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## Cardio3 BioSciences' cell therapy approach for cardiac repair recognized in Nature Reviews Cardiology

### Review highlights C-Cure as a next advance in regenerative science

**Mont-Saint-Guibert, Belgium,** - Cardio3 BioSciences (C3BS) (NYSE Euronext Brussels and Paris: CARD), a leader in the discovery and development of regenerative, protective and reconstructive therapies for the treatment of cardiac diseases, today announces the referencing in the journal Nature Reviews Cardiology of lineage-specified cardiac progenitor (Cardiopoietic) cells as a next generation advancement in the science of cardiac regeneration.<sup>1</sup>

The review retrospectively evaluates and correlates the different approaches employed in cardiac regeneration over the past decade and underscores the recent advances in the purification and lineage specification of stem cells.

The review points to the safety and feasibility of cell-based therapy as worldwide, thousands of patients to date have been treated using autologous approaches. The authors state that the main factors limiting adoption of cell therapies comprise the poor definition of cell types used, diversity in cell handling procedures and functional variability intrinsic to autologously-derived cells.

The outcomes of the various trials analyzed in the review suggest that cardiac-progenitors confer therapeutic benefit. Cardiac progenitors could be either derived from the heart or be cardiac lineage-specified, the latter a method used to generate C-Cure. Cardiac lineage-specified cells are guided *ex vivo* to differentiate into cardioreparative cells.

In the C-Cure trial, heart failure patients were treated with C-Cure® which consists of cardiac progenitor (cardiopoietic) cells. The findings of the study indicate that the use of cardiac progenitor cells (CP-hMSC) is feasible and safe and documents a statistically significant improvement of Left Ventricular Ejection Fraction, a measure of heart function, versus baseline compared to no change for the control group who were treated with standard of care. Based on these results, C-Cure® is being tested in a Phase III study in Europe and Israel (CHART-1) and has been authorized by the FDA to be tested in the U.S (CHART-2). These phase III therapeutic studies highlight advances in regenerative science.

**Dr Christian Homsy**, CEO of Cardio3 BioSciences, comments: "Being recognized in this review published in Nature Reviews Cardiology highlights Cardio3 BioSciences' technology and leadership in bringing new therapeutic options to patients. By choosing the route of lineage specification, we once again demonstrate that we are at the forefront of the cardiac regenerative medicine industry."

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<sup>1</sup> Behfar, A. et al. *Nat. Rev. Cardiol.* 11, 232–246 (2014) doi:10.1038/nrcardio.2014.9 Published online 04 March 2014



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**About Cardio3 BioSciences**

Cardio3 BioSciences is a Belgian leading biotechnology company focused on the discovery and development of regenerative and protective therapies for the treatment of cardiac diseases. The company was founded in 2007 and is based in the Walloon region of Belgium. Cardio3 BioSciences leverages research collaborations in the US and in Europe with Mayo Clinic and the Cardiovascular Centre Aalst, Belgium.

The Company's lead product candidate C-Cure<sup>®</sup> is an innovative pharmaceutical product that is being developed for heart failure indication. C-Cure<sup>®</sup> consists of a patient's own cells that are harvested from the patient's bone marrow and engineered to become new heart muscle cells that behave identically to those lost to heart disease. This process is known as Cardiopoiesis.

Cardio3 BioSciences has also developed C-Cath<sup>®ez</sup>, the most technologically advanced injection catheter with superior efficiency of delivery of bio therapeutic agents into the myocardium.

Cardio3 BioSciences' shares are listed on NYSE Euronext Brussels and NYSE Euronext Paris under the ticker symbol CARD.

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