Medtronic News

Medtronic Expands Minimally Invasive Spine Surgery Ecosystem with Next-Generation Spinal Technologies

Industry Leading Portfolio of Integrated Solutions Sets a New Standard for Minimally Invasive Spine Procedures, Beginning with MIS+ TLIF

DUBLIN, Sept. 30, 2021 /PRNewswire/ -- Medtronic plc (NYSE: MDT), the global leader in medical technology, today announced the latest additions to its minimally invasive spine surgery ecosystem, making it the only company to combine spinal implants, biologics, navigation, robotics, and AI-powered data to surgeons and patients.

New additions to the Medtronic MIS+ portfolio include:

- **Catalyft™ PL and PL40**, the first releases in the new Catalyft™ Expandable Interbody System. Catalyft™ PL and PL40 feature a unique design for anterior rim engagement, a beveled tip for ease of insertion, seamless integration with StealthStation™ Navigation, simplified bone graft delivery, and active expansion at the precise angle and lift that surgeons need for minimally invasive, patient-specific solutions to meet sagittal alignment goals.
- The **Space-D™ Access System,** which enables pedicle-screw-based distraction, retraction and compression, compatible with Medtronic's leading MIS screw system, CD Horizon™ Solera™ Voyager™, enabling simpler, all-in-one access for surgeons, making procedures more efficient and reproducible.
- **Accelerate™ Graft Delivery System with Grafton™ DBF** enables more controlled and efficient delivery of graft material into the disc space or other locations. Accelerate enables placement of more bone graft[2] to facilitate fusion and is nine-times faster than traditional graft delivery methods.[3] Bone grafting is also more controlled and easier for surgeons to visualize.

"At Medtronic, we continue to raise the bar in minimally invasive spine surgery through our commitment to driving innovation and expanding our MIS capabilities," said Carlton Weatherby, vice president and general manager of Spine & Biologics within the Cranial & Spinal Technologies business, which is part of the Neuroscience Portfolio at Medtronic. "Our seamless integration of implants, instrumentation, and enabling technologies into a single ecosystem is helping surgeons remove variability in the surgical procedure, streamline and personalize care, and enable better patient outcomes."

Advancing Care with MIS+ TLIF

More than 450,000 spinal fusion procedures[4] are performed in the United States each year to reduce pain, improve stability, or correct deformities of the spine. About 200,000 are lower or lumbar fusion procedures,[5] which treat conditions such as degenerative disc disease, herniated disc, fractured vertebrae, spinal stenosis, and other conditions. One of the most common spinal fusion procedures is transforaminal lumbar interbody fusion (TLIF). During a TLIF procedure, a disc is removed from the lumbar spine, and two vertebrae are joined together using screws or rods. An interbody fusion spacer is inserted into the space, and a bone graft or bone substitute is placed into the space. As the bone heals, it fuses the vertebrae together to form one bone.

The new additions to Medtronic's MIS+ portfolio create the most complete MIS+ TLIF solution available for surgeons. A complete procedural solution allows surgeons to provide the benefits of minimally invasive spine care – including lower infection and complication rates,[1] less blood loss,[1] smaller incisions, reduced hospital stays,[1] and less pain[6] – to more patients. Compared to open TLIF, MIS+TLIF requires a smaller incision and less muscle and tissue disruption, which can mean a faster recovery time after the operation.[7, 8, 9] Together, these technologies improve clinical and economic value while reducing OR time with a fully streamlined procedure[1].

"Medtronic's comprehensive ecosystem of MIS technologies is developing a new standard for TLIF and other spine procedures," said Christopher Holland, M.D., Ph.D. of Carolina Neurosurgery and Spine Associates. "While minimally invasive procedures can present a learning curve for surgeons, Medtronic's portfolio makes these operations efficient and reproducible,

utilizing instruments as in an open procedure, with the additional benefits of AI, navigation and robotics. The MIS ecosystem overall helps make these procedures safer, and my patients can recover faster and return home sooner (often without requiring a hospital admission), with a better overall care experience and better outcomes."

For more information, visit www.medtronic.com/MIS.

About Medtronic

Medtronic plc (www.medtronic.com), headquartered in Dublin, Ireland, is among the world's largest medical technology, services, and solutions companies – alleviating pain, restoring health, and extending life for millions of people around the world. Medtronic employs more than 90,000 people worldwide, serving physicians, hospitals, and patients in more than 150 countries. The company is focused on collaborating with stakeholders around the world to take healthcare Further, Together.

Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's periodic reports on file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.

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