

## **Karolinska Development's portfolio company AnaCardio's founder publishes article that supports development of heart failure drug candidate AC01**

STOCKHOLM, SWEDEN March 14, 2023. Karolinska Development AB (Nasdaq Stockholm: KDEV) today announces that the founder of its portfolio company AnaCardio, Professor Lars Lund, has published an article on a heart failure study in the scientific journal *European Heart Journal*. The study's publication reinforces the company's efforts to develop a novel treatment for heart failure based on proof-of-concept established by the study.

The scientific journal *European Heart Journal* publication is based on a study led by Professor Lars Lund, performed in cooperation with researchers at Karolinska Institutet and Karolinska University Hospital. The study, which evaluated the peptide hormone ghrelin as a novel treatment in patients with heart failure and in isolated heart cells in the laboratory, showed an increase in contractility and demonstrated a novel molecular mode of action.

The study was randomized, double-blind, and placebo-controlled and included 30 patients with heart failure. The patients were randomly assigned to either active treatment with ghrelin or placebo given intravenously for two hours. Treatment with ghrelin increased the volume of blood pumped by the heart by 28 percent, compared to no effect in the placebo group. No serious adverse reactions were observed and no signs of arrhythmia, ischemia, or hypotension were detected. The underlying mechanisms behind the increased pump function were evaluated and identified in preclinical models in isolated heart cells in the laboratory.

Based on this well-documented mode of action, Anacardio has initiated a clinical study to evaluate the drug candidate AC01, a small molecule mimicking the mode of action of ghrelin with great potential to safely enhance the contractions of the heart in heart failure patients.

"The development program for AC01, which has the same mode of action as ghrelin, is based on these study results. The publication of the article in the reputable journal *European Heart Journal* verifies the scientific hypothesis behind AnaCardio's unique pharmaceutical project and sheds light on a novel treatment with great potential to help patients with heart failure," says Viktor Drvota, CEO, Karolinska Development.

Karolinska Development's ownership interest in AnaCardio amounts to 21 percent.

Publication: Lund LH, Hage C, Pironti G, Thorvaldsen T, Ljung-Faxén U, Zabarovskaja S, Shahgaldi K, Webb D, Hellström PM, Andersson DC, Ståhlberg M.

Acyl ghrelin improves cardiac function in heart failure and increases fractional shortening in cardiomyocytes without calcium mobilization. *Eur Heart J* 2023; doi: 10.1093/eurheartj/ehad100, <https://academic.oup.com/eurheartj/article-lookup/doi/10.1093/eurheartj/ehad100>

### **For further information, please contact:**

Viktor Drvota, CEO, Karolinska Development AB  
Phone: +46 73 982 52 02, e-mail: [viktor.drivota@karolinskadevelopment.com](mailto:viktor.drivota@karolinskadevelopment.com)

Johan Dighed, General Counsel and Deputy CEO, Karolinska Development AB  
Phone: +46 70 207 48 26, e-mail: [johan.dighed@karolinskadevelopment.com](mailto:johan.dighed@karolinskadevelopment.com)

**TO THE EDITORS**



## **About Karolinska Development AB**

Karolinska Development AB (Nasdaq Stockholm: KDEV) is a Nordic life sciences investment company. The company focuses on identifying breakthrough medical innovations in the Nordic region that are developed by entrepreneurs and leadership teams. The Company invests in the creation and growth of companies that advance these assets into commercial products that are designed to make a difference to patients' lives while providing an attractive return on investment to shareholders.

Karolinska Development has access to world-class medical innovations at the Karolinska Institutet and other leading universities and research institutes in the Nordic region. The Company aims to build companies around scientists who are leaders in their fields, supported by experienced management teams and advisers, and co-funded by specialist international investors, to provide the greatest chance of success.

Karolinska Development has a portfolio of eleven companies targeting opportunities in innovative treatment for life-threatening or serious debilitating diseases.

The Company is led by an entrepreneurial team of investment professionals with a proven track record as company builders and with access to a strong global network.

For more information, please visit [www.karolinskadevelopment.com](http://www.karolinskadevelopment.com).