



HERANTIS
PHARMA

Company presentation

September 2023

Clinical-stage company developing disease-modifying treatment for Parkinson's disease

Forward-looking statement

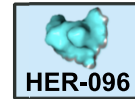
This company presentation includes forward-looking statements which are not historical facts but statements regarding future expectations instead. These forward-looking statements include without limitation, those regarding Herantis' future financial position and results of operations, the company's strategy, objectives, future developments in the markets in which the company participates or is seeking to participate or anticipated regulatory changes in the markets in which the company operates or intends to operate. In some cases, forward-looking statements can be identified by terminology such as "aim," "anticipate," "believe," "continue," "could," "estimate," "expect," "forecast," "guidance," "intend," "may," "plan," "potential," "predict," "projected," "should" or "will" or the negative of such terms or other comparable terminology. By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors because they relate to events and depend on circumstances that may or may not occur in the future.

Forward-looking statements are not guarantees of future performance and are based on numerous assumptions. The company's actual results of operations, including the company's financial condition and liquidity and the development of the industry in which the company operates, may differ materially from (and be more negative than) those made in, or suggested by, the forward-looking statements contained in this company release. Factors, including risks and uncertainties that could cause these differences include, but are not limited to risks associated with implementation of Herantis' strategy, risks and uncertainties associated with the development and/or approval of Herantis' drug candidates, ongoing and future clinical trials and expected trial results, the ability to commercialize drug candidates, technology changes and new products in Herantis' potential market and industry, Herantis' freedom to operate in respect of the products it develops (which freedom may be limited, e.g., by competitors' patents), the ability to develop new products and enhance existing products, the impact of competition, changes in general economy and industry conditions, and legislative, regulatory and political factors. In addition, even if Herantis' historical results of operations, including the company's financial condition and liquidity and the development of the industry in which the company operates, are consistent with the forward-looking statements contained in this company release, those results or developments may not be indicative of results or developments in subsequent periods.

Herantis – at a glance



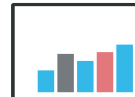
Developing disease-modifying treatment to address the unmet clinical need in Parkinson's disease and other neurodegenerative diseases



Lead asset **HER-096** is a small engineered peptide molecule with a **unique mechanism of action** and **subcutaneous injection** as an **easy route of administration**



Phase 1a clinical trial ongoing; Safety and blood-brain barrier (**BBB**) **penetration data** in **healthy volunteers** expected in **Q4 2023**



Herantis Pharma plc was founded in **Helsinki, Finland** in **2008**; **Listed** at Nasdaq First North Helsinki

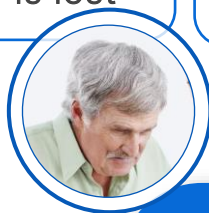


Experienced board and management team; Scientific advisory board with **globally leading experts in Parkinson's disease** from industry and academia

The unmet clinical need in Parkinson's disease

PARKINSON'S DISEASE (PD)

- Degeneration of dopaminergic nerve cells in mid brain cause severe motor and non-motor symptoms
- At the time of diagnosis, approximately half of the dopaminergic activity is lost



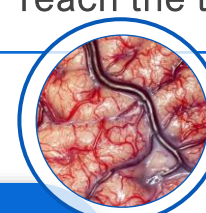
CURRENT TREATMENTS CANNOT STOP THE PROGRESSION OF PD

- For 50 years, the mainstay of Parkinson's treatment has been levodopa, which helps to restore dopamine levels in the brain



BLOOD-BRAIN BARRIER (BBB) PROTECTS THE BRAIN – DIFFICULT TO DELIVER DRUGS TO THE TARGET TISSUE

- Most pharmaceuticals cannot pass the BBB
- Many promising therapeutic candidates cannot be administered to patients so that they would reach the targets in the brain



UNMET NEED: DISEASE-MODIFYING TREATMENTS

AIMS OF HER-096

- Slow down or stop the process of mid brain neuron degeneration at early stage of the disease
- Preventing the Parkinson's disease-related symptoms to get worse



OVER \$10B MARKET

- 8-10 million patients globally
- Current market \$5B
- Market estimated to grow to \$11B by 2029 driven by disease-modifying treatments (source: GlobalData)



HER-096 is a perfect drug candidate for Parkinson's disease

HER-096

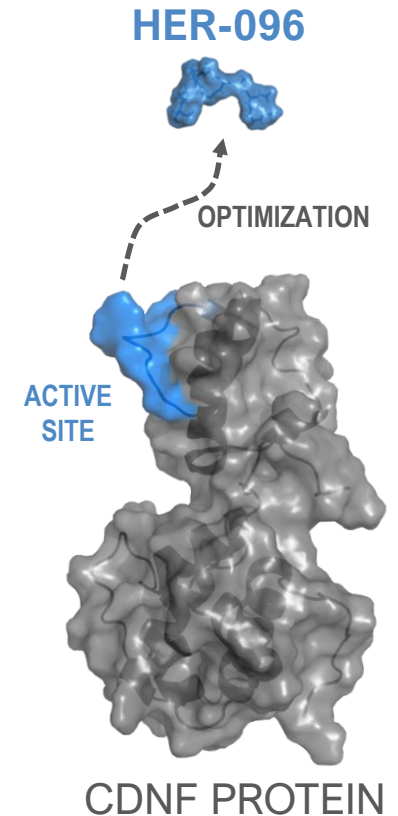
- Designed based on the active site of CDNF, a known ER protein and unfolded protein response (UPR) modulator
- Restores proteostasis and reduces neuroinflammation
- Synthetic peptidomimetic molecule, straightforward CMC

Strong preclinical evidence

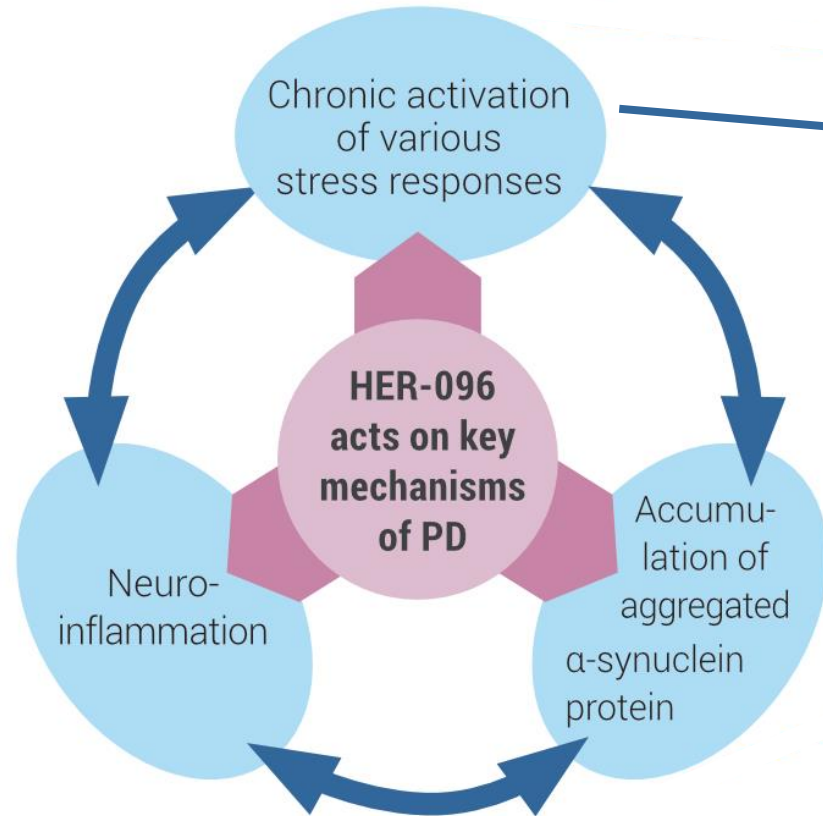
- Effectively passes through the blood-brain barrier *in vivo* with extended CSF to plasma half-life (s.c. administration)
- *In vivo* evidence of target modulation and effect on motor functions in an α -synuclein-based animal model

Progressing in clinical development

- Preclinical toxicology studies (GLP) completed (rats, dogs) – no signs of systemic toxicity
- Phase 1a started in April 2023, read-out expected in Q4 2023 (safety, blood-brain barrier penetration)



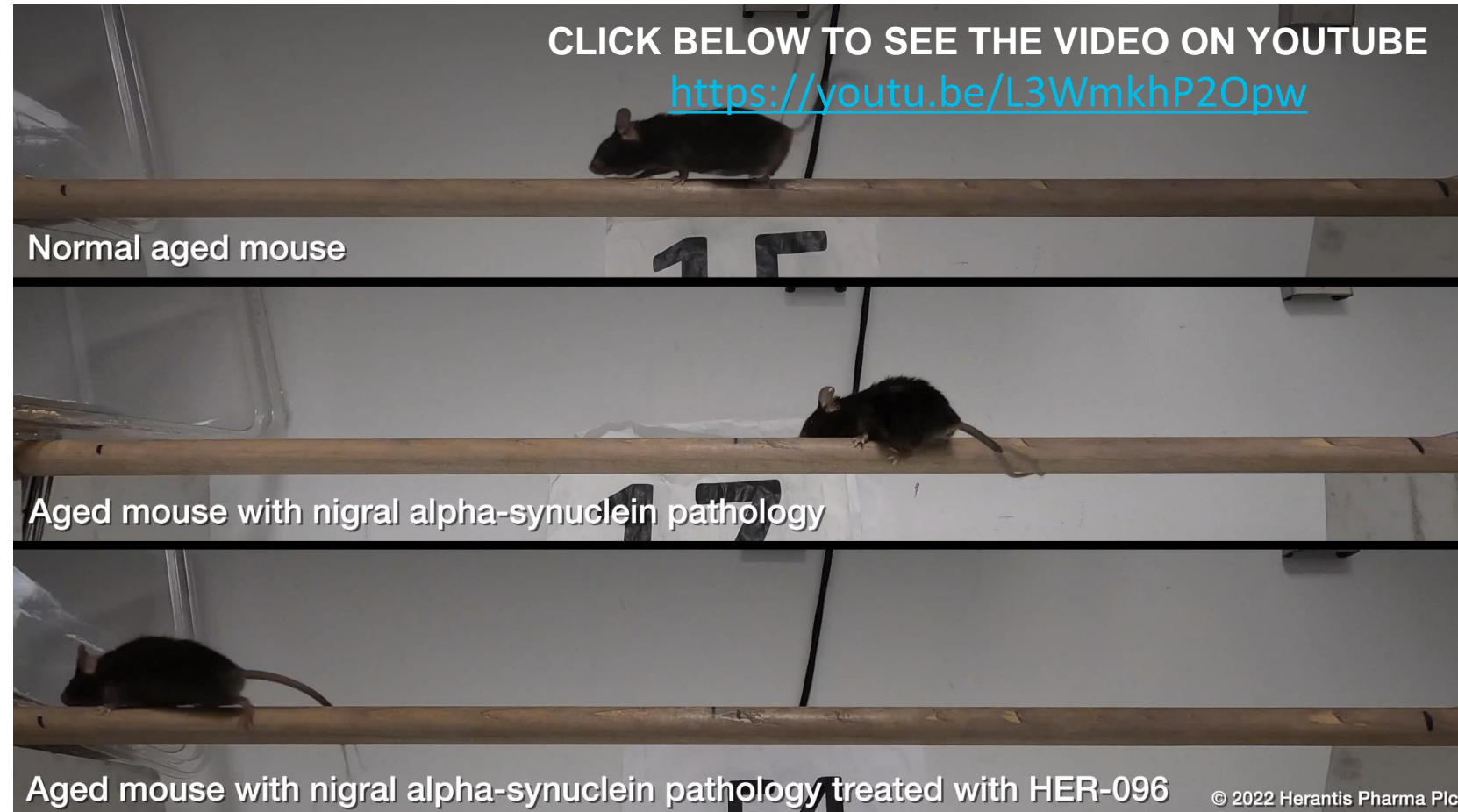
HER-096: A unique MoA targets Unfolded Protein Response (UPR) pathway



HER-096 Improves Motor Function in the Mouse Synucleinopathy Model

Mouse bar test to observe motor coordination

- Mouse walks from right to left
- Longer walking time corresponds to compromised motor coordination
- Video still image shows where the mice are at certain point of time
- **Mouse 1**: normal aged mouse → no challenges in crossing the bar
- **Mouse 2**: aged mouse in which pathology induced 6 weeks prior to the video shoot → compromised function
- **Mouse 3**: aged mouse in which pathology induced 6 weeks prior to video shoot and treated with subcutaneous HER-096 → **quicker than the control!**
- The original video is available by using the link <https://youtu.be/L3WmkhP2Opw>



Disease modification & improved motor function → potential to become first-in-class treatment of Parkinson's disease

Therapeutic Hypothesis for HER-096

- HER-096 promotes neuronal survival and functional recovery under prolonged stress conditions
 1. Reduced endoplasmic reticulum (ER) stress level by modulation of the unfolded protein response (UPR) pathway signalling
 2. Reduced accumulation and toxicity of misfolded protein aggregates
 3. Reduced inflammatory activity in the affected brain area
- **Slow down or stop the process of midbrain neuron degeneration at early stage of the disease**
- **Improve Parkinson's disease related symptoms**
- Subcutaneous administration 1 – 3 times per week: currently it seems that successful therapeutic effect does not require constant presence of HER-096 in the brain

HER-096 Phase 1a clinical trial in healthy volunteers

Part 1:
Male, age 20-45 years

Part 2 (ongoing):
Male & female, age >50 years

Objectives:

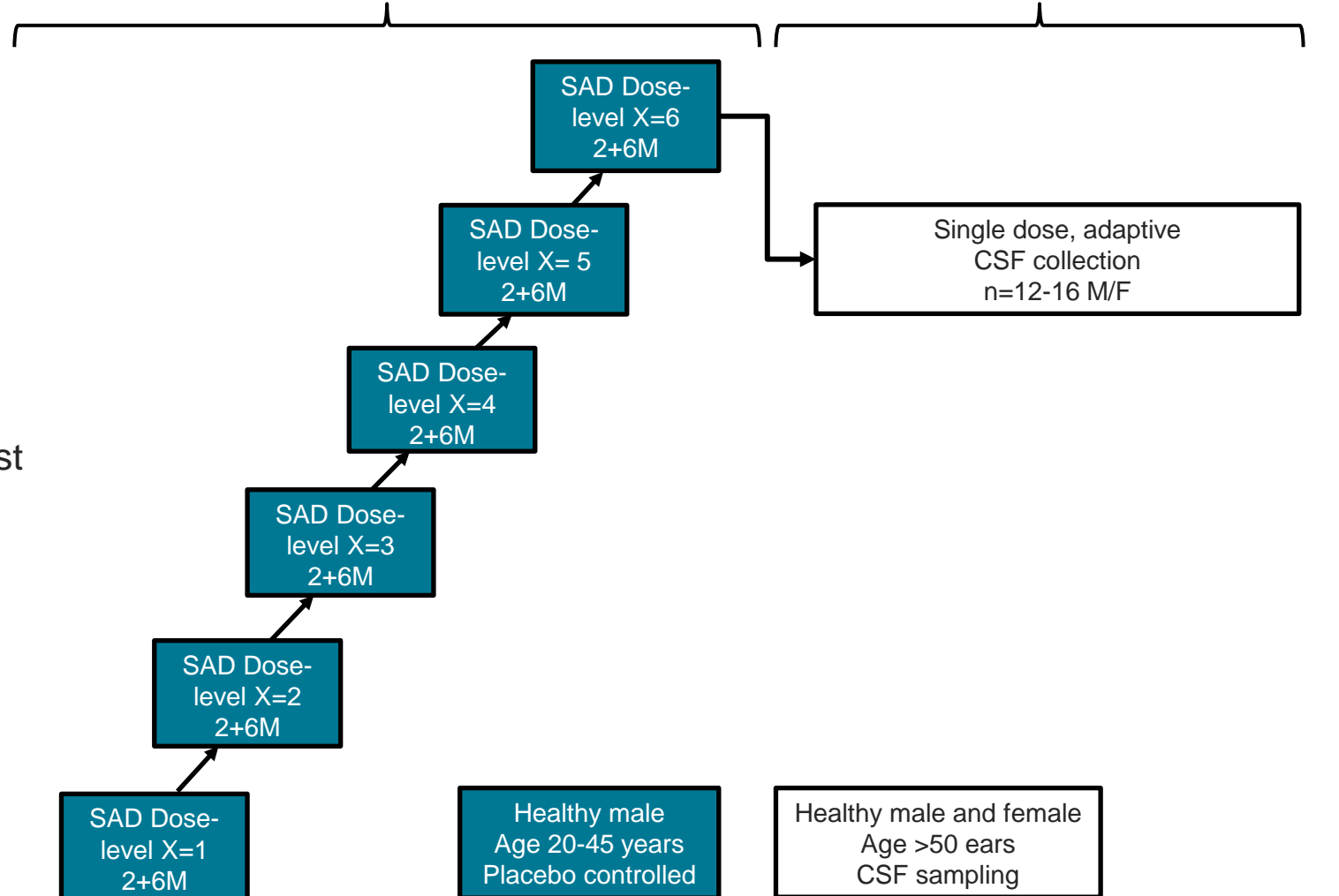
- Safety and tolerability (single dose)
- Blood-brain barrier (BBB) penetration
- Exploratory biomarkers

Timelines:

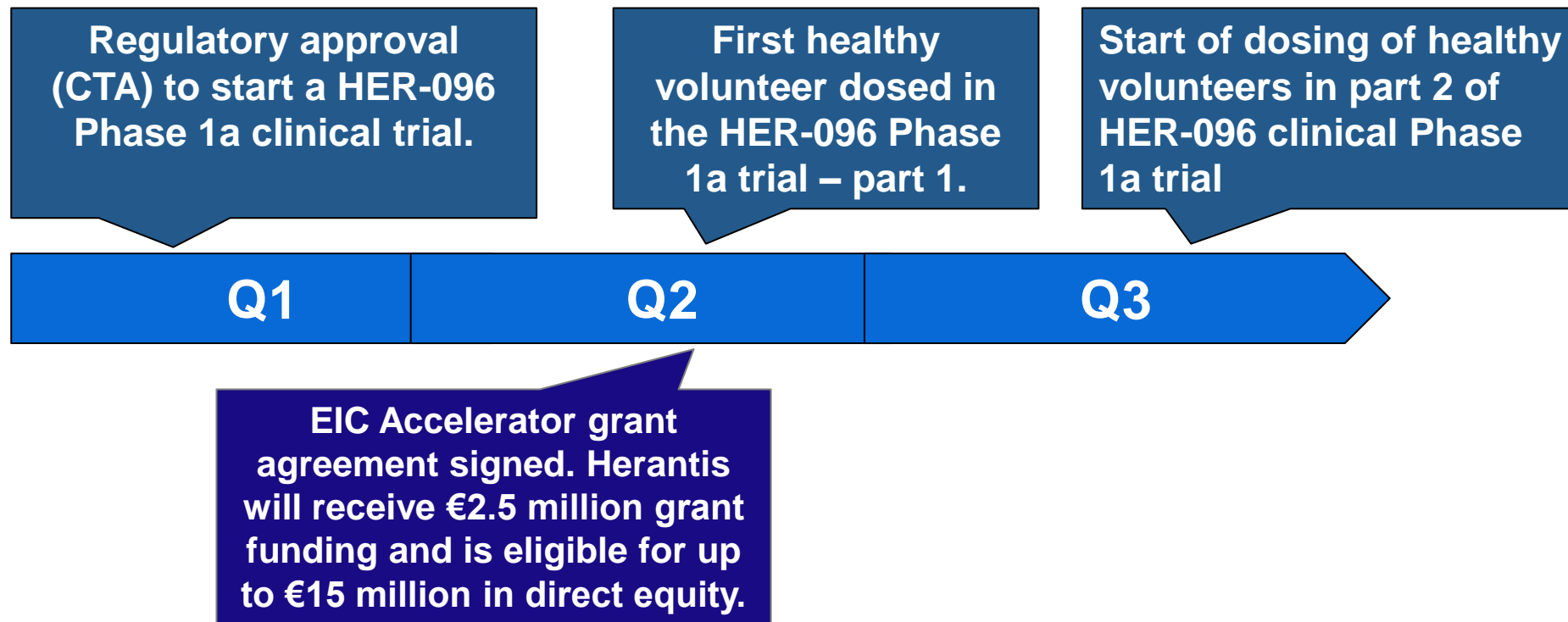
- Part 1: First healthy volunteers dosed in April
- Part 2: First healthy volunteers dosed in August
- Top-line data expected in Q4 2023

Expected next steps:

- Phase 1b clinical trial in PD patients
- Other Phase 2 proof-of-concept study preparations



Business highlights 2023



We have joined Herantis to develop therapies for those who are suffering from neurodegenerative diseases

Management team



Antti Vuolanto, D.Sc
CEO



Tone Kvåle
CFO



Henri Huttunen, PhD
CSO

Board of Directors



**Timo Veromaa, MD,
PhD, eMBA**
Chairman



Hilde Furberg



Mats Thorén



Aki Prihti



**Frans Wuite,
MD, MBA**

Scientific Advisory Board of global industry and academic leaders



- **Anders Gersel Pedersen, M.D., Ph.D.**
- Chairman of the Board
- Globally renowned and respected expert in CNS drug development. Previously Executive Vice President of R&D at Lundbeck for 19 years. Currently on multiple boards including e.g. Genmab.



- **Daniele Bravi, M.D., Ph.D.**
- Specialist Neurologist in movement disorders
- Renowned CNS disease expert. Previously Vice President, Chief Medical Officer, Vice President of Drug Development at Lundbeck USA



- **Alberto Espay, M.D., professor**
- Professor and chair of the University of Cincinnati James J. and Joan A. Gardner Family Center for Parkinson's Disease and Movement Disorders
- Globally renowned expert and author in biomarker-driven clinical development in movement disorders
- Chair of Movement Disorder Society's Technology Task Force



- **David Dexter, Ph.D., professor**
- Associate Research Director at Parkinson's UK and Professor of Neuropharmacology at Imperial College London
- Renowned expert in mechanisms of cell death and neuroprotection in Parkinson's disease

Herantis investment proposition



Lead asset

- HER-096 has the potential to become a therapy for Parkinson's disease with a unique, disease modifying Mechanism of Action



Market

- 10 million patients globally
- Unmet need: no disease modifying therapies for Parkinson's disease today
- Multi-billion EUR market estimated for disease modifying PD therapeutics



Evidence

- HER-096 rescues dopaminergic neurons and passes the BBB in animals
- Over decade of CDNF preclinical and clinical data de-risk the development



Strategy

- Create value in preclinical & early clinical development
- Find a development partner for late-stage clinical development and commercialization of HER-096

Contact details

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