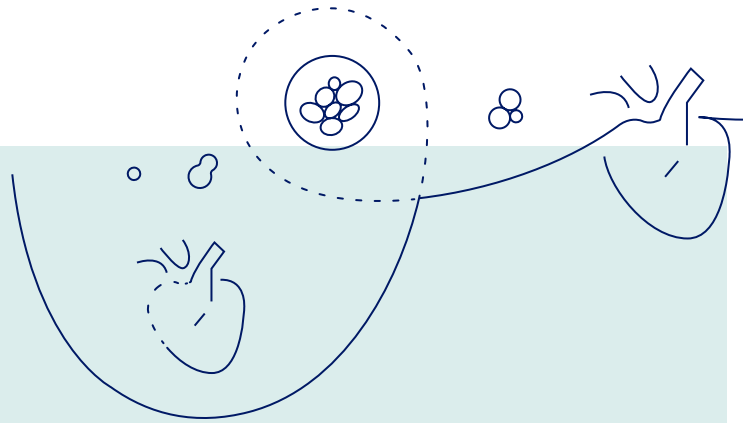


The potential of cell therapy in

chronic heart failure



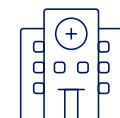
The impact of chronic heart failure



More than 65 million people worldwide are affected by chronic heart failure.¹



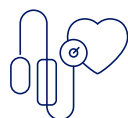
Chronic heart failure is a progressive, debilitating condition where the heart is unable to pump enough blood and oxygen to other organs in the body.²



It is the leading cause of hospitalisations for people over the age of 65 and over half of people diagnosed with chronic heart failure die within five years.^{4,5}



The symptoms of chronic heart failure include severe breathlessness, exhaustion, and chest pain that leave many people unable to perform simple, daily activities.³

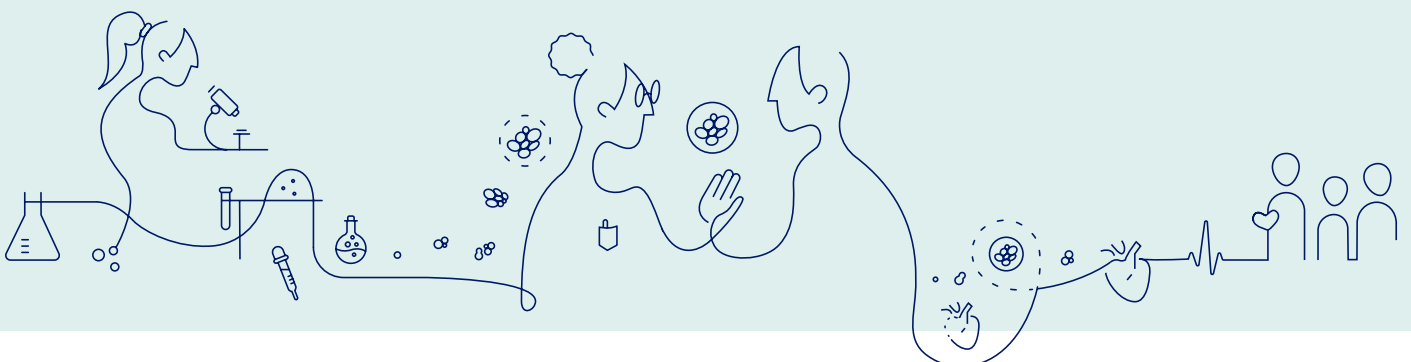


Chronic heart failure is caused by a number of heart problems such as past heart attack, coronary artery disease, and high blood pressure.²



Heart failure is estimated to account for 2% of the total spend on healthcare in western countries.^{6,7}

Current therapies can slow but not halt disease progression.⁸

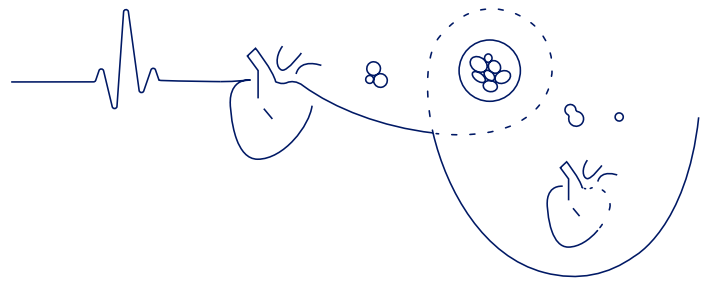


How cell therapy could transform the treatment of chronic heart failure

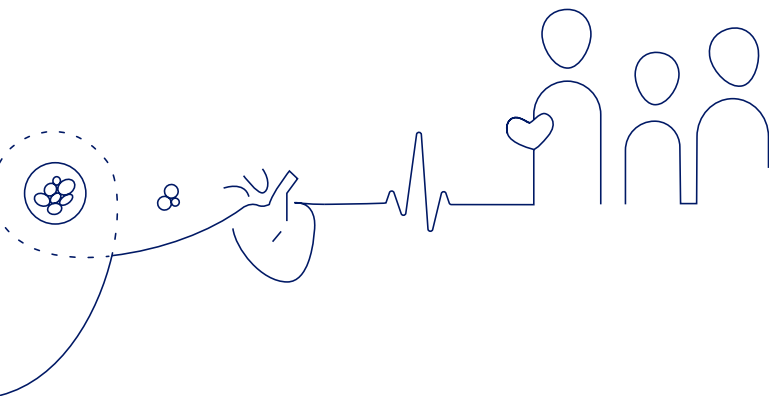
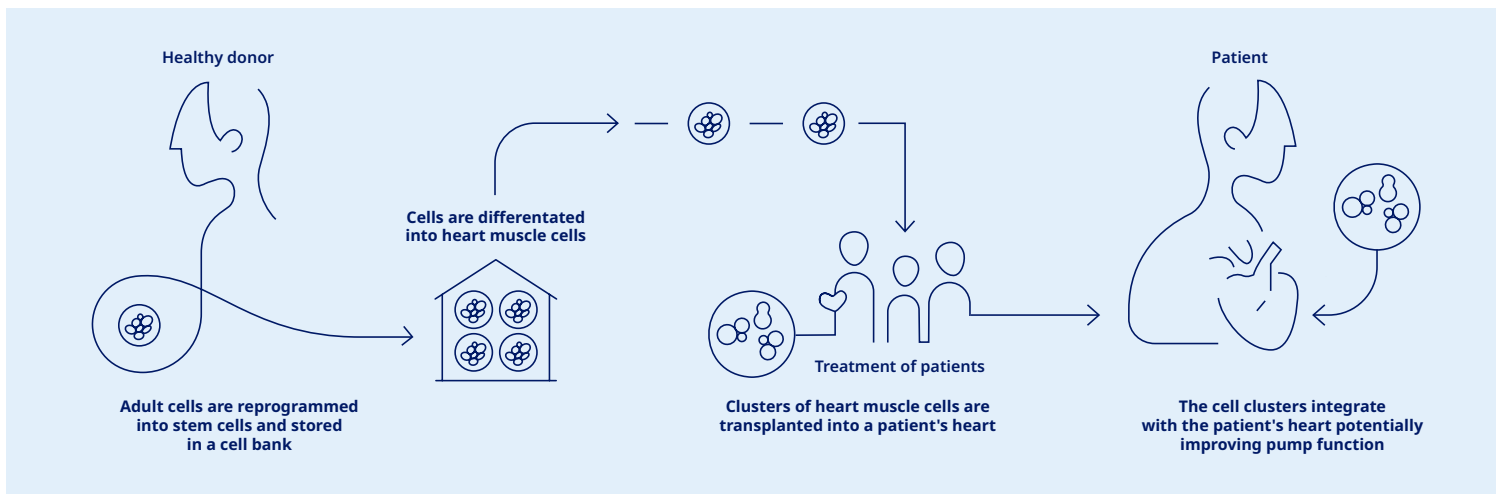
In one of the most common types of chronic heart failure, heart failure with reduced ejection fraction (HFrEF), a significant amount of the heart's four billion muscle cells (cardiomyocytes) are lost.⁹

Cell therapies, which are currently being investigated for the treatment of chronic heart failure, aims to replace the lost cells with new functioning cells. By transplanting new differentiated cells into the heart, cell therapies aim to regenerate damaged heart muscle thereby improving the heart's pump function.⁹

In doing so, it holds the potential to halt or reverse the progression of chronic heart failure.



Novo Nordisk's approach to cell therapy in chronic heart failure



Building on the work of Heartseed, a leading Japanese biotech company, Novo Nordisk is pioneering the development of a novel cell therapy to be produced at scale. This could enable people with chronic heart failure to live longer, healthier lives, with fewer hospitalisations and reduce the burden for society.

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