

BioLife Solutions CryoStor® Cell Freeze Media Embedded in Cellular Biomedicine Group Clinical Trial of AlloJoin™

Off the Shelf Allogeneic Stem Cell Therapy for Knee Osteoarthritis

BOTHELL, Wash., Sept. 19, 2017 /PRNewswire/ -- [BioLife Solutions](#), Inc. (NASDAQ: BLFS), the leading developer, manufacturer and marketer of proprietary clinical grade cell and tissue [hypothermic storage](#) and [cryopreservation freeze](#) media ("BioLife"), announced that Cellular Biomedicine Group (NASDAQ: CBMG), a leading clinical-stage biopharmaceutical firm engaged in the development of immunotherapies for cancer and stem cell therapies for degenerative diseases ("CBMG"), has validated BioLife's proprietary CryoStor freeze media for use in CBMG's planned US Phase I clinical trial of AlloJoin, an off the shelf allogeneic stem cell therapy for knee osteoarthritis.

Mike Rice, BioLife President & CEO, commented, "We are very pleased to support CBMG in their development and potential commercialization of AlloJoin. CBMG is the leading regenerative medicine company in China, with a robust clinical pipeline and high-quality, scalable manufacturing facilities."

In addition to this product adoption by CBMG, CryoStor and [HypoThermosol®](#), BioLife's companion cell storage and shipping media, have been used in at least 250 regenerative medicine applications, including several late-stage clinical trials. BioLife's customer base has grown to over 2,000 companies, universities and clinical centers in the regenerative medicine, drug discovery and biobanking markets.

Tony Liu, Chief Executive Officer of CBMG, remarked, "We constantly strive to attain the very highest level of quality in our manufacturing processes for engineered cells intended for human clinical use. This includes the qualification and selection of the most-effective and highest-quality biopreservation tools. Maximizing yield and shelf life of source material and manufactured cellular therapies is a top priority, since these attributes greatly impact therapeutic efficacy. CryoStor offers many performance and regulatory advantages over the previous home-brew freeze media we were evaluating."

About Knee Osteoarthritis

According to the Foundation for the National Institutes of Health, there are 27 million Americans with Osteoarthritis (OA), and symptomatic Knee Osteoarthritis (KOA) occurs in 13% of persons aged 60 and older. The International Journal of Rheumatic Diseases, 2011 reports that approximately 57 million people in China suffer from KOA. Currently no treatment exists that can effectively preserve knee joint cartilage or slow the progression of KOA. Current common drug-based methods of management, including anti-inflammatory medications (NSAIDs), only relieve symptoms and carry the risk of side effects. Patients with KOA suffer from compromised mobility, leading to sedentary lifestyles; doubling the risk of cardiovascular diseases, diabetes, and obesity; and increasing the risk of all causes of mortality, colon cancer, high blood pressure, osteoporosis, lipid disorders, depression and anxiety. According to the Epidemiology of Rheumatic Disease (Silman AJ, Hochberg MC. Oxford Univ. Press, 1993:257), 53% of patients with KOA will eventually become disabled.

About Cellular Biomedicine Group

Cellular Biomedicine Group, Inc. (NASDAQ: CBMG) develops proprietary cell therapies for the treatment of cancer and degenerative diseases. The company conducts immuno-oncology and stem cell clinical trials in China using products from its integrated GMP laboratory. CBMG has GMP facilities in China, consisting of twelve independent cell production lines, all designed and managed according to both China and U.S. GMP standards. CBMG recently commenced two Phase I human clinical trials in China using CAR-T to treat relapsed/refractory CD19+ B-cell Acute Lymphoblastic Leukemia (ALL) and Refractory Diffuse Large B-cell Lymphoma (DLBCL) as well as an ongoing Phase I trial in China for AlloJoin™ (CBMG's "Off-the-Shelf" Allogeneic Human Adipose-derived Mesenchymal Stem Cell) for the treatment of Knee Osteoarthritis (KOA). CBMG was also recently awarded \$2.29 million from the California Institute for Regenerative Medicine (CIRM) to support pre-clinical studies of AlloJoin™ for Knee Osteoarthritis in the United States. To learn more about CBMG, please visit www.cellbiomedgroup.com.

About BioLife Solutions

BioLife Solutions develops, manufactures and markets biopreservation media products and smart shipping containers connected to a cloud-hosted cold chain management app to improve the quality of delivery logistics for cells, tissues, and organs. The Company's proprietary HypoThermosol® and CryoStor® platform of solutions are highly valued in the biobanking, drug discovery, and regenerative medicine markets. BioLife's biopreservation media products are serum-free and protein-free, fully defined, and are formulated to reduce preservation-induced cell damage and death. BioLife's enabling technology provides commercial companies and clinical researchers significant improvement in shelf life and post-preservation viability

and function of cells, tissues, and organs. For more information please visit www.biolifesolutions.com, and follow BioLife on [Twitter](#).

This press release contains forward-looking statements, including, but not limited to, statements concerning new products, the company's anticipated business and operations, the potential utility of and market for its products and services, potential revenue growth and market expansion, and commercial manufacturing of our customers' products. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. These statements are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions that could cause actual results to differ materially from those described in the forward-looking statements, including among other things, uncertainty regarding market adoption of products; uncertainty regarding third-party market projections; market volatility; competition; litigation; and those other factors described in our risk factors set forth in our filings with the Securities and Exchange Commission from time to time, including our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q. We undertake no obligation to update the forward-looking statements contained herein or to reflect events or circumstances occurring after the date hereof, other than as may be required by applicable law.

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