

# Vicore initiates clinical proof-of-concept study of endothelial dysfunction

**Stockholm, May 3, 2023 – Vicore Pharma Holding AB (STO: VICO) (“Vicore”), unlocking the potential of a new class of drugs – angiotensin II type 2 receptor agonists (ATRAgS), today announces the first patient dosed with C21 in a clinical study of endothelial dysfunction.**

- **Endothelial dysfunction is a key driver of organ damage associated with many diseases**
- **Vicore’s ATRAGs have properties suggesting that they may restore endothelial function**
- **Restoration of endothelial function may be both therapeutic and serve as an early efficacy biomarker in pulmonary, renal, vascular and several other diseases**

Vicore is conducting a randomized, double-blind, placebo-controlled, cross-over trial evaluating the effect of ATRAGs on endothelial dysfunction (reflecting blood vessel health) in patients with type-2-diabetes-mellitus (T2DM)[1], a condition where endothelial dysfunction is central in the development of organ damage. The trial will be conducted with Vicore’s first ATRAG C21 and will use EndoPAT® [2], an FDA approved, non-invasive, simple, and robust technology to detect endothelial dysfunction. The first patient has now been dosed and results from the trial are expected in Q4, 2023. If proof-of-principle is reached, this would both strengthen the view that ATRAGs may be useful in several major common diseases, and that the EndoPAT® technique can be used for exploring therapeutic efficacy in diseases driven by endothelial dysfunction as well as for establishing the active dose-range for new ATRAGs.

*“Measuring endothelial dysfunction with the EndoPAT® technology in drug trials is a cost-effective and robust method for early documentation of proof-of-concept in pulmonary, renal and vascular diseases”* says Elin Rosendahl, VP Clinical Operations, Vicore Pharma. *“This has the potential to substantially shorten the timelines and decrease the risk in clinical development programs.”*

Endothelial dysfunction is characterized by a proinflammatory and prothrombotic state with impaired microvascular blood flow, and it is a vascular hallmark of several common diseases. There is currently no treatment for endothelial dysfunction and counteracting this vascular disturbance is likely to reduce cardiovascular, renal and other complications associated with, for example diabetes and ageing. Furthermore, endothelial dysfunction plays a central role in pulmonary arterial hypertension and preeclampsia, two microvascular diseases where ATRAGs have been proposed as a novel therapeutic approach and where there is strong preclinical support.

*“Patients with diabetes mellitus have an increased risk of cardiovascular events and endothelial dysfunction is an important factor for this development”* says Jan Nilsson, Professor in Experimental Cardiology, Lund University, and principal investigator in the trial. *“Treating endothelial dysfunction could be a major breakthrough in cardiovascular disease”.*

## **About angiotensin II type 2 receptor agonists (ATRAgS)**

The AT2 receptor is part of the body’s resolution and repair system and is suggested to be protective in several diseases connected to ageing and cell senescence, including idiopathic pulmonary fibrosis, chronic kidney disease, heart failure as well as cognitive disorders. Stimulating the AT2 receptor has been shown to be effective in combatting disease in numerous models and clinical validation is well

advanced in acute and chronic lung disease. Stimulating the AT2 receptor also dilates small diseased resistance vessels in animals and in humans, resulting in locally increased blood flow. Vicore is developing C21 for rare lung diseases and has a series of new ATRAGs in development for other indications, the first of which (C106) is in clinical phase 1.

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**About Vicore Pharma Holding AB (publ)**

*Vicore is an innovative Swedish clinical-stage pharmaceutical company dedicated to creating life-changing treatments in diseases where the AT2 (angiotensin II type 2) receptor has a central role in stopping and reversing disease pathology. The company is establishing a portfolio in rare lung diseases including idiopathic pulmonary fibrosis (IPF) and pulmonary arterial hypertension (PAH). C21 is a first-in-class orally available small molecule angiotensin II type 2 receptor agonist (ATRAG). Almee™ (an investigational medical device in clinical development) is a digital therapeutic (DTx) based on cognitive behavioral therapy (CBT) created to address the psychological impact of living with pulmonary fibrosis. Inhaled IMID is a new formulation and delivery route of thalidomide targeting the severe cough associated with IPF. With our unique expertise in the ATRAG biology we fuel our pipeline with several new assets with long patent life for a variety of diseases, some of which could be partnered while others can be taken to the market by Vicore.*

The company's shares (VICO) are listed on Nasdaq Stockholm's main market. For more information, see [www.vicorepharma.com](http://www.vicorepharma.com).

[1] NCT05831644

[2] A registered trademark of ZOLL® Itamar®, a division of ZOLL® Medical

**Attachments**

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