

## miRHeart Therapeutics

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Therapeutics

Coronary heart disease is the leading cause of mortality worldwide. Myocardial infarction (heart attack) is its most common form and causes permanent heart damage which, over time, weakens the heart muscle and leads to heart failure. Half of all heart failure patients die within the first 5 years, and the 10-year survival rate is less than 30%. Estimates point that by 2030, heart failure is expected to rise by an astonishing 46% in the United States, with costs exceeding US\$70 billion. There is a **striking economic and public health need to develop new therapies that restore heart function.**

Stem cell-based therapies have emerged as such, raising hope towards the development of a cure. However, despite much promise, these therapies have not yet delivered. The main reason for this relates to their efficacy and efficiency with limitations such as cell expansion, cell quality and lack of differentiation capacity, maturation and functionality. **We discovered that exposure of stem cells to a specific microRNA overcomes these limitations** thereby efficiently generating mature and functional cardiac cells, with **improved cardiac performance and superior heart regeneration capability.**

**miRHeart Therapeutics** vision is to establish a novel stem cell-based therapy, based on this microRNA, for the regeneration of cardiac tissue after an event of myocardial infarction.

Our team is composed by senior scientists that have been dedicated to this project over the last four years and are highly committed towards making it successful. Our expertise is crucial for the experimental and intellectual progress of the technology. We are seeking mentoring at the level of translational medicine and business creation, and capital investment of €500k for the development of the asset over the next 3 years. Our milestones include obtaining a robust proof of concept in a relevant clinical setting, performing safety pharmacology studies and scale-up production in preparation for clinical trials. These achievements will impact tremendously the valorization of this technology and expedite its transfer to the market.

**miRHeart Therapeutics** can help millions of patients and contribute to the healing of heart failure, generating a technology of great applicability with enormous social and economic value.

Help us help patients.