

Creative Spine Technology®

NuVasive®

2005 Annual Report

an evolution in spine treatment



MAS™ Platform

Dynamic Screw Test
InStim™ Percutaneous Screw Test
Nerve Detection

Free Run EMG Nerve Retractor I-PAS™ System



Access System
Decompression
TLIF/PLIF

Micro-Access System Micro-Decompression XLIF®

SpheRx * Spinal System
SpheRx DBR™ Spinal System
SmartPlate® Gradient CLP™
ExtenSure™ Allograft System

Triad[®] Facet Screws Triad Allograft CoRoent[®] Implants

NuVasive designs, develops and markets innovative products for the surgical treatment of spine disorders. Our product portfolio facilitates minimally disruptive spine surgery procedures, resulting in reduced surgery time and hospitalization costs and faster patient recovery. With a culture founded on the pursuit of Absolute Responsiveness™, we strive to bring products to market faster than our competitors while providing superior customer service. In doing so, we are addressing the critical needs of those people impacted by our innovative products and procedures — the patients, the surgeons and the hospitals.

To Our Customers, Shareowners and Shareholders:

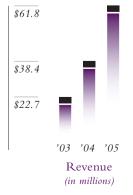
2005 was an exceptional year for NuVasive. It was a year of growth, innovation and performance. We planned to "raise the bar" and we did. In January, we relocated to our new corporate headquarters, opened our six-suite cadaver operating theater, and expanded our on-site customs and specials fabrication capabilities. Let me highlight other major achievements that contributed to our building shareholder value throughout the year:

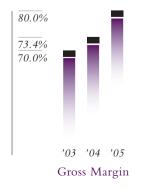


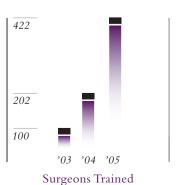
- Generated \$61.8 million in revenues, a 61% growth over 2004;
- Trained 422 spine surgeons on our Maximum Access Surgery (MAS™) platform, compared to 202 in 2004;
- Launched nine innovative new products, all of which received positive surgeon feedback;
- Initiated and completed 60% transition to sales force exclusivity to assure the strongest presence in the market;
- Executed three strategic acquisitions that further broadened product breadth; and
- Filed for two Investigational Device Exemptions with the FDA for cervical spine motion preservation devices in development.

Those of you who followed our progress during the year can surely recognize that we are now positioned to make significant strides toward becoming a key player in the spine industry. The core of our story recounts not only our strong performance during the year, but what NuVasive means to spine surgeons and the hospitals where their patients are treated.

If you are a spine surgeon, you have likely performed a number of "minimally invasive" procedures. Chances are you would have found some of those procedures unfamiliar and a bit awkward to perform. Our MAS platform is based on a unique product development philosophy that has overcome those limitations. The MAS solution of minimally disruptive surgery enables the surgeon to approach the spine from a unique direction with our NeuroVision® nerve monitoring technology to create a customizable surgical exposure, or "maximum access," for implant placement while minimizing tissue disruption. With our MAS platform, surgical procedures are performed using familiar instruments and specialized implants, minimizing the learning curve.







Surgeons are increasingly recognizing the benefits that NuVasive technology offers them and their patients. These benefits include dramatically reduced procedure time, substantially less blood loss, and reduced hospital stay. Said succinctly, it means the future of outpatient reconstructive spine surgery is here today with reduced costs and major benefits for patients, surgeons and hospitals alike.

We demonstrate the benefits of our MAS™ platform to surgeons in a unique, hands-on environment. Facilitated by a team of experts, our state-of-the-art six-suite operating room and training facility is available to surgeons on virtually a "24/7" basis. Through our Marquis Visit Program, or MVP, surgeons have the opportunity to experience NuVasive technology. We believe that this operating theater is the finest spine surgeon training facility in the U.S.

Surgeons tell us that performing procedures with our technology – whether the approach is our unique XLIF® (eXtreme Lateral Interbody Fusion), posterior (PLIF) or transforaminal (TLIF) – is safe and reproducible. Many of the country's top spine surgeons have praised our NeuroVision® nerve avoidance system, MaXcess® retractor and specialized implants as innovations that will become standard of care.

As honored as we are by these endorsements, the real test of a spine technology company's leadership value in the industry is its ability to consistently serve the needs of surgeons and patients by introducing new technology and product enhancements. NuVasive's innovation propels the increased adoption rate of our products. By optimizing patient outcomes, surgical reproducibility and procedural efficiencies, surgeons are able to grow their practices. Surgeons are able to see more patients and perform more procedures during one day than ever before. Simultaneously, these surgeons are providing an increasingly educated patient population with the latest minimally disruptive platform that takes the meaning of "clinical benefits" a step further.

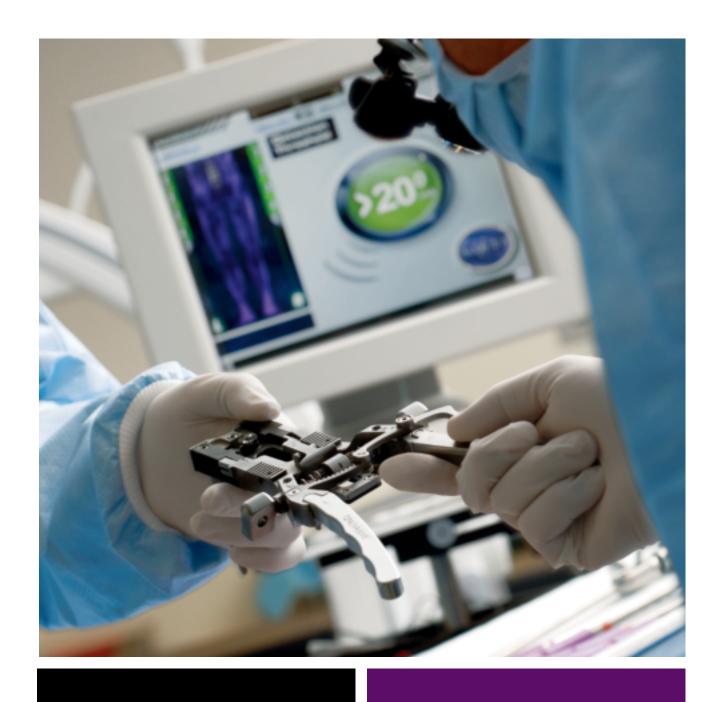
And there is no shortage of patients seeking out these clinical benefits. Spine disorders account for an estimated 130 million outpatient, hospital and emergency room visits in the U.S. each year. Census data tells us that 80% of all adults experience back pain at some time in their lives. For one in ten people, back pain is a chronic problem.

These numbers clearly reflect a large market for our products. But they mean something entirely different to a hospital CFO, who feels the economic pressures of keeping costs

70-90

Number of minutes for a typical XLIF procedure — approximately half the time of a traditional anterior approach.

Our MAS platform is based on a unique product development philosophy that has overcome the limitations of "minimally invasive" procedures. The MAS solution of minimally disruptive surgery enables the surgeon to approach the spine from a unique direction with our NeuroVision nerve monitoring technology to create "maximum access" for implant placement while minimizing tissue disruption.



maximum access

minimal disruption

under control while fundamentally maintaining quality care. Spine surgeons also feel economic pressures. Today's healthcare system mandates that surgeons must not only provide appropriate quality care, but also be conscious of technologies that promote cost effectiveness. This partnership between spine surgeons and hospital CFOs to deliver advanced care while reducing cost is where NuVasive has stepped up to the plate. New technology is best accepted when there are quantifiable patient benefits and real cost savings. Surgeons and hospitals alike are embracing the substantial economic benefits NuVasive technology offers—it makes good business sense.

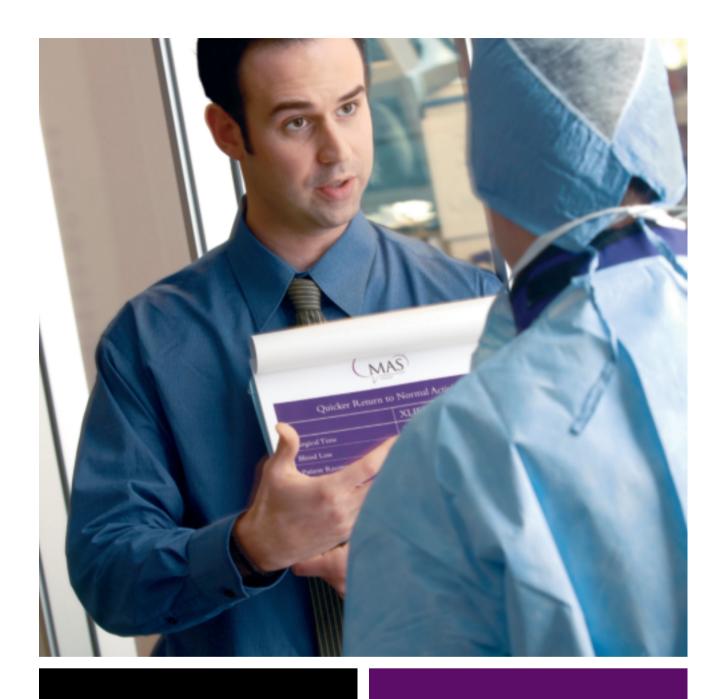
The cost savings to a hospital when using our XLIF® surgical approach are measurable. The hospital stay after the procedure is typically one day, compared to 2–3 days with a traditional anterior approach. Time in the operating room is reduced to 70–90 minutes on average, compared to a traditional 120–180 minutes. For a TLIF approach the numbers are also impressive, with surgery time reduced by one third and patients discharged 50% faster. We have provided solutions for hospitals to improve patient care while increasing their profit margins.

Hospitals are increasingly adopting our technology. With over 500 hospitals now using NuVasive products, we have achieved ground level momentum in penetrating the market. However, we also have substantial opportunity to increase the depth and reach of our products. This opportunity for our growth is built upon expanding surgeon relationships to achieve vertical product integration. These professional relationships work in two important ways: We develop products that are the direct result of surgeon feedback and, in turn, gain a greater share of a surgeon's business as they adopt these products. In 2005, the breadth of our platform increased significantly with nine product introductions, so that NuVasive now offers a comprehensive product suite to meet a broad variety of spine surgeon needs. This breadth was added to each of our three MAS™ product categories - NeuroVision®, MaXcess® and specialized implants - as well as to our classic fusion line of products. We launched a total of seven products in our MAS Platform, including our new MaXcess II retraction system, enhanced CoRoent® systems, several enhancements to NeuroVision, and ExtenSure™ Allograft, an interspinous dynamic stabilization and fusion product. On the classic fusion side, we launched SmartPlate® Gradient CLP™ – a dynamic cervical plate with a gradient locking mechanism that has made a positive impact on our classic fusion business and a CoRoent XLR anterior implant.

1

The typical number of days for a patient stay following an XLIF procedure. The cost savings to a hospital when using our XLIF surgical approach are measurable. The hospital stay after the procedure is typically one day, compared to 2–3 days with a traditional anterior approach. Time in the operating room is

reduced to 70-90 minutes, compared to a traditional 120-180 minutes. For a TLIF approach the numbers are also impressive. We have provided solutions for hospitals to improve patient care while increasing their profit margins.



clinical benefits reduced expenses

To seize these opportunities, we needed a powerful sales force to penetrate the market-place. Over the past few years, our products had been sold by independent distributors whose focus was divided between competing products. This system served us well in the initial stages of building our product platform. However, to achieve the sustained, long-term growth our shareholders expect and deserve, we made the decision to create a hybrid sales force exclusive to NuVasive. Our sales force is comprised of Area Business Managers who are NuVasive shareowners (employees) and exclusive, independent distributors, all with defined territories. We believe very strongly in the power of this sales organization. In fact, we have already made substantial progress in the transition – with over 60% sales force exclusivity at year-end 2005 and we are on track for 90% by mid 2006.

Our culture embodies "Absolute Responsiveness" in everything we do. What this means to us is constantly moving at a very fast rate toward achieving all of our goals. We call this Absolute Responsiveness at "cheetah speed" – like the fastest animal on earth. The ability to bring new products to market faster than our competitors and provide the utmost in service to surgeons is very important in our business. We are the only orthopedic spine company that turns prototypes around for surgeons in a matter of days and truly delivers "24/7" availability to surgeons. But Absolute Responsiveness goes deeper than that at NuVasive. When a shareowner uncovers an opportunity to advance our business – whether it be responding to a surgeon request or a chance to help another shareowner accomplish a goal – that shareowner responds with immediate and focused attention just like a "cheetah." And we will only add shareowners to our team who are top-notch people – A Players prepared for the challenge of serving with the highest standards. This reflex-like culture has helped to grow all of the moving parts that make up NuVasive – our innovative technology, state-of-the-art training facility, top-notch people, and robust R&D pipeline. We have made great steps in our evolution. Now, we will make great strides. Thank you for your continued confidence.

20;100

Alexis V. Lukianov Chairman and Chief Executive Officer



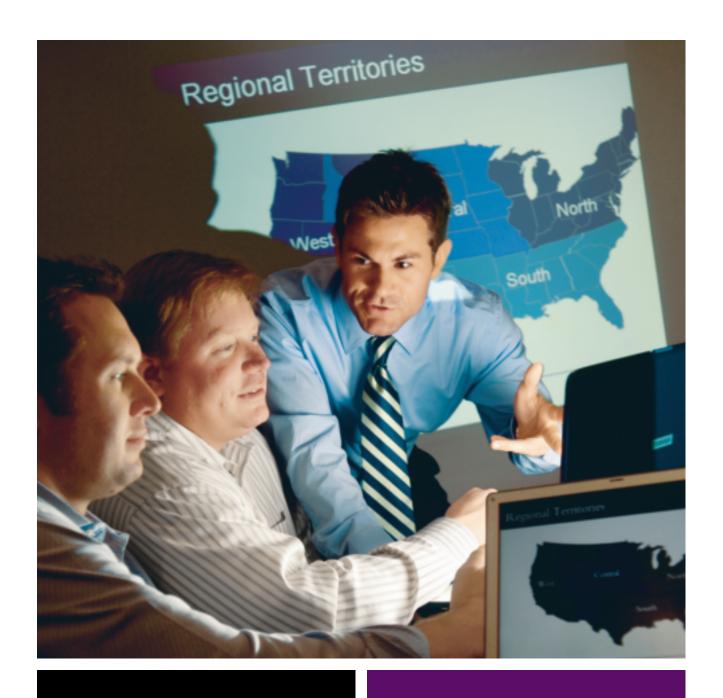
Absolute Responsiveness to our customers – means moving at "cheetah speed."

150

Number of our exclusive sales force representatives.

Our sales force is comprised of Area Business Managers who are NuVasive shareowners (employees) and exclusive, independent distributors, all with defined territories. We believe very strongly in the power of this

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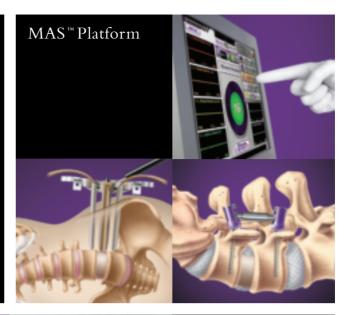
exclusive representation

market penetration

Product Development

Our culture of "Absolute Responsiveness®" demands giving immediate and focused attention to any opportunity that will improve our business while moving at a very fast rate to achieve our goals. This has translated into a broad MAS™ platform of products that we feel is second-to-none in the spine industry. It has also contributed to the successful launch of nine new products in 2005, rounding out a comprehensive

suite of innovative products for a surgeon's practice. Motion preservation of the cervical spine is another key focus. We feel that our NeoDisc™ and Cerpass™ cervical spine motion preservation devices in development provide substantial competitive advantages and will be well received by surgeons. Facilitating our innovation and speed of product development is our on-site machine shop and team of engineers, which allow us to develop custom prototypes to a surgeon's exact specifications in a matter of days.







(1) Neuro Vision® JJB 2.0 with Dual Electrodes, (2) I-PAS™



(3) MaXcess® II Access System



(4) SpheRx* DBR* Percutaneous Pedicle Screw System

Number of innovative products launched in 2005.



(5) SmartPlate® Gradient CLP™ Cervical Plate



(6-8) CoRoent® Implants



(9) ExtenSure[™] Allograft Dynamic Stabilization and Fusion System

Corporate Information

Board of Directors
Alexis V. Lukianov
Chairman &
Chief Executive Officer

Jack R. Blair Chairman of dj Orthopedics, Inc. and Retired Group President & Director, Smith & Nephew Inc.

James C. Blair, PhD General Partner, Domain Associates, L.L.C.

Peter C. Farrell, PhD, AM Chairman and Chief Executive Officer, ResMed, Inc.

Lesley H. Howe Retired Partner, KPMG Peat Marwick L.L.P.

Robert J. Hunt Retired Chief Financial Officer, AutoZone, Inc. and Co-founder Mercury Investment Group

Hansen A. Yuan, MD Professor of Orthopedic and Neurological Surgery, State University of New York, Syracuse and Past President of North American Spine Society Senior Management Alexis V. Lukianov

Chairman of the Board & Chief Executive Officer

Keith C. Valentine President

Kevin C. O'Boyle Executive Vice President & Chief Financial Officer

Patrick S. Miles Senior Vice President of Marketing

Jeffrey P. Rydin Senior Vice President of U.S. Sales

Jason M. Hannon Vice President of Legal Affairs and Secretary

Jonathan D. Spangler Vice President & Chief Patent Counsel

G. Bryan Cornwall, PhD, P.Eng. Vice President of Research and Development

James J. Skinner
Vice President of Strategic
Sales Development

Investor Relations Contact

Kevin C. O'Boyle

Executive Vice President & Chief Financial Officer

NuVasive, Inc. 858.909.1800

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Form 10-K

The Form 10-K is available on the internet by accessing NuVasive's website at www.nuvasive.com. A copy of the Company's most recent Form 10-K, as filed with the Securities and Exchange Commission (including consolidated financial statements and schedules thereto) will be provided to shareholders upon written request to the Company's Investor Contact.

Annual Meeting May 24, 2006

8:00 a.m. (PDT)

4545 Towne Centre Court San Diego, CA 92121

Corporate Headquarters

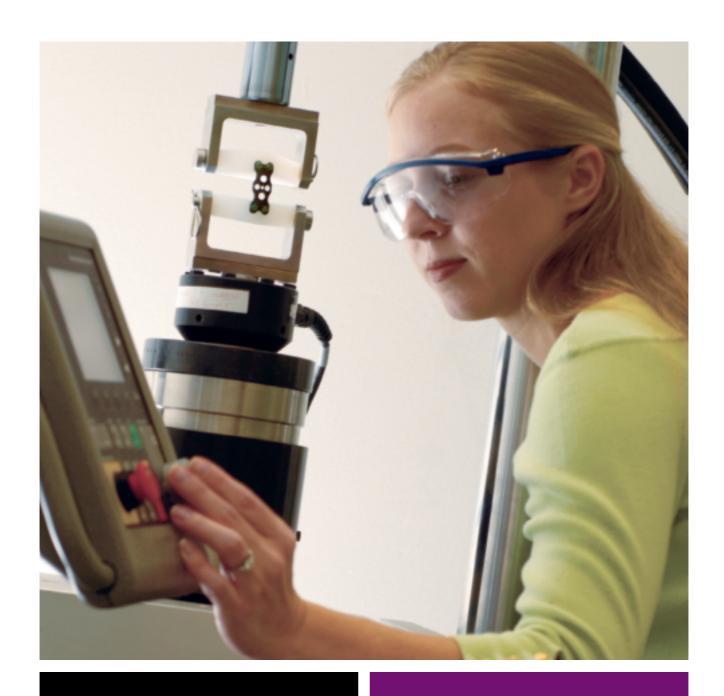
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Forward-Looking Statements

NuVasive cautions you that statements included in this annual report that are not a description of historical facts are forward-looking tatements that involve risks, uncertainties, assumptions and other factors which, if they do not materialize or prove correct, could caus NuVasive's results to differ materially from historical results or those expressed or implied by such forward-looking statements. The notential risks and uncertainties that could cause actual growth and results to differ materially include, but are not limited to: the rish lat NuVasive may be unable to successfully integrate new products or technologies into its business; the uncertain process of seeking egulatory approval or clearance for NuVasive's products or devices, including risks that such process could be significantly delayed; the possibility that the FDA may require significant changes to NuVasive's products or clinical studies; the risk that additional clinical expeience may demonstrate that NuVasive's products do not provide the intended safe and reproducible results; risks related to NuVasive's ability to successfully develop, obtain regulator pproval for, and commercialize new products; and other risks and uncertainties more fully described in NuVasive's annual report an veriodic filings with the Securities and Exchange Commission. NuVasive's public filings with the Securities and Exchange Commission reavailable at www.sec.gov. NuVasive assumes no obligation to update any forward-looking statement to reflect events or circumstance riving after the date on which it was made.

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