January 5, 2026

FibroBiologics Announces Positive Preclinical Results for a Fibroblast Spheroid-derived Chondrocyte (FSdC) Spheroid Therapy for Degenerative Disc Disease

FSdC demonstrated statistically significant and superior improvement in disc preservation and structural integrity compared to other treatments

HOUSTON, Jan. 05, 2026 (GLOBE NEWSWIRE) -- FibroBiologics, Inc. (Nasdaq: FBLG) ("FibroBiologics"), a clinical-stage biotechnology company with 270+ patents issued and pending with a focus on the development of therapeutics and potential cures for chronic diseases using fibroblasts and fibroblast-derived materials, today announced positive preclinical results for FSdC, an investigational FSdC spheroid-based therapy, demonstrating superior improvement in recovering intervertebral disc integrity and preventing degeneration in animal models of degenerative disc disease.

These preclinical findings represent a major advancement for FibroBiologics' regenerative medicine pipeline and highlight the potential of FSdC spheroids to address unmet needs in spinal health. Key results from the degenerative disc disease animal model study include:

- **Significantly Improved Disc Height Recovery**: FSdC spheroids exhibited the highest level of intervertebral disc height recovery at 12 weeks after treatment as compared to 2D fibroblasts and fibroblast spheroids, demonstrating superior long-term structural integrity.
- **Highly Significant Statistical Superiority**: Study data revealed FSdC spheroids exceptional performance in disc height recovery 12 weeks after treatment, achieving the most compelling statistical difference from vehicle control with an unadjusted p-value of 0.00015 as compared to 0.036 for 2D fibroblasts, and 0.068 for fibroblast spheroids—positioning it as the leading innovative approach.
- **Breakthrough Potential for Spinal Health**: By sustaining the highest average disc size index (%DHI) across all time points during the six disc height measuring periods of the 12 week study, FSdC spheroids significantly outperformed single cell fibroblasts and fibroblast spheroids, heralding a potential new era in regenerative therapies for the treatment of degenerative disc disease and joint-cartilage damage.

"These compelling preclinical results for FSdC mark a significant step forward in our regenerative pipeline and advance our goal of bringing innovative fibroblast-based therapies to patients," said Pete O'Heeron, Founder and Chief Executive Officer of FibroBiologics. "Degenerative disc disease impacts millions who face ongoing pain and limited mobility with current options. We believe FSdC spheroids have the potential not only to enhance

structural integrity but also to transform how spinal degenerative conditions are managed. This data reinforces our commitment to innovation, scientific excellence, and meaningful patient impact."

Hamid Khoja, Ph.D., Chief Scientific Officer of FibroBiologics, added: "Our preclinical findings indicate that FSdC spheroids leverage unique, multi-faceted regenerative activity, integrating extracellular matrix remodeling with targeted tissue support, and inflammation control which may help restore spinal disc homeostasis in degenerative states. We are enthusiastic about collaborating with regulatory authorities as we move this promising program toward clinical development."

Degenerative disc disease is a leading cause of chronic back pain and disability, affecting millions of adults in the United States and significantly impairing quality of life and productivity. Despite available treatments, unmet needs remain, particularly in achieving long-term disc preservation and regeneration with minimal invasiveness.

FibroBiologics is pursuing a development program for FSdC spheroids with the goal of advancing to clinical trials. The data includes comprehensive preclinical pharmacology and efficacy assessments supporting the therapy's mechanism of action, durability of effect, and potential for regenerative outcomes.

About FibroBiologics
Based in Houston, FibroBiologics is a clinical-stage biotechnology company developing a pipeline of treatments and seeking potential cures for chronic diseases using fibroblast cells and fibroblast-derived materials. FibroBiologics holds 270+ US and internationally issued patents/patents pending across various clinical pathways, including wound healing, multiple sclerosis, disc degeneration, psoriasis, orthopedics, human longevity, and cancer. FibroBiologics represents the next generation of medical advancement in cell therapy and tissue regeneration. For more information, visit www.FibroBiologics.com. For more information, please visit FibroBiologics' website or email FibroBiologics at: info@fibrobiologics.com.

Cautionary Statement Regarding Forward-Looking Statements
This communication contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. Forward-looking statements include information concerning the potential indications for FibroBiologics' programs, the potential clinical benefits of fibroblasts and fibroblast-derived materials, plans for, and the anticipated timing of the initiation and completion of, FibroBiologics' current and future preclinical studies, clinical trials, and research and development programs, the robustness, progress, and momentum of FibroBiologics' research and development program, and plans for, and the timing of, regulatory filings. These forward-looking statements are based on FibroBiologics' management's current expectations, estimates, projections and beliefs, as well as a number of assumptions concerning future events. These forward-looking statements are not guarantees of future performance, conditions or results, and involve a number of known and unknown risks, uncertainties, assumptions and other important factors, many of which are outside FibroBiologics' management's control, that could cause actual results to differ materially from the results discussed in the forward-looking statements, including those set forth under the caption "Risk Factors" and elsewhere in FibroBiologics' annual, quarterly and current reports (i.e., Form 10-K, Form 10-Q and Form 8-K) as filed or furnished with the SEC and any subsequent public filings. Copies are available on the SEC's website, www.sec.gov.

These risks, uncertainties, assumptions and other important factors include, but are not limited to: (a) risks related to FibroBiologics' liquidity and its ability to maintain capital resources sufficient to conduct its business; (b) expectations regarding the initiation, progress and expected results of FibroBiologics' R&D efforts and preclinical studies; and (c) the unpredictable relationship between R&D and preclinical results and clinical study results. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and FibroBiologics assumes no obligation and, except as required by law, does not intend to update, or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. FibroBiologics gives no assurance that it will achieve its expectations.

General Inquiries:
info@fibrobiologics.com

Investor Relations:
Nic Johnson
Russo Partners
(212) 845-4242
fibrobiologicsIR@russopr.com

Media Contact:
Liz Phillips
Russo Partners
(347) 956-7697
Elizabeth.phillips@russopartnersllc.com

Source: FibroBiologics, Inc.