

Bioheart Acquires Exclusive Option Rights to Tissue Genesis' Cell Technology for the Acute Treatment of Heart Attacks

August 7, 2006, Sunrise, FL – Bioheart, Inc. announced today that it has acquired an option to the worldwide exclusive rights to Tissue Genesis, Inc.'s adipose (fat) derived therapeutic cell technology, which is being developed to treat heart attacks and congestive heart failure. Adipose derived cells are an abundant, readily available tissue source that has been shown to be rich in microvascular, myogenic and angiogenic cells, and can be easily removed from patients. Tissue Genesis' TGI1200™ cell isolation system will rapidly process patient-derived adipose tissue to isolate and produce large quantities of regenerative cells that can potentially be used to treat patients suffering a heart attack.

Under the terms and for the period of the agreement, Bioheart will have the exclusive right to negotiate a worldwide exclusive license to all of Tissue Genesis' patents and technology for use in the heart attack and heart failure markets. The proposed, final form of license agreement provides for upfront and milestone equity payments to Tissue Genesis. Upon the successful completion of animal studies and approval of an IND application, Bioheart anticipates to initiating human clinical trials in the U.S. and Europe. The company plans to administer the adipose derived cells into patients via a combination of coronary infusion and direct intramyocardial injection with its MyoCath® needle-injection catheter.

“The Tissue Genesis cell isolation system will allow us to broaden our portfolio of product candidates and hopefully give cardiologists a way to prevent some of the damage caused by heart attacks,” said Howard J. Leonhardt, Chairman and CEO of Bioheart. “It has always been a goal of our company to develop an acute treatment for heart attack patients in addition to our proposed MyoCell therapy for chronic heart failure and the Tissue Genesis technology will allow us to realize that goal. We intend to demonstrate the benefits of a two part, percutaneous treatment plan. First, a quick bolus of isolated non-cultured cells shortly after the MI, and then a full dose of the MyoCell myogenic cells about 14- 18 days later to attempt to recover the remaining scar tissue,” he added.

“We are excited about this collaboration with Bioheart, a leader in developing cell therapies for cardiovascular disease. Heart attack patients will have a need for rapid, autologous, point-of-care treatment for acute MI, and we are seeking to fill that need.” said Anton C. Krucky, President and CEO of Tissue Genesis.

About Bioheart:

Bioheart, Inc. is focused on developing, testing and commercializing cell-based therapies for the treatment of cardiovascular diseases, including myocardial infarction and congestive heart failure. The Company is currently enrolling patients in its European Phase II/III clinical trial named SEISMIC to test its lead product candidates, MyoCell™ and MyoCath®. The MyoCell™ implantation therapy is designed to regenerate areas of damaged myocardial tissue. MyoCath® is a percutaneous needle injection catheter

engineered to deliver cell therapy or other compounds to myocardial tissue. Cardiovascular disease is the number one cause of death in developed countries. There are 7.1 million heart attack patients and almost 5 million patients with congestive heart failure in the United States alone, with the direct annual costs of their treatment reaching \$28 billion and \$25 billion, respectively. For more information about Bioheart, please visit www.bioheartinc.com or telephone Mr. Jason Griffeth at 954-835-1500.

About Tissue Genesis:

Tissue Genesis, Inc is commercializing its technology to isolate autologous adipose (fat) derived therapeutic cells to enable the rapid isolation and delivery of these cells at the point of care. The company is currently advancing its technology in a range of therapeutic areas including vascular, cardiovascular, and wound treatment applications through internal development and partnerships. Tissue Genesis' cell isolation technology supports a family of platform systems enabling autologous, point of care adipose derived therapeutic cell isolation in under two hours. For more information about Tissue Genesis, please contact Anton Krucky, CEO or visit www.tissuegenesis.com.

Statements in this press release that are not strictly historical may be "forward-looking" statements, which involve risks and uncertainties. There can be no assurance that Bioheart, Inc. will be able to commercially develop cardiovascular cell therapy or electrical stimulation products, that necessary regulatory approvals will be obtained or that any clinical trials will be successful or that the proposed treatments will prove to be safe and/or effective.