PRESS RELEASE

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Cardio3 BioSciences C-Cath® Article Published in Circulation Cardiovascular Interventions

Study Demonstrates Enhanced Endomyocardial Therapeutics Retention through an Optimized Delivery System.

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 advanced publication of C-Cath® ($C\text{-}Cath_{ez}$) study results in the on-line edition of the journal Circulation Cardiovascular Interventions (Circ Cardiovasc Interv.)[1].

The publication reported

- a close to three-fold increase in retention of cells within the heart muscle when using C-Cath®, a nitinol curved needle catheter developed by Cardio3 BioSciences compared with a standard needle
- that the increase in retention when using C-Cath® has no negative effect on biocompatibility or safety

The publication concluded that a nitinol-based curved needle delivery system with side holes such as C-Cath® achieved enhanced myocardial stem cell retention.

Percutaneous catheter based methods are an established route for delivery of regenerative biologics to the heart. However the current devices and methodologies are associated with a significant loss of the delivered stem cell dose in the general circulation, creating a barrier to the efficiency of local delivery of therapeutic agents. This study provided an opportunity to conceptualize model and test a variety of needle designs for optimization of cell retention. It demonstrated that a curved needle design featuring small-to-large graded side holes resulted in a significant increase in cell retention in both healthy and infracted hearts. More precisely, a curved needle design eliminated backflow of injectate and limited loss in the general circulation, and the use of a small-to-large graded side-hole design diminished interstitial pressure during delivery to improve diffusion and cell viability.

C-Cath®, with its nitinol-based curved needle and side holes, is the new generation of percutaneous injection catheter for myocardial delivery. This proprietary steerable percutaneous catheter has been designed and developed to elevate the standard of care to clinicians and patients by focusing on three key features: retention, safety, and ease of use.

1 Behfar A, Latere JP, Bartunek J, Homsy C, Daro D, Crespo-Dia R, Stalboerger P, Steenwinckel V, Seron A, Redfield M, Terzic A. Optimized Delivery System Achieves Enhanced Endomyocardial Stem Cell Retention. Circinterventions.112.000422 published online before print December 10, 2013

With C-Cath®, Cardio3 BioSciences provides the clinician with a catheter biocompatible with injected agents which can be safely manoeuvred to reach targeted sites within the heart chamber. C-Cath® also permits stable contact with the beating myocardium without generating additional tissue trauma and diffuses the therapeutic agent over a bigger target area to obtain both a higher concentration and a wider tissue exposure.

Dr Atta Behfar, the lead author from the Division of Cardiovascular Diseases and Center for Regenerative Medicine at Mayo Clinic, commented: "Major advances in the understanding of stem cells as reparative biotherapeutics have been achieved during the past decade, yet regenerative procedures remain limited by the low retention rates after transplantation. Optimized delivery of stem cells is a priority to advance regenerative procedures. Having used the C-Cath® in preclinical evaluation and having examined the device to assess its physical properties, I consider it to be a superbly crafted catheter that has the potential to become a unique tool, for use with a wide array of biologics".

Dr Christian Homsy, CEO of Cardio3 BioSciences**,** added: "While the key focus for Cardio3 BioSciences remains C-Cure®, our unique stem cell treatment for heart failure which is actually in a phase III clinical study in Europe, the publication of the C-Cath® study results in a journal as prestigious as Circulation Cardiovascular Interventions highlights Cardio3 BioSciences' dedication and leadership in bringing regenerative therapies to patients. We believe that innovation needs to take into account all the elements related to therapy, beyond the cells themselves and including, for example, the delivery systems. With our dedication to solid science and innovation, we once again demonstrate that we are the cornerstone of the cardiac regenerative medicine industry".

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For more information contact:

Cardio3 BioSciences — www.c3bs.com
Dr Christian Homsy, CEO — Tel : +32 10 39 41 00
Anne Portzenheim, Communication Manager — aportzenheim@c3bs.com

Citigate Dewe Rogerson — Tel : +44 (0) 207 638 9571
Chris Gardner/Nina Enegren — nina.enegren@citigatedr.co.uk

Hill & Knowlton — Tel : +32 2 737 95 00
Katia Delvaille — katia.delvaille@hkstrategies.com

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 close research collaborations in the US with Mayo Clinic and in Europe with the Cardiovascular Centre Aalst, Belgium.

The Company's lead product candidate C3BS-CQR-1 is the most advanced autologous cellular therapy product for the treatment of heart failure, one of the world's most pressing unmet medical needs. The product consists of patient's own stem cells harvested from the bone marrow and engineered to become progenitors of new functional cardiac cells that behave identically to those lost to heart disease with a goal to rebuild the heart. This process of cardiac-linage commitment is known as Cardiopoiesis. CQR-1 is currently the first product in a Phase III trial worldwide using organ specified cells for the treatment of ischemic heart failure.

Cardio3 BioSciences has also developed C-Cath®$_{ez}$, the technologically most advanced intra-myocardial injection catheter with superior performance for delivery of biotherapeutics into the myocardium. The proprietary steerable percutaneous catheter has been developed to elevate the standard of care to clinicians and patients. C-Cath$_{ez}$® is CE marked and is now available for commercial use in the EU and many other countries where the CE mark allows commercialization.

 In addition to historical facts or statements of current condition, this press release contains forward-looking statements, which reflect our current expectations and projections about future events, and involve certain known and unknown risks, uncertainties and assumptions that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements. These risks, uncertainties and assumptions could adversely affect the outcome and financial effects of the plans and events described herein. These forward-looking statements are further qualified by important factors, which could cause actual results to differ materially from those in the forward-looking statements, including timely submission and approval of anticipated regulatory filings; the successful initiation and completion of required Phase III studies; additional clinical results validating the use of adult autologous stem cells to treat heart failure; satisfaction of regulatory and other requirements; and actions of regulatory bodies and other governmental authorities. As a result, of these factors investors and prospective investors are cautioned not to rely on any forward-looking statements. We disclaim any intention or obligation to update or review any forward-looking statement, whether as a result of new information, future events or otherwise.