May 17, 2021

Theis Terwey, PD, Dr. Med. Chief Executive Officer GH Research PLC 28 Baggot Street Lower Dublin 2 D02 NX43 Ireland

> Re: GH Research PLC Draft Registration

Statement on Form F-1

2021

Submitted April 20,

CIK No. 0001855129

Dear Dr. Terwey:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response. After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments. Draft Registration Statement on Form F-1 Prospectus Summary, page 1 Please disclose that 1. your GH001 product candidate is delivered via inhalation of aerosols from a vaporization device produced by a third-party. Our Pipeline, page 1 2 Please revise the last two items under GH001 in your pipeline table to identify the indications or tell us why you believe these items are sufficiently material to warrant inclusion in the table despite not having identified an indication. The statement that you Theis Terwey, PD, Dr. Med. FirstName LastNameTheis Terwey, PD, Dr. Med. GH Research PI C Comapany May NameGH Research PLC 17, 2021 May 17, Page 2 2021 Page 2 FirstName LastName will plan to explore additional indications through collaborations with academic institutions and commercial contract research organizations, or CROs, where you appear not to have yet entered into any material collaborations, suggests that these are not currently material and do not warrant disclosure in the chart. Please also provide similar disclosure of the indication under GH002. We note that GH002 is in the preclinical stage

and there is little discussion of GH002 in your submission separate from the discussion of GH001. 5-MeO-DMT Mechanism of Action in Psychiatric and Neurological Disorders, page 2 We note your statement here that the administration of your product 3. candidates correlate with clinical improvement across various psychiatric and neurological disorders and your statement on page 130 that the SSG concluded that all single doses were safe to administer. Please revise this and all similar statements throughout your prospectus that state or imply that your product candidates are safe or effective as these determinations are solely within the authority of the FDA and comparable regulatory bodies. Our Market Opportunity, page 2 4. Please disclose the source of your statement that there are an estimated number of approximately 48 million MDD patients in the United States and Europe, of which about 50% receive treatment with pharmacotherapy or pharmacotherapy and psychotherapy, we estimate that there are approximately nine million TRD patients in the United States and Europe who would be candidates for treatment. Our 5-MeO-DMT Therapies: GH001 and GH002, page 3 Please disclose the percentage of patients in your clinical trials 5 that experienced at least one adverse drug reaction, the duration of your clinical trials and that your clinical trials were conducted in the Netherlands. **Risk Factors** We depend on third-party suppliers..., page 77 Please identify the manufacturer that is the sole supplier of your 6. vaporization device. Provisions of our Constitution could delay..., page 93 Please revise your statement that a supermajority of the voting power is required to amend your constitution to clarify that such an amendment requires the approval of 75% of the voting power. Use of Proceeds, page 100 Please revise your disclosure to indicate the portion of proceeds to 8. be allocated to each product candidate. Please also disclose how far the funds from this offer and existing cash will allow you to proceed with the continued development of each of your product Theis Terwey, PD, Dr. Med. **GH Research PLC** May 17, 2021 Page 3 candidates with respect to each indication you are pursuing. Management's Discussion and Analysis, page 107 Results of Operations, page 111 Given your disclosure on page 112 that you expect research and 9. development costs to "increase materially in the near future, consistent with our plan to advance our GH001 and GH002 product candidates through clinical development", please revise to disclose costs by product candidate as well as by the nature of expense for each period presented. To the extent that you do not track expenses by product candidate, please disclose as such. Please revise to disclose the extent to which any stock-based 10. compensation has been awarded during 2021 and provide the fair market valuation of each award. Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any

differences between the recent valuations of your common stock leading up to the initial public offering and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features. Please discuss with the staff how to submit your response. **Business** Economic and Societal Burden, page 118 Please disclose the source of your statements in this section. 11. Intellectual Property, page 134 Please disclose the jurisdictions in which you have filed your patent 12. applications and the specific products, product groups and technologies to which such patent applications relate. Also, briefly describe the agreements with third parties you refer to on page 71 under which you grant or are granted rights to intellectual property. Management Equity Incentive Plans, page 160 Please file the 2021 equity incentive plan and the employment 13. agreements with your executive officers as exhibits to your registration statement. Refer to Item 601(b)(10)(iii)(A) or advise. Tax Considerations, FirstName page 193 LastNameTheis Terwey, PD, Dr. Med. Comapany 14. NameGH Please file the Research consent ofPLC Davis Polk & Wardwell LLP as an exhibit to your registration May 17, statement. 2021 PageFor3 guidance, refer to Section III.A.2 of Staff Legal Bulletin No. 19. FirstName LastName Theis Terwey, PD, Dr. Med. FirstName LastNameTheis Terwey, PD, Dr. Med. GH Research PLC Comapany NameGH Research PLC May 17, 2021 May 17, Page 4 2021 Page 4 FirstName LastName Underwriting, page 200 Please disclose the exceptions to the lock-up agreements with your 15. directors, officers and existing stockholders. General 16. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. You may contact Jenn Do at 202-551-3743 or Kevin Kuhar at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Jeffrey Kauten at 202-551-3447 or Mary Beth Breslin at 202-551-3625 with any other questions.

> Sincerely, Division of Office of Life

Corporation Finance