Improved Cryopreservation Outcomes in Potential \$100B Tissue Engineering Market Enabled by BioLife Solutions CryoStor $^{\text{\tiny TM}}$

Independent, Comparative Evaluation by Leading Research Centers in Germany and Portugal Indicates Significant Biopreservation Advantages of Serum-Free, Pre-Formulated CryoStor

PRNewswire-FirstCall BOTHELL, Wash.

BioLife Solutions, Inc. (BULLETIN BOARD: BLFS), a leading developer and marketer of proprietary cGMP hypothermic storage and cryopreservation media products for cells, tissue, and organs, today announced that an independent European comparison of the Company's CryoStor pre-formulated serum-free and protein-free biopreservation media against traditional in-house formulated culture media/serum/DMSO showed CryoStor offers a significant cryopreservation process improvement and better cellular outcomes. Compared to media/serum/DMSO, CryoStor enabled enhanced post-thaw cell membrane integrity and a full recovery of metabolic activity and differentiation capacity within 24 hours after thawing.

The study, titled "Cryopreservation of Adherent Cells: Strategies to Improve Cell Viability and Function after Thawing," was published in the January 2009 online issue of Tissue Engineering Part C. This reports the results of experiments conducted by research teams at the Fraunhofer IBMT in St. Ingbert/Sulzbach, Germany and IBET/ITQB-UNL in Oeiras, Portugal.

The study findings also confirm that despite improved cell recovery immediately after thawing for media/serum/DMSO cryopreserved cells beneath alginate, up to 50 percent cell death still occurred within 24 hours post-thawing. The authors agreed with other published data describing post-thaw survival overestimates, and suggest that the decrease in cell viability might be related to sequential apoptotic and necrotic processes not evident immediately subsequent to thawing. This supports very early BioLife research and discoveries of the phenomena of preservation-induced, delayed onset cell death.

Mike Rice, BioLife's chairman and CEO, noted, "The tissue engineering market is highly strategic for BioLife. Our products have great potential to resolve the current cell yield and shelf-life issues that often limit large scale commercialization and clinical distribution of new biologic-based therapies. We currently supply CryoStor and HypoThermosol® to several start-up customers and support product evaluations at other key companies in the tissue engineering market."

According to a 2009 analysis and report by Life Science Intelligence, the largely untapped global market potential for tissue engineering and regenerative medicine products will exceed \$118 billion by 2013. The actual current market, which represents only a fraction of the potential market, was estimated at \$1.5 billion in 2008. The report forecasts rapid growth driven by various factors including increased adoption in various clinical areas and international market trends.

About BioLife Solutions, Inc.:

BioLife Solutions develops and markets patented hypothermic storage/transport and cryopreservation media products for cells, tissues, and organs. The Company's proprietary HypoThermosol® and CryoStor™ platform of biopreservation media products are marketed to academic research institutions, hospitals, and commercial companies involved in cell therapy,

tissue engineering, cord blood banking, drug discovery, and toxicology testing. BioLife's cGMP products are serum-free and protein-free, fully defined, and formulated to reduce preservation-induced, delayed-onset cell damage and death. BioLife's enabling technology provides research and clinical organizations significant improvement in post-preservation cell and tissue viability and function. For more information please visit www.biolifesolutions.com.

About IBET- Instituto de Biologia Experimental e Tecnologica:

Instituto de Biologia Experimental e Tecnologica (IBET) is a private not for profit institution created in 1989 to integrate and strengthen biological and biochemical knowledge from its academic and industrial partners into technology and transfer it into economic wealth and job creation. Science and technology are used together to ensure the translational application of competences from early stage discovery to final production and processes. IBET has 20 years of experience in biopharmaceuticals development and over 10 years experience in cell line creation and cryobiology. In its Animal Cell Technology Laboratory, work has been ongoing with recombinant and fusion proteins for diagnostics and therapeutics, subunit and virus like particle (VLP) vaccines, vectors for gene therapy (retro-, lenti-, adeno- and, more recently, baculovirus) and stem cells for cell therapies (neuronal, hepatocytes). For more information please visit http://www.ibet.pt/.

About Fraunhofer Institute for Biomedical Engineering:

The Fraunhofer Institute for Biomedical Engineering IBMT is your partner in offering solutions for individual tasks in the areas of Biomedical-/medical engineering, sensor- and measuring technologies, ultrasound technologies, health telematics, biotechnology and biohybrid technology, cryo(bio)technology and nano(bio)technology, environmental control systems, material testing, home systems, air quality control and security systems as well as industrial process automation and in-line/on-line process control.

For more information please visit http://www.ibmt.fraunhofer.de/fhg/ibmt/index.jsp.

This news release contains forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. These forward-looking statements include any statements that relate to the intent, belief, plans or expectations of the Company or its management, or that are not a statement of historical fact. Any forward-looking statements in this news release are based on current expectations and beliefs and are subject to numerous risks and uncertainties that could cause actual results to differ materially. Some of the specific factors that could cause BioLife Solutions' actual results to differ materially are discussed in the Company's recent filings with the Securities and Exchange Commission. BioLife Solutions disclaims any obligation to update any forward-looking statements as a result of developments occurring after the date of this press release.

Media Relations: Len Hall Allen & Caron Inc (949) 474-4300 len@allencaron.com Investor Relations:
Matt Clawson
Allen & Caron Inc
(949) 474-4300
matt@allencaron.com

First Call Analyst: FCMN Contact:

SOURCE: BioLife Solutions, Inc.

CONTACT: Media Relations, Len Hall, len@allencaron.com, or Investor Relations, Matt Clawson, matt@allencaron.com, both of Allen & Caron Inc, +1-949-474-4300, for BioLife Solutions, Inc.

Web Site: http://www.biolifesolutions.com/

https://investors.biolifesolutions.com/2009-03-10-Improved-Cryopreservation-Outcomes-in-Potential-100B-Tissue-Engineering-Market-Enabled-by-BioLife-Solutions-CryoStor