
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of January, 2023.

Commission File Number: 001-40530

GH Research PLC

(Exact name of registrant as specified in its charter)

28 Baggot Street Lower
Dublin 2
D02 NX43
Ireland

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F

Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

GH Research PLC (the "Company") will hold one-on-one investor meetings during the J.P. Morgan Annual Healthcare Meeting 2023, which is scheduled to take place from January 9-12, 2023 in San Francisco, California.

On January 9, 2023, the Company provided business updates by way of a press release and an updated investor presentation, which it made available on its website. A copy of the press release is attached hereto as Exhibit 99.1 and a copy of the presentation is attached hereto as Exhibit 99.2.

The fact that this presentation is being made available and furnished herewith should not be deemed an admission as to the materiality of any information contained in the materials. The information contained in the presentation is being provided as of January 9, 2023 and the Company does not undertake any obligation to update the presentation in the future or to update forward-looking statements to reflect subsequent actual results.

EXHIBIT INDEX

| Exhibit No. | Description |
|----------------------|---|
| 99.1 | Press release dated January 9, 2023 |
| 99.2 | Corporate Presentation for January 2023 |

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GH Research PLC

Date: January 9, 2023

By: /s/ Julie Ryan
Name: Julie Ryan
Title: Vice President, Finance

GH Research Provides Business Updates and Highlights Key Upcoming Milestones

- Initial approvals received for Phase 2b trial of GH001 in TRD (GH001-TRD-201), initiation of this trial expected in Q1 2023
- Development of proprietary aerosol delivery device for GH001 progressed, IND submission with this device expected in Q3 2023
- Phase 1 trial of GH002 in healthy volunteers (GH002-HV-105) initiated, completion of this trial expected in Q4 2023
- New patent application filed, expanding patent portfolio to 11 families
- Mebufotenin selected by WHO as International Nonproprietary Name for 5-MeO-DMT

Dublin, Ireland, January 9, 2023 – GH Research PLC (Nasdaq: GHRS), a clinical-stage biopharmaceutical company dedicated to transforming the treatment of psychiatric and neurological disorders, today provided updates on its business and highlighted key upcoming milestones.

GH001 for the treatment of TRD

GH001 is our proprietary inhalable mebufotenin (5-MeO-DMT) product candidate. We have recently received initial regulatory and ethical approvals for our planned multi-center, randomized, double-blind, placebo-controlled Phase 2b trial of GH001 in treatment-resistant depression (TRD) (GH001-TRD-201). We continue to expect initiation of this trial in several European countries in the first quarter of 2023. Trial design details are described in our updated corporate presentation, which is available in the investor section on our website.

Proprietary aerosol delivery device for 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. Based on recent development progress, we now expect to submit an IND for GH001, delivered with this proprietary device, in the third quarter of 2023. The IND-opening study will be a Phase 1 clinical pharmacology trial in healthy volunteers (GH001-HV-106), designed to support bridging to the clinical data generated with the third-party device we currently use in our clinical trials. Due to the progress with our proprietary aerosol delivery device, we no longer plan to submit an IND with this third-party device.

GH002

GH002 is our mebufotenin (5-MeO-DMT) product candidate formulated for administration via a proprietary injectable approach. The previously announced randomized, double-blind, placebo-controlled, dose-ranging clinical pharmacology trial of GH002 in healthy volunteers (GH002-HV-105) has recently been initiated. We expect to complete this trial in the fourth quarter of 2023.

Intellectual property

We have recently filed a new device-related patent application, expanding our patent portfolio to 11 patent families, that relate to various aspects of mebufotenin (5-MeO-DMT) use in a therapeutic context, including but not limited to the use of mebufotenin (5-MeO-DMT) for treatment of various disorders when administered by inhalation, or by nasal, buccal, sublingual, intravenous, intramuscular or subcutaneous routes.

Other updates

We are pleased to announce the selection of mebufotenin as the International Nonproprietary Name (INN) for 5-MeO-DMT by the World Health Organization (WHO) Expert Advisory Panel on the International Pharmacopoeia and Pharmaceutical Preparations. From this point forward, we will introduce the nomenclature mebufotenin into our communications.

About GH Research PLC

GH Research PLC is a clinical-stage biopharmaceutical company dedicated to transforming the treatment of psychiatric and neurological disorders. GH Research PLC's initial focus is on developing its novel and proprietary mebufotenin (5-MeO-DMT) therapies for the treatment of patients with treatment-resistant depression (TRD).

GH Research PLC's annual report on Form 20-F filed with the U.S. Securities and Exchange Commission for the year ended December 31, 2021 is available at www.ghres.com and shareholders may receive a hard copy free of charge upon request.

About GH001

Our lead product candidate, GH001, is formulated for mebufotenin (5-MeO-DMT) administration via a proprietary inhalation approach. With GH001, we have completed two Phase 1 healthy volunteer clinical trials and a Phase 1/2 clinical trial in patients with treatment-resistant depression (TRD). Based on the observed clinical activity, where 87.5% of patients with TRD were brought into an ultra-rapid remission with our GH001 single-day individualized dosing regimen in the Phase 2 part of the trial, we believe that GH001 has potential to change the way TRD is treated today. Across the GH001 program, no serious adverse events have been reported and GH001 was well tolerated at the investigated single dose levels and in the individualized dosing regimen. GH001 is expected to enter Phase 2b clinical development in TRD in the first quarter of 2023.

About GH002 and GH003

GH002 is our mebufotenin (5-MeO-DMT) product candidate formulated for administration via a proprietary injectable approach. GH002 is currently in Phase 1 clinical development. GH003 is our mebufotenin (5-MeO-DMT) product candidate formulated for administration via a proprietary intranasal administration approach. GH003 is currently in preclinical development.

Forward-Looking Statements

This press release contains statements that are, or may be deemed to be, forward-looking statements. All statements other than statements of historical fact included in this press release, including statements regarding our future results of operations and financial position, our cash runway, business strategy, product candidates, research pipeline, ongoing and currently planned preclinical studies and clinical trials, regulatory submissions and approvals, research and development costs, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. Forward-looking statements appear in a number of places in this press release and include, but are not limited to, statements regarding our intent, belief or current expectations. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. Such statements are subject to risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to, those described in our filings with the U.S. Securities and Exchange Commission. No assurance can be given that such future results will be achieved. Such forward-looking statements contained in this document speak only as of the date of this press release. We expressly disclaim any obligation or undertaking to update these forward-looking statements contained in this press release to reflect any change in our expectations or any change in events, conditions, or circumstances on which such statements are based unless required to do so by applicable law. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

Investor Relations:

Julie Ryan
GH Research PLC
investors@ghres.com



Corporate Presentation

GH Research PLC (NASDAQ: GHRS)

January 2023

Disclaimer Regarding Forward-Looking Statements

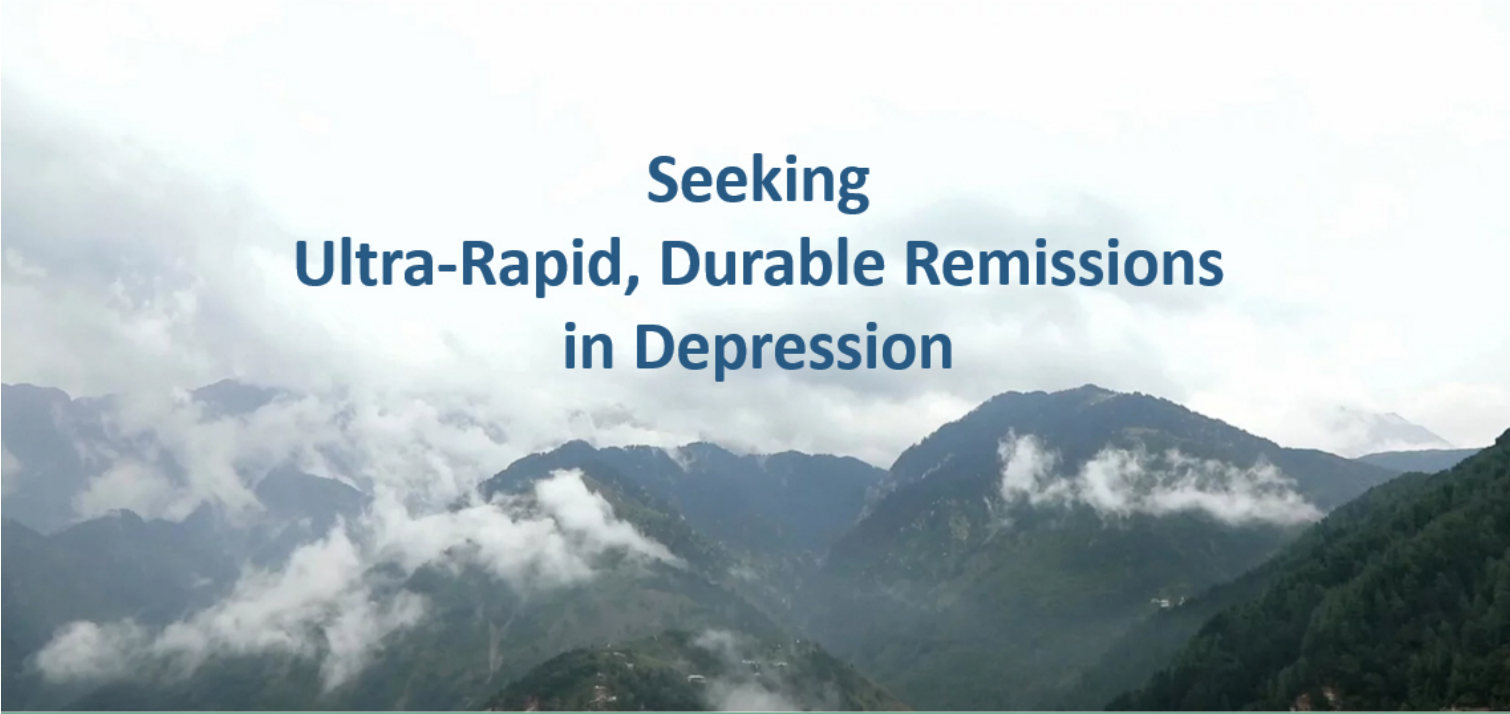
This presentation has been prepared by GH Research PLC ("GH Research") for informational purposes only and not for any other purpose. Nothing contained in this presentation is, or should be construed as, a recommendation, promise or representation by the presenter or GH Research or any director, employee, agent, or adviser of GH Research. This presentation does not purport to be all-inclusive or to contain all of the information you may desire.

This presentation does not constitute an offer to sell or the solicitation of an offer to buy securities, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

This presentation contains forward-looking statements, all of which are qualified in their entirety by this cautionary statement. Many of the forward-looking statements contained herein can be identified by the use of forward-looking words such as "may", "anticipate", "believe", "could", "expect", "should", "plan", "intend", "estimate", "will", "potential" and "ongoing", among others, although not all forward-looking statements contain these identifying words.

Any statements contained herein that do not describe historical facts are forward-looking statements that are based on management's expectations and are subject to certain factors, risks and uncertainties that may cause actual results, outcomes, timing and performance to differ materially from those expressed or implied by such statements. These factors, risks and uncertainties include, but are not limited to: the costs and uncertainties associated with GH Research's research and development efforts; the inherent uncertainties associated with the conduct, timing and results of nonclinical and clinical studies of GH Research's product candidates; GH Research's ability to obtain, maintain, enforce and defend issued patents; the adequacy of GH Research's capital resources, the availability of additional funding and GH Research's cash runway; and other factors, risks and uncertainties described in GH Research's filings with the U.S. Securities and Exchange Commission.

Except as otherwise noted, these forward-looking statements speak only as of the date of this presentation, and GH Research undertakes no obligation to update or revise any of such statements to reflect events or circumstances occurring after this presentation. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond GH Research's control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in any such forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. GH Research cautions you not to place undue reliance on the forward-looking statements contained in this presentation.



Seeking Ultra-Rapid, Durable Remissions in Depression

Pipeline

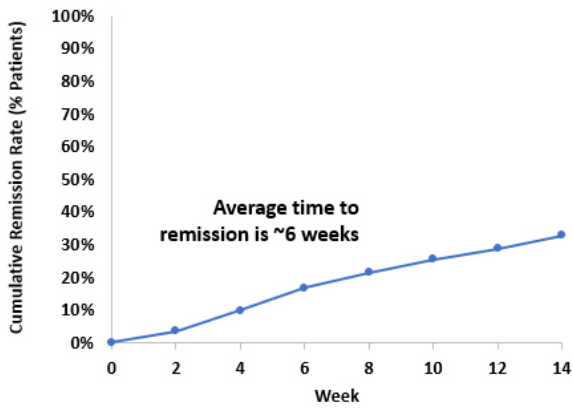
| PROGRAMS | INDICATION | Stage of Development | | | | | CURRENT STATUS |
|---|--------------------------------------|----------------------|---------|----------|----------|---------|--|
| | | PRECLINICAL | PHASE 1 | PHASE 2a | PHASE 2b | PHASE 3 | |
| GH001 <i>Mebutofenin (5-MeO-DMT)</i> for inhalation administration | Treatment-Resistant Depression (TRD) | | | | | | Phase 2b CTAs submitted (GH001-TRD-201) |
| | Bipolar II Disorder* (BDII) | | | | | | Phase 2a POC trial initiated (GH001-BD-202) |
| | Postpartum Depression (PPD) | | | | | | Phase 2a POC trial initiated (GH001-PPD-203) |
| GH002 <i>Mebutofenin (5-MeO-DMT)</i> for i.v. administration | Psychiatric or Neurological Disorder | | | | | | Phase 1 in HVs initiated (GH002-HV-105) |
| GH003 <i>Mebutofenin (5-MeO-DMT)</i> for nasal administration | Psychiatric or Neurological Disorder | | | | | | Pre-clinical development ongoing |

*Bipolar II disorder with a current major depressive episode
 5-MeO-DMT; 5-Methoxy-N,N-Dimethyltryptamine; i.v., intravenous; CTA, Clinical Trial Application; POC, Proof-of-Concept; HV, Healthy Volunteer

The Problem for Patients with Depression

Established Therapies are **Slow-Acting**

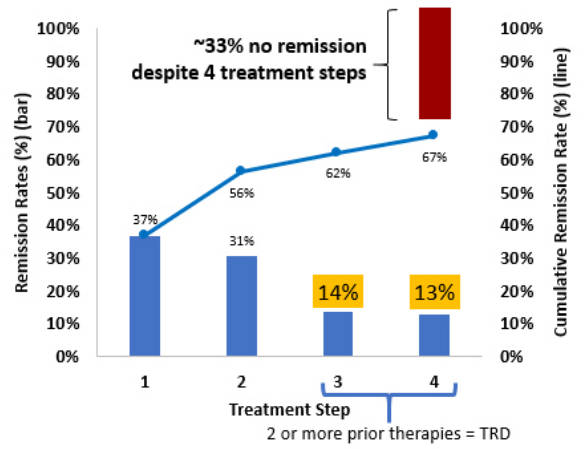
(STAR*D study, Remission Rate Over Time, Treatment Step 1 = Citalopram)



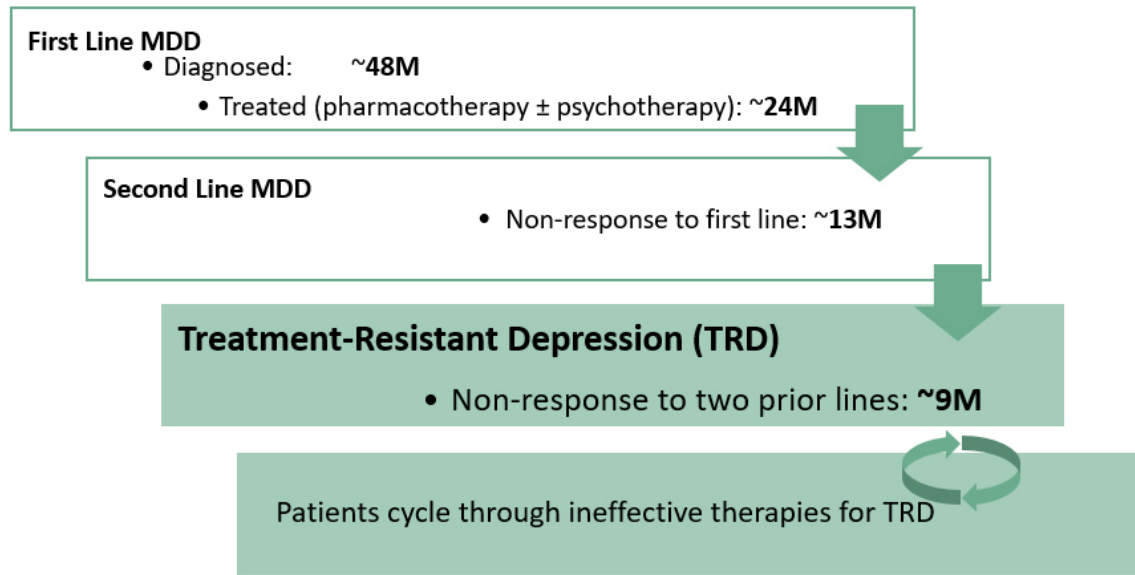
Adapted from Trivedi et al., Am J Psychiatry 2005 and Rush et al., Am J Psychiatry 2005
TRD, Treatment-Resistant Depression

... Remission Rates in TRD < 15%

(STAR*D study, Remission Rates Treatment Steps 1 to 4)



Large and Open Depression Market in the EU and US

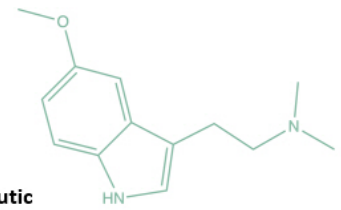


Company estimates based on: <https://www.nimh.nih.gov/health/statistics/major-depression.shtml>; Wittchen et al., The size and burden of mental disorders and other disorders of the brain in Europe 2010, European Neuropsychopharmacology (2011); Rush et al., Acute and Longer-Term Outcomes in Depressed Outpatients Requiring One or Several Treatment Steps: A STAR*D Report, Am J Psychiatry 2006
MDD, Major Depressive Disorder

Mebufotenin (5-MeO-DMT) and GH001

- Mebufotenin (5-Methoxy-N,N-Dimethyltryptamine, 5-MeO-DMT)
 - Naturally-occurring psychoactive substance from tryptamine class
 - **Highly potent** agonist on 5-HT1A and 5-HT2A receptors
 - **High propensity to induce peak experiences (PE), which may be a surrogate marker for therapeutic effects**

- GH001 (Mebufotenin administration via a proprietary pulmonary inhalation approach)
 - **Psychoactive effects with ultra-rapid onset** (within seconds) **and short duration** (5 to 30 min)
 - **Intraday individualized dosing regimen (IDR)** for **maximization of ultra-rapid and durable remissions**
 - **Single visit initial treatment**, with no structured psychotherapy
 - Potential for **convenient and infrequent retreatment**



Mebufotenin (5-MeO-DMT)

Foundational IP

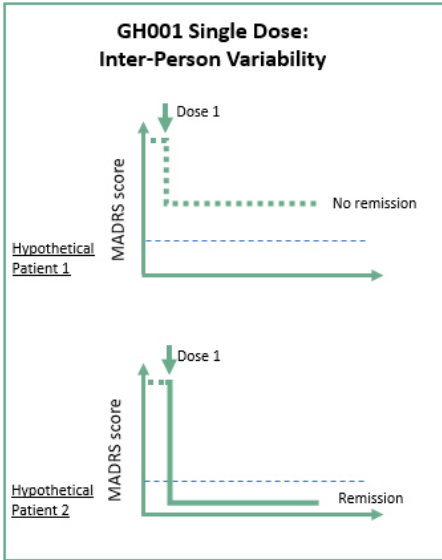
(32) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)
 (75) World Intellectual Property Organization
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 (43) International Publication Date: 27 August 2020 (27.08.2020) WIPO | PCT (51) International Publication Number: WO 2020/169850 A1

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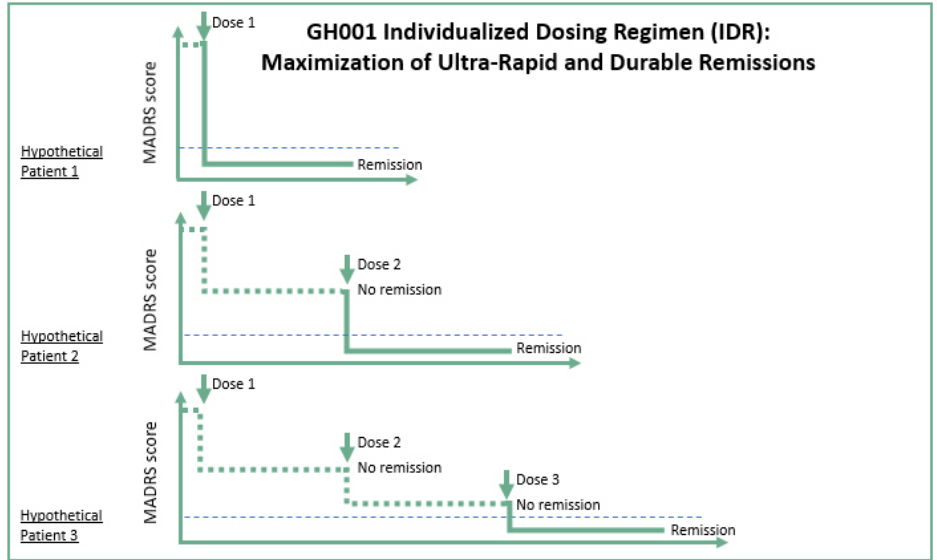
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 (43) International Publication Date: 03 September 2021 (03.09.2021) WIPO | PCT (51) International Publication Number: WO 2021/170614 A1

(32) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)
 (75) World Intellectual Property Organization
 International Bureau
 (43) International Publication Date: 24 December 2020 (24.12.2020) WIPO | PCT (51) International Publication Number: WO 2020/254584 A1

GH001 – Individualized Dosing Regimen (IDR) for Maximization of Ultra-Rapid and Durable Remissions



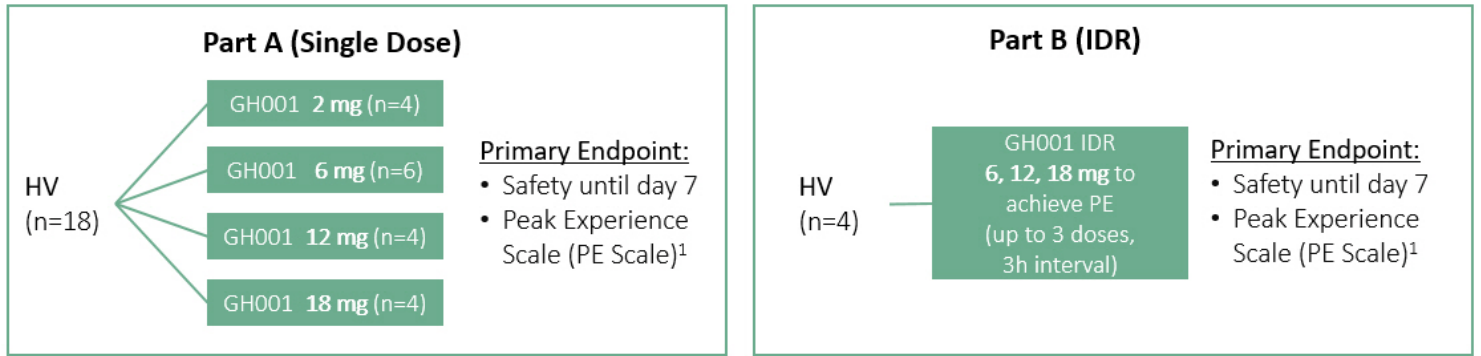
MADRS, Montgomery-Åsberg Depression Rating Scale



Phase 1 Trial in Healthy Volunteers GH001-HV-101 (Completed)

Clinicaltrials.gov ID: NCT04640831

Design of Phase 1 Trial in Healthy Volunteers (GH001-HV-101)



HV, Healthy Volunteer; PE, Peak Experience; IDR, Individualized Dosing Regimen

¹The PE Scale averages answers scored by the subject by marking a visual analogue scale between 0 and 100 for the following three questions: 1. How intense was the experience; 2. To what extent did you lose control; 3. How profound (i.e., deep and significant) was the experience?

Part A (Single Dose) and Part B (IDR) – Safety

Study Safety Group review

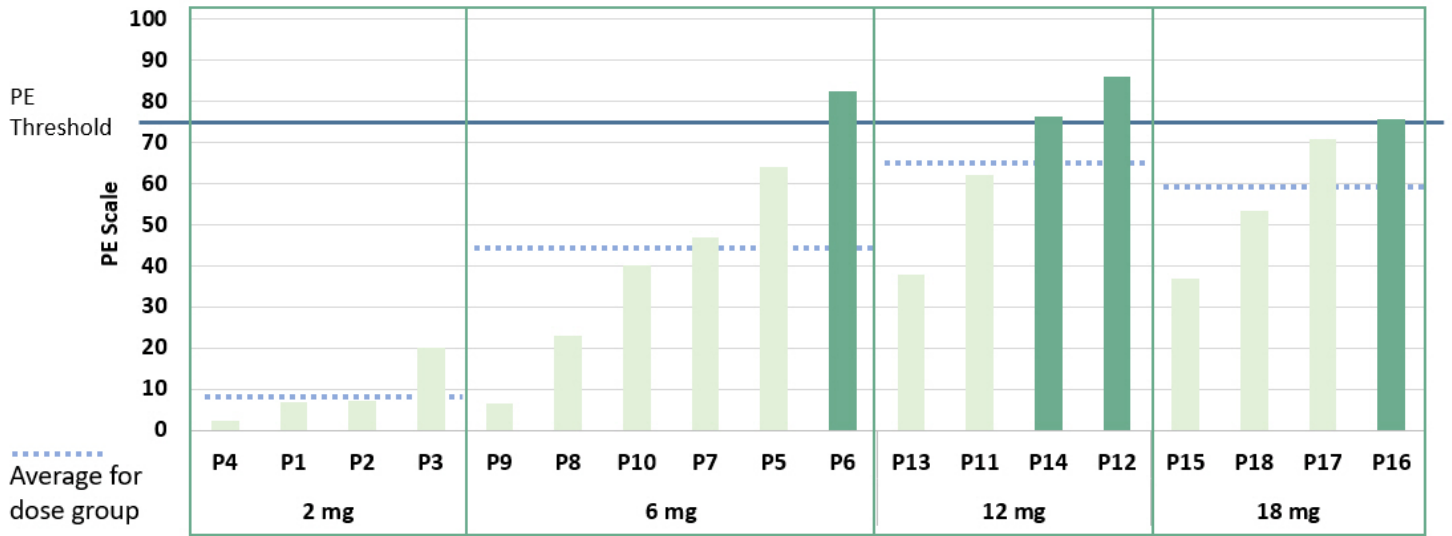
- No SAEs
- All ADRs mild, except two moderate (*)
- All ADRs resolved spontaneously
- Inhalation well-tolerated
- No noteworthy changes in vital parameters, except for temporary, non-clinically relevant increase in heart rate and blood pressure shortly after administration of GH001
- No clinically significant changes in safety laboratory analyses, psychiatric safety assessments or measures of cognitive function

| ADRs | Part A (Single Dose) | | | | Part B (IDR) |
|-----------------------|----------------------|------------|-------------|-------------|------------------------|
| | 2 mg (n=4) | 6 mg (n=6) | 12 mg (n=4) | 18 mg (n=4) | IDR ¹ (n=4) |
| MedDRA Preferred Term | Number of Events | | | | |
| Abnormal dreams | | | | 1 | |
| Anxiety | | 1 | 1 | | |
| Clumsiness | | 1 | | | |
| Confusional state | | 1 | | | |
| Euphoric mood | | 1 | | | |
| Fatigue | | | | 1 | 1* |
| Feeling hot | | 1 | | | |
| Flashback | | | | 1 | |
| Hallucination | | | | 1 | |
| Head discomfort | | | | | 1 |
| Headache | | 2 | | 1 | 1 |
| Heart rate increased | | | 1* | | |
| Hyperacusis | | | | 1 | |
| Insomnia | | | | 1 | |
| Mental fatigue | | | | 1 | |
| Nausea | 2 | 1 | | 1 | 2 |
| Vision blurred | 1 | | | | |

SAE, Serious Adverse Event; ADR, Adverse Drug Reaction, an adverse event with a relationship code to the investigational product of definite, probable, or possible, or where code is missing; IDR, Individualized Dosing Regimen

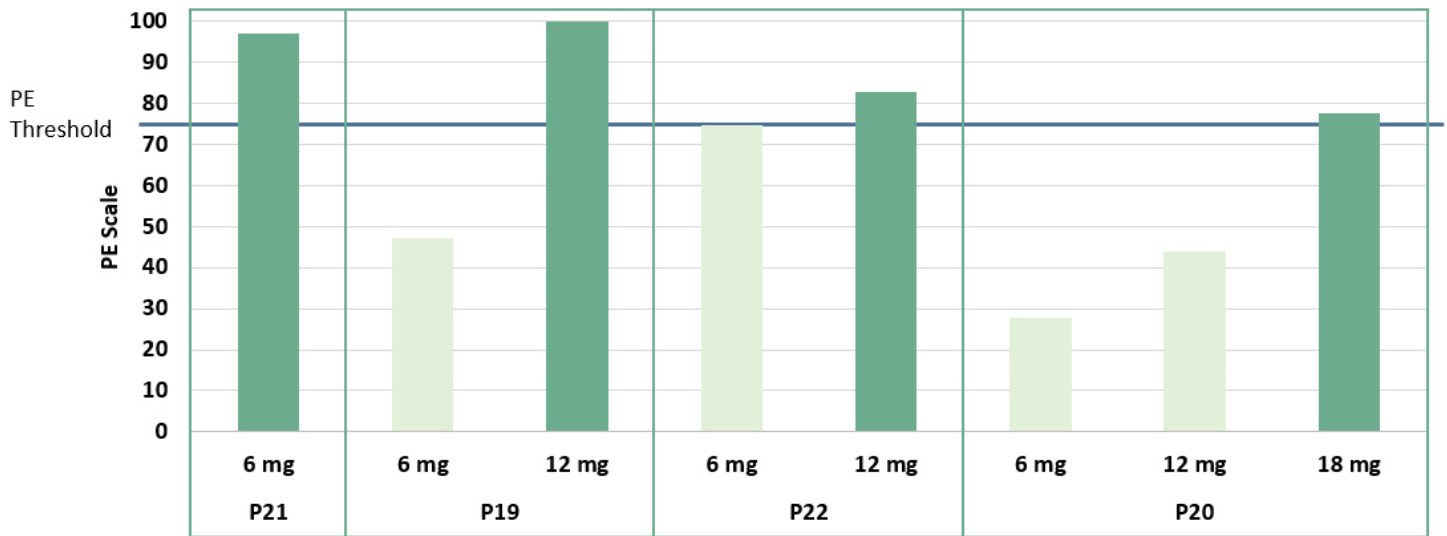
*6 mg (n=1); 6-12 mg (n=2); 6-12-18 mg (n=1)

Part A – Peak Experience (PE) Dose-Effects and Inter-Person Variability



PE, Peak Experience

Part B – Peak Experience (PE) Effect of Intraday Individualized Dosing Regimen (IDR)

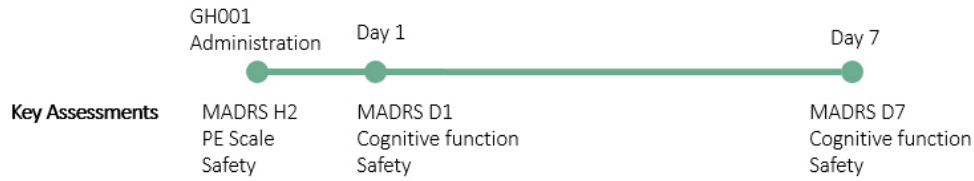
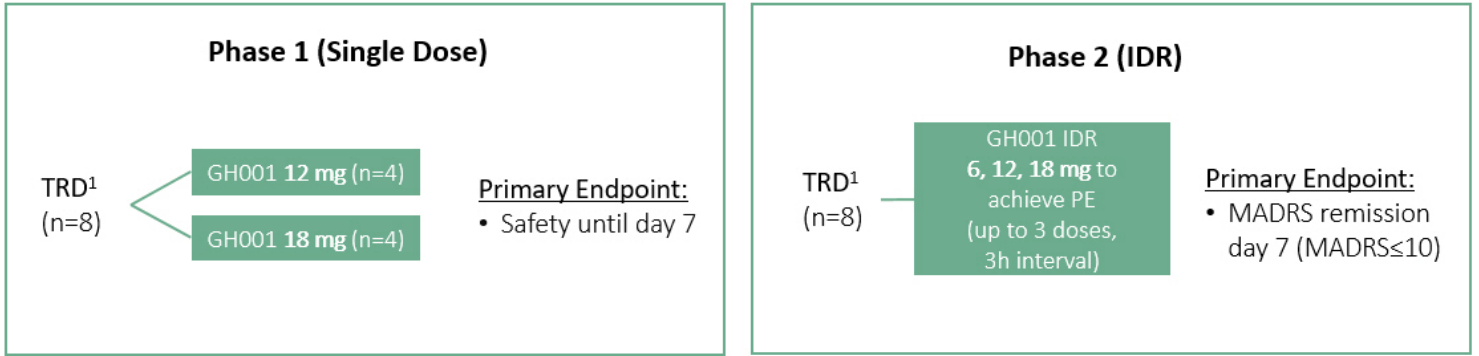


PE, Peak Experience

Phase 1/2 Trial in Treatment-Resistant Depression GH001-TRD-102 (Completed)

Clinicaltrials.gov ID: NCT04698603

Design of Phase 1/2 Trial in TRD (GH001-TRD-102)



TRD, Treatment-Resistant Depression; PE, Peak Experience; MADRS, Montgomery-Åsberg Depression Rating Scale; IDR, Individualized Dosing Regimen; H, Hour; D, Day

¹ Defined as inadequate response to at least two adequate courses of pharmacological therapy or one adequate course of pharmacological therapy and at least one adequate course of evidence-based psychotherapy

Phase 1 (Single Dose) and Phase 2 (IDR) – Safety

Study Safety Group review

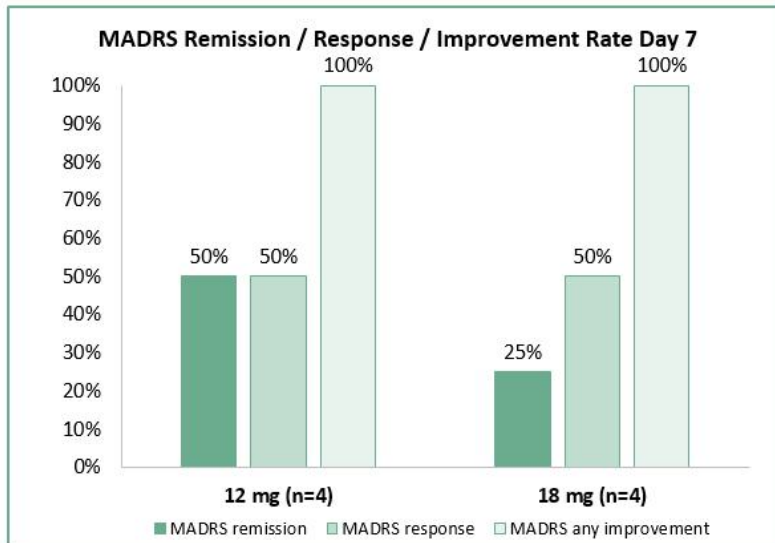
- No SAEs
- All ADRs mild, except three moderate*
- All ADRs resolved spontaneously
- Inhalation well-tolerated
- No noteworthy changes in vital parameters, except for temporary, non-clinically relevant increase in heart rate and blood pressure shortly after administration of GH001
- No clinically significant changes in safety laboratory analyses, psychiatric safety assessments or measures of cognitive function
- No safety signal relating to suicidal ideation or suicidal behavior, based on C-SSRS and MADRS subscore item “suicidal thoughts”

| ADRs | Phase 1 (Single Dose) | | Phase 2 (IDR) |
|-----------------------|-----------------------|-------------|------------------------|
| | 12 mg (n=4) | 18 mg (n=4) | IDR ¹ (n=8) |
| MedDRA Preferred Term | Number of Events | | |
| Abdominal discomfort | | | 1 |
| Anxiety | | | 2 |
| Depressive symptom | | | 1* |
| Dizziness | 1 | | |
| Feeling abnormal | 1 | 1 | |
| Flashback | 1 | 1 | 2 |
| Headache | 2 | 1 | 3 |
| Muscle discomfort | | | 1 |
| Muscle spasms | | 1 | |
| Nausea | | | 2* |
| Paresthesia | | | 1 |
| Sensory disturbance | | | 3 |

SAE, Serious Adverse Event; ADR, Adverse Drug Reaction, an adverse event with a relationship code to the investigational product of definite, probable, or possible, or where code is missing; IDR, Individualized Dosing Regimen; C-SSRS, Columbia-Suicide Severity Rating Scale; MADRS, Montgomery-Åsberg Depression Rating Scale

¹6-12 mg (n=6); 6-12-18 mg (n=2)

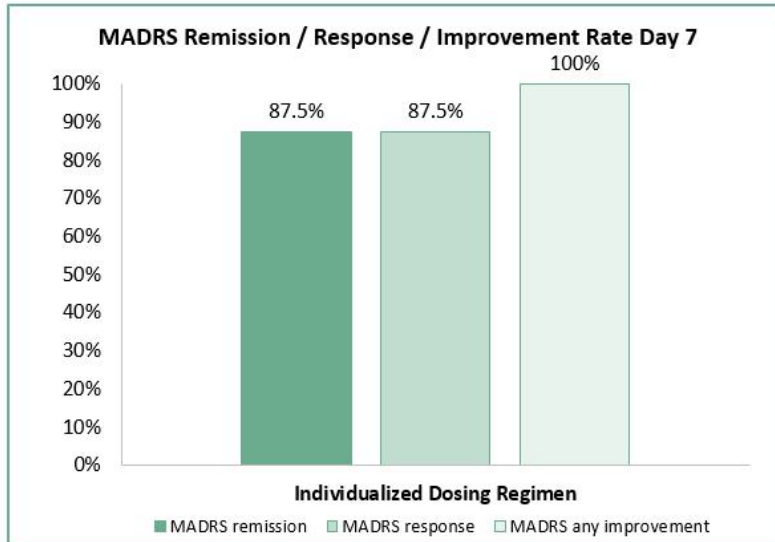
Phase 1 (Single Dose) – Efficacy (MADRS)



- 2 of 4 (50%) in the 12 mg group and 1 of 4 (25%) in the 18 mg group had a MADRS remission at day 7
- 2 of 8 patients had a PE and both had a MADRS remission at day 7

PE, Peak Experience; MADRS, Montgomery-Åsberg Depression Rating Scale
MADRS remission = MADRS of ≤10; MADRS response = Reduction of ≥50% from baseline in MADRS; MADRS any improvement = any reduction from baseline in MADRS.

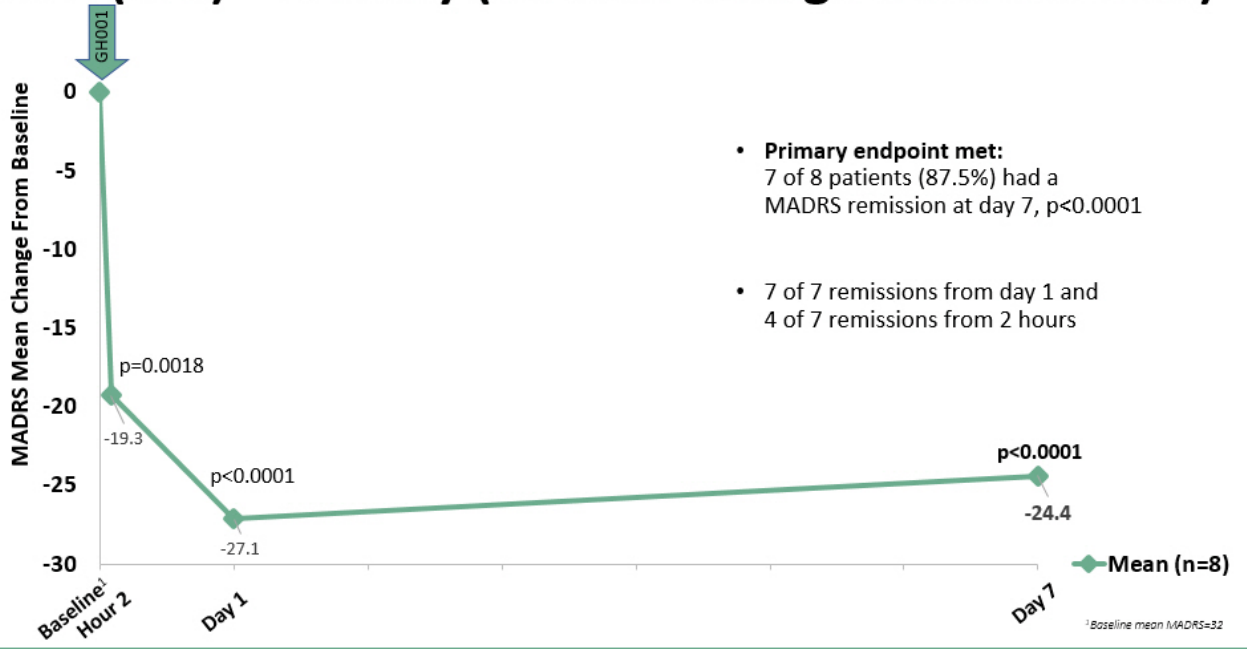
Phase 2 (IDR) – Efficacy (MADRS)



- **Primary endpoint met:**
7 of 8 patients (87.5%) had a MADRS remission at day 7, $p < 0.0001$
- 7 of 8 patients had a PE and 6 of those had a MADRS remission at day 7

PE, Peak Experience; MADRS, Montgomery-Åsberg Depression Rating Scale
MADRS remission = MADRS of ≤ 10 ; MADRS response = Reduction of $\geq 50\%$ from baseline in MADRS; MADRS any improvement = any reduction from baseline in MADRS.

Phase 2 (IDR) – Efficacy (MADRS Change from Baseline)



- **Primary endpoint met:**
7 of 8 patients (87.5%) had a MADRS remission at day 7, p<0.0001
- 7 of 7 remissions from day 1 and 4 of 7 remissions from 2 hours

MADRS and PE – Observed Improved Outcome in Phase 2 (IDR) vs Phase 1 (Single Dose)

| | Phase 2 (IDR) | Phase 1 (Single Dose) 12 mg | Phase 1 (Single Dose) 18 mg |
|-----------------------------------|----------------------|-----------------------------|-----------------------------|
| MADRS Remission Rate Day 7 | 87.5% (7 of 8) | 50% (2 of 4) | 25% (1 of 4) |
| Mean MADRS Change Day 7 | -24.4 (-76%) | -21.0 (-65%) | -12.5 (-40%) |
| Rate of PE | 87.5% (7 of 8) | 50% (2 of 4) | 0% (0 of 4) |
| Mean PE Score | 90.4 (at final dose) | 58.2 | 59.1 |

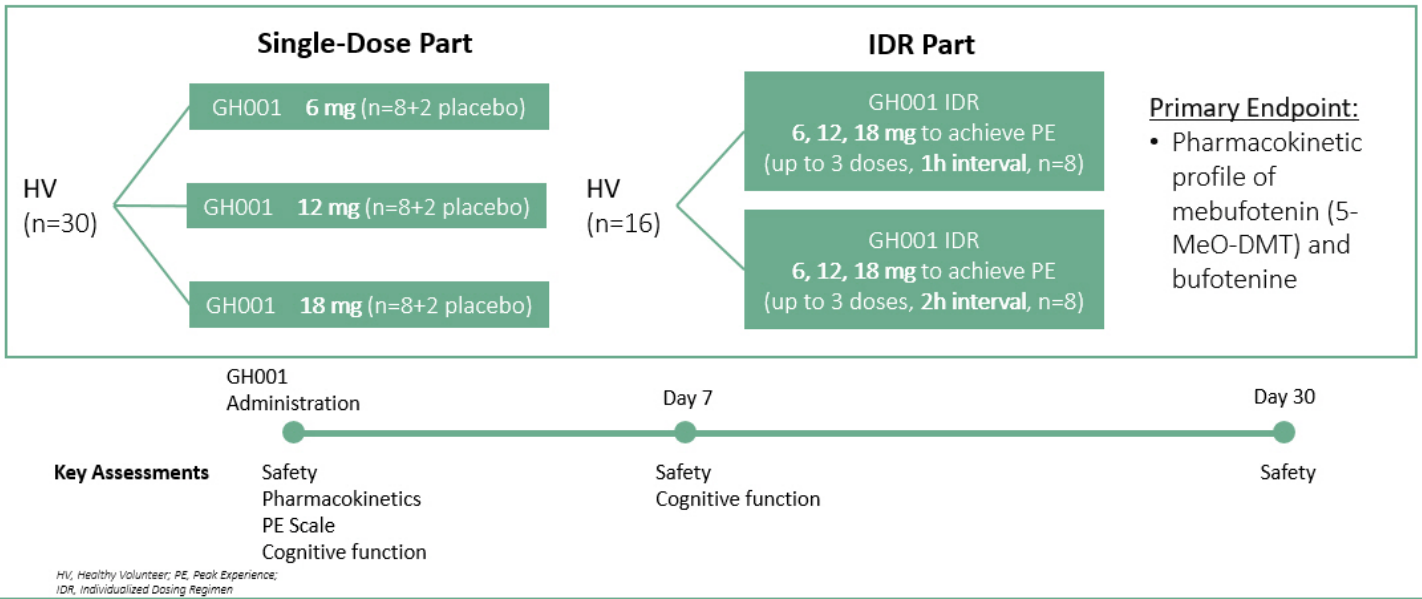
PE, Peak Experience; MADRS, Montgomery-Åsberg Depression Rating Scale;
IDR, Individualized Dosing Regimen

Phase 1 Clinical Pharmacology Trial in Healthy Volunteers GH001-HV-103

(Completed)

Clinicaltrials.gov ID: NCT05163691

Design of Phase 1 Clinical Pharmacology Trial in Healthy Volunteers (GH001-HV-103)



Single Dose and IDR – Safety and Further Results

Safety Review

- No SAEs
- All ADRs mild
- All ADRs resolved spontaneously
- Inhalation well-tolerated
- No noteworthy changes in vital parameters, except for temporary, non-clinically relevant increase in heart rate and blood pressure shortly after administration of GH001
- No clinically relevant changes in ECG, safety laboratory analyses, peak flow, cognitive function, psychiatric safety assessments, including the C-SSRS

Further Results

- Pharmacokinetic analyses and psychoactive effect assessments (PE Scale) support that an interval down to 1 hour between individual doses of the IDR is feasible for future clinical trials

| ADRs | Single-dose | | | | IDR | |
|-----------------------|------------------|----------------|----------------|------------------|-----------------------------------|-----------------------------------|
| | 6 mg (n=8) | 12 mg (n=8) | 18 mg (n=8) | Placebo (n=6) | 1h interval (n=8) ¹ | 2h interval (n=8) ² |
| MedDRA Preferred Term | Number of Events | | | | | |
| Abnormal dreams | | | | | | 1 |
| Chest discomfort | | 1 | | | | |
| Crying | | | | | 2 | |
| Dizziness | | | 2 | | | |
| Dry mouth | 1 | | 1 | | | |
| Dyskinesia | | | 1 | | | |
| Fatigue | | 1 | | | 2 | 1 |
| Headache | 3 | | 1 | | 1 | 1 |
| Hypoesthesia oral | | 1 | | | | |
| Paresthesia oral | | | | | | 1 |
| Retching | | | 1 | | | |
| Somnolence | | 1 | | | | |
| Tachycardia | | | 2 | | | |
| Tension | | | | | | 1 |
| Tremor | | | 1 | | | |

SAE, Serious Adverse Event; ADR, Adverse Drug Reaction, or ADR, an adverse event with a relationship code to the investigational product of definite, probable, or possible, or where code is missing; IDR, Individualized Dosing Regimen; C-SSRS, Columbia-Suicide Severity Rating Scale; PE, Peak Experience

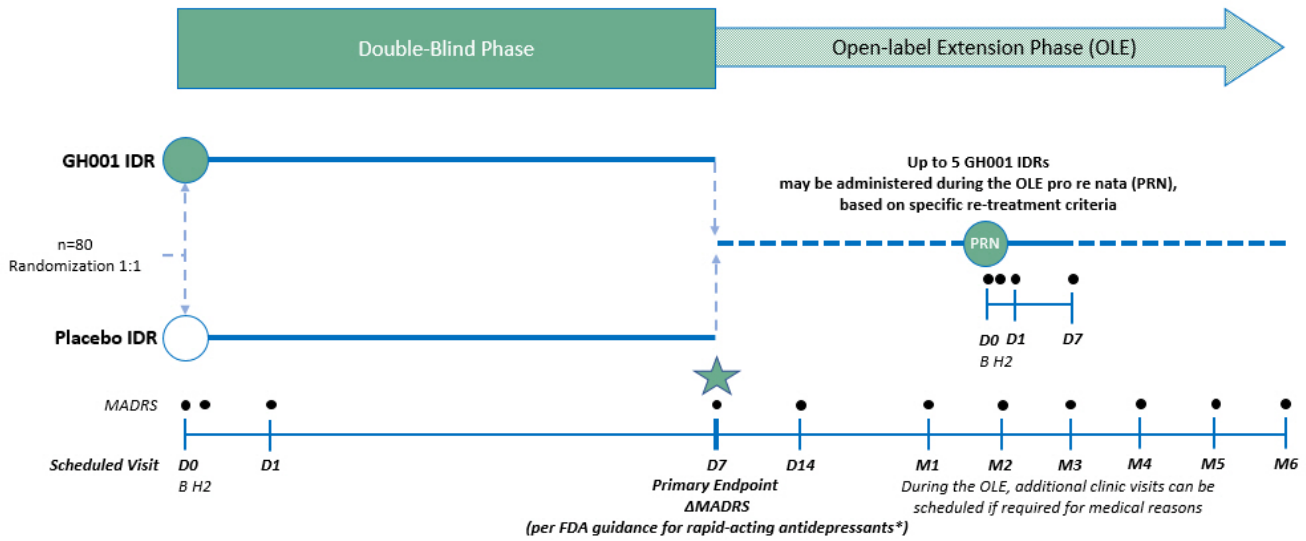
¹6 mg (n=1), 6-12 mg (n=3), 6-12-18 mg (n=4)
²6-12 mg (n=3), 6-12-18 mg (n=5)

Phase 2b Trial in Treatment-Resistant Depression GH001-TRD-201

(Initiation Expected Q1 2023)

EudraCT Number: 2022-000574-26

Design of Phase 2b Trial in TRD (GH001-TRD-201)



The bold solid lines indicate the fixed duration of 7 days (± 1 day) after an IDR with visits on D0, D1 and D7. The bold dotted line indicates the variable duration until a potential GH001 IDR in the OLE. The GH001 IDR consists of up to 3 increasing doses (6, 12, 18 mg) and the Placebo IDR consists of up to three placebo doses, to achieve a peak experience, given at a 1H interval. As in previously completed trials, the GH001-TRD-201 trial will be conducted under the supervision of a healthcare provider, but without any planned psychotherapeutic interventions before, during, or after dosing. IDR, Individualized Dosing Regimen; PRN, pro re nata (as needed); B, Baseline; H, Hour; D, Day; M, Month. *FDA Guidance for Industry: Major Depressive Disorder: Developing Drugs for Treatment

Three-Layer Protection Strategy

LAYER 1: REGULATORY EXCLUSIVITY

FDA: 5 years (+2.5 years paragraph IV stay)
EMA: 10 years (+1 year for new indication)

LAYER 2: PATENTS

11 patent families filed relating to mebufotenin (5-MeO-DMT), including:

- Novel aerosol compositions of matter
- Novel manufacturing methods and novel salt forms
- Novel uses in various disorders (including inhaled, nasal, buccal, sublingual, i.v., i.m., s.c. routes)
- Novel device-related technologies

LAYER 3: TECHNICAL

Complex bioequivalence for systemically-acting inhalation/intranasal products with high intra- and inter-subject variability

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 BSc
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Scientific Advisors




Madhukar Trivedi
M.D.
Professor of Psychiatry,
UT Southwestern Medical
Center




Michael Thase
M.D.
Professor of Psychiatry, Perelman School of
Medicine
University of Pennsylvania




Mark Zimmerman
M.D.
Professor of Psychiatry and Human
Behavior,
Brown University




Eduard Vieta
Prof. Dr.
Head, Psychiatry Unit,
Hospital Clínic de
Barcelona





Michael Bauer
Prof. Dr. rer. nat. Dr. med.
Chair, Department of Psychiatry and
Psychotherapy,
Technische Universität Dresden



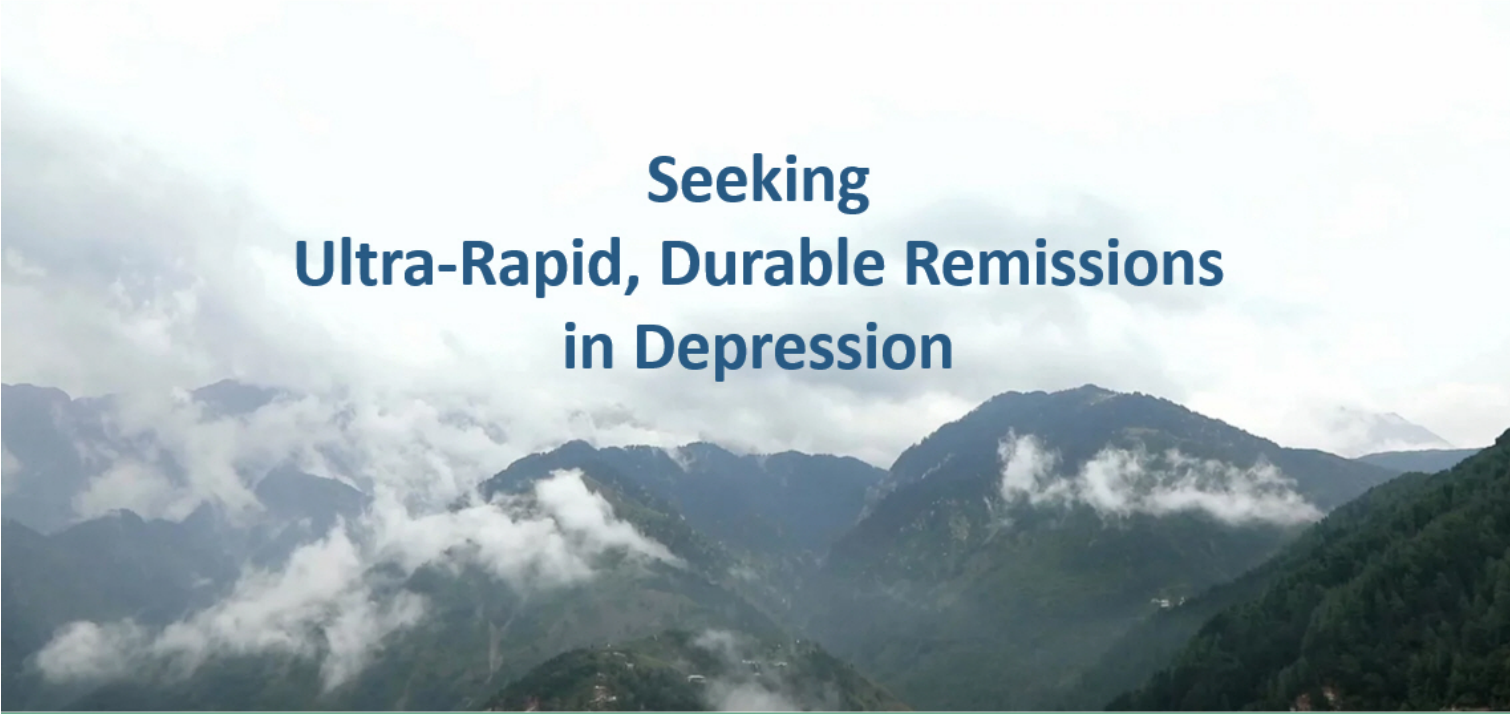

Malek Bajbouj
Prof. Dr. med.
Head, Center for Affective
Neuroscience,
Charité, Berlin




Johannes Ramaekers
Prof. Dr.
Professor, Faculty of Psychology
and Neuroscience of Maastricht
University


Anticipated Milestones and Financial Overview

- **GH001**
 - Initiate multi-center, randomized, double-blind, placebo-controlled Phase 2b trial in TRD in Q1 2023
 - Submit U.S. IND for GH001 with proprietary aerosol delivery device in Q3 2023
 - Complete proof-of-concept Phase 2a trials in BDII and in PPD in Q4 2023
- **GH002**
 - Complete Phase 1 clinical pharmacology trial in healthy volunteers in Q4 2023
- **GH003**
 - Complete preclinical development
- **Financial Overview**
 - Cash was \$256.9 million as of September 30, 2022
 - We believe existing cash will be sufficient to fund operating expenses and capital expenditure requirements into 2025



Seeking Ultra-Rapid, Durable Remissions in Depression