

October 19, 2026



FibroBiologics Presents Preclinical Data on Fibroblast Spheroid-Derived Chondrocyte Spheroids for Degenerative Disc Disease at the North American Spine Society 2026 Annual Meeting

FSdC Spheroids Preserved Disc Height Better Than Any Other Fibroblast-Based Approach Tested in a 12-Week Rabbit Model of Degenerative Disc Disease

HOUSTON, Oct. 19, 2026 /PRNewswire/ -- FibroBiologics, Inc. (Nasdaq: FBLG) ("FibroBiologics" or the "Company"), 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 that Nikolay Bazhanov, M.D., Ph.D. presented preclinical data on the Company's fibroblast spheroid-derived chondrocyte (FSdC) spheroids for degenerative disc disease (DDD) at the North American Spine Society (NASS) 2026 Annual Meeting, taking place October 14-17 in San Antonio.



Oral Presentation details:

- **Title:** Efficacy of fibroblast spheroid-derived chondrocyte spheroids in a rabbit model of degenerative disc disease (Abstract #152)
- **Presenter:** Nikolay Bazhanov, M.D., Ph.D.
- **Date and time:** Thursday, October 15, 2026, 3:15 p.m. to 3:20 p.m. [CT]
- **Location:** Stars at Night Ballroom B2/B3

The preclinical study evaluated three approaches using allogeneic human dermal fibroblasts: conventionally cultured (2D) fibroblasts, three-dimensional (3D) fibroblast spheroids, and fibroblast spheroid-derived chondrocytes (FSdC). Using an established model of intervertebral disc degeneration, researchers assessed the effects of a single injection of each cell preparation compared with a control. Treatment outcomes were monitored over 12 weeks through periodic X-ray imaging, followed by MRI and tissue analysis to evaluate changes in disc structure and degeneration.

Key findings include:

- Chondrogenic differentiation of the FSdC spheroids was confirmed by positive Alcian blue staining and upregulation of the cartilage-associated genes TGF β 1, COMP, SOX9, and ACAN;
- All three fibroblast-treated groups had higher disc heights than vehicle controls, measured by normalized percent disc height index (%DHI). In mixed-model analysis, the improvements were statistically significant for 2D fibroblasts ($p < 0.05$), fibroblast spheroids ($p < 0.05$), and FSdC spheroids ($p < 0.01$);
- Throughout the 12-week study, the FSdC spheroid group kept significantly higher %DHI values than the other treatment groups;
- At 12 weeks, %DHI was 80.7% in the FSdC spheroid group versus 71.8% in controls ($p < 0.05$); and
- The treatment effects were consistent across the lumbar levels studied.

"Degenerative disc disease is driven by a loss of the cells and extracellular matrix that keep the disc functional, and our fibroblast spheroid platform is designed to address that biology directly," said Hamid Khoja, Ph.D., Chief Scientific Officer of FibroBiologics. "The data presented at NASS show key findings such as matrix remodeling and reduced inflammation in degenerated discs, and we look forward to discussing these findings with the spine community as we continue advancing our programs."

"For people living with degenerative disc disease, treatment today largely comes down to managing pain or undergoing surgery, and neither approach is designed to restore the cells the disc has lost," said Nikolay Bazhanov, M.D., Ph.D., and the presenter on this study. "FSdC spheroids are designed to potentially do exactly that, by delivering allogeneic cartilage-forming cells directly into the damaged disc. In this study, FSdCs preserved disc height better than any other approach we tested, and that advantage held for the full 12 weeks."

For more information, please visit FibroBiologics' [website](#), email FibroBiologics at info@fibrobiologics.com or follow FibroBiologics on [LinkedIn](#), [YouTube](#), [Facebook](#) or [X](#).

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.

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 of FSdC spheroids to restore cells the disc has lost, the design of the Company's fibroblast spheroid platform to address the loss of the cells and extracellular matrix that keep the disc functional, potential indications for FibroBiologics' programs,

FibroBiologics' research and development programs, and the potential clinical benefits of fibroblasts and fibroblast-derived materials. 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; (c) the unpredictable relationship between R&D and preclinical results and clinical study results; and (d) the ability of FibroBiologics to successfully prosecute its patent applications. 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.

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