



CryoLife Announces Implant of First FDA-Cleared SynerGraft(R) Processed Human Pulmonary Heart Valve

March 24, 2008

ATLANTA, March 24 /PRNewswire-FirstCall/ -- CryoLife, Inc., (NYSE: CRY) a biomaterials, medical device and tissue processing company, today announced implantation of the first CryoValve(R) SG pulmonary human heart valve since the product was cleared by the Food and Drug Administration (FDA) in February. The procedure was performed on a patient at St. Louis Children's Hospital in St. Louis, Mo. The CryoValve SG is processed with the Company's proprietary SynerGraft(R) technology, which removes allogeneic donor cells and cellular remnants from the valve without compromising the integrity of the underlying collagen matrix.

The CryoValve SG is indicated for the replacement of diseased, damaged, malformed or malfunctioning native pulmonary valves in pediatric and adult patients. The valve can be used in conjunction with right ventricular outflow tract reconstruction procedures (RVOT), commonly performed in children with congenital heart defects. In addition, the valve can be used for pulmonary valve replacement during the Ross Procedure, an operation in which a patient's defective aortic valve is removed and replaced with his own pulmonary valve. The CryoValve SG is then surgically implanted in place of the removed native pulmonary valve.

"CryoValve SG is an attractive valve replacement option for many children born with heart defects," said Steven G. Anderson, CryoLife's president and chief executive officer. "CryoValve SG may also be a good option for patients who underwent pulmonary valve replacement surgery at a young age, but may require another pulmonary valve replacement as they've grown into adulthood."

Charles Huddleston, M.D., chief of pediatric cardiothoracic surgery and professor of surgery at St. Louis Children's Hospital, performed the first CryoValve SG implant surgery since FDA clearance of the product in a patient who had undergone two previous allograft implants.

"The new technology provided by this SynerGraft processing was used in this patient in an effort to limit additional valve operations," said Dr. Huddleston. "We are very hopeful that this new valve will be a great thing for the patient and that the outcome with the CryoValve SG implant will last longer than the previous valve surgeries."

At the FDA's request, CryoLife is planning a post-clearance study to seek evidence for the potential and implied long-term benefits of the SynerGraft process. Data to be collected is expected to include long-term safety and hemodynamic function, immune response and explant analysis. CryoLife believes that this information may help it ascertain whether the SynerGraft process reduces the immunogenicity or potential for rejection of the transplanted heart valve and whether the valve recellularizes with the recipients own cells.

Please visit the CryoLife website at www.cryolife.com for additional information about the SynerGraft technology and CryoValve SG.

About CryoLife, Inc.

Founded in 1984, CryoLife, Inc. is a leader in the processing and distribution of implantable living human tissues for use in cardiac and vascular surgeries throughout the United States and Canada. The Company recently received FDA clearance for its CryoValve(R) SG pulmonary human heart valve, processed using CryoLife's proprietary SynerGraft(R) Technology. The Company's BioGlue(R) Surgical Adhesive is FDA approved as an adjunct to sutures and staples for use in adult patients in open surgical repair of large vessels. BioGlue is also CE marked in the European Community and approved in Canada and Australia for use in soft tissue repair. The Company also distributes the CryoLife-O'Brien(R) stentless porcine heart valve, which is CE marked for distribution within the European Community.

Statements made in this press release that look forward in time or that express management's beliefs, expectations or hopes are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include those regarding anticipated effectiveness, benefits and indications for use of CryoValve SG. These future events may not occur as and when expected, if at all, and, together with the Company's business, are subject to various risks and uncertainties. These risks and uncertainties include that CryoValve SG may not perform as well as expected or provide all of the benefits anticipated, and may not reduce the immunogenicity or potential for rejection of the transplanted heart valve or recellularize with the recipient's own cells, and other risk factors detailed in CryoLife's Securities and Exchange Commission filings, including CryoLife's Form 10-K filing for the year ended December 31, 2007 and the Company's other SEC filings. The Company does not undertake to update its forward-looking statements.

For additional information about the company, visit CryoLife's Web site: <http://www.cryolife.com>

Media Contacts:

D. Ashley Lee

Executive Vice President, Chief Financial
Officer and Chief Operating Officer

Phone: 770-419-3355

Katie Brazel

Fleishman Hillard

Phone: 404-739-0150