GH Research Announces Primary Endpoint Met in Two Phase 2a POC Trials with GH001 and Completion of All FDA Requests to Address IND Hold with No Findings of Respiratory Toxicity in Non-Rodents

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- Primary endpoint met in phase 2a POC trial in postpartum depression with a MADRS reduction from baseline of –35.4 points ($p<0.0001$, $n=10$) and 100% of patients in remission at Day 8
- Primary endpoint met in phase 2a POC trial in bipolar II disorder with a current major depressive episode with a MADRS reduction from baseline of –16.8 points ($p=0.0099$, $n=6$) and 33% of patients in remission at Day 8
- In both trials, GH001 was well tolerated and no treatment-related serious adverse events were reported
- Inhalation toxicology study in a non-rodent species was completed with no histology findings in the respiratory tract of any dogs in the study at any dose level
- Additional inhalation toxicology study in rats was completed supporting our position that respiratory tract histology findings are rat specific
- Our response to FDA's request for additional device design verification information is being prepared
- Full response to the IND hold planned to be submitted in mid-2025
- Top-line data from our randomized, double-blind, placebo-controlled Phase 2b trial in TRD on track to be announced in Q1 2025

DUBLIN, Jan. 10, 2025 (GLOBE NEWSWIRE) -- 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.

Primary Endpoint Met in Phase 2a Proof-of-Concept Trial in PPD

The primary endpoint of the Phase 2a proof-of-concept (POC) trial for GH001 in postpartum depression (PPD) was met with a significant reduction from baseline of –35.4 points (96.3%) in Montgomery–Åsberg Depression Rating Scale (MADRS) total score on Day 8 after administration of GH001 ($p<0.0001$). On Day 8, 100% of patients were in remission (MADRS ≤ 10).

GH001 led to an ultra-rapid antidepressant effect with a significant reduction in MADRS score at 2 hours after administration of –31.4 points ($p<0.0001$) and on Day 2 of –36.0 points ($p<0.0001$).

The trial recruited 10 patients with PPD. All patients were administered an individualized dosing regimen (IDR) of up to three escalating doses of GH001. There was no psychotherapeutic intervention in this trial. The mean total MADRS score on Day 8 was 1.3 and all 10 patients were in remission.

GH001 was well tolerated and no treatment-related serious adverse events were reported. All treatment-emergent adverse events (TEAEs) were mild or moderate.

Primary Endpoint Met in Phase 2a Proof-of-Concept Trial in BDII

The primary endpoint of the Phase 2a POC trial for GH001 in bipolar II disorder with a current major depressive episode (BDII) was met with a significant reduction from baseline of –16.8 points (51.9%) in MADRS total score on Day 8 after administration of GH001 ($p=0.0099$). On Day 8, 33.3% of patients were in remission (MADRS ≤ 10).

GH001 led to an ultra-rapid antidepressant effect with a reduction in MADRS score at 2 hours after administration of –16.3 points ($p=0.0006$) and on Day 2 of -13.3 points ($p=0.0299$).

The trial recruited 6 patients with BDII. All patients were administered an IDR of up to three escalating doses of GH001. There was no psychotherapeutic intervention in this trial.

GH001 was well tolerated and no treatment-related serious adverse events were reported. The majority of TEAEs were mild or moderate and there were no reported TEAEs of hypomania or mania.

Update on IND for GH001

As previously announced, our Investigational New Drug Application (IND) for GH001 administered using our proprietary aerosol delivery device has been placed on clinical hold by the U.S. Food and Drug Administration (FDA), with the FDA requesting that we provide (i) an inhalation toxicology study in a non-rodent species and an additional inhalation toxicology study in rats, (ii) additional device design verification information and (iii) updates to our investigator brochure, to resolve the hold.

The requested additional inhalation toxicology study in a non-rodent species has now been completed. The pathology report concludes that there are no histology findings in the respiratory tract of any dogs at any dose level evaluated in the study.

The requested additional inhalation toxicology study in rats has now been completed which showed histology findings consistent with our previously completed study in rats. This supports our position that these findings are rat specific.

Based on previously announced FDA interactions, the response to their request for additional device design verification information is being prepared and, together with the completion of the inhalation toxicology studies, provides the final piece of information requested by the agency.

We are preparing to engage with the FDA in advance of providing a full response to the IND hold which we plan to submit in mid-2025.

Business Updates

GH001 in Patients with TRD

As previously announced, we completed enrolment of the double-blind phase of our randomized, double-blind, placebo-controlled Phase 2b trial in 80 treatment-resistant depression (TRD) patients in the third quarter of 2024, with top-line data on track to be announced in the first quarter of 2025. This trial also includes a 6-month open-label extension which is on track for completion of last patient visit in the first quarter of 2025.

Cash Position

Cash, cash equivalents, other financial assets and marketable securities were $182.6 million as of December 31, 2024, compared to cash, cash equivalents, other financial assets and marketable securities of $222.7 million as of December 31, 2023.

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 therapies for the treatment of patients with treatment-resistant depression (TRD).

About GH001

Our lead product candidate, GH001, is formulated for mebufotenin administration via a proprietary inhalation approach. Based on the observed clinical activity in our completed phase 1/2 GH001-TRD-102 trial, where 87.5% of patients with TRD achieved ultra-rapid remission with our GH001 individualized single-day dosing regimen in the Phase 2 part of the trial, we believe that GH001 has the potential to change the way TRD is treated today.

About Notation for Trial Timepoints

In relation to our clinical trials we have previously referred to the day of dosing as Day 0 (D0), the day after dosing as Day 1 (D1), and the seventh day after dosing as Day 7 (D7). In this press release, and going forward, we shall refer to the day of dosing as Day 1 (D1), the day after dosing as Day 2 (D2) and the seventh day after dosing as Day 8 (D8).

Forward-Looking Statements

This press release contains statements that are, or may 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, 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.

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