EXHIBIT Y

TO THE REPLY DECLARATION OF JIM A. YOUSSEF, M.D.

IN SUPPORT OF NUVASIVE'S MOTION FOR PRELIMINARY INUNCTION

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Life moves us

SURGICAL TECHNIQUE



LLIF Procedure

Lateral Lumbar Interbody Fusion



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At Globus, we move with a sense of urgency to deliver innovations that improve the quality of life for patients with spinal disorders. We are inspired by the needs of these patients and also the needs of the surgeons and health care providers who treat them.

This passion combined with Globus' world class engineering transforms clinical insights into tangible spine care solutions. We are driven to provide the highest quality products to improve the techniques and outcomes of spine surgery so patients can resume their lives as quickly as possible. We extend our reach beyond our world class implants, instrumentation, and service by partnering with researchers and educators to advance the science and knowledge of spine care.

The energy and enthusiasm each of us bring everyday to Globus is palpable. We are constantly in the pursuit of better patient care and understand that speed is critical because life cannot wait.



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Lateral Lumbar Interbody Fusion



The use of a lateral approach to access the thoracolumbar spine has been well documented in literature. In the late 19th century (1894), Menard developed a procedure that allowed greater exposure to the lateral aspect of the spine. Capener, in 1954, built on Menard's advances for the treatment of Pott disease (tuberculosis of the spine).^{1, 2} However, their procedures had limitations.

During the past 35 years, surgeons have continued to develop the lateral technique. In 1976 Fraser et al. described a muscle splitting approach to the lumbosacral spine. The exposure gained with this retroperitoneal technique offered successful access to the mid-lumbar and lumbosacral spine.³ O'Brien analyzed his many patients that underwent a leftsided, retroperitoneal approach. The benefit of this was avoidance of canal trauma and elimination of motion by using a large graft.⁴ McAfee et al. presented the first clinical series investigating the use of the lateral retroperitoneal approach for fusion from L1-L5, reporting an overall lower morbidity comparable to traditional approaches.⁵ Building on this, Bertagnoli developed the anterolateral transpsoatic approach for accessing the lumbar disc while avoiding disruption to the posterior elements.⁶ Today, Globus has refined the lateral approach with the introduction of MARS[™]3V and TransContinental[®].

- 1 Ménard V: Causes de la paraplégie dans le mal de Pott. Rev Orthop: 47-64, 1894.
- 2 Capener N: The evolution of lateral rhacotomy. J Bone Joint Surg Br 36: 173-179, 1954.
- 3 Fraser RD, Gogan WJ. A Modified Muscle-Splitting Approach to the Lumbosacral Spine. Spine 17(8): 943-8, 1992.
- 4 Kozak J, O'Brien J. Simultaneous Combined Anterior and Posterior Fusion. An Independent Analysis of a Treatment for the Disabled Low-Back Pain Patient Spine 15(4): 322-328, 1990.
- 5 McAfee P et al. Minimally Invasive Anterior Retroperitoneal Approach to the Lumbar Spine: Emphasis on the Lateral BAK. Spine 23(13): 1476-1484, 1998.
- 6 Bertagnoli R, Vazquez RJ. The Anterolateral TransPsoactic Approach(ALPA): a new technique for implanting prosthetic disc-nucleus devices. J Spinal Disord Tech 16(4): 398-404, 2003.

LLIF LATERAL LUMBAR INTERBODY FUSION

The MIS lateral approach has been refined with the combination of the MARS[™]3V retractor and the TransContinental[®] spacer system.

MARS[™]3V is a versatile and variable vision system that gives unprecedented control of tissue retraction during the entire procedure.

TransContinental® is a comprehensive spacer system with extensive instrumentation.

MARS[™]3V

The MARS[™]3V Retractor provides the versatility, stability, and precision required to access hard-to-reach disc spaces.

- Independent blade retraction
- Individual blade angulation up to 20°
- Lightweight, aluminum components for radiolucency
- Illumination system fits within blade walls for less bulk

TransContinental®

The TransContinental[®] System is ideal for a minimally invasive approach to help preserve patient anatomy.

- Self-distracting leading edge for ease of insertion
- Radiographic positioning markers for implant placement and orientation
- Comprehensive disc preparation instrumentation
- Trial length indicators provide accurate length assessment on fluoroscopy





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