

“We use the worldwide first self-organizing human heart organoids to reinvent cardiac drug discovery.”

DRUG DISCOVERY CHALLENGES

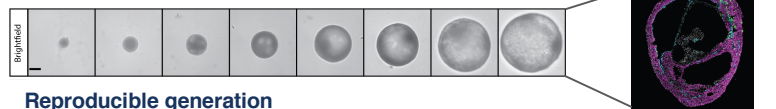
Current cardiac disease models used for drug discovery

- lack human physiology;
 - lack a pumping heart chamber;
 - miss multi-cellular architecture and interactions;
 - are mostly not scalable.
- > High drug failure rates when translated into human clinical trials

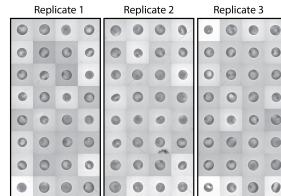
Solution: Human organoid model system and screening assay (Cardioids) along the entire cardiac drug discovery value chain.

CARDIOID TECHNOLOGY

Human stem-cell derived formation of a beating heart chamber



Reproducible generation

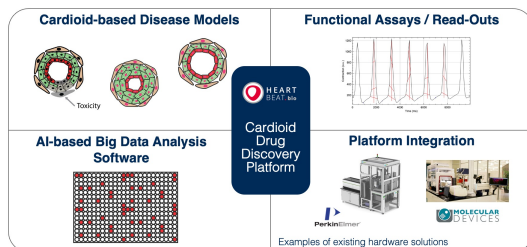


Unique features:

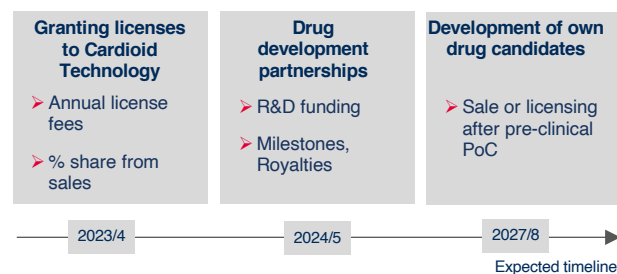
- Resemble human heart architecture;
- Allow to measure heart pumping function;
- Highly reproducible;
- Cost-efficient;
- Scalable for high-throughput application.

Source: Hofbauer et al. Cell Hofbauer, P., et al. (2021). Cardioids reveal self-organizing principles of human cardiogenesis. Cell.

CARDIOID DRUG DISCOVERY PLATFORM

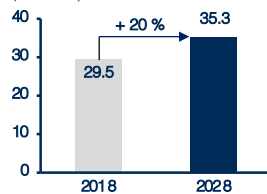


VALUE CREATION FROM 3 REVENUE STREAMS



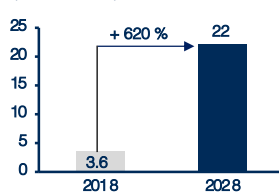
TARGET MARKET: HEART FAILURE

Prevalence in Heart Failure (in million)¹⁾



- Aging population
- Increase of patients with diabetes, obesity, hypertension

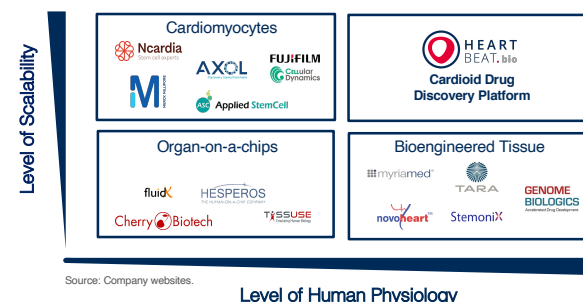
Drug Sales in Heart Failure (in US-\$ billion)¹⁾



- Market crowded with generics (~70% of drug sales)
- Main growth driver: Launch of new drugs with limited clinical benefit

¹⁾ Numbers in 8 major markets: USA, France, Germany, Italy, Spain, UK, Japan, China
Source: Heart Failure: Global Drug Forecast and Market Analysis to 2028, Global Data, December 2019.

COMPETITIVE LANDSCAPE



3-YEARS ROADMAP

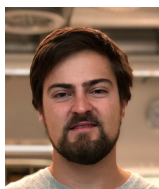


FINANCIAL NEEDS

€ 6 M to fund 3-years roadmap until mid of 2024:

- Secured seed funding: € 1.7 M
- Expected non-dilutive funding: € 3.3 M
- Pre-Series A round (Q1 2022): € 1 M equity

FOUNDER TEAM



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Kundenfokus: B2B

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