

## HeartBeat.bio raises € 4.5 million in Pre-Series A financing to drive development of organoid screening platform for cardiac drug discovery

- New funds committed to market-ready development of HeartBeat.bio's unique 3D human tissue-based Cardioid Drug Discovery Platform for heart disease
- Organoid cultivation, screening and data analysis platform combines organoid technology, automated hardware solutions and AI-based software suitable for primary drug screening and clinical trials-in-a-dish
- Investor syndicate includes: i&i Biotech Fund; Invest AG; aws Gründungsfonds II; and Tensor Ventures

**Vienna, Austria – 02 November 2023** – HeartBeat.bio AG, a biotech company building a highly scalable human organoid and AI-supported drug discovery platform for heart disease, today announced the closing of a € 4.5 million Pre-Series A round co-led by i&i Biotech Fund, Invest AG, aws Gründungsfonds II, and Tensor Ventures. The financing enables the completion of a ready-to-use, fully integrated, automated, high-throughput Cardioid Drug Discovery Platform for proprietary and collaborative drug discovery programs in indications with a high medical need such as drug-induced and genetic cardiomyopathies as well as myocardial infarction and fibrosis.

While cardiovascular diseases are the leading cause of death worldwide<sup>1</sup>, the development of effective therapeutic options is still limited due to high failure rate in clinical drug development and the lack of representative models that can adequately predict the physiology of the human heart.

HeartBeat.bio's Cardioid Drug Discovery Platform facilitates the transition from traditional pre-clinical development to an animal-free, human-centric drug discovery approach. This new Cardioid Drug Discovery Platform approach starts from target identification and validation, disease modeling, hit identification and confirmation up to lead compound development, drug profiling and finally clinical trials-in-a-dish. Developed in partnership with *Molecular Devices*, HeartBeat.bio combines their highly scalable Cardioid technology with Molecular Devices' *CellXpress.ai<sup>TM</sup> Automated Cell Culture System<sup>2</sup>*, a 3D biology innovation hub. Along with high-content-imaging and AI-based software, the Cardioid Drug Discovery Platform is designed to develop first-in-class drugs faster, less expensively and with a higher clinical success rate.

**Michael Krebs, CEO of HeartBeat.bio** said: "This financing round is an important validation of our Cardioid technology and will help to unlock the platform's potential to disrupt the cardiac drug development paradigm. We are proud to have received funding

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<sup>1</sup> <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>

<sup>2</sup> <https://www.moleculardevices.com/newsroom/news/molecular-devices-introduces-cellxpress-ai-automated-cell-culture-system-a-3d-biology-innovation-hub-for-fast-reliable-drug-discoveries>

from four complementary investors with the financial capacity to continue funding in our Series A venture round, which is planned for 2025.”

"We believe HeartBeat.bio's technology has real potential to contribute to more effective drug development to treat cardiovascular diseases. At the same time, we also see an ethical dimension, as the deployment of this technology will lead to a reduction in the number of animal experiments," commented **Tomas Maršálek, CFO of i&i Biotech Fund**.

"HeartBeat.bio's leading proprietary Cardioid technology and revolutionary platform to scale the cultivation of cardiac organoids have huge potential to change the future of cardiovascular drug development," said **Philipp Schupfer, Board Member of Invest AG**, and continued: "As the leading Private Equity Fund in Austria, we are very pleased to support such an innovative Austrian biotech startup which is quite exceptional in this segment. We are very keen to support HeartBeat.bio and its strong team in the future and we are already excited about the coming years."

Including this investment, HeartBeat.bio has secured a total of € 10 million in private and public funds since company formation in 2021.

### **About HeartBeat.bio AG (“HeartBeat.bio”)**

HeartBeat.bio is building the worldwide first high-throughput human organoid cultivation, screening and AI-supported data analysis solution for developing first-in-class drugs to treat heart failure; faster, less expensively and with a higher probability of success in clinical trials. The so-called Cardioid Drug Discovery Platform relies on self-assembling, highly reproducible cardiac organoids which recapitulate the human physiology and enable modeling of heart diseases in a way not achieved with other *in-vitro* systems. Currently, HeartBeat.bio is focused on drug-induced and different sub-types of genetic cardiomyopathies, followed by programs in diabetic cardiomyopathy, myocardial infarction, and cardiac remodeling. HeartBeat.bio was founded in 2021 based on technology from the Institute of Molecular Biotechnology (IMBA) and is located at the Vienna BioCenter in Austria. The Company received a seed investment by [red-stars.com data AG](#) and the [Austrian promotional bank \(AWS\)](#) as well as grants from the [Austrian Research Promotion Agency \(FFG\)](#) and the [Vienna Business Agency](#).

For further information, please visit [www.heartbeat.bio](http://www.heartbeat.bio) or follow us on [LinkedIn](#).

### **About i&i Biotech Fund (“i&i Bio”)**

i&i Bio is a Luxembourg-based venture capital firm that invests in innovative European Life Sciences companies focused on drug discoveries, medical devices, diagnostics, and digital health. The Fund was created thanks to the cooperation of the biotech incubator i&i Prague and the European Investment Fund (see below). With over € 53 million under management, i&i Bio plans to invest in about 20 early-stage companies. i&i Bio is led by

an experienced team of professionals with backgrounds in private equity, healthcare and venture capital supporting entrepreneurs on their journey to global success. Thanks to close cooperation with the fund's main sponsor, the biotech academic incubator i&i Prague, i&i Bio is supporting and advancing transformative Central European technology companies. More information at <https://www.inibio.eu/>.

### **About the European Investment Fund (“EIF”)**

The Fund is supported by an investment from the EIF, with the support of:

- InnovFin Equity, with the financial backing of the European Union under Horizon 2020 Financial Instruments and the European Fund for Strategic Investments (EFSI) set up under the Investment Plan for Europe. The purpose of the EFSI is to help support financing and implementing productive investments in the European Union and to ensure increased access to financing; and
- the Pan-European Guarantee Fund (EGF), implemented by the EIF with the financial support of the Participating Member States. The objective of the EGF is to respond to the economic impact of the COVID-19 pandemic by ensuring that companies in the Participating Member States have sufficient short-term liquidity available to weather the crisis and can continue their growth and development in the medium to long term.

More information at [www.eif.org](http://www.eif.org).

### **About Invest Unternehmensbeteiligungs AG ("Invest AG"):**

Invest AG is the leading Austrian private equity fund specialized in providing equity, quasi-equity, and mezzanine capital to companies of various sizes. With its evergreen fund structure, Invest AG has strong presence in Austria, the German market and Switzerland for almost 30 years and currently manages fund assets of around half a billion Euros. The typical investment focus is on transactions with equity tickets between € 2 and 50 million. Both, majority, but predominantly minority transactions can be done. In terms of industries focus, Invest AG is generally flexible with industry preference on consumer and retail, industrial, technology, software, food, pharma & life sciences, and medical technology. With currently around 55 portfolio companies, combined investment turnover of c. € 13.5 billion and 127,000 jobs, Invest AG stands for long-term partnerships with companies in German-speaking countries and supports companies in various industries. More information at [www.investag.at](http://www.investag.at).

### **About aws Gründungsfonds II Beteiligungs GmbH & Co KG ("aws Gründungsfonds II"):**

The aws Gründungsfonds II is an Austrian venture capital fund with a fund volume of around € 70 million. As a seed investor, we support start-ups from the first growth phase through further follow-up financing rounds (Series A/B) to exit. We see ourselves as a long-term, stable partner with a hands-on mentality and support the founding teams as an active sparring partner. Since 2013, we have invested more than € 500 million in 45+ investments with the predecessor fund and together with national and international co-investors and have successfully realized numerous exits.

## **About Tensor Ventures Fund (“Tensor Ventures”)**

Tensor Ventures is a global deep tech fund based in Prague and Luxembourg, founded by Roman Smola, Martin Drdúl and Petr Ulvr. The fund supports revolutionary ideas of deep tech startups at an early stage of development. Currently, Tensor Ventures' portfolio consists of more than twenty startups from Europe, the UK, Israel, the US, the Czech Republic, and Slovakia. The fund has supported startups like Tatum, Veracity Protocol, QC82 and others in their strong growth. For more information, visit <https://tensor.ventures>.

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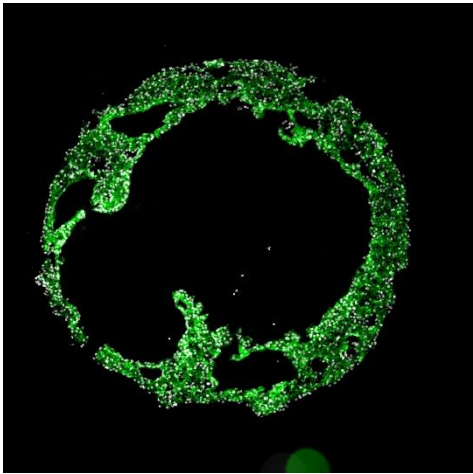
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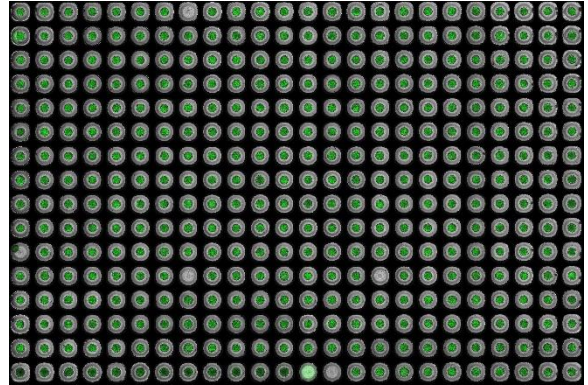
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**Picture 1: Cardiac Organoid (Cardioid)**



**Picture 2: Cardioids in 384 well plate**

For high-resolution pictures please contact [heartbeatbio@mc-services.eu](mailto:heartbeatbio@mc-services.eu).