

## **HeartBeat.bio AG to Reinvent Cardiac Drug Discovery**

- **World-wide first self-organizing human cardiac organoids (Cardioids) for high-throughput drug screening**
- **Technology licensed from renowned Vienna Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA)**
- **Company launched based on seed financing by red-stars.com data AG**

**Vienna, Austria – 04 May 2021** – HeartBeat.bio AG, a spin-off company of the Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA), today announced that it has established its operations with seed financing of EUR 1.5 million from red-stars.com data AG. The Company is developing a high-throughput 3D screening platform for heart diseases using the world-wide first self-organizing human cardiac organoids (Cardioids).

The Cardioid technology has been invented by the Mendjan lab at IMBA, one of the global leading hubs in organoid research. HeartBeat.bio has signed an exclusive license and collaboration agreement with IMBA and will closely cooperate with the research group of Sasha Mendjan to further develop the technology.

Cardioids are a stem-cell derived, multi-cellular, 3D tissue culture system that recapitulates the human heart physiology and the most clinically relevant left ventricular chamber in an unprecedented way. This human organoid screening platform enables the automated, reproducible, and cost-effective large-scale generation and analysis of cardiac organoids, making it suitable for high-throughput compound screenings. The drug discovery program will focus on heart failure and cardiomyopathies as well as cardiotoxicity studies for new drug candidates.

HeartBeat.bio was founded by an experienced team of biotech entrepreneurs and IMBA scientists: **Michael Krebs**, CEO of HeartBeat.bio and former Managing Director of IMBA, **Sasha Mendjan**, Principal Investigator of the Human Cardiogenesis Team at IMBA, **Oliver Szolar**, CEO of a:head bio AG and **Pablo Hofbauer**, co-inventor of the Cardioid technology and Head of Organoid Research at HeartBeat.bio.

Michael Krebs, CEO of HeartBeat.bio said: “We strongly believe that the Cardioid-based screening platform has the potential to radically change the cardiovascular drug discovery paradigm resulting in higher clinical trial success rates and reduced cost and time for compound development.”

“Our curiosity-driven research has revealed innovative and radically new possibilities for drug development. The founding of HeartBeat.bio demonstrates the benefits of basic research for taxpayers and the economic well-being. We are very proud of being able to contribute to its success”, added Jürgen Knoblich, Scientific Director of IMBA.

Thomas Streimelweger, CEO of red-stars.com data AG, commented: “HeartBeat.bio is an extremely promising academic spin-off with great potential to revolutionize cardiac drug discovery. The market for major heart disease prescription drugs has an annual volume of over US \$ 60 billion and there is a high unmet medical need to discover new drugs for difficult-to-treat diseases such as heart failure and cardiomyopathies.”

The gross proceeds of the seed financing will be used to establish operations, build up an experienced team over the next 12 months, and develop the Cardioid technology into a platform solution for compound screening. Besides red-stars’ seed investment, HeartBeat.bio has already received financial support from AWS - via the AWS Pre-Seed Program which is funded by the Austrian Federal Ministry for Digital and Economic Affairs (BMDW) and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) - and from Vienna’s high-tech incubator INiTS via its AplusB Scaleup Program.

### **About HeartBeat.bio**

HeartBeat.bio AG is dedicated to developing the first high-throughput human organoid screening platform for cardiac drug discovery. The screening platform is built on self-organizing, highly scalable cardiac organoids which recapitulate the human heart physiology and enable modeling of diseases such as heart failure and cardiomyopathies as well as cardiotoxicity. HeartBeat.bio AG was founded in 2021 based on technology from the Institute of Molecular Biotechnology (IMBA) by a seasoned team with in-depth experience in organoid research, drug discovery and business development. The Company is located at the Vienna BioCenter in Austria. For further information, please visit [www.heartbeat.bio](http://www.heartbeat.bio) or follow us on [LinkedIn](#).

### **About IMBA**

IMBA - Institute of Molecular Biotechnology of the Austrian Academy of Sciences - is one of the leading biomedical research institutes in Europe focusing on cutting-edge stem cell technologies, functional genomics, and RNA biology. IMBA is located at the Vienna BioCenter, a vibrant cluster of universities, research institutes and biotech companies in Austria. IMBA is a subsidiary of the Austrian Academy of Sciences, the leading national sponsor of non-university academic research. The stem cell and organoid research at IMBA is being funded by the Austrian Federal Ministry of Science and the City of Vienna.

### **About red-stars.com data AG**

red-stars.com data AG is an operative holding company engaged in the global penetration of highly scalable innovative technologies, utilizing and commercializing scientific IP and software.

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