquire the device used to create the inhaled aerosol from a third party. The device and our uses thereof may be covered by one or more patents issued to such third party or other third parties, or other intellectual property rights of such third party or other third parties. We do not currently have a commercial supply agreement with this third party, nor have we established license agreements with any alternative provider of a suitable device. In 2021, we initiated the development of a proprietary aerosol delivery device for GH001 for use in our pivotal clinical trial program and for commercial use. However, despite our efforts to proactively identify any such third-party rights, this proprietary device and our uses thereof may be covered by one or more patents issued to third parties, or other intellectual property rights of third parties. In the event that a third party successfully asserts its intellectual property rights against us, unless we obtain a license to such intellectual property rights, under which we would most likely be required to pay various types of fees, milestones, royalties or other amounts, and which may not be available on commercially reasonable terms or at all, we could be prevented from continuing to develop or commercialize our proprietary aerosol delivery device for GH001. Further, for GH002 and any future delivery platforms that include the use of a device, we plan to either license or acquire the required delivery devices from third parties or work with a CDMO to develop such device and establish manufacturing capabilities for such device. However, we may not be able to in-license the relevant technology, acquire the required delivery device or develop a proprietary delivery device, and our competitive position may suffer if we are unable to obtain necessary commercial supply agreements, licenses, or development agreements with the third parties.

In addition, with respect to any patents we may co-own with third parties, we may require licenses to such co-owners' interest in such patents.

We may be unable to acquire or in-license any compositions, methods of use, processes, or other third-party intellectual property rights from third parties that we identify as necessary for GH001, GH002 or any other product candidates or medical devices to deliver such product candidates on commercially reasonable terms or at all. For example, we may collaborate with U.S. and foreign academic institutions to accelerate our nonclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our applicable investigational therapy or program.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. If we are unable to successfully acquire or obtain a license to third-party intellectual property rights necessary for the development of an investigational therapy or program, or maintain the existing intellectual property rights we have, we may have to abandon development of that investigational therapy or program, which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Furthermore, even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments.

Changes in patent laws or patent jurisprudence could diminish the value of patents in general or prevent us from obtaining adequate patent protection, and thereby impair our ability to protect our product candidates.

As is the case with other companies in our industry, our success is heavily dependent on obtaining, maintaining, protecting and enforcing our intellectual property rights, particularly patents. Obtaining and enforcing patent rights in the pharmaceutical industry involves technological and legal complexity, and is costly, time-consuming and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States or other jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For example, the America Invents Act, or the AIA, enacted in the United States in 2012 and 2013, has resulted in significant changes to the U.S. patent system.

Prior to the enactment of the AIA, assuming that other requirements for patentability are met, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 16, 2013, under the AIA, the United States transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention regardless of whether a third party was the first to invent the claimed invention. Under this regime, a third party that files a patent application in the USPTO before us could be awarded a patent covering an invention of ours even if we made the invention before the third party. The AIA requires us to be cognizant going forward of the time from invention to filing of a patent application, but circumstances could prevent us from promptly filing patent applications on our inventions.

Among some of the other significant changes introduced by the AIA are changes that limit where a patentee may file a patent infringement suit and provide additional opportunities for third parties to challenge any pending patent application or issued patent in the USPTO. Such opportunities include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim in any of our future U.S. patents invalid even though the same

evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use USPTO procedures to invalidate patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. The AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of any of our future U.S. patent applications and the enforcement or defense of any patents that may issue from such patent applications.

Additionally, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts and the USPTO, or similar authorities in foreign jurisdictions, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce patents that we might obtain in the future. In particular, Europe's new Unified Patent Court, or UPC, may give rise to uncertainties relating to our ability to enforce our existing patent applications and any patents that we might obtain in the future. This new court came into force on June 1, 2023, and while it is intended to bring significant benefits to patent holders, including greater efficiency and certainty to patent enforcement in the UPC signatory states, it also provides parties with a new means by which to centrally revoke European patents in the countries over which it has jurisdiction, which may change over time. As it is a new court with no established body of case law, the full scope of patent rights and remedies that will be afforded to patentees under the UPC will not become clear for a number of years. We will have the ability to opt our patents out of this system for the first seven years of the UPC's existence but doing so might preclude us from availing of the advantages this jurisdiction has to offer.

If we fail to comply with our obligations under the agreements pursuant to which we license intellectual property rights to or from third parties, or otherwise experience disruptions to our business relationships with our licensors, licensees or collaborators, we could lose the rights to intellectual property that is important to our business and lose the ability to continue the development and/or commercialization of our product candidates.

We are party to development agreements with CDMOs under which we grant such CDMOs non-exclusive rights to use certain of our intellectual property as necessary for such CDMOs to perform their obligations under such agreements, and under which we are granted non-exclusive rights to use certain of such CDMOs' intellectual property as necessary in order to use and exploit such CDMOs' deliverables under such agreements. We expect that we may need to enter into additional license or collaboration agreements in the future that may be important to our business. We expect that future license agreements may impose various financial and other obligations on us related to, among other things, therapeutic development and payment of royalties and fees based on achieving certain milestones. In addition, under such future license agreements, we may be prohibited from developing and commercializing therapies that would compete with the therapies licensed under such agreements. If we fail to comply with our obligations under these agreements, our licensor or collaboration partner may have the right to terminate the agreement, including any licenses included in such agreement, and we may face other liabilities for breach of such agreement.

The termination of any license or collaboration agreements or failure to adequately protect our or our collaborators' rights under such license or collaboration agreements could prevent us from further developing or commercializing GH001, GH002 or any other product candidates or medical devices to deliver such product candidates covered by the agreement or intellectual property licensed thereunder. For example, we may rely on license agreements which grant us rights to certain intellectual property and proprietary materials that we use in connection with the development of our therapies. If such agreements were to terminate, we may be unable to timely license similar intellectual property and proprietary materials from an alternate source, on commercially reasonable terms or at all, and may be required to conduct additional bridging studies on GH001, GH002 or any other product candidates or medical devices to deliver such product candidates or redesign our product candidates, or medical devices, or the methods for manufacturing them, which could delay or otherwise have a material adverse effect on the development and commercialization of GH001, GH002 or any other product candidates or medical devices to deliver such product candidates.

Our existing and future license agreements may also contain sublicenses from third parties which are not the original licensor of the intellectual property at issue. Under these agreements, we must rely on our licensor to comply with its obligations under the primary license agreements under which such third party obtained rights in the applicable intellectual property, where we may have no relationship with the original licensor of such rights. If our licensors fail to comply with their obligations under these upstream license agreements, the original third-party licensor may have the right to terminate the original license, which may terminate the sublicense. If this were to occur, we would no longer have rights to the applicable intellectual property and, in the case of a sublicense, if we were not able to secure our own direct license with the owner of the relevant rights, which we may not be able to do at a reasonable cost or on reasonable terms, it may adversely affect our ability to continue to develop and commercialize GH001, GH002 or any other product candidates or medical devices to deliver such product candidates incorporating the relevant intellectual property.

Disputes may arise regarding intellectual property subject to a license or collaboration agreement, including the following:

- the scope of rights granted under the agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe, misappropriate or otherwise violate intellectual property of the licensor or collaboration partner that is not subject to the agreement;
- the sublicensing of patents and other rights under any current or future collaboration relationships;
- our diligence obligations under the agreement and what activities satisfy those diligence obligations;
- our rights to transfer or assign the agreement;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our collaboration partners; and
- the priority of invention of patented technology.

In addition, third-party license and collaboration agreements are complex, and 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 have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidate, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

Obligations, including contractual relationships with and statutory requirements regarding employees and others may not adequately prevent disclosure of our trade secrets and protect other proprietary information.

We consider our trade secrets and proprietary confidential and unpatented know-how to be important to our business. We rely on trade secrets and confidential know-how to protect our proprietary technology, especially where patent protection is believed to be of limited value. However, trade secrets and know-how are difficult to maintain as confidential and we may, at times, have to share our trade secrets and confidential know-how with third parties with whom we collaborate for development, manufacturing or commercialization (e.g. via joint research and development programs), or with regulatory agencies with whom we interact during development and to secure approval of our current or future product candidates.

To protect this type of information against disclosure or misappropriation by third parties and our competitors, our policy is to require our employees, consultants, contractors and advisors to enter into

confidentiality agreements with us. However, we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or confidential know-how. Also, current or former employees, consultants, contractors and advisors may unintentionally or willfully disclose our trade secrets and confidential know-how to our competitors and other third parties or breach such agreements. We rely on the statutory and regulatory confidentiality obligations certain regulatory agencies have to us when submitting information to them. These obligations may not be adequate to protect our trade secrets and confidential know-how from disclosure and unauthorized use. Monitoring unauthorized uses and disclosures is difficult, and enforcing a claim that a third party illegally obtained and is using our trade secrets or confidential know-how is difficult, expensive, time-consuming and unpredictable. The enforceability of confidentiality obligations may vary from jurisdiction to jurisdiction and courts outside the United States are sometimes less willing to protect trade secrets. We may not be able to obtain an adequate remedy for such disclosures either because it was not awarded to us or if it is unavailable under the local laws and jurisprudence. Furthermore, if a competitor or other third party lawfully obtained or independently developed any of our trade secrets or confidential know-how, we would have no right to prevent such competitor or other third party from using that technology or information to compete with us, which could harm our competitive position. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating such trade secrets. If any of our trade secrets were to be disclosed to, or independently developed by a competitor or other third party, or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position would be materially and adversely harmed.

Failure to obtain or maintain trade secret protection could adversely affect our competitive position. Moreover, our competitors may independently develop substantially equivalent proprietary information and may even apply for patent protection in respect of the same. If successful in obtaining such patent protection, our competitors could limit our use of our trade secrets or confidential know-how.

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

We expect to rely on trademarks in the future as a means to distinguish our product candidates that are approved for marketing from the products of our competitors. We have not yet selected trademarks for our product candidates and have not yet begun the process of applying to register trademarks for GH001, GH002 or any other product candidates. Once we select trademarks and apply to register them, our trademark applications may not be approved. Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks, in which case we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. Accordingly, we may not be able to adequately protect our rights to these trademarks and trade names, which we need to build name recognition by potential partners or customers in our markets of interest. If we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. If other entities use trademarks similar to ours in different jurisdictions, or have senior rights to ours, it could interfere with our use of our trademarks throughout the world.

We may not be able to protect our intellectual property rights throughout the world and may face difficulties in certain jurisdictions, which may diminish the value of intellectual property rights in those jurisdictions and negatively impact our business.

We or our licensors have not pursued or maintained, and may not pursue or maintain in the future, patent protection for our product candidates in every country or territory in which we may sell our products, if approved. Filing, prosecuting and defending patents covering product candidates in all countries and jurisdictions throughout the world would be prohibitively expensive and our licensors' or collaboration partners' intellectual property rights in some countries outside of, for instance, the member states of the European Patent Convention and the United States, could be less extensive than those in the member states of the European Patent Convention and the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries, or from selling therapies or importing therapeutic compositions made using our inventions in and into, for instance, the member states of the European Patent Convention and the United States, or other jurisdictions. In addition, we may decide to abandon national and regional patent applications before grant.

Furthermore, the grant proceeding of each national/regional patent is an independent proceeding which may lead to situations in which applications might in some jurisdictions be refused by the relevant patent offices, while granted by others. It is also quite common that depending on the country, the scope of patent protection may vary for the same product candidate or technology.

Competitors may use our and our licensors' or collaboration partners' technologies in jurisdictions where we have not obtained patent protection to develop their own therapies and, further, may export otherwise infringing therapies to territories where we and our licensors or collaboration partners have patent protection, but where enforcement is not as strong as in other jurisdictions. These therapies may compete with GH001, GH002 or any other product candidates, and our and our licensors' or collaboration partners' patents or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

The laws of some jurisdictions do not protect intellectual property rights to the same extent as the laws in, for instance, the member states of the European Patent Convention and the United States, and companies have encountered significant difficulties in protecting and defending such rights in such jurisdictions. If we or our licensors encounter difficulties in protecting, or are otherwise precluded from effectively protecting, the intellectual property rights important for our business in such jurisdictions, the value of these rights may be diminished and we may face additional competition from others in those jurisdictions.

Some countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, some countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors or collaboration partners is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired and our business and results of operations may be adversely affected.

Proceedings to enforce our and our licensors' or collaboration partners' patent rights in foreign jurisdictions could result in substantial costs and divert our and our licensors' or collaboration partners' efforts and attention from other aspects of our business, regardless of whether we or our licensors or collaboration partners are successful, and could put our and our licensors' or collaboration partners' patents at risk of being invalidated or interpreted narrowly. In addition, such proceedings could put our and our licensors' or collaboration partners' patent applications at risk of not issuing and could provoke third parties to assert claims against us or our licensors or collaboration partners. We or our licensors or collaboration partners may not prevail in any lawsuits that we or our licensors or collaboration partners initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Risks Related to Our Dependence on Third Parties

We rely on third parties to assist in conducting our nonclinical studies and clinical trials. If they do not perform satisfactorily, we may not be able to initiate new clinical trials, successfully complete clinical trials, obtain regulatory approval or commercialize our product candidates, or such approval or commercialization may be delayed, and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third parties, such as laboratories, CROs, clinical data management organizations, medical institutions, clinical investigators and consultants, to organize, support or conduct our nonclinical studies and clinical trials and expect to rely on these third parties to conduct nonclinical studies and clinical trials of any other product candidate that we develop. Any of these third parties may terminate their engagements with us under certain circumstances. We may not be able to enter into alternative arrangements or do so on commercially reasonable terms. In addition, there is a natural transition period when a new CRO begins work. As a result, delays may occur, which could negatively impact our ability to meet our expected clinical development timelines and harm our business, financial condition and prospects.

Although our reliance on these third parties for nonclinical and clinical development activities limits our control over these activities, we remain responsible for ensuring that each of our nonclinical studies

and clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards. Moreover, human clinical research must comply with GCPs for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators, clinical trial sites and IRBs. If we or our third-party contractors fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the regulatory authorities may require us to perform additional clinical trials before approving our product candidates, which would delay the regulatory approval process. We cannot be certain that, upon inspection, a regulatory authority will determine that any of our clinical trials comply with GCPs.

The third parties conducting nonclinical studies and clinical trials on our behalf are not our employees, and except for remedies available to us under our agreements with such contractors, we cannot control whether or not they devote sufficient time, skill and resources to our ongoing development programs. These outside contractors may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. These contractors may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could impede their ability to devote appropriate time to our clinical programs. If these third parties, including clinical investigators, do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we may not be able to obtain, or may be delayed in obtaining, regulatory approvals for our product candidates. If that occurs, we will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. In such an event, our financial results and the commercial prospects for any product candidates that we seek to develop could be harmed, our costs could increase and our ability to generate revenues could be delayed, impaired or foreclosed.

If our relationships with any third parties conducting our studies are terminated, we may be unable to enter into arrangements with alternative third parties on commercially reasonable terms, or at all. Switching or adding third parties to conduct our studies involves substantial cost and requires extensive management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays occur, which can materially impact our ability to meet our desired nonclinical and clinical development timelines. Although we carefully manage our relationships with third parties conducting our studies, we cannot assure that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material and adverse effect on our business, financial condition and results of operations.

We also rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or regulatory approval of our product candidates or commercialization of any resulting products, producing additional losses and depriving us of potential product revenue.

The development and manufacture of our active pharmaceutical ingredients, product candidates and medical devices required to deliver such product candidates is complex, and we may encounter difficulties during further development or in production. We currently rely completely on third parties to develop, formulate and manufacture our nonclinical study and clinical trial supplies. The development and commercialization of any of our active pharmaceutical ingredients, product candidates and medical devices required to deliver such product candidates could be stopped, delayed or made less profitable if those third parties fail to provide us with sufficient quantities of such drug supplies or fail to do so at acceptable quality levels, including in accordance with rigorously enforced regulatory requirements or contractual obligations, and our operations could be harmed as a result.

The processes involved in developing and manufacturing our drug substance, product candidates and medical devices required to deliver such product candidates are complex, expensive, highly regulated and subject to multiple risks. Further, as drug substance, product candidates and medical devices required to deliver such product candidates are developed through nonclinical studies, from early-stage clinical trials to late-stage clinical trials towards approval and commercialization, it is common that various aspects of the drug substance, product candidates and medical devices required to deliver such product candidates, such as technical specifications, design, features and manufacturing

methods, are altered along the way in an effort to optimize performance, processes and results and to fulfill regulatory requirements, which are stricter for late-stage clinical trials and commercial manufacture than for early-stage trials. We are currently implementing such changes, which carries the risk that they will not achieve the intended objectives, or could lead to delays, and any of these changes could require the conduct of bridging studies and could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials. Additionally, the manner in which we currently manufacture our drug substance and product candidates and medical devices required to deliver such product candidates may not fulfill regulatory requirements for late-stage clinical trials and for commercial use, and there can be no assurance that we will be able to manufacture our drug substance and product candidates in a manner that would fulfill such regulatory requirements in a timely manner, or at all. We have limited experience in drug formulation or manufacturing. Currently, we rely on an extensive network of consultants and contract manufacturers, and in some cases sole source suppliers, for the production of our drug substance, product candidates and medical devices required to deliver such product candidates for current and planned clinical trials.

In order to conduct clinical trials of our product candidates, or supply commercial products, if approved, we will need to manufacture them and the drug substance contained in our product candidates in large quantities. Our CDMOs may be unable to successfully increase the manufacturing capacity for our drug substance and any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If our CDMOs are unable to successfully scale up the manufacture of our drug substance or product candidates in sufficient quality and quantity, the development, testing and clinical trials of that product candidate may be delayed or become infeasible, and regulatory approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business. The same risk would apply to our internal manufacturing facilities, should we decide to build internal manufacturing capacity in the future. In addition, building internal manufacturing capacity would carry significant risks in terms of being able to plan, design and execute on a complex project to build manufacturing facilities in a timely and cost-efficient manner, and the resources associated with ensuring the ongoing regulatory compliance of such manufacturing facilities would be significant.

In addition, the manufacturing process for any products that we may develop is subject to FDA, EMA, and comparable foreign regulatory authority approval processes and continuous oversight, and we will need to contract with manufacturers who can meet all applicable FDA, EMA and foreign regulatory authority requirements, including complying with cGMPs on an ongoing basis. Although our agreements with our CDMOs require them to perform according to certain cGMP requirements such as those relating to quality control, quality assurance and qualified personnel, we cannot control the ability of our CDMOs to implement and maintain these standards. If we or our third-party manufacturers are unable to reliably produce products to specifications acceptable to the FDA, EMA or other comparable foreign regulatory authorities or maintain a compliance status acceptable to the FDA, EMA, or other comparable foreign regulatory authorities, we may not obtain or maintain the approvals we need to commercialize such products. Even if we obtain regulatory approval for any of our product candidates, there is no assurance that either we or our CDMOs will be able to manufacture the approved product to specifications acceptable to the FDA, EMA, or other comparable foreign regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product, or to meet potential future demand. Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates, impair commercialization efforts, increase our cost of goods and have an adverse effect on our business, financial condition, results of operations and prospects.

If any third-party manufacturer of our product candidates is unable to increase the scale of its production of our product candidates, and/or increase the product yield of its manufacturing, then our costs to manufacture the product may increase and commercialization may be delayed.

In order to produce sufficient quantities to meet the demand for clinical trials and, if approved, subsequent commercialization of our product candidates that we may develop, our third-party manufacturers will be required to increase their production and optimize their manufacturing processes while maintaining the quality of the product. The transition to larger scale production could prove difficult. In addition, if our third-party manufacturers are not able to optimize their manufacturing processes to increase the product yield for our product candidates, or if they are unable to produce increased

amounts of our product candidates while maintaining the quality of the product, then we may not be able to meet the demands of clinical trials or market demands, which could decrease our ability to generate profits and have a material adverse impact on our business and results of operation.

We depend on third-party suppliers for key raw materials used in our manufacturing processes, as well as for the vaporization device used to administer GH001, and we expect to depend on third-party suppliers for the devices required for administration of GH002, some of which are our sole source of supply, and the loss of these third-party suppliers or their inability to supply us with adequate raw materials or medical devices could harm our business.

We rely on our CDMOs to purchase from third-party suppliers the materials necessary to produce our product candidates for our clinical trials. We do not have, nor do we expect to enter into, any agreements for the commercial production of these raw materials, and we do not expect to have any control over the process or timing of our CDMOs' acquisition of raw materials needed to produce our product candidates. Furthermore, while we have initiated the development of a proprietary aerosol delivery device for GH001, we currently purchase the vaporization device with which we administer GH001 from a single third-party manufacturer, Storz & Bickel, Tuttlingen. We do not have a commercial supply agreement with such third-party manufacturer. Any significant delay in the supply of a product candidate, the raw material components thereof or any device necessary to administer our products for an ongoing clinical trial due to a manufacturer's need to replace a third-party supplier of raw materials or medical devices could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates. Additionally, if our future manufacturers or we are unable to purchase these raw materials to commercially produce any of our product candidates that gains regulatory approvals, or if we are unable to purchase or manufacture medical devices with which we administer any of our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of our product candidates.

A significant number of components in our proprietary aerosol delivery device for GH001 are manufactured in China. As such, if the relationship between China and Taiwan were to materially deteriorate, or if a trade war or other series of events were to occur that disrupted our supply chain for these raw materials, such changes could adversely affect our ability to conduct ongoing and future clinical trials of our product candidates, and/or adversely affect our ability to commercialize our products (subject to regulatory approval).

Furthermore, for those third-party suppliers who are our sole source of supply of certain materials, we may not have arrangements in place for a redundant or second-source supply of any such materials or medical devices in the event any of our current suppliers cease their operations for any reason. Establishing additional or replacement suppliers for the raw materials used in our product candidates or medical devices used to administer our product candidates, if required, may not be accomplished quickly. If we are able to find a replacement supplier, such replacement supplier would need to be qualified and may require additional regulatory inspection or approval, which could result in further delay.

We expect to depend on collaborations with third parties for the research, development and commercialization of certain of the product candidates we may develop. If any such collaborations are not successful, we may not be able to realize the market potential of those product candidates.

We are currently seeking and may continue to seek third-party collaborators for the research, development and commercialization of certain of the product candidates we may develop. Our likely collaborators include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies, biotechnology companies and academic institutions. If we enter into any such arrangements with any third parties, we will likely have shared or limited control over the amount and timing of resources that our collaborators dedicate to the development or potential commercialization of any product candidates we may seek to develop with them. Our ability to generate revenue from these arrangements with commercial entities will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements. We cannot predict the success of any collaboration that we enter into.

Collaborations involving our research programs, or any product candidates we may develop, pose the following risks to us:

- collaborators generally have significant discretion in determining the amount and timing of efforts and resources that they will apply to these collaborations;

- collaborators may not properly obtain, maintain, enforce or defend intellectual property or proprietary rights relating to our product candidates or research programs, or may use our proprietary information in such a way as to expose us to potential litigation or other intellectual property-related proceedings, including proceedings challenging the scope, ownership, validity and enforceability of our intellectual property;

- collaborators may own or co-own intellectual property covering our product candidates or research programs that results from our collaboration with them, and in such cases, we may not have the exclusive right to commercialize such intellectual property or such product candidates or research programs;

- we may need the cooperation of our collaborators to enforce or defend any intellectual property we contribute to or that arises out of our collaborations, which may not be provided to us;

- collaborators may control certain interactions with regulatory authorities, which may impact our ability to obtain and maintain regulatory approval of our product candidates;

- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our product candidates or research programs or that result in costly litigation or arbitration that diverts management attention and resources;

- collaborators may decide to not pursue development and commercialization of any product candidates we develop or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding or external factors such as an acquisition that diverts resources or creates competing priorities;

- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;

- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates or research programs if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;

- collaborators may restrict us from researching, developing or commercializing certain products or technologies without their involvement;

- collaborators with marketing and distribution rights to one or more product candidates may not commit sufficient resources to the marketing and distribution of such product candidates;

- we may lose certain valuable rights under circumstances identified in our collaborations, including if we undergo a change of control;

- collaborators may grant sublicenses to our technology or product candidates or undergo a change of control and the sublicensees or new owners may decide to take the collaboration in a direction which is not in our best interest;

- collaborators may become bankrupt, which may significantly delay our research or development programs, or may cause us to lose access to valuable technology, know-how or intellectual property of the collaborator relating to our products, product candidates or research programs;

- key personnel at our collaborators may leave, which could negatively impact our ability to productively work with our collaborators;

- collaborations may require us to incur short and long-term expenditures, issue securities that dilute our shareholders or disrupt our management and business;

- if our collaborators do not satisfy their obligations under our agreements with them, or if they terminate our collaborations with them, we may not be able to develop or commercialize product candidates as planned;

- collaborations may require us to share in development and commercialization costs pursuant to budgets that we do not fully control and our failure to share in such costs could have a detrimental impact on the collaboration or our ability to share in revenue generated under the collaboration;

- collaborations may be terminated in their entirety or with respect to certain product candidates or technologies and, if so terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates or technologies; and

- collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If a present or future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our development or commercialization program under such collaboration could be delayed, diminished or terminated.

We may face significant competition in seeking appropriate collaborations. Recent business combinations among biotechnology and pharmaceutical companies have resulted in a reduced number of potential collaborators. In addition, the negotiation process is time-consuming and complex, and we may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop product candidates or bring them to market and generate product revenue.

If we enter into collaborations to develop and potentially commercialize any product candidates, we may not be able to realize the benefit of such transactions if we or our collaborator elects not to exercise the rights granted under the agreement or if we or our collaborator are unable to successfully integrate a product candidate into existing operations and company culture. The failure to develop and commercialize a product candidate pursuant to our agreements with our current or future collaborators could prevent us from receiving future payments under such agreements, which could negatively impact our revenues. In addition, if our agreement with any of our collaborators terminates, our access to technology and intellectual property licensed to us by that collaborator may be restricted or terminate entirely, which may delay our continued development of our product candidates utilizing the collaborator's technology or intellectual property or require us to stop development of those product candidates completely. We may also find it more difficult to find a suitable replacement collaborator or attract new collaborators, and our development programs may be delayed or the perception of us in the business and financial communities could be adversely affected. Many of the risks relating to product development, regulatory approval, and commercialization described herein also apply to the activities of our collaborators and any negative impact on our collaborators may adversely affect us.

We may acquire businesses or products, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions or alliances.

We may acquire additional businesses or products, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing business. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations

and company culture. We may encounter numerous difficulties in developing, manufacturing and marketing any new products resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure that, following any such acquisition, we will achieve the expected synergies to justify the transaction.

Risks Related to Employee Matters, Managing Our Business and Operations

We depend heavily on our executive officers, principal consultants and others, and the loss of their services would materially harm our business.

Our success depends, and will likely continue to depend, upon our ability to hire, retain the services of our current executive officers, principal consultants and others. The loss of their services might impede the achievement of our research, development and commercialization objectives. We do not maintain "key person" insurance for any of our executives or other employees.

Our ability to compete in the biotechnology and pharmaceuticals industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. Our industry has experienced a high rate of turnover of management personnel in recent years. Replacing executive officers or other key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain regulatory approval of and commercialize products successfully.

Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key employees on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

We rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategies. Our consultants and advisors may be employed by other entities and may have commitments under consulting or advisory contracts with those entities that may limit their availability to us. If we are unable to continue to attract and retain highly qualified personnel, our ability to develop and commercialize our product candidates will be limited.

We only have a limited number of employees to manage and operate our business. If we are unable to hire or to retain adequate personnel, then we may not be able to meet our operational goals.

As of December 31, 2024, we had fifty employees and a large part of our development efforts remains outsourced to consultants, CMOs and CROs, aiming to optimize cash utilization and to manage and operate our business in a highly efficient manner. We cannot ensure that we will be able to hire and/or retain adequate staffing levels to develop GH001 and GH002 or other potential product candidates, or to run our operations and/or to accomplish all of the objectives that we otherwise would seek to accomplish.

Our employees, independent contractors, consultants, collaborators and CROs may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk that our employees, independent contractors, consultants, collaborators and CROs may engage in fraudulent conduct or other illegal activity. Misconduct by those parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violates:

- regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities;

- manufacturing standards;

- federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities; and

- laws that require the accurate reporting of financial information or data.

Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of clinical trials, creating fraudulent data in our nonclinical studies or clinical trials or illegal misappropriation of product materials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this kind of activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, disgorgement, integrity oversight and reporting obligations, possible exclusion from participation in the United States in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could have a material adverse effect on our ability to operate our business and our results of operations.

We expect to continue to expand our organization, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

Since our initial public offering, we have substantially expanded the size of our organization and we expect to continue to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of regulatory affairs and sales, marketing and distribution, as well as to support our public company operations. To manage these growth activities, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Our management may need to devote a significant amount of its attention to managing these growth activities. Moreover, our expected growth could require us to relocate to a different geographic area of Ireland. Due to the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion or relocation of our operations, retain key employees, or identify, recruit and train additional qualified personnel. Our inability to manage the expansion or relocation of our operations effectively may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could also require significant capital expenditures and may divert financial resources from other projects, such as the development of existing and additional product candidates. If we are unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate revenues could be reduced and we may not be able to implement our business strategy, including the successful commercialization of our product candidates.

Our business is subject to economic, political, regulatory and other risks associated with international operations.

Our business is subject to risks associated with conducting business internationally. Accordingly, our future results could be harmed by a variety of factors, including:

- economic weakness, including inflation, or political instability in particular in foreign economies and markets;

- differing and changing regulatory requirements, price controls and reimbursement regimes;

- potentially reduced protection for our intellectual property rights;

- difficulties in compliance with different, complex and changing laws, regulations and court systems of multiple jurisdictions and compliance with a wide variety of foreign laws, treaties and regulations;

- changes in regulations and customs, tariffs and trade barriers;
- changes in currency exchange rates and currency controls;
- changes in a specific country's or region's political or economic environment;
- trade protection measures, import or export licensing requirements or other restrictive actions by governments;
- negative consequences from changes in, including the interpretation of, tax laws;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- workforce uncertainty in countries where labor unrest is more common than in the United States and the EEA;
- difficulties associated with staffing and managing international operations, including differing labor relations;
- business interruptions resulting from geo-political actions, including war and terrorism, natural disasters including earthquakes, typhoons, floods and fires, or pandemics, epidemics, outbreaks of an infectious disease or similar events; and
- cyber-attacks, which are growing in frequency, sophistication and intensity, and are becoming increasingly difficult to detect.

If a pandemic, epidemic, outbreak of an infectious disease or similar event occurs in Ireland or worldwide our business may be adversely affected. Such an event could delay enrollment in our clinical trials due to prioritization of hospital resources toward the outbreak or other factors, and some patients may be unwilling to enroll in our trials or be unable to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services, which would delay our ability to conduct clinical trials or release clinical trial results and could delay our ability to obtain regulatory approval and commercialize our product candidates. Furthermore, such an outbreak could affect the operations of key governmental agencies, such as the FDA, EMA or other comparable foreign regulatory authorities, which could delay the development or approval process for any or all of our product candidates. The spread of a pandemic, epidemic, outbreak of an infectious disease or similar event may also result in the inability of our suppliers to deliver components or raw materials on a timely basis or at all. In addition, hospitals may reduce staffing and reduce or postpone certain treatments in response to an outbreak. Such events may result in a period of business disruption, and in reduced operations, or doctors and medical providers may be unwilling to participate in our clinical trials, any of which could materially affect our business, financial condition and results of operations. Finally, an ongoing outbreak of this nature may also cause the risks associated with our industry and business described herein and in our other public filings to become more significant. A significant pandemic, epidemic, outbreak of an infectious disease or similar event also could result in a widespread health crisis that could adversely affect the economies and financial markets worldwide, resulting in an economic downturn that could impact our business, financial condition and results of operations.

Additionally, a significant number of components in our proprietary aerosol delivery device for GH001 are manufactured in China. As such, if the relationship between China and Taiwan materially deteriorates, or if a trade war or other series of events occur that disrupt our supply chain for these raw materials, such changes could to deteriorate, this could disrupt our supply chain, adversely affect our ability to conduct ongoing and future clinical trials of our product candidates, and/or adversely affect our ability to commercialize our products (subject to regulatory approval). For further information regarding risks to our supply chain from our international operations, see the risk factor titled "We depend on third-party suppliers for key raw materials used in our manufacturing processes, as well as for the vaporization device used to administer GH001, and we expect to depend on third-party suppliers for the devices required for administration of GH002, some of which are our sole source of supply, and the loss of these third-party suppliers or their inability to supply us with adequate raw materials or medical devices could harm our business."

These and other risks associated with our planned international operations may materially adversely affect our ability to attain profitable operations.

Cyber-attacks or other failures in our telecommunications or IT systems, or those of our collaborators, CROs, third-party logistics or other service providers, distributors, suppliers or other contractors or consultants, could result in information theft, data corruption and significant disruption or unavailability of our business operations.

We, our collaborators, our CROs, third-party logistics and service providers, distributors, suppliers and other contractors and consultants utilize IT systems and networks to process, transmit and store electronic information in connection with our business activities. If our privacy, data protection, or information security measures (or those of any third parties that handle our sensitive information) are inadequate or are breached as a result of third-party action, employee or contractor error, malfeasance, malware, system error, software bugs or defects in our products, trickery, process failure or otherwise, third parties gaining access to employee accounts using stolen or inferred credentials, computer malware, viruses, spamming, phishing attacks or other means, and deliberate attacks and attempts to gain unauthorized access to computer systems and networks, and, as a result, there is improper disclosure of, or someone obtains unauthorized access to sensitive information, including personally identifiable information or protected health information, or if we suffer a ransomware or advanced persistent threat attack, or if any of the foregoing is reported or perceived to have occurred, our reputation and business could be damaged, we could incur significant costs associated with remediation and the implementation of additional security measures, we may incur significant liability and financial loss, and be subject to regulatory scrutiny, investigations, proceedings, lawsuits and penalties. While we are not aware of any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. These threats pose a risk to the security of our, our collaborators' and our CROs', third-party logistics and service providers', distributors', suppliers' and other contractors' and consultants' systems and networks, and the confidentiality, availability and integrity of our data. There can be no assurance that we will be successful in preventing cyber-attacks or successfully mitigating their effects. Similarly, there can be no assurance that our collaborators, CROs, third-party logistics providers, distributors and other contractors and consultants will be successful in protecting our clinical and other data that is stored on their systems. Any cyber-attack, data breach, inaccessibility or destruction or loss of data could result in a violation of applicable U.S. and international privacy, data protection and other laws, and subject us to litigation and governmental investigations and proceedings by federal, state and local regulatory entities in the United States and by international regulatory entities, resulting in exposure to material civil and/or criminal liability. Further, our general liability insurance and corporate risk program may not cover all potential claims to which we are exposed and may not be adequate to indemnify us for all liability that may be imposed; and could have a material adverse effect on our business and prospects. For example, the loss of clinical trial data from completed, ongoing or planned clinical trials for any of our product candidates could result in delays in our development and regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, we may suffer reputational harm or face litigation or adverse regulatory action as a result of cyber-attacks or other data security breaches and may incur significant additional expense to implement further data protection measures.

Risks Related to the Ownership of Our Ordinary Shares

The market price of our ordinary shares has historically been, and in the future may continue to be, volatile and may fluctuate due to factors beyond our control, and you could lose all or part of your investment.

The price of the securities of publicly traded emerging pharmaceutical and drug discovery and development companies has been highly volatile and is likely to remain highly volatile in the future. In the past, we have experienced such volatility in the price of our ordinary shares. The market price of our ordinary shares could be subject to wide fluctuations in response to many risk factors, some of which are beyond our control, including the following:

- positive or negative results of testing and clinical trials by us, strategic partners or competitors;

- a failure to lift, or significant delay in lifting, the clinical hold on the study we proposed in our IND for GH001, or other adverse developments related to regulatory approvals of our product candidates;
- delays in entering into strategic relationships with respect to development or commercialization of our GH001 and GH002 product candidates or any other product candidates;
- entry into strategic relationships on terms that are not deemed to be favorable to us;
- technological innovations or commercial therapeutic introductions by competitors;
- changes in government regulations and healthcare payment systems;
- developments concerning proprietary rights, including patent and litigation matters;
- public concern relating to the commercial value or safety of any of our GH001 and GH002 product candidates or any other product candidates;
- negative publicity or public perception of the use of mebufotenin as a medical treatment;
- financing or other corporate transactions, or the failure to obtain financing or enter into other corporate transactions;
- publication of research reports or comments by securities or industry analysts;
- the trading volume of our ordinary shares on the Nasdaq Global Market (referred to herein as Nasdaq);
- sales of our ordinary shares by us, members of our senior management and directors or our shareholders or the anticipation that such sales may occur in the future;
- general market conditions in the pharmaceutical industry or in the economy as a whole;
- general economic, political, and market conditions and overall market volatility in the United States, the UK or the EU as a result of pandemics or similar events; and
- other events and factors, many of which are beyond our control.

These and other market and industry factors may cause the market price and demand for our securities to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their ordinary shares and may otherwise negatively affect the liquidity of our ordinary shares. In addition, pharmaceutical companies have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies, including as a result of the COVID-19 pandemic.

Future sales, or the possibility of future sales, of our securities by existing shareholders could depress the market price of our ordinary shares.

Future sales of a substantial number of our ordinary shares, or the perception that such sales will occur, could harm the prevailing market price of our ordinary shares. These sales, or the perception that these sales could occur, also might make it more difficult for us to sell equity securities in the future and at a price that we deem appropriate.

Moreover, we have filed a registration statement on Form S-8 with the SEC covering ordinary shares available for future issuance under our equity incentive plans. While such registration statement remains effective, any ordinary shares issued under such plans will be eligible for sale in the public market, subject to compliance with Rule 144, in the case of our affiliates. Sales of a large number of the ordinary shares issued under these plans in the public market, or a perception that such sales may occur, could have an adverse effect on the market price of our ordinary shares.

Our executive officers, directors and certain significant shareholders will continue to own a substantial number of our ordinary shares and, as a result, may be able to exercise control over us, including the outcome of shareholder votes. Certain of our directors and officers hold interests in one of these shareholders and these shareholders may have different interests from us or your interests.

As of February 15, 2025, our officers, directors, 5% holders and their affiliates represented beneficial ownership, in the aggregate, of approximately 77.3% of our total outstanding ordinary shares, including 23.9% held by Florian Schönharting, the Chairman of our Board of Directors. As a result, these parties may be able to determine all matters requiring shareholder approval. For example, these shareholders may be able to exert control over our business, including significant corporate actions such as mergers, schemes of arrangement, sales of substantially all of our assets, and election, re-election and removal of directors. This may prevent or discourage unsolicited acquisition proposals or offers for our ordinary shares, or other such changes in control, that you may feel are in your best interest. The interests of this group of shareholders may not always coincide with your interests or the interests of other shareholders and they may act in a manner that advances their best interests and not necessarily those who purchase ordinary shares in the future, including seeking a premium value for their ordinary shares, and might affect the prevailing market price for our ordinary shares.

The trading market for our ordinary shares is relatively illiquid, which may limit your ability to sell your shares.

Since our initial public offering, the trading market for our ordinary shares has been relatively illiquid. A public trading market having the desirable characteristics of depth, liquidity and orderliness depends upon the existence of willing buyers and sellers at any given time, such existence being dependent upon the individual decisions of buyers and sellers over which neither we nor any market maker has control. The failure of an active and liquid trading market to develop and continue would likely have a material adverse effect on the price of our ordinary shares. An inactive market may also impair our ability to raise capital to continue to fund operations through future equity issuances and may impair our ability to acquire other companies or technologies by using our shares as consideration in any such transactions.

We have never paid cash dividends, do not anticipate paying any cash dividends and our ability to pay dividends, or repurchase or redeem our ordinary shares, is limited by law.

We have never declared or paid cash dividends on our ordinary shares and do not anticipate paying any dividends on our ordinary shares in the foreseeable future. Any determination to pay dividends in the future will be at the sole discretion of our Board of Directors after considering our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors our Board of Directors deems relevant, and subject to compliance with applicable laws, including the Irish Companies Act 2014 (as amended), (referred to herein as the Irish Companies Act), which requires Irish companies to have distributable reserves equal to or greater than the amount of the proposed dividend. Distributable reserves are the accumulated realized profits of the Company that have not previously been utilized in a distribution or capitalization less accumulated realized losses that have not previously been written off in a reduction or reorganization of capital. In addition, we cannot pay any dividend unless our net assets are not less than the aggregate of our called up share capital plus undistributable reserves and the dividend does not reduce our net assets below such aggregate. Undistributable reserves include the Company's undenominated capital (effectively its share premium and capital redemption reserve) and the amount by which the Company's accumulated unrealized profits, so far as not previously utilized by any capitalization, exceed the Company's accumulated unrealized losses, so far as not previously written off in a reduction or reorganization of capital.

Unless the Company creates sufficient distributable reserves from its business activities, the creation of such distributable reserves would involve a reduction of the Company's share premium account or other undenominated capital account, which would require the approval of (i) 75% of our shareholders present and voting at a shareholder meeting, and (ii) the Irish High Court. In the event that we do not undertake a reduction of capital to create distributable reserves, no distributions by way of dividends, share repurchases or otherwise will be permitted under Irish law until such time as the Company has created sufficient distributable reserves from its business activities. The determination as to whether or not the Company has sufficient distributable reserves to fund a dividend must be made by reference to "relevant accounts" of the Company. The "relevant accounts" are either the last set of

unconsolidated annual audited financial statements or unaudited financial statements prepared in accordance with the Irish Companies Act, which give a "true and fair view" of the Company's unconsolidated financial position in accordance with accepted accounting practice in Ireland.

We intend to retain earnings, if any, for use in our business and do not anticipate paying any cash dividends in the foreseeable future. As a result, capital appreciation, if any, on our ordinary shares will be an investor's sole source of gains for the foreseeable future. Any recommendation by our Board of Directors to pay dividends will depend on many factors, including our financial condition (including losses carried forward), results of operations, legal requirements and other factors. We are unlikely to pay dividends or other distributions in the foreseeable future.

Dividends paid may be subject to Irish dividend withholding tax.

We have never declared or paid cash dividends on our ordinary shares and do not anticipate paying any dividends on our ordinary shares in the foreseeable future. To the extent that we do make dividend payments (or other returns to shareholders that are treated as "distributions" for Irish tax purposes), in certain circumstances, as an Irish tax resident company, we will be required to deduct Irish dividend withholding tax (currently at the rate of 25%) from dividends paid to our shareholders. Shareholders that are resident in the United States, EU countries (other than Ireland) or other countries with which Ireland has signed a tax treaty (whether the treaty has been ratified or not) generally should not be subject to Irish dividend withholding tax so long as the shareholder has provided its broker, for onward transmission to our qualifying intermediary or other designated agent (in the case of shares held beneficially), or us or our transfer agent (in the case of shares held directly), with all the necessary documentation by the appropriate due date prior to payment of the dividend.

Our ordinary shares received by means of a gift or inheritance could be subject to Irish capital acquisitions tax.

Irish capital acquisitions tax, or CAT, could apply to a gift or inheritance of our ordinary shares irrespective of the place of residence, ordinary residence or domicile of the parties. This is because our ordinary shares will be regarded as property situated in Ireland. The person who receives the gift or inheritance has primary liability for CAT. Gifts and inheritances passing between spouses are exempt from CAT, while children have a tax-free threshold of €400,000 in respect of taxable gifts or inheritances received from their parents. To the extent a person who receives a gift or inheritance involving our ordinary shares fails to qualify for an applicable exemption and/or surpasses the aforementioned threshold, such person could be liable for CAT.

If securities or industry analysts do not continue to publish research, or publish inaccurate or unfavorable research, about our business, the price of our ordinary shares and our trading volume could decline.

The trading market for our ordinary shares depends, in part, on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our ordinary shares or publish inaccurate or unfavorable research about our business, the price of our ordinary shares would likely decline. In addition, if our operating results fail to meet the forecast of analysts, the price of our ordinary shares would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our ordinary shares could decrease, which might cause the price of our ordinary shares and trading volume to decline.

Shareholders could be diluted in the future if we increase our issued share capital because of the disapplication of statutory preemption rights. In addition, shareholders in certain jurisdictions, including the United States, may not be able to exercise their preemption rights even if those rights have not been disapplied.

As a matter of Irish law, holders of our ordinary shares will have a preemption right with respect to any issuance of our ordinary shares for cash consideration or the granting of rights to subscribe for our ordinary shares for cash consideration, unless such preemption right is disapplied, in whole or in part, either in our Constitution or by resolution of our shareholders at a general meeting of shareholders or otherwise. We have opted out of these preemption rights in the Constitution as permitted under Irish company law (for a period of five years from the date of adoption of our Constitution). Thus, our Board

of Directors will be permitted to issue up to all of our authorized but unissued share capital on a non-preemptive basis for cash consideration at any stage during the period of five years after the date of adoption of the Constitution. In addition, even if the disapplication of preemption rights contained in the Constitution expires (and is not renewed by shareholders at a general meeting) or is terminated by our shareholders in a general meeting, due to laws and regulations in certain jurisdictions outside Ireland, shareholders in such jurisdictions may not be able to exercise their preemption rights unless we take action to register or otherwise qualify the rights offering under the laws of that jurisdiction. For example, in the United States, U.S. holders of our ordinary shares may not be able to exercise preemption rights unless a registration statement under the Securities Act is effective with respect to our ordinary shares issuable upon exercise of such rights or an exemption from the U.S. registration requirements is available. If shareholders in such jurisdictions are unable to exercise their preemption rights, their ownership interest would be diluted. Any future issuance of shares or debt instruments convertible into shares where preemption rights are not available or are excluded would result in the dilution of existing shareholders and reduce the earnings per share, which could have a material adverse effect on the price of shares.

We may be at an increased risk of securities class action litigation.

Historically, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical and biopharmaceutical companies have experienced significant share price volatility in recent years. If we were to be sued, it could result in substantial costs and a diversion of management's attention and resources, which could harm the trading price of our ordinary shares.

A future transfer of ordinary shares, other than one effected by means of the transfer of book entry interests in DTC, may be subject to Irish stamp duty.

Transfers of ordinary shares effected by means of the transfer of book entry interests in the Depository Trust Company, or DTC, should not be subject to Irish stamp duty where ordinary shares are traded through DTC, either directly or through brokers that hold such shares on behalf of customers through DTC. However, if you hold your ordinary shares directly rather than beneficially through DTC, any transfer of ordinary shares could be subject to Irish stamp duty (currently at the rate of 1% of the higher of the price paid or the market value of the shares acquired). Payment of Irish stamp duty is generally a legal obligation of the transferee. The potential for stamp duty to arise could adversely affect the price of our ordinary shares.

Our Constitution provides that the courts of Ireland will be the exclusive forum for the resolution of all shareholder complaints other than complaints asserting a cause of action arising under the Securities Act and the Exchange Act, and that the U.S. federal district courts will be the exclusive forum for the resolution of any shareholder complaint asserting a cause of action arising under the Securities Act and the Exchange Act.

Our Constitution provides that the courts of Ireland will be the exclusive forum for resolving all shareholder complaints other than shareholder complaints asserting a cause of action arising under the Securities Act and the Securities Exchange Act of 1934, as amended, or the Exchange Act, and that the U.S. federal district courts will be the exclusive forum for resolving any shareholder complaint asserting a cause of action arising under the Securities Act and the Exchange Act. This choice of forum provision may limit a shareholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits. The enforceability of similar exclusive forum provisions (including exclusive federal forum provisions for actions, suits or proceedings asserting a cause of action arising under the Securities Act) in other companies' organizational documents has been challenged in legal proceedings, and there is uncertainty as to whether courts would enforce the exclusive forum provisions in our Constitution. Additionally, our shareholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. If a court were to find either choice of forum provision contained in our Constitution to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our results of operations and financial condition.

Claims of U.S. civil liabilities may not be enforceable against us.

We are incorporated and have our registered office in, and are currently existing under the laws of, Ireland. In addition, certain members of our Board of Directors and senior management are non-residents of the United States, and all or a substantial portion of our assets and the assets of such persons are located outside the United States. As a result, it may not be possible to serve process on such persons or us in the United States or to enforce judgments obtained in U.S. courts against them or us based on civil liability provisions of the securities laws of the United States. As a result, it may not be possible for investors to effect service of process within the United States upon such persons or to enforce judgments obtained in U.S. courts against them or us, including judgments predicated upon the civil liability provisions of the U.S. federal securities laws.

The United States and Ireland do not currently have a treaty providing for recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Consequently, a final judgment for payment given by a court in the United States, whether or not predicated solely upon U.S. securities laws, would not automatically be recognized or enforceable in Ireland. In addition, uncertainty exists as to whether Irish courts would entertain original actions brought in Ireland against us or our directors or senior management predicated upon the securities laws of the United States or any state in the United States. Any final and conclusive monetary judgment for a definite sum obtained against us in U.S. courts would be treated by Irish courts as a cause of action in itself and sued upon as a debt at common law so that no retrial of the issues would be necessary, provided that certain requirements are met. Whether these requirements are met in respect of a judgment based upon the civil liability provisions of U.S. securities laws, including whether the award of monetary damages under such laws would constitute a penalty is an issue subject to determination by the court making such decision. If an Irish court gives judgment for the sum payable under a U.S. judgment, the Irish judgment will be enforceable by methods generally available for this purpose. These methods generally permit the Irish court discretion to prescribe the manner of enforcement.

As a result, U.S. investors may not be able to enforce against us or our senior management, Board of Directors or certain experts named herein who are residents of Ireland or countries other than the United States any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

We believe that we were a PFIC for our 2024 taxable year, and we anticipate that we will likely be a PFIC in 2025 and potentially also in future years, which could subject U.S. investors in our ordinary shares to significant adverse U.S. federal income tax consequences.

Under the Internal Revenue Code of 1986, as amended, or the Code, we will be a PFIC for any taxable year in which, after the application of certain look-through rules with respect to our subsidiaries, either (1) 75% or more of our gross income consists of "passive income" or (2) 50% or more of the average quarterly value of our assets consists of assets that produce, or are held for the production of, "passive income." Passive income generally includes dividends, interest, certain non-active rents and royalties, and capital gains. Based on our current operations, income, assets and certain estimates and projections, including as to the relative values of our assets, including goodwill, which is based on the price of our ordinary shares, we believe that we were a PFIC for our 2024 taxable year due to the interest income we recognized (which is passive income for purposes of the PFIC rules) and the fact that we generated no other active income. Additionally, we expect a similar income composition in 2025 and, therefore, we anticipate that we will likely be a PFIC in 2025 and may also be a PFIC in future taxable years. However, because our PFIC status is a factual annual determination that can be made only after the end of the relevant taxable year, our PFIC status for 2025 or any future taxable year is uncertain. Prospective investors should invest in our ordinary shares only if they are willing to bear the U.S. federal income tax consequences associated with an investment in a PFIC.

If we are a PFIC for any taxable year during which a U.S. investor holds ordinary shares, we generally would continue to be treated as a PFIC with respect to that U.S. investor for all succeeding years during which the U.S. investor holds ordinary shares, even if we ceased to meet the threshold requirements for PFIC status. Such a U.S. investor would generally be subject to adverse U.S. federal income tax consequences, including (1) the treatment of all or a portion of any gain on disposition of the ordinary shares as ordinary income; (2) the application of a deferred interest charge on such gain and the receipt of certain dividends; and (3) certain reporting requirements. A "mark-to-market" election may be available that will alter the consequences of PFIC status if our ordinary shares are

regularly traded on a qualified exchange. If we provide certain information to U.S. investors, a "qualified electing fund" election also may be available that will alter the consequences of PFIC status.

We are an "emerging growth company" and are availing ourselves of reduced disclosure requirements applicable to emerging growth companies, which could make our ordinary shares less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we intend to continue to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including not being required to comply with the auditor attestation requirements of Section 404(b) of the U.S. Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest of (1) the last day of the fiscal year (i) in which we have total annual gross revenue of $1.235 billion; (ii) the end of the fiscal year following the fifth anniversary of the date of the completion of our initial public offering; or (iii) in which we are deemed to be a "large accelerated filer," which requires the market value of our ordinary shares that is held by non-affiliates to exceed $700 million as of the prior June 30th, and (2) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three-year period. Investors may find our ordinary shares less attractive because we may rely on these exemptions. If some investors find our ordinary shares less attractive as a result, there may be a less active trading market for our ordinary shares and the price of our ordinary shares may be more volatile.

As a foreign private issuer, we are permitted to adopt certain home country requirements in relation to corporate governance matters that differ significantly from Nasdaq corporate governance listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with corporate governance listing standards.

As a foreign private issuer, we are permitted to follow certain home country corporate governance requirements as opposed to those requirements that would otherwise be required by Nasdaq for domestic U.S. issuers. Following our home country governance practices allows us to follow Irish corporate law and the Irish Companies Act with regard to certain corporate governance matters as opposed to the requirements that would otherwise apply to U.S. companies listed on Nasdaq may provide less protection to our shareholders than what is accorded to investors under Nasdaq rules applicable to domestic U.S. issuers.

As a foreign private issuer, we are exempt from the rules and regulations under the Exchange Act related to the furnishing and content of proxy statements. Our officers, directors and principal shareholders are also exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file reports and financial statements with the SEC as frequently or as promptly as U.S. domestic companies whose securities are registered under the Exchange Act and we are exempt from filing quarterly reports with the SEC under the Exchange Act. Moreover, we are not required to comply with Regulation FD, which restricts the selective disclosure of material information, although we have voluntarily formed a disclosure committee consisting of certain of our officers to monitor and review disclosures made by the Company. These exemptions and leniencies will reduce the frequency and scope of information and protections to which you may otherwise have been eligible in relation to a U.S. domestic issuer.

We intend to continue to follow, or may in the future elect to follow, as the case may be, Irish corporate governance requirements in lieu of the corporate governance requirements of Nasdaq in respect of the following:

- the majority independent director requirement under Nasdaq listing rules;
- the requirement under Nasdaq listing rules that a compensation committee composed solely of independent directors governed by a compensation committee charter oversee executive compensation;

- the requirement under Nasdaq listing rules that director nominees be selected or recommended for selection by either a majority of the independent directors or a nominations committee composed solely of independent directors;

- the requirement under Nasdaq listing rules that a quorum must consist of at least 33$^{1/3}$% of the outstanding shares of a listed company's common voting stock; and

- the requirement under Nasdaq listing rules that the independent directors have regularly scheduled meetings with only the independent directors present.

Furthermore, Nasdaq's corporate governance rules require listed U.S. companies to, among other things, seek shareholder approval for the implementation of certain equity compensation plans and issuances of ordinary shares, which we are not required to follow as a foreign private issuer. Therefore, our shareholders may be afforded less protection than they otherwise would have under corporate governance listing standards applicable to U.S. domestic issuers.

We may lose our foreign private issuer status in the future, which could result in significant additional cost and expense.

While we currently qualify as a foreign private issuer, the determination of foreign private issuer status is made annually on the last business day of an issuer's most recently completed second fiscal quarter and, accordingly, the next determination will be made with respect to us on June 30, 2025.

In the future, we would lose our foreign private issuer status if we were to fail to meet the requirements necessary to maintain our foreign private issuer status as of the relevant determination date. For example, if more than 50% of our securities are held by U.S. residents and more than 50% of our executive officers or members of our Board of Directors are residents or citizens of the United States, we could lose our foreign private issuer status.

The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly more than costs we incur as a foreign private issuer. If we are not a foreign private issuer, we will be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive in certain respects than the forms available to a foreign private issuer. In addition, we may lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers such as the ones described above and exemptions from procedural requirements related to the solicitation of proxies.

As a public company, we have incurred, and in the future will incur significant additional costs, and our management will be required to devote substantial time and attention to our public reporting obligations.

As a publicly traded company we have incurred, and in the future will incur significant additional legal, accounting and other expenses compared to levels when we were a private company. In addition, new and changing laws, regulations and standards relating to corporate governance and public disclosure, including the Dodd-Frank Wall Street Reform and Consumer Protection Act and the rules and regulations promulgated and to be promulgated thereunder, as well as under the Sarbanes-Oxley Act, the JOBS Act and the rules and regulations of the SEC and Nasdaq, have created uncertainty for public companies and increased our costs and time that our Board of Directors and management must devote to complying with these rules and regulations. We have invested, and intend to continue to invest, resources to comply with evolving laws, regulations and standards, and this investment has increased, and may continue to increase, legal and financial compliance costs and has diverted, and may continue to divert, management's time and attention from revenue-generating activities.

Irish law differs from the laws in effect in the United States and may afford less protection to holders of our securities.

You may have difficulties enforcing, in actions brought in courts in jurisdictions located outside the United States, judgments obtained in the U.S. courts under U.S. securities laws. In particular, if you sought to bring proceedings in Ireland based on U.S. securities laws, the Irish court might consider:

- that it did not have jurisdiction;
- that it was not the appropriate forum for such proceedings;
- that, applying Irish conflict of law rules, U.S. law (including U.S. securities laws) did not apply to the relationship between you and us or our directors and officers; or
- that the U.S. securities laws were of a penal nature and violated Irish public policy and should not be enforced by the Irish court.

It may not be possible to enforce court judgments obtained in the United States against us in Ireland based on the civil liability provisions of the U.S. federal or state securities laws. In addition, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on the civil liabilities provisions of the U.S. federal or state securities laws. We have been advised that the United States currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any U.S. federal or state court based on civil liability, whether or not based solely on U.S. federal or state securities laws, would not automatically be enforceable in Ireland.

A judgment obtained against us will be enforced by the courts of Ireland only if the following general requirements are met:

- U.S. courts must have had jurisdiction in relation to the particular defendant according to Irish conflict of law rules (the submission to jurisdiction by the defendant would satisfy this rule); and
- the judgment must be final and conclusive and the decree must be final and unalterable in the court which pronounces it.

A judgment can be final and conclusive even if it is subject to appeal or even if an appeal is pending. But where the effect of lodging an appeal under the applicable law is to stay execution of the judgment, it is possible that in the meantime the judgment may not be actionable in Ireland. It remains to be determined whether final judgment given in default of appearance is final and conclusive. Irish courts may also refuse to enforce a judgment of the U.S. courts which meets the above requirements for one of the following reasons:

- the judgment is not for a definite sum of money;
- the judgment was obtained by fraud;
- the enforcement of the judgment in Ireland would be contrary to natural or constitutional justice;
- the judgment is contrary to Irish public policy or involves certain U.S. laws which will not be enforced in Ireland; or
- jurisdiction cannot be obtained by the Irish courts over the judgment debtors in the enforcement proceedings by personal service in Ireland or outside Ireland whether under Order 11 of the Irish Superior Courts Rules or otherwise.

As an Irish company, we are governed by the Irish Companies Act, which differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including, among others, differences relating to interested director and officer transactions and shareholder lawsuits. Likewise, the duties of directors and officers of an Irish company generally are owed to the company only. Shareholders of Irish companies generally do not have a personal right of action against directors or officers of the company and may exercise such rights of action on behalf of the company only in limited circumstances. Accordingly, holders of our securities may have more difficulty protecting their interests than would holders of securities of a corporation incorporated in a jurisdiction of the United States.

You should also be aware that Irish law does not allow for any form of legal proceedings directly equivalent to the class action available in the United States.

As an Irish public limited company, certain capital structure decisions require shareholder approval, which may limit our flexibility to manage our capital structure.

Under Irish law, our authorized share capital can be increased by an ordinary resolution of our shareholders and the directors may issue new ordinary shares up to a maximum amount equal to the authorized but unissued share capital, without shareholder approval, once authorized to do so by our Constitution or by an ordinary resolution of our shareholders. Additionally, subject to specified exceptions, Irish law grants statutory preemption rights to existing shareholders where shares are being issued for cash consideration but allows shareholders to disapply such statutory preemption rights either in our Constitution or by way of special resolution of our shareholders. Such disapplication can either be generally applicable or be in respect of a particular allotment of shares. Accordingly, our Constitution contains, as permitted by Irish company law, provisions authorizing the board to issue new shares, and to disapply statutory preemption rights. The authorization of the directors to issue shares and the disapplication of statutory preemption rights must both be renewed by the shareholders at least every five years, and we cannot provide any assurance that these authorizations will always be approved, which could limit our ability to issue equity and thereby adversely affect the holders of our securities.

Provisions of our Constitution could delay or prevent a third party's effort to acquire us.

Our Constitution could delay, defer or prevent a third party from acquiring us, even where such a transaction would be beneficial to the holders of ordinary shares, or could otherwise adversely affect the price of ordinary shares. For example, certain provisions of our Constitution:

- impose advance notice requirements for shareholder proposals and director nominations to be considered at annual shareholder meetings; and

- require the approval of 75% of the voting power of our shares entitled to vote at a general meeting of shareholders to amend or repeal any provisions of our Constitution.

We believe these provisions, if implemented in compliance with applicable law, may provide some protection to holders of ordinary shares from coercive or otherwise unfair takeover tactics. These provisions are not intended to make us immune from takeovers. They will, however, apply even if some holders of ordinary shares consider an offer to be beneficial and could delay or prevent an acquisition that our Board of Directors determines is in the best interest of the holders of ordinary shares. Certain of these provisions may also prevent or discourage attempts to remove and replace incumbent directors.

In addition, mandatory provisions of Irish law could prevent or delay an acquisition of the Company by a third party. For example, Irish law does not permit shareholders of an Irish public limited company to take action by written consent with less than unanimous consent. In addition, an effort to acquire us may be subject to various provisions of Irish law relating to mandatory bids, voluntary bids, requirements to make a cash offer and minimum price requirements, as well as substantial acquisition rules and rules requiring the disclosure of interests in ordinary shares in certain circumstances.

Irish law differs from the laws in effect in the United States with respect to defending unwanted takeover proposals and may give our Board of Directors less ability to control negotiations with hostile offerors.

Following the authorization for trading of our ordinary shares on Nasdaq, we became subject to the Irish Takeover Panel Act, 1997, Irish Takeover Rules 2022, or the Irish Takeover Rules. Under the Irish Takeover Rules, our Board of Directors is not permitted to take any action that might frustrate an offer for our ordinary shares once our Board of Directors has received an approach that may lead to an offer or has reason to believe that such an offer is or may be imminent, subject to certain exceptions. Potentially frustrating actions such as (i) the issue of shares, options, restricted share units or convertible securities by the Company, (ii) the redemption or repurchase of securities by the Company (save in certain circumstances) (iii) material acquisitions or disposals, (iv) entering into contracts other than in the ordinary course of business or (v) any action, other than seeking alternative offers, which may result in frustration of an offer, are prohibited during the course of an offer or at any earlier time during which our Board of Directors has reason to believe an offer is or may be imminent. These

provisions may give our Board of Directors less ability to control negotiations with hostile offerors than would be the case for a corporation incorporated in a jurisdiction of the United States.

The operation of the Irish Takeover Rules may affect the ability of certain parties to acquire our ordinary shares.

Under the Irish Takeover Rules, if an acquisition of ordinary shares were to increase the aggregate holding of the acquirer and its concert parties to ordinary shares that represent 30% or more of the voting rights of the company, the acquirer and, in certain circumstances, its concert parties would be required (except with the consent of the Irish Takeover Panel) to make an offer for the outstanding ordinary shares at a price not less than the highest price paid for the ordinary shares by the acquirer or its concert parties during the previous 12 months. This requirement would also be triggered by an acquisition of ordinary shares by a person holding (together with its concert parties) ordinary shares that represent between 30% and 50% of the voting rights in the company if the effect of such acquisition were to increase that person's percentage of the voting rights by 0.05% within a 12-month period.

Under the Irish Takeover Rules, certain separate concert parties are presumed to be acting in concert. Our Board of Directors and their relevant family members, related trusts and "controlled companies" are presumed to be acting in concert with any corporate shareholder who holds 20% or more of our shares. The application of this presumption may result in restrictions upon the ability of any of the concert parties and/or members of our Board of Directors to acquire more of our securities, including under the terms of any executive incentive arrangements. We may consult with the Irish Takeover Panel with respect to the applicability of this presumption and the restrictions on the ability to acquire further securities without the requirement to make a mandatory offer to acquire all of our shares, although we are unable to provide any assurance as to whether the Irish Takeover Panel will overrule this presumption. Accordingly, the application of the Irish Takeover Rules may restrict the ability of certain of our shareholders and directors to acquire our ordinary shares.

The operation of the Screening of Third Country Transactions Act 2023 of Ireland may affect the ability of certain parties to acquire our ordinary shares or to acquire certain of our assets.

The Screening of Third Country Transactions Act 2023 of Ireland, or the FDI Act, which came into effect on January 6, 2025, introduced a foreign direct investment screening system in Ireland. The FDI Act requires parties to certain acquisition and/or investment transactions involving (i) Irish companies and business undertakings in a range of sectors (including critical health infrastructure); and (ii) acquiring/investing parties established in countries outside of the EEA and Switzerland, or third countries, to provide notice of such transactions to the Irish Minister for Enterprise, Trade and Employment for prior approval. The Minister will then determine if the relevant transaction poses a risk to Ireland's security or public order and may, where deemed appropriate, prevent the transaction from being consummated or otherwise impose conditions on the transaction. The Minister may also review transactions for which he/she has not received notice, if the Minister has reasonable grounds for believing that a given transaction poses a risk to Ireland's security or public order, whether such transaction has been completed or not. The FDI Act also results in increased information sharing and co-operation with other Member States of the EU in light of the EU Investment Screening Regulation (Regulation (EU) 2019/452). Accordingly, the application of the FDI Act may, if it applies to our activities, delay or restrict the ability of certain third parties outside of the EEA and Switzerland to acquire our ordinary shares or certain of our assets.

Risks Related to Our Controls Over Financial Reporting

Failure to maintain proper and effective internal control over financial reporting may hinder our ability to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our ordinary shares.

Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. We are required pursuant to Section 404 of the Sarbanes-Oxley Act to maintain internal control over

financial reporting and to assess and report on the effectiveness of those controls. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. Our management concluded that our internal controls over financial reporting were effective, as of the year ended December 31, 2024. However, any future failure to maintain adequate internal controls or produce accurate financial statements on a timely basis could increase our operating costs and harm our business. In addition, investors' perceptions that our internal controls are inadequate or that we are unable to produce accurate financial statements on a timely basis may harm the price of our ordinary shares.

Financing and Liquidity

We have incurred operating losses since inception, including net losses of $39.0 million in the year ended December 31, 2024, (2023: $35.6 million*)*. As of December 31, 2024, we had an accumulated deficit of $106.4 million, compared to an accumulated deficit as of December 31, 2023 of $ 67.9 million. We expect to incur significant expenses and operating losses for the foreseeable future as we expand our research and development activities. In addition, our losses from operations may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials, our expenditures on other research and development activities and based on foreign currency translation differences.

We anticipate that our expenses will increase significantly in connection with our ongoing research and development activities. In addition, as we progress toward marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales, and distribution.

As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources, including potential collaborations with other companies or other strategic transactions. We cannot be certain that additional funding will be available on acceptable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back, or discontinue the development and commercialization of one or more of our product candidates or other research and development initiatives, which could have a material adverse effect on our business, results of operations, and financial condition. We will need to generate significant revenue to achieve profitability, and we may never do so.

Going Concern

GH Research is a clinical-stage biopharmaceutical company developing innovative therapeutics. The Group is exposed to all risks inherent in establishing and developing its business, including the substantial uncertainty that current projects will succeed. Research and development expenses have been incurred from the start of the Group's activities, generating negative cash flows from operating activities since formation.

Since its incorporation, the Group has funded its growth through capital increases. The Group has no bank loans or other debt outstanding, except lease liabilities, as of December 31, 2024. As a result, the Group is not exposed to liquidity risk through requests for early repayment of loans.

As of December 31, 2024, the Group's cash and cash equivalents amounted to $100.8 million (December 31, 2023: $78.4 million). The Group also held marketable securities of $62.4 million and other financial assets of $19.4 million as of December 31, 2024 (December 31, 2023: marketable securities of $88.7 million and other financial assets of $55.6 million). The Group's marketable securities are quoted in active markets and are an additional source of liquidity.

The Board of Directors believes that the Group and the Company has sufficient financial resources available to cover its planned cash outflows for a period of at least twelve months from the date on which the consolidated financial statements are authorized for issue. The Group and the Company, therefore, continues to adopt the going concern basis in preparing its consolidated and Company financial statements.

Financial Risk Management

The Group's operations expose it to financial risks, including liquidity risk, interest rate risk, foreign exchange risk and credit risk. The Group manages risk in order to limit the impact of these risks on the performance of the Group. The Group does not utilize derivative financial instruments to hedge economic exposures at this time. Please see note 19 in the notes to our consolidated financial statements for further detail.

Results of operations

The results for the year have been presented on page 100 and in the related notes. The main Key Performance Indicators as measured by the Group are loss from operations and the Group's cash, cash equivalents, other financial assets and marketable securities position as detailed in the financial statements below.

The Group incurred a loss from operations for the year of $50.3 million (2023: $41.2 million). The increase in loss from operations is due to an increase in research and development expenses primarily due to increased expenses relating to clinical development activities, including clinical trial and nonclinical activities. Employee expenses have also increased primarily due to the hiring of personnel to support our research and development activities. Please refer to note 3 in the consolidated financial statements for further detail on the Group's research and development expenses. General and administrative expenses have also increased due to an increase in professional fees and an increase in expenses relating to the hiring of personnel to support the Company's corporate requirements.

The Company did not propose or pay a dividend to the ordinary shareholders for the year ended December 31, 2024. At December 31, 2024 the Group had net assets of $179.0 million (2023: $219.0 million).

Directors and Secretary

Our board of directors is composed of four members. The current members of our Board of Directors were reelected at our annual general meeting of shareholders in 2024 and will serve until our next annual general meeting in 2025.

There is no service contract between any of our directors and the Group, which provides for any benefits upon termination of employment.

The following table sets forth information concerning the company secretary and the composition of the Company's board of directors and thereof committees as of December 31, 2024:

Name	Position
Florian Schönharting [2][3]	Chairman and Director
Michael Forer [1][2][3]	Vice Chairman and Director
Dermot Hanley [1]	Director
Duncan Moore [1]	Director
Magnus Halle	Company Secretary

[1] Member of Audit Committee
[2] Member of Remuneration Committee
[3] Member of Nominating and Corporate Governance Committee

Audit Committee
The Company has established an audit committee and therefore meets the requirements of Section 167 of the Companies Act 2014. The audit committee, which consists of Dermot Hanley (chair), Michael Forer and Duncan Moore, assists our board of directors in overseeing our accounting and financial reporting processes and the audits of our financial statements. In addition, the audit committee is directly responsible for the compensation, retention and oversight of the work of our external auditors.

Directors' Holdings
At December 31, 2024 the directors of the Company had the following shareholdings in the Company.

Name	Number of Ordinary Shares Beneficially Owned	Percentage of Ordinary Shares Beneficially Owned
Florian Schönharting	14,824,419	28.5%

The percentage of beneficial ownership in the table above is based on 52,028,145 ordinary shares outstanding as of December 31, 2024. At January 1, 2024, Florian Schönharting held 14,824,419 shares in the Company, which represented 28.5% of ordinary shares beneficially owned.

At January 1, 2024, and December 31, 2024, aside from those disclosed above, the remaining directors and secretary who held office, including their spouses and children under eighteen years of age, had no interests that in the aggregate for each individual represent more than 1% in the nominal value of the Company's issued share capital.

During the year ended December 31, 2024, the Company granted the option to purchase 33,120 shares each to certain members of the board of directors, being Michael Forer, Dermot Hanley and Duncan Moore. These share options are subject to a two year service condition, had a contractual term (expiration) of seven years from the grant date with an exercise price of $0.025 per share. During the year ended December 31, 2024, the Company granted the option to purchase 150,000 shares each to certain members of the board of directors, being Michael Forer, Dermot Hanley and Duncan Moore. These share options had a contractual term (expiration) of seven years from the grant date with an exercise price of $0.025 per share. These share options were outstanding at December 31, 2024.

During the year ended December 31, 2023, members of the board of directors, being Michael Forer, Dermot Hanley and Duncan Moore, exercised 2,432 share options each at an exercise price of $2.05 per option which were granted in 2021 and were outstanding at January 1, 2023. The shares relating to the exercise of these options were issued in October 2023. For further detail relating to the grant and exercise of options please see note 18, "Share-based compensation" and note 20 "Related party disclosures".

Subsidiary Undertakings

The information required by the Companies Act in relation to a subsidiary undertaking is presented in note 22, "Subsidiary Undertaking" in the consolidated financial statements and note 13, "Subsidiary Undertaking" of the Company financial statements.

Rights and obligations attaching to the Company's shares

The authorized share capital of the Company is $1,000,000,000 divided into 40,000,000,000 ordinary shares of $0.025 at December 31, 2024. The holders of ordinary shares are entitled to one vote for each ordinary share held on all matters submitted to a vote of the shareholders. Holders of ordinary shares are also entitled to receive such dividends as are recommended by our directors and declared by our shareholders or in the case of an interim dividend, declared by our directors. For further information please see note 16, "Share capital and reserves".

Political Donations

The Group has made no political donations during the year (2023: $nil) which would require disclosure under the Electoral Act, 1997.

Accounting Records

The directors believe that they have complied with the requirements of Section 281 to 285 of the Companies Act 2014 with regard the keeping of adequate accounting records by appointing accounting personnel with appropriate expertise and by providing adequate resources to the financial function. The accounting records of the Company are maintained at its offices at Joshua Dawson House, Dawson Street, Dublin 2, Ireland.

Relevant Audit Information

Each of the persons who is a director at the date of approval of this annual report confirms that:

- So far as the director is aware, there is no relevant audit information of which the Company's statutory auditor is unaware; and
- The directors have taken all steps that ought to have been taken as a director in order to be aware of any relevant audit information and to establish that the Company's statutory auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of Section 330 of the Companies Act 2014.

Directors' compliance statement

The directors, in accordance with Section 225(2) of the Companies Act 2014, acknowledge that they are responsible for securing the Company's compliance with certain obligations specified in that section arising from the Companies Act 2014 and Tax laws ("relevant obligations"). The directors confirm that:

- A compliance policy statement has been drawn up setting out the Group's policies that in their opinion are appropriate with regard to such compliance;
- Appropriate arrangements and structures have been put in place that, in their opinion, are designed to provide reasonable assurance of compliance in all material respects with those relevant obligations; and
- A review had been conducted, during the financial year, of those arrangements and structures.

Events after the reporting period

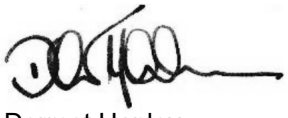
In 2025, the Group received net cash proceeds of $139.8 million from a public offering of ordinary shares.

There were no other events after the reporting date requiring adjustment or disclosure in the Group or Company financial statements.

Auditor

The statutory auditors, PricewaterhouseCoopers, have expressed their willingness to continue in office in accordance with Section 382(2) of the Companies Act 2014. A resolution that they be reappointed will be proposed at the Annual General Meeting.

On Behalf of the Board



Dermot Hanley
Director
Date: March 27, 2025

Duncan Moore
Director

Statement of Directors' Responsibilities

The directors are responsible for preparing the directors' report and the financial statements in accordance with Irish law.

Irish company law requires the directors to prepare financial statements for each financial year that give a true and fair view of the Group's and Company's assets, liabilities and financial position as at the end of the financial year and of the profit or loss of the Group for the financial year. Under that law, the Directors have prepared the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union ("IFRS") and with those parts of the Act applicable to companies applying IFRS and the Company financial statements in accordance with Irish Generally Accepted Accounting Practice (accounting standards issued by the UK Financial Reporting Council, including Financial Reporting Standard 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland* and Irish law).

Under Irish law, the directors shall not approve the financial statements unless they are satisfied that they give a true and fair view of the Group's and Company's assets, liabilities and financial position as at the end of the financial year and the profit or loss of the Group for the financial year.

In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether the financial statements have been prepared in accordance with applicable accounting standards and identify the standards in question, subject to any material departures from those standards being disclosed and explained in the notes to the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to:

- correctly record and explain the transactions of the Group and Company;
- enable, at any time, the assets, liabilities, financial position and profit and loss of the Group and Company to be determined with reasonable accuracy; and
- enable the directors to ensure that the financial statements comply with the Companies Act and enable those financial statements to be audited.

The directors are also responsible for safeguarding the assets of the Group and Company and hence, for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

On behalf of the Board

Dermot Hanley
Director

Duncan Moore
Director

Independent auditors' report to the members of GH Research PLC

Report on the audit of the financial statements

Opinion

In our opinion:

- GH Research PLC's consolidated financial statements and company financial statements (the "financial statements") give a true and fair view of the group's and the company's assets, liabilities and financial position as at 31 December 2024 and of the group's loss and cash flows for the year then ended;
- the consolidated financial statements have been properly prepared in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the European Union;
- the company financial statements have been properly prepared in accordance with Generally Accepted Accounting Practice in Ireland (accounting standards issued by the Financial Reporting Council of the UK, including Financial Reporting Standard 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland" and Irish law); and
- the financial statements have been properly prepared in accordance with the requirements of the Companies Act 2014.

We have audited the financial statements, included within the Directors' Report and Financial Statements (the "Annual Report"), which comprise:

- the Consolidated Statement of Financial Position as at 31 December 2024;
- the Company Statement of Financial Position as at 31 December 2024;
- the Consolidated Statement of Comprehensive Income for the year then ended;
- the Consolidated Statement of Cash Flows for the year then ended;
- the Consolidated Statement of Changes in Equity for the year then ended;
- the Company Statement of Changes in Equity for the year then ended; and
- the notes to the financial statements, which include a description of the accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (Ireland) ("ISAs (Ireland)") and applicable law. Our responsibilities under ISAs (Ireland) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in Ireland, which includes IAASA's Ethical Standard as applicable to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Our audit approach

Overview

Overall materiality

- c. $980,000 (2023: $400,000) - Consolidated financial statements
- Based on c. 2.5% of loss before tax (2023: c. 1% of total expenses).

- c. $2,853,000 (2023: $2,800,000) - Company financial statements
- Based on c. 1% of total assets.

Performance materiality

- $637,000 (2023: $260,000) - Consolidated financial statements.
- $1,854,000 (2023: $1,820,000) - Company financial statements.

Audit scope

- The consolidated financial statements are a consolidation of the operating subsidiary and the Company. We performed a full scope audit of the Group inclusive of the Company and the subsidiary based on our materiality levels.

Key audit matter

- Research and development tax credits.

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud.

Key audit matter

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Key audit matter	***How our audit addressed the key audit matter***
Research and development tax credits As described in the "Use of estimates and judgments Research and development tax credits" and "Material accounting policies - Research and development tax credits" sections within Note 2 "Basis of preparation, significant judgements, and accounting policies", the Group recognised $2.6 million of research and development (R&D) tax credits as a deduction from research and development expenses in the year ended December 31, 2024. Management exercises judgement in determining the nature and amount of expenses that qualify for a credit under the Irish R&D tax legislation, including estimating the allocation of time spent directly or indirectly supporting the pursuit of R&D activities, and evaluating the nature of	We evaluated, with the assistance of PwC taxation specialists, management's assessment of the nature of the activities performed by the Group and their qualification for R&D tax credits under the Taxes Consolidation Act 1997. In respect of the research and development (R&D) tax credit recorded during the year ended 31 December 2024: ● We tested the accuracy of the data used in the R&D tax credit calculations; ● We evaluated the appropriateness of management's estimate of time spent in respect of determining qualifying employment costs and performed sensitivity analysis over the estimate; and ● To the extent consumables and outsourced contract research organization costs were included in claims filed for R&D tax credits, we tested a sample of

Key audit matter	*How our audit addressed the key audit matter*
consumables and outsourced contract research organization costs. Research and development tax credits are recognized at their fair value where there is reasonable assurance that the tax credits will be received and the Group will comply with all conditions attaching to them. A portion of the R&D tax credit claim remains unrecognised at 31 December 2024, as management has assessed that some uncertainty remains and therefore, reasonable assurance has not been achieved. We determined the benefit from R&D tax credits to be a key audit matter due to the significant judgement exercised by management in determining the nature and amount of expenses that qualify for R&D tax credit, including estimating the amount for which reasonable assurance has been achieved.	consumables and outsourced contract research organization costs to underlying documentation and third-party evidence. In assessing the reasonableness of management's estimate of the amount for which reasonable assurance has been achieved, in conjunction with our PwC taxation specialists, we • considered the nature of the Group's R&D operations whereby such activities are outsourced and carried out by external third parties; and • considered the judgement and subjectivity involved in determining whether certain R&D costs qualify for a tax credit based on the nature of such costs. We also assessed the appropriateness of the related disclosures in the financial statements. Based on the procedures set out above, management's judgements and assumptions were deemed appropriate, and no material exceptions were noted.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the group, the accounting processes and controls, and the industry in which the group operates and the circumstances of the Company as a clinical-stage biopharmaceutical company. The consolidated financial statements are a consolidation of the operating subsidiary and the Company. The Group's accounting process is structured around a centralised finance function. We performed a full-scope audit of the Group inclusive of the Company and its subsidiary based on our materiality levels.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Consolidated financial statements	*Company financial statements*
Overall materiality	c. $980,000 (2023: $400,000).	c. $2,853,000 (2023: $2,800,000).
How we determined it	c. 2.5% of loss before tax (2023: c. 1% of total expenses).	c. 1% of total assets.
Rationale for benchmark applied	The Group is a clinical-stage biopharmaceutical company which has not yet commercialised its products and is accordingly loss making. As such, loss before tax is deemed to be the most appropriate benchmark on which to calculate materiality, as this is the metric on which the Group's financial performance is assessed.	Total assets is considered as the primary measure used by the shareholders in assessing the performance of the company. We have used the lower overall group audit materiality on balances and transactions that do not eliminate on consolidation.

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the scope of our audit and the nature and extent of our testing of account balances, classes of transactions and disclosures, for example in determining sample sizes. Our performance materiality was 65% of overall materiality, amounting to $637,000 (group audit) and $1,854,000 (company audit).

In determining the performance materiality, we considered a number of factors - the history of misstatements, risk assessment and aggregation risk and the effectiveness of controls - and concluded that an amount in the middle of our normal range was appropriate.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above $49,000 (group audit) (2023: $20,000) and $142,000 (company audit) (2023: $140,000) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

Our evaluation of the directors' assessment of the group and company's ability to continue to adopt the going concern basis of accounting included:

- Obtaining management's going concern assessment for the going concern period of at least twelve months from the date on which the financial statements are authorised for issue;
- Understanding the process undertaken by management in performing the going concern assessment;
- Assessing the key assumptions underpinning the group's cash flow forecasts; and
- Assessing the current liquidity position and financial condition of the group by reference to the level of cash and cash equivalents as further explained in note 2 to the consolidated financial statements.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's or the company's ability to continue as a going concern for a period of at least twelve months from the date on which the financial statements are authorised for issue.

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the group's or the company's ability to continue as a going concern.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Directors' Report, we also considered whether the disclosures required by the Companies Act 2014 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (Ireland) and the Companies Act 2014 require us to also report certain opinions and matters as described below:

- In our opinion, based on the work undertaken in the course of the audit, the information given in the Directors' Report for the year ended 31 December 2024 is consistent with the financial statements and has been prepared in accordance with the applicable legal requirements.
- Based on our knowledge and understanding of the group and company and their environment obtained in the course of the audit, we have not identified any material misstatements in the Directors' Report.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of Directors' Responsibilities set out on page 93, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view.

The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the group's and the company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

Based on our understanding of the group and industry, we identified that the principal risks of non-compliance with laws and regulations related to compliance with clinical trial regulations, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2014 and relevant tax laws. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries to manipulate financial results. Audit procedures performed by the engagement team included:

- Inquiries with the Audit Committee, internal audit, and senior management, including consideration of known or suspected instances of non-compliance with laws and regulations and fraud;
- Reading the meeting minutes of the Board of Directors, the Audit Committee, and the Remuneration Committee;
- Evaluating whether there was evidence of management bias in accounting estimates that represents a risk of material misstatement due to fraud;

- Identifying and testing journal entries based on our risk assessment; and
- Designing audit procedures to incorporate elements of unpredictability.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Our audit testing might include testing complete populations of certain transactions and balances, possibly using data auditing techniques. However, it typically involves selecting a limited number of items for testing, rather than testing complete populations. We will often seek to target particular items for testing based on their size or risk characteristics. In other cases, we will use audit sampling to enable us to draw a conclusion about the population from which the sample is selected.

A further description of our responsibilities for the audit of the financial statements is located on the IAASA website at:

https://www.iaasa.ie/getmedia/b2389013-1cf6-458b-9b8f-a98202dc9c3a/Description_of_auditors_responsibilities_for_audit.pdf

This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with section 391 of the Companies Act 2014 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2014 opinions on other matters

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion the accounting records of the company were sufficient to permit the company financial statements to be readily and properly audited.
- The Company Statement of Financial Position is in agreement with the accounting records.

Other exception reporting

Directors' remuneration and transactions

Under the Companies Act 2014 we are required to report to you if, in our opinion, the disclosures of directors' remuneration and transactions specified by sections 305 to 312 of that Act have not been made. We have no exceptions to report arising from this responsibility.

Alisa Hayden

for and on behalf of PricewaterhouseCoopers
Chartered Accountants and Statutory Audit Firm
Dublin
27 March 2025

Consolidated Statement of Comprehensive Loss

	Note	Year ended December 31, 2024 $'000	2023 $'000
Operating expenses			
Research and development	**3**	(35,016)	(29,821)
General and administration	**3**	(15,296)	(11,401)
Loss from operations		**(50,312)**	**(41,222)**
Finance income	**6**	9,873	8,978
Finance expense	**6**	(717)	(723)
Movement of expected credit loss	**11**	66	1
Foreign exchange gain/(loss)	**19**	2,129	(2,621)
Total other income		**11,351**	**5,635**
Loss before tax		**(38,961)**	**(35,587)**
Tax charge/(credit)	**7**	-	-
Loss for the year		**(38,961)**	**(35,587)**
Other comprehensive (expense)/income			
Items that may be reclassified to profit or loss			
Fair value movement on marketable securities	**11**	(173)	(95)
Currency translation adjustment		(2,054)	2,528
Total comprehensive loss for the year		**(41,188)**	**(33,154)**
Attributable to owners:			
Loss for the year		(38,961)	(35,587)
Total comprehensive loss for the year		(41,188)	(33,154)
Loss per share			
Basic and diluted loss per share (in USD)	**21**	(0.75)	(0.68)

The accompanying notes form an integral part of the consolidated financial statements.

On behalf of the Board

Dermot Hanley
Director

Duncan Moore
Director

Consolidated Statement of Financial Position

	Note	At December 31, 2024 $'000	2023 $'000
ASSETS			
Non-current assets			
Marketable securities	**11**	33,300	61,142
Property, plant and equipment	**12**	748	1,069
Total non-current assets		**34,048**	**62,211**
Current assets			
Cash and cash equivalents	**9**	100,791	78,420
Other financial assets	**9**	19,387	55,615
Marketable securities	**11**	29,146	27,525
Other current assets	**10**	4,901	2,529
Total current assets		**154,225**	**164,089**
Total assets		**188,273**	**226,300**
LIABILITIES AND EQUITY			
Non-current liabilities			
Lease liability	**15**	369	631
Total non-current liabilities		**369**	**631**
Current liabilities			
Trade payables	**13**	3,741	3,490
Lease liability	**15**	255	343
Other current liabilities	**14**	4,957	2,868
Total current liabilities		**8,953**	**6,701**
Total liabilities		**9,322**	**7,332**
Equity attributable to owners			
Share capital	**16**	1,301	1,301
Share premium	**16**	304,426	304,426
Other reserves	**16**	(12,673)	(12,500)
Share-based compensation reserve	**16**	4,904	4,188
Foreign currency translation reserve	**16**	(12,561)	(10,507)
Accumulated deficit	**16**	(106,446)	(67,940)
Total equity		**178,951**	**218,968**
Total liabilities and equity		**188,273**	**226,300**

The accompanying notes form an integral part of the consolidated financial statements.

On behalf of the Board

Dermot Hanley
Director

Duncan Moore
Director

Consolidated Statement of Changes in Equity

	Share capital	Share premium	Other reserves	Share-based compensation reserve	Foreign currency translation reserve	Accumulated deficit	Total
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
	Note 16	Note 16	Note 16	Note 18	Note 16		
At January 1, 2023	**1,301**	**304,411**	**(12,405)**	**2,037**	**(13,035)**	**(32,493)**	**249,816**
Loss for the year	-	-	-	-	-	(35,587)	(35,587)
Other comprehensive (loss)/income	-	-	(95)	-	2,528	-	2,433
Total comprehensive (loss)/income for the year	**-**	**-**	**(95)**	-	**2,528**	**(35,587)**	**(33,154)**
Share-based compensation expense	-	-	-	2,291	-	-	2,291
Share option exercises		15		(140)		140	15
Total transactions with owners	-	**15**	-	**2,151**	-	**140**	**2,306**
At December 31, 2023	**1,301**	**304,426**	**(12,500)**	**4,188**	**(10,507)**	**(67,940)**	**218,968**
At January 1, 2024	**1,301**	**304,426**	**(12,500)**	**4,188**	**(10,507)**	**(67,940)**	**218,968**
Loss for the year	-	-	-	-	-	(38,961)	(38,961)
Other comprehensive loss	-	-	(173)	-	(2,054)	-	(2,227)
Total comprehensive loss for the year	**-**	**-**	**(173)**	**-**	**(2,054)**	**(38,961)**	**(41,188)**
Share-based compensation expense	-	-	-	1,171	-	-	1,171
Transfer of share options	-		-	(455)	-	455	-
Total transactions with owners	**-**	**-**	-	**716**	**-**	**455**	**1,171**
At December 31, 2024	**1,301**	**304,426**	**(12,673)**	**4,904**	**(12,561)**	**(106,446)**	**178,951**

The accompanying notes form an integral part of the consolidated financial statements.

Consolidated Statement of Cash Flows

	Note	Year ended December 31, 2024 $'000	2023 $'000
Cash flows from operating activities			
Loss for the year		**(38,961)**	**(35,587)**
Depreciation	**12**	315	315
Share-based compensation expense	**18**	1,171	2,291
Finance income	**6**	(9,873)	(8,978)
Finance expense	**6**	717	723
Movement of expected credit loss	**11**	(66)	(1)
Foreign exchange (gain)/loss	**19**	(2,129)	2,621
Movement in working capital		188	1,645
Cash flows used in operating activities		**(48,638)**	**(36,971)**
Finance expense paid		(723)	(648)
Finance income received		7,076	4,283
Net cash used in operating activities		**(42,285)**	**(33,336)**
Cash flows from/(used) in investing activities			
Purchase of property, plant and equipment	**12**	(49)	(100)
Purchase of other financial assets	**9**	-	(54,000)
Proceeds from sale of other financial asset	**9**	38,000	-
Proceeds from redemptions and disposals of marketable securities	**11**	27,184	-
Cash flows from/(used) in investing activities		**65,135**	**(54,100)**
Cash flows used in financing activities			
Payment of lease liability	**15**	(304)	(219)
Proceeds from share issuances	**16**	**—**	15
Net cash flows used in financing activities		**(304)**	**(204)**
Net increase/(decrease) in cash and cash equivalents		**22,546**	**(87,640)**
Cash and cash equivalents at the beginning of the year		78,420	165,955
Impact of foreign exchange on cash and cash equivalents		(175)	105
Cash and cash equivalents at the end of the year		**100,791**	**78,420**

The accompanying notes form an integral part of the consolidated financial statements.

Notes to Consolidated Financial Statements

1. Corporate information

GH Research PLC (the "Company") was incorporated on March 29, 2021. The registered office of the Company is located at Joshua Dawson House, Dawson Street, Dublin 2, Ireland. The Company controls one wholly-owned subsidiary: GH Research Ireland Ltd, which was incorporated in Dublin, Ireland on October 16, 2018. The Company and its subsidiary form the GH Research Group (the "Group" or "GH Research").

The Group is a clinical-stage biopharmaceutical company dedicated to transforming the lives of patients by developing a practice-changing treatment in depression. Its initial focus is on developing the novel and proprietary mebufotenin therapies for the treatment of patients with Treatment Resistant Depression, or TRD. Its portfolio currently includes GH001, a proprietary inhalable mebufotenin product candidate and GH002, a proprietary intravenous mebufotenin product candidate.

These consolidated financial statements were presented to the Board of Directors and approved by them for issue on March 27, 2025.

2. Basis of preparation, significant judgments, and accounting policies

Basis of preparation

Compliance with IFRS Accounting Standards

The consolidated financial statements for the year ended December 31, 2024, have been prepared in accordance with IFRS Accounting Standards as adopted by the European Union and those parts of the Companies Act, 2014, applicable to companies reporting under IFRS. These consolidated financial statements are presented in U.S. dollar ("USD" or "$"), which is the Company's functional currency and the Group's presentation currency. The financial statements have been prepared under the historical cost convention aside from the measurement at fair value of all investments in money market funds and marketable securities and the measurement of share-based payments at initial date of award.

New and amended IFRS Accounting Standards

There are no new IFRS Accounting Standards, amendments to standards or interpretations that are mandatory for the financial year beginning on January 1, 2024, that are relevant to the Group and that have had any material impact on the consolidated financial statements. The review of the impact of new standards on the Group's financial statements which are not yet effective and which have not been early adopted by the Group is ongoing. This includes the recently issued IFRS 18 "Presentation and Disclosure in Financial Statements".

Going concern basis

GH Research is a clinical-stage biopharmaceutical company developing innovative therapeutics. The Group is exposed to all risks inherent in establishing and developing its business, including the substantial uncertainty that current projects will succeed. Research and development expenses have been incurred from the start of the Group's activities, generating negative cash flows from operating activities since formation.

Since its incorporation, the Group has funded its growth through capital increases. The Group has no bank loans or other debt outstanding, except lease liabilities, as of December 31, 2024. As a result, the Group is not exposed to liquidity risk through requests for early repayment of loans.

As of December 31, 2024, the Group's cash and cash equivalents amounted to $100.8 million (December 31, 2023: $78.4 million). The Group also held marketable securities of $62.4 million and other financial assets of $19.4 million as of December 31, 2024 (December 31, 2023: marketable securities of $88.7 million and other financial assets of $55.6 million). The Group's marketable securities are quoted in active markets and are an additional source of liquidity.

The Board of Directors believes that the Group has sufficient financial resources available to cover its planned cash outflows for at least the next twelve months from the date of issuance of these consolidated financial statements. The Group, therefore, continues to adopt the going concern basis in preparing its consolidated financial statements.

Use of estimates and judgments

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates.

In preparing these consolidated financial statements, the significant judgments made by management in applying the Group's accounting policies and the key sources of estimation uncertainty are as follows:

Functional currency

As explained in this note and in note 19, the functional currency of the subsidiary, GH Research Ireland Ltd, is euro. Judgment was applied in the determination that euro was the appropriate functional currency of the subsidiary. The principal consideration supporting this decision was made by reference to the current activities the subsidiary undertakes which is the execution of clinical trials for which the costs are primarily in euro. Judgment was also applied in the determination that the U.S. dollar is the functional currency of the parent company with the principal considerations being that most of the expenses incurred and all funding raised are in U.S. dollars.

Share-based compensation expense

As explained in note 18, the expected volatility assumption used was based on selected volatility determined by median values observed among other comparable public companies. Judgment was applied in the selection of comparable public companies and of the relevant period of observation used to determine the median values.

Prepaid and Accrued Research and Development Expenses

The Group has entered into various research and development contracts with research institutions and other companies. As part of preparing the consolidated financial statements, the Group is required to estimate the prepaid and accrued research and development expenses. This process involves reviewing open contracts, communicating with our personnel to identify services which have been performed on the Group's behalf and estimating the level of service which has been performed and the associated cost relating to that service when the Group has not yet been invoiced or otherwise notified of actual costs. Estimates of our prepaid and accrued research and development expenses are made at each balance sheet date based on the facts and circumstances known at the time. The estimate of prepaid and accrued research and development expenses is dependent, in part, upon the receipt of timely and accurate information from CROs and other third party-service providers. Although the Group does not expect the estimates to be materially different from amounts actually incurred, its understanding of the status and timing of services performed may vary and may result in reporting that is too high or too low in any particular period.

Deferred tax balances and the valuation of tax operating losses

During the period from incorporation of GH Research Ireland Ltd to December 31, 2024, the Group has incurred losses, which are a potential benefit in the event that the Group reports a taxable profit in the future. In preparing these financial statements, the Group has assessed that the likelihood of a taxable profit is currently not sufficiently certain for these potential benefits to be recognized as a deferred tax asset. This assessment is based on the status of the research

into the Group's principal investigational product and the significant challenges that remain before operating profits can be assured (refer to note 8, "Deferred income taxes").

Research and development tax credits

As a Group, we carry out extensive research and development activities and have assessed whether those activities qualify for a credit under the Irish research and development tax legislation. Qualifying expenditures largely comprise employment costs for research staff for which an estimate of time spent directly or indirectly supporting the pursuit of research and development activities is made, consumables and outsourced contract research organization costs. Judgment is made by management in determining the expenditure which is considered qualifying.

Based on that analysis, claims for research and development tax credits have been filed by the Group for the year ended December 31, 2023, 2022 and 2021. A claim for research and development tax credits for the year ended December 31, 2024, has not yet been submitted. During the year ended December 31, 2024, $2.6 million relating to the research and development tax credit has been recognized (2023: $0.1 million). Included in this amount is an estimate relating to a component of the claim for the year ended December 31, 2024. The remaining components of this claim have not been recognized at December 31, 2024, as reasonable assurance has not been achieved at this time.

A portion of the research and development tax credit claimed remains unrecognized at December 31, 2024, as management has assessed that some uncertainty remains and therefore, reasonable assurance has not been achieved. Reasonable assurance is achieved using internal experience, judgment and assistance from our professional advisors. If the portion of the research and development tax credit which remains unrecognized at December 31, 2024, increased or decreased by 5%, this would not have a material impact on the financial statements.

Material accounting policies

Consolidation

The consolidated financial statements incorporate the financial statements of the Company and its subsidiary, GH Research Ireland Ltd. Subsidiaries are all entities over which the Company has control. Control is achieved when the Company has power over an entity, is exposed to or has rights to variable returns from its involvement with the entity and has the ability to affect returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases. All intercompany transactions have been eliminated.

Foreign currency translation

The functional currency of the Company is the U.S. dollar given it is listed on Nasdaq and its fundraising activities and most of its expenses incurred are in U.S. dollars. The functional currency of its subsidiary, GH Research Ireland Ltd, is euro due to its expenses being mainly incurred in euro. These consolidated financial statements are presented in U.S. dollar which is the Group's presentation currency.

Items included in the financial statements of the Company's subsidiary are measured using the currency of the primary economic environment in which the entity operates which is the euro.

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated at the consolidated statement of financial position date. The subsidiary is holding a U.S. cash balance and, as a result of the accounting treatment, when it is translated to euro in the subsidiary accounts, it results in a foreign exchange gain or loss in the income statement. On consolidation, the subsidiary's assets and liabilities in foreign currencies are retranslated and the resulting foreign currency difference goes through the foreign currency translation reserve.

Cash and cash equivalents

Cash and cash equivalents represent cash held in bank current accounts with original maturities of less than three months and investments which are readily convertible to a known amount of cash and are subject to insignificant changes in value. Cash and cash equivalents are carried at amortized cost or, in the case of investments in money market funds, at fair value through profit or loss as the cash flows from these funds do not represent solely payments of principal and interest. The Group's determination of its investments as cash equivalents requires judgment, which includes assessing the ability to readily convert an instrument into cash.

The Group's cash balance is maintained with well established, highly rated financial institutions. The majority of the cash balance is held in U.S. dollars.

Financial assets

A financial asset is recognized in the statement of financial position when the Group becomes a party to its contractual provisions. At initial recognition, a financial asset is measured at fair value, adjusted for directly attributable transaction costs, with the exception of financial assets at fair value through profit and loss ("FVTPL"), which are measured at fair value and is assigned one of the following classifications for the purpose of subsequent measurement:

- financial asset at amortized cost;
- financial asset at fair value through other comprehensive income ("FVOCI"); or
- financial asset at FVTPL.

The Group determines the appropriate classification based on the contractual cash flow characteristics of the financial asset and the objective of the business model within which the financial asset is held. In determining the business model for a group of financial assets, the Group considers factors such as, how performance is evaluated and reported within the Group, the risks that impact performance and how they are managed, and the expected frequency, value and timing of sales of financial assets.

In considering the contractual cash flow characteristics of a financial asset, the Group determines whether the contractual terms give rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal outstanding. In making this determination, the Group assesses whether the financial asset contains a contractual term that could change the timing or amount of the contractual cash flows such that it would not meet this condition.

Financial assets are derecognized when the Group's contractual rights to the cash flows from the financial asset expire, are extinguished or transferred to a third party.

Marketable securities are mainly comprised of investment grade bonds. At initial recognition, marketable securities are measured at fair value and subsequently at FVOCI when both of the following conditions are met:

- The asset has contractual terms that give rise to cash flows on specified dates that are solely payments of principal and interest on the principal outstanding; and
- The asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling those assets.

Purchases and sales of instruments are recognized on the trade date with gains and losses arising from changes in fair value included in Other Comprehensive Income, ("OCI"). Interest income, using the effective interest rate method, is recognized in the income statement. An impairment loss allowance is recognized for expected credit losses ("ECL"). The impairment loss allowance does not reduce the carrying value of the asset but an amount equal to the allowance is recognized in OCI, as an accumulated impairment amount, with corresponding impairment gains or losses recognized in the income statement. On derecognition, the cumulative gain or loss previously recognized in OCI is reclassified to the income statement.

Other financial assets represent money market funds with a weighted average maturity of more than 90 days and are carried at fair value through profit or loss as the cash flows from these funds do not represent solely payments of principal and interest.

Property, plant and equipment

Property, plant and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful lives of the respective assets, which are as follows:

	Estimated Useful Life
IT equipment	3 years
Office equipment	3 years
Medical equipment	2 years

Leases and right-of-use assets

The Group recognizes a right-of-use ("ROU") asset and a corresponding lease liability for all arrangements in which it is a lessee, except for leases with a term of 12 months or less (short-term leases) and low-value leases. Under IFRS 16, the Group recognizes a ROU asset and a lease liability at the lease commencement date at the present value of the future lease payments, discounted at the Group's incremental borrowing rate. The ROU asset is subsequently depreciated using the straight-line method over the lease term within depreciation expenses and an interest expense on lease liabilities is recognized within finance expense in the Group's consolidated statement of comprehensive loss. The interest expense is calculated based on the incremental borrowing rate of the Group.

For short-term or low value leases, the Group recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease.

Trade payables and other current liabilities

Trade payables and other current liabilities are recognized initially at fair value and subsequently measured at amortized cost.

Share-based compensation expense

The fair value of options granted under the share option plan is recognized as a share-based compensation expense with a corresponding increase in equity. The total expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied.

Share capital and share premium

Share capital

Share capital represents the nominal value of outstanding shares (see note 16, "Share capital and reserves").

Share premium

Amounts received in excess of the nominal value of allotted shares are accounted for as share premium.

Incremental costs directly attributable to equity transactions such as the issue of new capital shares are shown in equity as a deduction, net of tax, within Other reserves. Transaction costs that relate to equity and non-equity transactions are allocated to those transactions using a basis of allocation that is rational and consistent with similar transactions. If the equity instruments are not subsequently issued, the transaction costs would be expensed.

Research and development expenses

Research and development expenses consist of costs incurred in performing research and development activities, including salaries, share-based compensation and benefits, travel, and external costs of outside vendors engaged to conduct clinical development activities, clinical trials, technical development activities and the cost to manufacture clinical trial materials.

Research expenditure is recognized as an expense in the year in which it is incurred. Internal development expenditure is capitalized only if it meets the recognition criteria of IAS 38 “Intangible Assets”. Where regulatory and other uncertainties are such that the criteria are not met the expenditure is recognized in the statement of comprehensive loss. When certain criteria are met, the Group may capitalize and amortize on a straight-line basis over its estimated useful life, internal development expenditures. To date, the Group has not capitalized any R&D expenses.

General and administrative expenses

General and administrative expenses relate to the administration of the Group including salaries, share-based compensation and benefits, travel and external costs including legal and professional fees.

Research and development tax credits

Research and development tax credits are available to the Group under the tax laws in Ireland based on qualifying research and development spend as defined under those tax laws. Research and development tax credits are recognized at their fair value where there is reasonable assurance that the tax credits will be received and the Group will comply with all conditions attaching to them. Upon recognition, the tax credits are deducted from the relevant operating expenses amount, if the related amounts were previously expensed as incurred, or deducted in arriving at the carrying value of the related asset, if the related costs had been capitalized.

Finance income and expense

The Group’s finance income and expense includes:

- Interest income on cash and cash equivalents, other financial assets and marketable securities;
- Interest expense; and
- Net gain or loss on financial assets classified at FVTPL.

Interest income or expense is recognized using the effective interest rate method. The effective interest rate is the rate that discounts estimated future cash receipts through the expected life of the financial instrument to the gross carrying value of the financial asset. Amounts received from money market funds, other than those related to the sale of units, are recognized when the right to payment is established which generally occurs on receipt of the related funds.

Current and deferred income tax

The tax expense for the financial year comprises current and deferred tax. Tax is recognized in the income statement, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case the related tax is recognized in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date where the Group generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Taxes on income are accrued in the same financial year as the income and expenses to which they relate. Current income tax assets and liabilities for the current financial year are measured at the amount expected to be recovered from or paid to the tax authorities.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences or the unused tax losses can be utilized. Deferred income tax assets from tax credit carry-forwards are recognized to the extent that the realization of the related tax benefit through future taxable profits is probable.

Contingencies

The Group assesses the likelihood of any adverse outcomes as a contingency, including legal matters. Provisions for such contingencies are recorded where it is probable that a liability will be incurred and the amount of that loss can be reliably estimated. A contingent liability is disclosed where the existence of the obligation will only be confirmed by future events, or where the amount of the obligation cannot be measured reliably.

Segment reporting

Management considers the Group to have only a single segment: Research and Development ("R&D"). This is consistent with the way that information is reported internally within the Group for the purpose of allocating resources and assessing performance.

Loss per share

Basic loss per share is calculated by dividing the net loss attributable to shareholders by the weighted average number of shares in issue during the year.

3. Expenses by nature

The following table provides the consolidated statement of comprehensive loss classification of our expense by nature:

	Year ended December 31,	
	2024	**2023**
	$'000	**$'000**
Research and development		
External research and development expenses	27,562	22,777
Employee expenses [1] [3]	7,216	6,771
Depreciation	21	35
Other expenses	217	238
Total research and development expenses	**35,016**	**29,821**
General and administrative		
External costs	10,182	7,692
Employee expenses [2] [3]	4,820	3,429
Depreciation	294	280
Total general and administrative expenses	**15,296**	**11,401**
Total operating expenses	**50,312**	**41,222**

[1] Included in employee expenses is share-based compensation expense of $0.5 million and $1.4 million for the years ended December 31, 2024 and 2023, respectively, relating to employees in the research and development department.

[2] Included in employee expenses is share-based compensation expense of $0.7 million and $0.9 million for the years ended December 31, 2024 and 2023, respectively, relating to employees in the general and administrative department.

[3] Includes termination expenses incurred in the year ended December 31, 2024.

4. Auditors' remuneration

The following table sets forth the fees of the Statutory auditor, for work carried out during the fiscal year ended December 31, 2024 and 2023:

	Year ended December 31,	
	2024 $'000	**2023 $'000**
Audit fees [1][2]	322	330
Other assurance services [3]	394	437
Total	**716**	**767**

[1] Audit fees include annual audit fees for GH Research PLC. All audit fees are billed or billable by PricewaterhouseCoopers, Ireland.

[2] Includes audit fees billed or billable by PricewaterhouseCoopers, Ireland of $19 thousand (2023: $19 thousand) with respect to audit fees for the Company.

[3] Includes other assurance services billed or billable by PricewaterhouseCoopers, Ireland, of $394 thousand (2023: $437 thousand).

5. Payroll and related benefits

	Year ended December 31,	
	2024 $'000	**2023 $'000**
Salaries	7,578	6,391
Social insurance costs	840	690
Share-based compensation expense	1,171	2,291
Employer pension contributions	348	82
Other employee benefits[1]	1,286	81
Total payroll and related benefits[2]	**11,223**	**9,535**

[1] Other employee benefits primarily relates to termination benefits.

[2] Excludes non-benefit related employee expenses.

As of December 31, 2024, the Group had 50 employees (2023: 49 employees*)*. During the year-ended December 31, 2024, the Group had an average of 48 employees (2023: 39 employees*)*. During the year-ended December 31, 2024, the average number of employees in research and development was 34 employees and in general and administration was 14 employees (2023: 28 and 11 respectively). A share-based compensation expense of $1.2 million has been recognized for the year ended December 31, 2024 (2023: $2.3 million*)* relating to the Share Option Plan as set out in note 18.

6. Finance income and expense

	Year ended December 31,	
	2024 $'000	2023 $'000
Finance income		
Finance income on cash, cash equivalents and other financial assets	2,628	1,890
Gain on cash equivalents and other financial assets at FVTPL	3,598	2,950
Interest income under effective interest rate method at FVOCI	3,647	4,138
Finance income	**9,873**	**8,978**
Finance expense		
Finance expense on investment	(669)	(660)
Interest expense	(48)	(63)
Finance expense	**(717)**	**(723)**

7. Income tax

The Group's expected tax charge/(credit) of $nil for each year is based on the applicable tax rate in Ireland and reconciles to the actual tax charge/(credit) as follows:

	Year ended December 31,	
	2024 $'000	2023 $'000
Loss before tax	**38,961**	**35,587**
Tax credit calculated at the domestic tax rate 12.5%	(4,870)	(4,448)
Tax effects of:		
Losses for which no deferred tax asset was recognized	4,027	4,200
Income taxable at a higher rate of tax	1,594	118
Other permanent differences	(751)	130
Tax charge/(credit)	**-**	**-**

8. Deferred income taxes

At December 31, 2024, the Group had unused tax losses of $102.8 million (2023: $65.0 million). Deferred tax assets have not been recognized in respect of these losses because it is not sufficiently certain that the Group will generate sufficient taxable profits to be able to utilize these loss carry-forwards.

The Group held investments in money market funds and marketable securities during the year ended December 31, 2024. The Group's net deferred tax position as of December 31, 2024, was $nil. A deferred tax liability of $1.1 million (2023: $nil) has been recognized in respect of potential future liabilities arising on realization of these investments. Offsetting this deferred tax liability, was a deferred tax asset of $1.1 million (2023: $nil) in respect of losses that can be used against potential future liabilities arising on realization of these investments.

9. Cash and cash equivalents

	Year ended December 31,	
	2024	2023
	$'000	$'000
Cash at bank and in hand	28,577	41,390
Cash equivalents	72,214	37,030
	100,791	**78,420**

Cash equivalents comprise an investment in a money market fund which is held at fair value through profit and loss. The fair value of cash equivalents is calculated by multiplying the net asset value per unit by the investment held at the reporting date.

During the year ended December 31, 2023, an investment of $54.0 million was made in a money market fund. This investment has been classified as other financial assets, as the cash flows from these funds do not represent solely payments of principal and interest. During the year ended December 31, 2024, proceeds of $38.0 million were received from the sale of a portion of other financial assets which were used to fund operating activities of the Group.

10. Other current assets

	Year ended December 31,	
	2024	2023
	$'000	$'000
Prepaid expenses	3,169	2,232
VAT receivable	150	178
Other receivables	1,582	119
	4,901	**2,529**

At December 31, 2024, other receivables primarily represents research and development tax receivable.

11. Marketable securities

	Year ended December 31,	
	2024	2023
Fair value	$'000	$'000
At January 1	**88,667**	**85,724**
Accrued interest	3,647	4,138
Interest received	(974)	(1,101)
Redemptions and disposals of marketable securities	(28,787)	-
Revaluation adjustment	(107)	(94)
At December 31	**62,446**	**88,667**

Marketable securities had a fair value of $62.4 million at December 31, 2024 (2023: $88.7 million). During the year ended December 31, 2024, proceeds of $28.8 million were received from the redemption and disposal of marketable securities, which includes accrued interest. The impairment loss allowance for expected credit loss ("ECL") at the reporting date was $0.1 million (2023 $0.1 million). The overall movement through OCI is shown in the table below

	Year ended December 31,	
	2024	**2023**
	$'000	**$'000**
Revaluation adjustments	(107)	(94)
Movement of ECL on assets measured at FVOCI	(66)	(1)
Movement on marketable securities through OCI	**(173)**	**(95)**

Marketable securities at FVOCI have stated interest rates of 0.25% to 3.35% (2023: 0.25% to 3.75%) and mature at varying dates within the next three years.

12. Property, plant and equipment

	Computer Equipment $'000	Office Equipment $'000	Medical Devices $'000	ROU Assets $'000	Total $'000
Cost					
At January 1, 2023	119	8	36	-	163
Additions	90	10	-	1,179	1,279
Exchange difference	(1)	(2)	-	19	16
At December 31, 2023	**208**	**16**	**36**	**1,198**	**1,458**
Accumulated Depreciation					
At January 1, 2023	37	3	26	-	66
Charge for the year	54	5	9	247	315
Exchange difference	2	-	1	5	8
At December 31, 2023	**93**	**8**	**36**	**252**	**389**
Net Book Amount					
At December 31, 2023	**115**	**8**	**-**	**946**	**1,069**

	Computer Equipment $'000	Office Equipment $'000	Medical Devices $'000	ROU Assets $'000	Total $'000
Cost					
At January 1, 2024	208	16	36	1,198	1,458
Additions	49	-	-	-	49
Exchange difference	(15)	(1)	(2)	(72)	(90)
At December 31, 2024	**242**	**15**	**34**	**1,126**	**1,417**
Accumulated Depreciation					
At January 1, 2024	93	8	36	252	389
Charge for the year	63	5	-	247	315
Exchange difference	(8)	-	(2)	(25)	(35)
At December 31, 2024	**148**	**13**	**34**	**474**	**669**
Net Book Amount					
At December 31, 2024	**94**	**2**	**-**	**652**	**748**

Depreciation expense of $21 thousand (2023: $35 thousand) has been charged in research and development expenses and $0.3 million (2022: $0.3 million) in general and administration expenses.

13. Trade payables

Trade payables primarily represents amounts incurred for the provision of manufacturing, research and consulting services and legal and professional fees, which are outstanding at the end of the year. Trade payables are due to be settled at different times within 12 months.

14. Other current liabilities

	Year ended December 31,	
	2024 $'000	2023 $'000
Accruals	3,868	2,325
Social insurance payable	385	340
Other liabilities	704	203
	4,957	**2,868**

Other current liabilities mainly comprise accruals for operating expenses and employee tax payable and are expected to be settled within one year.

15. Leases

During the year ended December 31, 2023, the Group entered into a lease for an office space. The right-of-use asset relating to this lease has been included in property, plant and equipment. At the lease commencement date, the right-of-use asset was recognized at the present value of the future lease payments, discounted at the Group's incremental borrowing rate which was calculated as 6%.

At December 31, 2024, the Group's lease liability was $0.6 million (2023: $1.0 million). Interest expense of $48 thousand was recognized on lease liabilities in the year ended December 31, 2024 (2023: $0.1 million). The following table sets out the maturity analysis of lease payments, on an undiscounted basis.

	Year ended December 31,	
	2024 $'000	2023 $'000
Less than one year	271	360
One to two years	271	288
Two to three years	135	288
Three to four years	-	144
Total undiscounted lease payable	**677**	**1,080**

Lease expenses for short-term leases were $29 thousand for the year ended December 31, 2024 (2023: $0.1 million).

16. Share capital and reserves

Issued and fully paid shares:	Number of outstanding shares	Share capital $'000	Share premium $'000	Other reserves $'000
At January 1, 2023	**52,020,849**	**1,301**	**304,411**	**(12,405)**
Movement on marketable securities through OCI	-	-	-	(95)
Share option exercises (Note 18)	7,296	-	15	-
At December 31, 2023	**52,028,145**	**1,301**	**304,426**	**(12,500)**
Movement on marketable securities through OCI	-	-	-	(173)
At December 31, 2024	**52,028,145**	**1,301**	**304,426**	**(12,673)**

The authorized share capital of GH Research PLC is 40,000,000,000 ordinary shares of nominal value $0.025 each as of December 31, 2024.

Dividend

No dividends were declared or paid during the year (2023: $nil).

Other reserves

Other reserves of $12.7 million (2023: $12.5 million) is comprised of:

- the difference to the share premium previously carried in GH Research Ireland Ltd. and the nominal value of the shares issued in GH Research PLC as part of the corporate reorganization of $9.8 million (2023: $9.8 million). As part of the corporate reorganization which took place on May 27, 2021, shareholders in GH Research Ireland Ltd exchanged each of the shares held by them in GH Research Ireland Ltd, which had a nominal value of €0.01, for shares of GH Research PLC of the same share classes and with the same shareholder rights as the shares held by them in GH Research Ireland Ltd. This share exchange resulted in a share premium balance of $120.7 million, a difference of $9.8 million to the share premium previously carried in GH Research Ireland Ltd, and was recorded under Other reserves.

- transaction costs totaling $22.8 million (2023: $22.8 million) incurred as part of the issuance of the Series B preferred shares and the IPO; and

- the difference between the fair value and the amortized cost of marketable securities measured at FVOCI of $0.1 million as at 31 December 2024 (2023: $0.5 million).

Share-based compensation reserve

Share-based compensation reserve of $4.9 million as of December 31, 2024, (2023: $4.2 million) comprises amounts expensed in the Consolidated statement of comprehensive loss in connection with awards made under the Share Option Plan (see Note 18, "Share-based compensation").

Foreign currency translation reserve

Foreign currency translation reserve of $12.6 million as of December 31, 2024, (2023: $10.5 million) consists of the cumulative currency translation adjustment in respect of GH Research Ireland Ltd whose functional currency is euro. The translation adjustments arise from the retranslation of the results of such operations from the average exchange rate for the year to

the exchange rate at the statement of financial position date as well as the retranslation of the subsidiary's applicable assets and liabilities.

17. Contingencies

As of December 31, 2024, there were no material contingencies which required adjustment to or disclosure in the Group's financial statements (2023: none*).*

18. Share-based compensation

Share Options

In June 2021, the Company adopted a share option plan referred to herein as the Share Option Plan under which grants of options are made to eligible participants. The Company initially reserved 1,202,734 ordinary shares for future issuance under the Share Option Plan, which includes ordinary shares pursuant to share-based equity awards issued to date. As of December 31, 2024, the total number of ordinary shares which may be issued under the Share Option Plan was 2,202,704 and the Company has 325,861 ordinary shares available for the future issuance of share-based equity awards (2023: 404,718 shares*)*.

Under the Share Option Plan, the options may be settled only in ordinary shares of the Company. Therefore, the grants of share options under the Share Option Plan have been accounted for as equity settled under IFRS 2. As such, the Company records a charge for the vested portion of award grants and for partially earned but non vested portion of award grants.

During the year ended December 31, 2024, the Company granted the option to purchase 1,320,120 ordinary shares (2023: 440,719 shares), respectively, which were in line with the general terms of the Share Option Plan.

The terms of the 1,320,120 share options granted during the year ended December 31, 2024, are described below:

- 187,000 share options were granted which vest 25% on the first anniversary of the date of grant, and thereafter evenly on a monthly basis over the subsequent three years and are subject to a two-year service condition. The contractual term (expiration) of these share options is eight years from the grant date with an exercise price of the closing market price on the day prior to the grant.

- 33,120 share options were granted which vested on the date of grant and are subject to a two-year service condition. The contractual term (expiration) of these share options is seven years from the grant date with an exercise price of $0.025.

- 1,100,000 share options were granted which vest 25% on the first anniversary of the date of grant, and thereafter evenly on a monthly basis over the subsequent three years. The contractual term (expiration) of these share options is seven years from the grant date with an exercise price of $0.025.

During the year ended December 31, 2024, 241,293 share options (2023: 104,299 share options) were forfeited. No share options were exercised during the year ended December 31, 2024. During the year ended December 31, 2023, the weighted average share price of share options exercised was $9.90.

The following table summarizes the share option awards outstanding as of December 31, 2024 and 2023:

	Average exercise price per share in USD	Number of awards	Weighted average remaining life in years
At January 1, 2023	**15.32**	**461,596**	**7.14**
Granted	5.41	440,719	7.05
Forfeited	12.02	(104,299)	6.77
Exercised	2.05	(7,296)	5.74
At December 31, 2023	**10.35**	**790,720**	**6.57**
Granted	1.37	1,320,120	6.98
Forfeited	10.85	(241,293)	6.05
At December 31, 2024[(1)]	**3.95**	**1,869,547**	**6.56**

[(1)]213,243 of the awards outstanding as of December 31, 2024 were exercisable (2023: 112,244).

The weighted average grant date fair value of awards granted during the year ended December 31, 2024 was $8.70 (2023: $7.72) per award.

The fair values of the options granted were determined on the date of the grant using the Black-Scholes option-pricing model. The Company used an independent valuation firm to assist in calculating the fair value of the award grants per participant.

The fair values of the options granted during the years ended December 31, 2024 and 2023, were determined on the date of the grant using the following assumptions:

	Year ended December 31, 2024	**Year ended December 31, 2023**
Share price, in USD	5.80 - 14.81	5.32 - 13.15
Strike price, in USD (weighted average)	1.37	5.41
Expected volatility	85%-94%	83% - 88%
Award life (weighted average)	5.55	5.6
Expected dividends	—	—
Risk-free interest rate	3.54% - 4.52%	3.50% - 4.77%

The expected volatility was based on selected volatility determined by median values observed among other comparable public companies.

The award life is based on the time interval between the date of grant and the date during the life of the share option after which, when making the grant, the Company expected on average that participants would exercise their options.

As of December 31, 2024, the amount recorded as an increase to Share-Based Compensation Reserve within equity on the consolidated statement of financial position of the Share Option Plan was $4.9 million (December 31 2023: $4.2 million) relating to the Group's Share Option Plan. Balances which relate to forfeited awards which had previously vested are transferred from Share-Based Compensation Reserve to Accumulated Deficit. The amount of expense for all awards recognized for services received during the year ended December 31, 2024, was $1.2 million (2023: $2.3 million).

19. Financial risk management

Financial risk factors

The Board of Directors currently reviews the Group's cash forecast and liquidity requirements. The Group's activities expose it to a variety of financial risks including foreign exchange risk, credit risk, interest rate risk and liquidity risk.

Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the U.S. dollar, euro and pounds sterling. Transaction exposure arises because the amount of local currency paid or received in transactions denominated in foreign currencies may vary due to changes in exchange rates. Foreign exchange risk arises from:

- forecast expenses denominated in a currency other than the entity's functional currency; and
- recognized assets and liabilities denominated in a currency other than the entity's functional currency.

The Group's cash, cash equivalents and other financial assets are denominated in the following currencies:

	2024	2024	2023	2023
	Local Currency '000	$'000	Local Currency '000	$'000
In USD	119,363	119,363	133,816	133,816
In Euro	723	752	187	207
In GBP	50	63	10	12
		120,178		**134,035**

The Group is exposed to foreign exchange risk in respect of its subsidiary as its functional currency is euro. The subsidiary holds significant cash deposits and other financial assets denominated in U.S. dollar. Accordingly, future changes in the exchange rates of euro and the U.S. dollar will expose the Group to currency gains or losses that will impact the reported amounts of assets, liabilities, income and expenses and the impact could be material.

For the year ended December 31, 2024, the Group recognized a foreign exchange gain of $2.1 million (2023: loss of $2.6 million). The foreign exchange gain primarily relates to the U.S. dollar cash and other financial assets holding of its subsidiary and the associated strengthening of the U.S. dollar compared to euro during the year. Movement in foreign exchange rates could positively or negatively affect the Group and the effect could be material. These foreign exchange movements are largely offset by related movements within Other Comprehensive Income.

The Group does not believe there is currently a need to enter into specific contracts to reduce the exposure to changes in foreign exchange rates, such as by entering into options or forward contracts. The Group may in the future consider using options or forward contracts to manage currency transaction exposures. All marketable securities are denominated in U.S. dollar and are not subject to foreign exchange risk as they are held in an entity whose functional currency is the U.S. dollar. Other financial assets are denominated in U.S. dollar but are held in an entity whose functional currency is not the U.S. dollar and as such are subject to foreign exchange risk.

At December 31, 2024, if the U.S. dollar had weakened / strengthened by 10% against the euro with all other variables held constant, the loss before tax for the year would have been $2.3 million higher / lower (2023: $6.4 million higher / lower), mainly related to the translation of cash and other financial assets held in U.S. dollar in the Company's subsidiary, GH Research Ireland Ltd., whose functional currency is euro as explained in note 2, "Basis of preparation, significant

judgments, and accounting policies". This would be offset by an equivalent amount within Other Comprehensive Income.

Credit risk

The Group is exposed to credit risk on our cash, cash equivalents, other financial assets and marketable securities. The Group's cash balance is maintained with well established, highly rated financial institutions. As of December 31, 2024, the cash balance is held at three banks that have a minimum S&P's credit rating of A-. At December 31, 2024, the amount reflected in the statement of financial position for cash and cash equivalents represents the Group's maximum exposure to credit risk for these instruments.

At December 31, 2024, the Group holds investments in investment grade bonds and in money market funds ("the Portfolio"). These investments are exposed to credit risk in the event of default of the counterparty. The Group does not invest in equity instruments or derivatives and none of the bonds are individually above 3% of the value of the Portfolio.

The Group's marketable securities, measured at FVOCI, are subject to the expected credit loss model. The Group provides for expected credit losses as prescribed by IFRS 9 for its assets held at FVOCI. The expected credit loss model under IFRS 9 requires the calculation of "12 month expected credit losses" for financial assets. Those are the losses based on defaults which are possible within 12 months of the reporting date. This is required unless the asset is not considered to be of low credit risk at the reporting date and is deemed to have had a significant increase in credit risk since initial recognition. If that is the case, lifetime expected credit losses should be recorded. Management considers low credit risk for existing marketable securities to be an investment grade credit rating with at least one major rating agency. Assets held at FVOCI are considered to have low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the short term. The Group's current policy is to invest primarily in investment grade securities. After a downgrade, compliance with this restriction is restored in a timely manner. The credit risk for the Group's marketable securities is considered to be low as of December 31, 2024. The impairment allowance recognized during the period was calculated based on 12 month expected credit losses and reconciles to the opening impairment allowance as follows:

	Year ended December 31,	
	2024 $'000	**2023 $'000**
Opening impairment allowance	**120**	**121**
Movement in impairment allowance during the year	(66)	(1)
Closing impairment allowance	**54**	**120**

The impairment allowance is based on assumptions around probability of default, loss given default, exposure at default and the discount rate. Judgment is used in making these assumptions and selecting the inputs to the expected credit losses calculation, based on any historical experience and current market conditions, as well as forward looking estimates at the end of the reporting period.

Interest rate risk

Interest rate risk is the risk of a change in the price of a financial instrument due to fluctuations in interest rates, leading to a financial loss. The Group is exposed to interest rate risk on its marketable securities. Although the bonds pay interest at a fixed rate, the value of the Group's marketable securities would decrease in the short term in the event of an interest rate increase in alternative investments.

As of December 31, 2024, if interest rates had increased / decreased by 50 basis points, with all other variables held constant, the Group's total comprehensive loss would have been $0.3

million higher / lower (2023: $0.7 million higher / lower), due to the movement in the fair value of the Group's marketable securities.

Liquidity risk

Liquidity risk is the risk that the Group may not be able to generate sufficient cash resources to settle its obligations in full as they fall due or can do so only on terms that are materially disadvantageous. Prudent liquidity risk management implies maintaining sufficient cash to cover working capital requirements. Cash is monitored by the Group's management.

Funding and liquidity risks are reviewed regularly by the Board of Directors and management. The Group funds its capital requirements through capital raising. All financial liabilities, aside from lease liabilities as included in Note 15 "Leases", are due within one year from the balance sheet date.

Capital management

The Group considers capital as equivalent to the IFRS equity on the balance sheet (including share capital, share premium and all other equity reserves attributable to the owners of the Company). The Group has no interest-bearing debt.

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern and to provide returns to its shareholders through advancing our investigational pharmaceutical product candidates towards regulatory approval.

Fair value estimation

The carrying amount is considered to be a reasonable approximation of fair value for the following financial assets and liabilities:

- Cash
- Other current assets
- Trade payables and other current liabilities

The following table shows the carrying amounts and fair values of financial assets. The table does not include fair value information for financial assets or financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value.

	Carrying amount			
	2024	**2024**	**2023**	**2023**
	FVOCI	**FVTPL**	**FVOCI**	**FVTPL**
	$'000	**$'000**	**$'000**	**$'000**
Financial assets measured at fair value				
Marketable securities	62,446	-	88,667	-
Cash equivalents	-	72,214	-	37,030
Other financial assets	-	19,387	-	55,615
	62,446	**91,601**	**88,667**	**92,645**

Fair value methodology

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments:

Level 1: Quoted prices (unadjusted) in active markets for identical assets and liabilities.

Level 2: Inputs other than quoted market prices within Level 1 that are observable for the asset, either directly or indirectly.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities.

The fair value of marketable securities, other financial assets and cash equivalents are based on quoted market prices representing Level 1 inputs.

Fair value – share-based compensation

Fair values must be estimated on an ongoing basis with regard to awards under the Share Option Plan. The approach to valuation follows the grant date fair value principle and the key input factors are described for the share-based compensation awards in note 18, “Share-based compensation”.

20. Related party disclosures

During the year ended December 31, 2024, GH Research PLC granted the option to purchase 1,043,120 ordinary shares to key management.

- 60,000 share options were granted which vest 25% on the first anniversary of the date of grant, and thereafter evenly on a monthly basis over the subsequent three years and are subject to a two-year service condition. The contractual term (expiration) of these share options is eight years from the grant date with an exercise price of the closing market price on the day prior to the grant.

- 33,120 share options were granted which vested on the date of grant and are subject to a two-year service condition. The contractual term (expiration) of these share options is seven years from the grant date with an exercise price of $0.025.

- 950,000 share options were granted which vest 25% on the first anniversary of the date of grant, and thereafter evenly on a monthly basis over the subsequent three years. The contractual term (expiration) of these share options is seven years from the grant date with an exercise price of $0.025.

During the year ended December 31, 2023, GH Research PLC granted the option to purchase 122,399 ordinary shares to key management. Of the 122,399 share options granted during the year ended December 31, 2023, 72,399 share options were granted with a contractual term (expiration) of seven years from the grant date and an exercise price of $0.025 per share. The remaining 50,000 share options were granted with a contractual term (expiration) of eight years from the grant date and an exercise price at the closing market price on the day prior to the grant. 19,899 share options vested on the date of grant, subject to a two-year service condition. In the same period, 7,296 share options were exercised by related parties. For further information, see Note 18 “Share-based compensation”.

Key Management Compensation

Key management are those persons who have the authority and responsibility for planning, directing and controlling the activities of the Group. Key management is comprised of officers and the Board of Directors who served during the reporting period.

	Year ended December 31,	
	2024	**2023**
	$’000	**$’000**
Salary and related expenses	1,870	1,421
Pension contributions	61	-
Share-based compensation expense	1,227	590
Termination benefits	260	-
	3,418	**2,011**

Directors' Remuneration

	Year ended December 31,	
	2024	**2023**
	$'000	**$'000**
Directors' emoluments	407	243
Gain on share option exercise	-	57
Total directors' remuneration	**407**	**300**

During the year ended December 31, 2024, members of the board of directors exercised no share options (2023: 7,296 share options). In the year ended December 31, 2023 this resulted in an aggregate gain of $57 thousand.

21. Loss per share

The basic loss per share is calculated by dividing the loss for the year attributable to shareholders by the weighted average number of shares in issue during the financial year as follows:

	Year ended December 31,	
	2024	**2023**
Loss attributable to shareholders (in $'000)	(38,961)	(35,587)
Weighted average number of shares in issue	52,028,145	52,022,588
Basic and diluted loss per share (in USD)	(0.75)	(0.68)

For the years ended December 31, 2024 and 2023, basic and diluted loss per share are calculated on the weighted average number of shares issued and outstanding and exclude shares to be issued under the Share Option Plan, as the effect of including those shares would be anti-dilutive.

22. Subsidiary undertaking

As of December 31, 2024, the Group had one subsidiary undertaking, GH Research Ireland Ltd. GH Research Ireland Ltd's registered office is Joshua Dawson House, Dawson Street, Dublin 2. The Subsidiary is a clinical-stage biopharmaceutical company dedicated to transforming the treatment of psychiatric and neurological disorders. As of December 31, 2024, the Group owned 100% of the ordinary share capital of the Subsidiary undertaking.

23. Events after the reporting date

In 2025, the Group received net cash proceeds of $139.8 million from a public offering of ordinary shares.

There were no other events after the reporting date requiring disclosure in the Group's consolidated financial statements.

Company Statement of Financial Position

	Note	At December 31, 2024 $'000	At December 31, 2023 $'000
ASSETS			
Non-current assets			
Investment in subsidiary	**3**	126,771	125,874
Marketable securities	**4**	33,300	61,142
Total non-current assets		**160,071**	**187,016**
Current assets			
Cash and cash equivalents	**5**	96,611	68,469
Marketable securities	**4**	29,146	27,525
Other current assets	**6**	1,259	1,389
Total current assets		**127,016**	**97,383**
Total assets		**287,087**	**284,399**
LIABILITIES AND EQUITY			
Current liabilities			
Trade payables		342	31
Other current liabilities	**7**	846	713
Total current liabilities		**1,188**	**744**
Total liabilities		**1,188**	**744**
Equity			
Share capital	**8**	1,301	1,301
Share premium	**8**	304,426	304,426
Other reserves	**8**	(16,083)	(15,910)
Share-based compensation reserve	**8**	4,904	4,188
Accumulated deficit		(8,649)	(10,350)
Total equity		**285,899**	**283,655**
Total liabilities and equity		**287,087**	**284,399**

As permitted by Section 304 of the Companies Act 2014, the Company has not presented a Company Statement of Profit and Loss. The total comprehensive income for the year ended December 31, 2024, of the Company amounted to $1.1 million (total comprehensive gain for year ended December 31, 2023: $0.1 million).

The accompanying notes form an integral part of the financial statements.

On behalf of the Board

Dermot Hanley
Director

Duncan Moore
Director

Company Statement of Changes in Equity

	Share capital	Share Premium	Other reserves	Share-based compensation reserve	Accumulated deficit	Total
	$'000	$'000	$'000	$'000	$'000	$'000
	Note 8	Note 8	Note 8	Note 8		
At January 1, 2023	**1,301**	**304,411**	**(15,815)**	**2,037**	**(10,722)**	**281,212**
Profit for the year	-	-	-	-	232	232
Other comprehensive loss	-	-	(95)	-	-	(95)
Total comprehensive (loss)/income for the year	**-**	**-**	**(95)**	**-**	**232**	**137**
Share-based compensation expense	-	-	-	2,291	-	2,291
Share option exercises	-	15	-	(140)	140	15
Total transactions with owners	**-**	**15**	**-**	**2,151**	**140**	**2,306**
At December 31, 2023	**1,301**	**304,426**	**(15,910)**	**4,188**	**(10,350)**	**283,655**
At January 1, 2024	**1,301**	**304,426**	**(15,910)**	**4,188**	**(10,350)**	**283,655**
Profit for the year	-	-	-	-	1,246	1,246
Other comprehensive loss	-	-	(173)	-	-	(173)
Total comprehensive (loss)/income for the year	**-**	**-**	**(173)**	**-**	**1,246**	**1,073**
Share-based compensation expense	-	-	-	1,171	-	1,171
Transfer of share options	-	-	-	(455)	455	-
Total transactions with owners	-	-	-	**716**	**455**	**1,171**
At December 31, 2024	**1,301**	**304,426**	**(16,083)**	**4,904**	**(8,649)**	**285,899**

The accompanying notes form an integral part of the financial statements

Notes to the Company Financial Statements

1. Corporate information

The Company is a public limited company registered in Ireland under the registration number 691405 and with its registered office at Joshua Dawson House, Dawson Street, Dublin 2. The Company was incorporated on March 29, 2021.

The principal activity of GH Research PLC is to act as an investment holding company.

2. Basis of preparation, significant judgments, and accounting policies

Statement of compliance

The Company's financial statements have been prepared in accordance with applicable accounting standards, issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland, including FRS 102, 'The Financial Reporting Standard applicable in the UK and Republic of Ireland' and the Irish Companies Act 2014.

Basis of preparation

The Company's financial statements have been prepared on a going concern basis under the historical cost convention aside from the measurement at fair value of all investments in money market funds and marketable securities and share-based payments at initial date of award. The preparation of these financial statements requires the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Company's accounting policies. Actual results may differ from these estimates. The significant accounting policies used in the preparation of the Company financial statements are set out below. These policies have been consistently applied to all financial years presented, unless otherwise stated.

In accordance with section 304 of the Companies Act 2014, the Company is availing of the exemption from presenting its individual profit and loss account to the annual general meeting and from filing it with the Registrar of Companies.

Disclosure Exemptions

FRS 102 allows a qualifying entity certain disclosure exemptions. The Company is a qualifying entity and has availed of the following disclosure exemptions:

i. Exemption from the requirements of Section 7 of FRS 102 and FRS 102 paragraph 3.17(d) to present statement of cash flows.

ii. Exemption from the financial instrument disclosure requirements of Section 11 paragraphs 11.42 to 11.48A of FRS 102 as the equivalent disclosures are included in the consolidated financial statements of the Company in which the entity is consolidated.

iii. Exemption from certain disclosure requirements of Section 26 of FRS 102 (paragraphs 26.18(b), 26.19 to 26.21 and 26.23), in respect of share-based compensation as the share-based compensation concerns its own equity instruments its separate financial statements are presented alongside the consolidated financial statements of the Company; and the equivalent disclosures are included in the consolidated financial statements of the Company in which the entity is consolidated.

iv. Exemption from the requirement of FRS 102 paragraph 33.7 to disclose key management personnel compensation in total.

v. The Company has not disclosed related party transactions between the Company and its subsidiary, having availed of the exemption under Schedule 3(67), paragraph 3 of the Companies Act 2014. This provides an exemption from the disclosures of transactions entered into between two or more members of a group, provided that any subsidiary undertaking which is a party to the transaction is wholly owned by a member of the Group.

Critical accounting judgments and estimation uncertainty

Estimates and judgments made in the process of preparing the entity financial statements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Critical accounting estimates and assumptions

The estimation process required to prepare the Company's financial statements requires assumptions to be made about future events and conditions, and as such, is inherently subjective and uncertain. The Company's actual results could differ materially from those estimates.

In preparing these Company financial statements, the significant judgments made by management in applying the Company's accounting policies and the key sources of estimation uncertainty for the year ended December 31, 2024 and 2023, are as follows:

Carrying value of investment in subsidiary

The Company is a holding company and included in the statement of financial position is an investment in subsidiary carried at cost of $126.8 million (2023: $125.9 million*)*. Recoverability of the investment is dependent on the financial condition of the Subsidiary of the Company. The investment is reviewed for impairment indicators. As of December 31, 2024, no impairments were noted (2023: none*)*.

Share-based compensation expense

The Company accounts for the share-based compensation charge of share options granted to employees of a subsidiary as an increase in its investment in that subsidiary. As explained in note 18 to the consolidated financial statements, the expected volatility assumption used in the determination of the fair value of the share-based compensation awards was based on selected volatility determined by median values observed among other comparable public companies. Judgment was applied in the selection of comparable public companies and of the relevant period of observation used to determine the median values.

Functional currency

Judgment was applied in the determination that the U.S. dollar is the functional currency of the Company with the principal considerations being that most of the expenses incurred and all funding raised are in U.S. dollars.

Going concern basis

As the Company's operational existence relies on the financial resources and activities of the Company and its subsidiary as a Group (collectively, the "Group"), a going concern assessment performed at the Group level was deemed relevant to support the Company's ability to continue as a going concern. The Company's board of directors formed a judgment at the time of approving these financial statements that there was a reasonable expectation that the Company has adequate resources to continue as a going concern for a period of at least twelve months from the date on which these financial statements are approved for issue.

In arriving at this conclusion, the Company's board of directors has considered the Group's level of cash, cash equivalents, other financial assets and marketable securities amounting to $182.6 million as of December 31, 2024 and the projected planned cash outflows for at least 12 months from the date of approval of the financial statements. For this reason, the going concern basis has been adopted in the preparation of the Company's financial statements.

Accounting policies

Foreign currency translation

The functional currency of the Company is the U.S. dollar given it is listed on Nasdaq and its fundraising activities and most of its expenses incurred are in U.S. dollars. These Company financial statements are presented in U.S. dollar.

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated at the statement of financial position date.

Investments in subsidiaries

The Company holds an investment in a subsidiary company, which is carried at cost less any impairments. The investment is tested for impairment if circumstances or indicators suggest that an impairment may exist.

Cash and cash equivalents

Cash and cash equivalents represent cash held in bank current accounts with original maturities of less than three months and investments which are readily convertible to a known amount of cash and are subject to insignificant changes in value. Cash and cash equivalents are carried at amortized cost or, in the case of investments in money market funds, at fair value through profit or loss as the cash flows from these funds do not represent solely payments of principal and interest. The Company's determination of its investments as cash equivalents requires judgment, which includes assessing the ability to readily convert an instrument into cash.

The Company's cash balance is maintained with well established, highly rated financial institutions. The majority of the cash balance is held in U.S. dollars.

Financial assets

In accordance with FRS 102, the Company has opted to apply the recognition and measurement requirements of IFRS 9: Financial instruments to its financial instruments that fall in scope of Sections 11 and 12 of FRS 102. In addition, the presentation and disclosure requirements of FRS 102 have been applied as required by FRS 102.

In accordance with IFRS 9, a financial asset is recognized in the statement of financial position when the Company becomes a party to its contractual provisions. At initial recognition, a financial asset is measured at fair value, adjusted for directly attributable transaction costs, with the exception of financial assets at fair value through profit and loss ("FVTPL") which are measured at fair value and is assigned one of the following classifications for the purpose of subsequent measurement:

- financial asset at amortized cost;
- financial asset at fair value through other comprehensive income ("FVOCI"); or
- financial asset at FVTPL.

The Company determines the appropriate classification based on the contractual cash flow characteristics of the financial asset and the objective of the business model within which the financial asset is held. In determining the business model for a group of financial assets, the Company considers factors such as, how performance is evaluated and reported within the Company, the risks that impact performance and how they are managed, and the expected frequency, value and timing of sales of financial assets.

In considering the contractual cash flow characteristics of a financial asset, the Company determines whether the contractual terms give rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal outstanding. In making this determination, the Company assesses whether the financial asset contains a contractual term that could change the timing or amount of the contractual cash flows such that it would not meet this condition.

Financial assets are derecognized when the Company's contractual rights to the cash flows from the financial asset expire, are extinguished or transferred to a third party.

Marketable securities are mainly comprised of investment grade bonds. At initial recognition, marketable securities are measured at fair value and subsequently at FVOCI when both of the following conditions are met:

- The asset has contractual terms that give rise to cash flows on specified dates that are solely payments of principal and interest on the principal outstanding; and
- The asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling those assets.

Purchases and sales of instruments are recognized on the trade date with gains and losses arising from changes in fair value included in Other Comprehensive Income ("OCI"). Interest income, using the effective interest method, is recognized in the income statement. An impairment loss allowance is recognized for expected credit losses ("ECL"). The impairment loss allowance does not reduce the carrying value of the asset but an amount equal to the allowance is recognized in OCI as an accumulated impairment amount, with corresponding impairment gains or losses recognized in the income statement. On derecognition, the cumulative gain or loss previously recognized in OCI is reclassified to the income statement.

Other current assets

Other current assets mainly comprise prepayments made by the Company and typically constitute amounts paid as consideration for expenses for a specific period after the balance sheet date or for services to be received after the balance sheet date which are systematically amortized over that period or when the service is received.

Trade payables and other current liabilities

Trade payables and other current liabilities are recognized initially at fair value and subsequently measured at amortized cost.

Share-based compensation expense

The Company accounts for the annual expense corresponding to the fair value of share options granted to employees of the subsidiary as an increase in its investment in that subsidiary. The fair value of such options is determined in a consistent manner to that set out in the Group share-based compensation accounting policy and as set out in note 2 and 18 to the consolidated financial statements.

Share capital and *share premium*

Share capital

Share capital represents the nominal value of outstanding shares (see note 8, "Share capital and reserves").

Share premium

Amounts received in excess of the nominal value of allotted shares are accounted for as share premium.

Incremental costs directly attributable to equity transactions such as the issue of new capital shares are shown in equity as a deduction, net of tax, within Other reserves. Transaction costs that relate to equity and non-equity transactions are allocated to those transactions using a basis of allocation that is rational and consistent with similar transactions. If the equity instruments are not subsequently issued, the transaction costs would be expensed.

Current and deferred income tax

The tax expense for the financial year comprises current and deferred tax. Tax is recognized in the income statement, except to the extent that it relates to items recognized in other

comprehensive income or directly in equity. In this case the related tax is recognized in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date where the Company generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Taxes on income are accrued in the same financial year as the income and expenses to which they relate. Current income tax assets and liabilities for the current financial year are measured at the amount expected to be recovered from or paid to the tax authorities.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences or the unused tax losses can be utilized. Deferred income tax assets from tax credit carry-forwards are recognized to the extent that the realization of the related tax benefit through future taxable profits is probable.

3. Investment in subsidiary

	December 31,	
	2024	**2023**
	$'000	**$'000**
Balance at start of year	125,874	123,659
Increase in investment[(1)]	897	2,215
Balance at end of year	**126,771**	**125,874**

[(1)]Share-based compensation.

4. Marketable securities

	December 31,	
	2024	**2023**
	$'000	**$'000**
Fair value		
Opening balance	**88,667**	**85,724**
Accrued interest	3,647	4,138
Interest received	(974)	(1,101)
Redemptions and disposals of marketable securities	(28,787)	-
Revaluation adjustment	(107)	(94)
Closing balance	**62,446**	**88,667**

For further information on the marketable securities held at December 31, 2024, please see note 11 "Marketable Securities" and note 19 "Financial Risk Management" in the Group's consolidated financial statements. All marketable securities held at December 31, 2024, are held by the Company.

5. Cash and cash equivalents

	December 31,	
	2024	2023
	$'000	$'000
Cash at bank and in hand	24,397	31,439
Cash equivalents	72,214	37,030
	96,611	**68,469**

Cash equivalents comprise an investment in a money market fund which is held at fair value through profit and loss. The fair value of cash equivalents is calculated by multiplying the net asset value per unit by the investment held at the reporting date.

6. Other current assets

	December 31,	
	2024	2023
	$'000	$'000
Prepaid expenses	1,128	1,192
VAT receivable	98	97
Other receivables	33	100
	1,259	**1,389**

7. Other current liabilities

	December 31,	
	2024	2023
	$'000	$'000
Amounts owed to subsidiary undertaking	3	6
Social security payable	32	38
Other accruals	811	669
	846	**713**

Amounts owed to the Company's subsidiary undertaking are unsecured, interest free and repayable on demand.

8. Share capital and reserves

Share capital

Issued and fully paid shares:	Number of outstanding shares	Share capital	Share Premium	Other reserves
		$'000	$'000	$'000
At January 1, 2023	**52,020,849**	**1,301**	**304,411**	**(15,815)**
Movement on marketable securities through OCI	-	-	-	(95)
Exercise of share options	7,296	-	15	-
At December 31, 2023	**52,028,145**	**1,301**	**304,426**	**(15,910)**
Movement on marketable securities through OCI	-	-	-	(173)
At December 31, 2023	**52,028,145**	**1,301**	**304,426**	**(16,083)**

The authorized share capital of GH Research PLC is 40,000,000,000 ordinary shares of nominal value $0.025 each as of December 31, 2024.

Dividend

No dividends were declared or paid during the year (2023: $nil).

Other reserves

Other reserves of $16.1 million (2023: $15.9 million) million represents:

- transactions costs of $16.4 million incurred as part of the IPO share issuance which occurred on June 29, 2021, when GH Research PLC closed its IPO of 11,499,999 ordinary shares on the Nasdaq Global Market at $16.00 per share; and

- the difference between the fair value and the amortized cost of marketable securities measured at fair value through OCI of $0.1 million as at 31 December 2024 (2023: $0.5 million).

Share-based compensation reserve

Share-based compensation reserve of $4.9 million as of December 31, 2024 (2023: $4.2 million) comprises amounts expensed in connection with awards made under the Share Option Plan. For further details please see note 18 to the consolidated financial statements.

9. Related party transactions

Please see Notes 18 and 20 of the consolidated financial statements for details of related party transactions.

10. Auditors' remuneration

In the year ended December 31, 2024, $19 thousand was payable for the statutory audit of the Company financial statements to the auditors (2023: $19 thousand), PricewaterhouseCoopers, Ireland.

11. Employee particulars

As of December 31, 2024, the Company had 1 employee (2023: 1 employee*)*. During the year ended December 31, 2024 the Company had an average of 1 employee. The Company incurred salary and related expenses of $0.6 million and social security costs of $6 thousand in the year-ended December 31, 2024 (2023: $0.3 million and $6 thousand respectively*)*.

12. Contingencies

See note 17 in the consolidated financial statements.

13. Subsidiary undertaking

As of December 31, 2024, the Company had one subsidiary undertaking, GH Research Ireland Ltd. GH Research Ireland Ltd's registered office is Joshua Dawson House, Dawson Street, Dublin 2. The Subsidiary is a clinical-stage biopharmaceutical company dedicated to transforming the treatment of psychiatric and neurological disorders. As of December 31, 2024, the Group owned 100% of the ordinary share capital of the Subsidiary undertaking.

14. Events after the reporting date

In 2025, the Group received net cash proceeds of $139.8 million from a public offering of ordinary shares.

There were no other events after the reporting date requiring adjustment or disclosure in the Company's financial statements.

15. Approval of financial statements

The financial statements of GH Research PLC for the year ended December 31, 2024 were authorized for issue by the Board of Directors on March 27, 2025.