



News Release

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FOR IMMEDIATE RELEASE

**Multi-center cadaver study shows HydroCision's SpineJet® XL removed 86 percent of available endplate cartilage surface area compared to 70 percent with conventional instruments used in preparation for spinal fusion surgery**

**'Cutting-with-water' SpineJet XL instrument ushers in the era of HydroSurgery™ for the spine market**

*"Safe removal of as much of the available endplate cartilage as possible is an important goal of preparing a patient for successful lumbar interbody spine fusion. Our study shows that endplate preparation can be achieved much more effectively using HydroCision's SpineJet device instead of conventional instruments."*

Mitchell Hardenbrook, M.D.  
Director of Spine Surgery  
Naval Medical Center  
Portsmouth, Virginia

BILLERICA, Mass., Feb. 20, 2006 — HydroCision® Inc. ([www.hydrocision.com](http://www.hydrocision.com)) announced today that a multi-center study (using cadaver models) demonstrated that the Company's *fluidjet*-based instruments removed 17 percent more endplate cartilage from the available spinal disc surface than conventional surgical instruments in preparation for spinal fusion.

HydroCision's *HydroSurgery* system, including SpineJet XL instruments, uses a high-velocity stream of water to simultaneously cut and aspirate tissue from spinal discs in preparation for fusion. The technique's advantages, illustrated by this and previous studies, include the safe and more effective removal of degenerated disc-nucleus material and endplate preparation that can lead to optimal clinical outcomes while requiring less instrument passes by vital structures.

"Spinal fusion patients may optimize the benefits from lumbar interbody fusion if the surgeon is empowered to remove as much of the endplate cartilage as possible to facilitate a solid intradiscal fusion," said Mitchell Hardenbrook, M.D., a principal investigator and Director of Spine Surgery at the Naval Medical Center, Portsmouth, Va. "Our study comparing the use of HydroCision's SpineJet XL instrument to conventional surgical instruments shows that endplate preparation via a HydroSurgery approach is not only safe but also more effective at helping the spine surgeon prepare an optimal environment for lumbar interbody fusion."

"We are very pleased with this, and two other recently announced studies, that clearly position the HydroSurgery approach made possible by SpineJet XL products as a safe and more effective modality for spine surgeons. Our HydroSurgery devices have three important benefits for spine surgeons and their patients. First, SpineJet XL instruments enable surgeons to confidently prepare a spinal disc space much more thoroughly for fusion procedures. Secondly, they enable surgeons to perform disc preparation with dramatically less collateral damage than other modalities. And thirdly, SpineJet XL instruments minimize the repetitive motion and fatigue suffered by spine surgeons using conventional tools," added Douglas J. Daniels, President and CEO of HydroCision. "For these three important reasons, we believe HydroSurgery will become a standard of care for spine surgeons performing PLIF (Posterior Lumbar Interbody Fusion), TLIF (Transforaminal Lumbar Interbody Fusion), and all MIS (Minimally Invasive Surgery) fusion procedures."

**About HydroCision**

HydroCision ([www.hydrocision.com](http://www.hydrocision.com)) is a leading developer, manufacturer, and marketer of fluidjet-based surgical tools. The Company believes its proprietary fluidjet technology is the basis of a new surgical modality, "HydroSurgery", because of its compelling features and versatility. The Company is developing a broad range of fluidjet-based products to meet the needs of spine surgeons and their patients.

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(Please note: The views expressed in this news release are those of the author(s) and do not reflect the official policy or position of the Department of the Navy, Department of Defense, or the United States Government.)