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For Immediate Release

BIOHEART ANNOUNCES PHASE III MIRROR TRIAL FOR MYOCELL INITIATED

Sunrise, FL – July 2nd, 2013 - Bioheart, Inc. (BHRT.OB) announced today the successful enrollment and randomization of the first patient in the Phase III MIRROR Trial using MyoCell® or muscle derived stem cells.

The MIRROR trial is fully funded by Bioheart and will be conducted at up to 35 centers in North and South America. The trial is designed to enroll up to 126 patients over a 12 month time period. The first patient has been enrolled in Mexico at the Hospital Angeles with the Regenerative Medicine Institute (RMI). This study will complement the data completed in the Phase II/III MARVEL trial on patients with congestive heart failure (CHF). Patients are randomized into either the treatment (2/3) or placebo (1/3) arm. All patients will receive delivery into the damaged areas of the heart using the MyoCath® Catheter. Data endpoints will include safety, exercise capacity, quality of life, and ejection fraction at 3 months and 6 months. Kristin Comella, Bioheart's Chief Science Officer said "We are hoping to achieve results similar to those from the

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MARVEL trial in which patients improved almost 100 meters over placebo in their exercise capacity test. We believe this therapy can address an unmet need for cardiac patients."

The FDA has placed a hold on the request for an Expanded Access protocol using MyoCell in part because the proposed expanded access study would likely interfere with the clinical development of MyoCell and/or interfere with developing market approval. Bioheart intends to continue enrollment in the MIRROR trial while hold items are addressed with the FDA. In addition, Bioheart plans to initiate part 2 of the MARVEL trial using the J&J MyoStar™ Catheter to deliver MyoCell to CHF patients.

About Bioheart, Inc.

Bioheart is committed to maintaining its leading position within the cardiovascular sector of the cell technology industry delivering cell therapies and biologics that help address congestive heart failure, lower limb ischemia, chronic heart ischemia, acute myocardial infarctions and other issues. Bioheart's goals are to cause damaged tissue to be regenerated, when possible, and to improve a patient's quality of life and reduce health care costs and hospitalizations.

Specific to biotechnology, Bioheart is focused on the discovery, development and, subject to regulatory approval, commercialization of autologous cell therapies for the treatment of chronic and acute heart damage and peripheral vascular disease. Its leading product, MyoCell, is a clinical muscle-derived cell therapy designed to populate regions of scar tissue within a patient's heart with new living cells for the purpose of improving cardiac function in chronic heart failure patients. For more information on Bioheart, visit www.bioheartinc.com, or visit us on Facebook: Bioheart and Twitter @BioheartInc.

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Forward-Looking Statements: Except for historical matters contained herein, statements made in this press release are forward-looking statements. Without limiting the generality of the foregoing, words such as "may," "will," "to," "plan," "expect," "believe," "anticipate," "intend," "could," "would," "estimate," or "continue" or the negative other variations thereof or comparable terminology are intended to identify forward-looking statements.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Also, forward-

looking statements represent our management's beliefs and assumptions only as of the date hereof. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

The Company is subject to the risks and uncertainties described in its filings with the Securities and Exchange Commission, including the section entitled "Risk Factors" in its Annual Report on Form 10-K for the year ended December 31, 2012, and its Quarterly Report on Form 10-Q for the quarter ended March 31, 2013.