

FOR IMMEDIATE RELEASE

Dr. Todd H. Lanman and Dr. Jared Ament Perform First-Ever Combined Implantation of MOTUS Device and TOPS™ System at Adjacent Lumbar Levels

Beverly Hills, CA – May 21, 2025 — In a groundbreaking advancement for motion-preserving spine surgery, renowned spinal neurosurgeon Dr. Todd H. Lanman and his colleague Dr. Jared Ament have successfully completed the first known case of combined implantation of the MOTUS total joint replacement device (developed by 3Spine, Inc.) at L5-S1 and the TOPS™ System at L4-5. The procedure was performed in Beverly Hills on a young man suffering from severe facet disease.

This historic surgical pairing represents a significant leap forward in the treatment of lumbar spinal degeneration, particularly in cases involving multilevel facet pathology. The patient, debilitated by advanced facet arthropathy at an unusually young age, was not a candidate for traditional disc replacement alone. Instead, Drs. Lanman and Ament utilized a two-tiered approach to restore both mobility and stability across the lower lumbar spine.

The MOTUS device, a posterior total joint replacement developed by 3Spine, Inc., replaces both the intervertebral disc and facet joints at L5-S1. Directly above, the TOPS™ System was implanted at L4-5 to dynamically stabilize the segment while preserving motion—a combination never before documented in spinal surgery.

“This is the first time the MOTUS total joint replacement has been placed at the bottom level of the spine with a TOPS™ device directly above it,” said Dr. Lanman, founder of Lanman Spinal Neurosurgery and ADR Spine. “The biomechanical challenge was significant. L5-S1 is a high-load bearing level, and placing MOTUS beneath a TOPS™ device at L4-5 required precise alignment, careful load distribution planning, and complete mastery of both technologies. This patient’s severe facet disease made him an ideal candidate for this innovative construct, and we are thrilled with the early outcomes.” An intraoperative X-ray image taken immediately after the procedure confirms optimal placement of both implants.

The MOTUS device is currently under investigation through a pivotal clinical trial in the United States and has been granted Breakthrough Device Designation by the FDA. The TOPS™ System, meanwhile, has gained attention as a dynamic alternative to spinal fusion for select patients with lumbar spinal stenosis and facet arthropathy.

The surgery reflects Drs. Lanman and Ament’s continued leadership at the forefront of spinal arthroplasty innovation.

About Dr. Todd H. Lanman

Dr. Todd H. Lanman is a globally recognized spinal neurosurgeon, thought leader, and innovator in motion-preserving spine surgery. With over three decades of clinical experience and more than 25 years in practice in Beverly Hills, he is the founder of Lanman Spinal Neurosurgery and ADR Spine. Dr. Lanman has pioneered numerous surgical firsts in artificial disc replacement (ADR), multilevel arthroplasty, and fusion reversal. Dr. Lanman is also a lecturer, educator, and contributor to peer-reviewed publications, advancing the field of spine surgery both academically and in his surgical practice.

About Lanman Spinal Neurosurgery

Lanman Spinal Neurosurgery is a leading center for advanced spine care specializing in artificial disc replacement, fusion reversal, and motion preservation. With a focus on restoring full function and range of motion, the practice has been at the forefront of spine health innovation for over 25 years.

About ADR Spine

ADR Spine is a national leader in motion-preserving spinal care, dedicated to advancing the science and practice of artificial disc replacement. Founded by renowned neurosurgeon Dr. Todd H. Lanman, ADR Spine is a trusted platform that connects patients with the most qualified spine arthroplasty specialists across the United States. Through its Top Doctors in Arthroplasty program, ADR Spine rigorously evaluates surgeons based on success rates, patient-reported outcomes, and procedural expertise. Every spine surgeon in the program shares a commitment to restoring spinal motion, improving quality of life, and achieving excellent outcomes for their spine surgery patients. For more information or to find a leading spine surgeon, visit www.adrspine.com.

About Dr. Jared D. Ament

Dr. Jared Ament, MD, MPH, FAANS, FACS, is a board-certified, fellowship-trained neurosurgeon specializing in complex and minimally invasive brain and spine surgery. As Co-Director of Spine Neurosurgery and Director of Research at the Neurosurgery & Spine Group (NSG) in Los Angeles, Dr. Ament is recognized for his expertise in motion-preserving spinal procedures, including artificial disc replacement and facet joint arthroplasty. He is a principal investigator in multiple FDA clinical trials and has contributed to advancing spine surgery through both clinical practice and research.

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Transcript:

You could say this is the first surgery ever done with the 3-spine device at the bottom level of L5S1 with a top's all capital TOPS device at L4-5 immediately above it. I did this with Dr. Jared

Ament, my former fellow, and colleague today for this gentleman with terrible facet disease at a young age.

