DELPHARM
DEVELOPMENT

JUNE
2023

END-TO-END SUPPORT

CASE
STUDY

HMNC
BRAIN
HEALTH
PRECISION THERAPEUTICS

in collaboration with

CREAPHARM
BIO&PHARMA

When specialists join forces to better serve HMNC Brain Health in its phase II clinical trial

FROM DRUG PRODUCT MANUFACTURING TO CLINICAL TRIAL SUPPLY MANAGEMENT

HMNC Brain Health is a disruptive clinical stage biopharmaceutical company pioneering Precision Psychiatry, powered by its AI Platform, and focusing on Treatment-Resistant Depression (TRD) and Major Depressive Disorder (MDD).

THE CLINICAL TRIAL

BH-200-03 European Phase II clinical trial

Nelivabon program is one of HMNC Brain Health's flagship precision psychiatry programs for MDD, in which the company develops the drug candidate Nelivaptan (BH-200) together with a companion diagnostic test. The investigational medicinal product (IMP), BH-200, is a vasopressin 1b receptor antagonist.

Started in May 2023, the clinical trial is a 14-weeks, **multicentre, double-blind, randomised, placebo-controlled phase II study** with an 8-weeks treatment period to assess the efficacy and tolerability of a fixed dose of BH-200 (250 mg BID) in outpatients with MDD. HMNC Brain Health expects 324 patients to be included in this clinical trial.

> ***Our strategic alliance with DELPHARM & CREAPHARM has enabled us to take forward our compound to a Phase II clinical study as per the planned timelines. We look forward to continuing our successful collaboration for our next projects as well.***

Daniel Gehrlach,
Associate Director
HMNC Brain Health

DELPHARM Development and CREAPHARM CLINICAL SUPPLIES have collaborated **to fully meet HMNC Brain Health's need and makes its task easier while handling end-to-end operations** for both non-GMP technical batches and clinical batches:

- **Process handover**
- **Clinical batch manufacturing**
- Matching **placebo manufacturing**
- **Stability** studies
- **Analytical** studies
- IMP and placebo **blistering**
- **Walletting** and **clinical labelling**
- **QP-release**
- **Clinical logistics** to European sites

#SYNERGY

Hand in hand collaboration and team spirit between each partner leads to a successful project: making clinical batches available in a record time for patients.

Margot Loones
Development Project Manager
DELPHARM

Each specialist contributed to the success of this clinical trial set-up, sharing expertise & experience, with an innovative approach aimed at moving things forward.

Céline Tinguely
General Manager
CREAPHARM CLINICAL SUPPLIES

MAKE THE CLINICAL TRIAL SPONSOR'S TASK EASIER

Providing solutions for manufacturing challenges

Due to limited API availability, Delpharm was able to reposition manufacturing batches size and reached a successful dissolution profile.
The teams adapted the manufacturing planning in order to handle the technical batches manufacturing with conform and robust process and results in a short timing, due to the API's synthesizing requirements and specifications. DELPHARM Development team was able to adapt the capsule quantity of each dosage according to the clinical trial design which evolved during the project.

The right blinding strategy

Effective blinding includes all the related traits of the drug AND of its packaging.
To ensure BH-200 50 mg, BH-200 100 mg and placebo caps likelihood, size 0, Swedish-orange hard gelatine capsule are used for manufacturing of dosage strengths 50 mg
and 100 mg and matching placebo (without nelivaptan dose).
The primary and secondary packaging steps are fitted to the maximum quantity available of each dosage and placebo at time.
The QC check ensures the likelihood as a mandatory prerequisite.

Distributing IMP all over Europe

250 shipments are planed, from CREAPHARM CLINICAL SUPPLIES Le Haillan to the clinical sites in 7 European countries.
To meet local regulations, CREAPHARM's depot partner in Serbia acts as the importer and broker for clincial distribution to this country.
Every treatment unit is labelled in the 11 languages requested to address the target countries in the clinical trial. Booklet labels were designed by CREAPHARM Project Management Team. The variable data are printed in-house for more flexibility.

Unmet therapeutic needs in MDD

+20%	of the global burden of disease are psychiatric disorders.
350 million	people affected by depression.
1/3	patients do not respond sufficiently to their 1st antidepressant medication.
< 50%	of these patients achieve full remission after 8 weeks of a 2nd treatment.

SOURCE: FINAL PROTOCOL OF THE BH-200-03

BH-200 may represent a novel treatment for patients with depression.

About CREAPHARM CLINICAL SUPPLIES

CREAPHARM CLINICAL SUPPLIES is the pharmaceutical industry global partner for Clinical Trial Supply Management (CTSM), specialized in clinical packaging, labeling and clinical logistics.
With the aim to provide high value-added services that meet the specific needs of each client, CREAPHARM offers a tailor-made approach. The teams give and bring their best to achieve operational excellence and maximize the success of each clinical trial.
> creapharm.com
> contact@creapharm.com

Shared values

Customer Centricity, Multi-Specialists, Reliability, Flexibility and Technical Expertise are DELPHARM's core values.
It's because CREAPHARM is in line with our approach that we set up a strong partnership. Our respective teams easily work together to offer a comprehensive and efficient service offer to our common customers.

QUICK FACTS

01

HMNC'S CHALLENGES

FIRST PATIENT IN - Accelerating the clinical trial start and make research progress forthwith

METHOD TRANSFER - Production method

BLINDING CHALLENGES

PARTNERING WITH JOB SPECIALISTS Leading different vendors and related operations

MULTILINGUAL LABELLING

QP-RELEASE - Entrusting the release to a certifying site

BUDGET MANAGEMENT

02

CREAPHARM & DELPHARM APPROACH

DEADLINE COMMITMENT - To meet the First Patient In objective

MANUFACTURING - Method testing, transfer and then scale-up

LIKELIHOOD - Verum and Placebo manufactured by the same team. Adapted packaging item purchase and blistering/walleting runs

AGILITY - Rescheduling

EXPERIENCE & ADVICE - Providing the best option for customer & patients

PARTNERING RELATIONSHIP Working hand in hand with customers and partner vendors with trust

03

VENDORS SOLUTION

ADAPTED EQUIPMENT - Small batches

SCALE-UP - Method/Process transfer

WALLET CARDS redesigned to serve cost optimization

BOOKLET LABELS - To manage 11 languages, avoid IMP waste (no unit allocation) & limit labelling operations

PHARMACEUTICAL SUPPORT Quality/Regulatory expert advice, QP-release & shelf-life extension

CSR positive impact - Reliable AND reusable insulated boxes for distribution