NEW YORK (GBI Research), 19 December 2012 - The market for spinal surgery devices is being
driven
forward
, as patients are offered safer, more reliable surgery that will preserve natural movement and prevent degeneration of the spine, states a new report by healthcare experts GBI Research.

The new report* looks at spinal surgery devices, which are used for the treatment of lower back pain caused by degenerative disorders, trauma and sports injuries.

Motion-preservation techniques in spinal non-fusion procedures are predicted to be the next big thing in spinal surgery, and have seen enhanced adoption rates over the last few years. Following developments in the understanding of spinal physiology, anatomy and spinal biomechanics, innovative techniques can now maintain spinal mobility while treating spinal degeneration, and a number of manufacturers have developed motion-preserving devices to exploit this growing trend.

While spinal fusion has remained the gold standard for the treatment of spinal degenerative disorders, it can cause restriction of motion and degeneration of adjacent spinal segments through stress which can further delay recovery and in some cases, even lead to unwanted additional back surgery. This has led surgeons and patients to adopt spinal non-fusion or motion-preserving technologies, which maintain the patient’s spinal mobility while alleviating severe back and leg pain. The ability of the spine to be mobile and stable after intensive surgical procedures makes it preferred over fusion procedures, and advances in non-fusion procedures alleviate pain and restore motion despite enduring heavy loads, offering clinical benefits over arthrodesis or spinal joint fusion.

Spinal non-fusion technology is experiencing rapid advances, with advanced technologies leading to the introduction of new devices, such as Artificial Disc Replacement (ADR), dynamic stabilization and Interspinous

Process Decompression (IPD) devices. ADR involves the replacement of the damaged natural disc with an artificial disc without compromising the mobility of the spine, while stabilization devices treat back pain by restricting motion in certain areas while allowing motion in adjacent vertebral segments.

Minimally Invasive Spinal Surgery (MISS) can be used to implant these devices, and surgeons are finding a number of clinical benefits. Traditional open spinal surgery requires a large incision to be made in the back or abdomen, requiring the expertise of specialized vascular surgeons and risking serious injury. Large incision scars and surgical complications such as excessive blood loss and severe post-operative pain all lead to significant hospital stays and recovery periods.

In contrast, MISS techniques allow surgery to be performed with advanced devices such as endoscopes, lasers and sophisticated computer-aided navigation systems, requiring an incision of only 2cm. MISS consequently brings down the overall cost of treatment, as it reduces costs associated with prolonged hospital stays and continuous use of pain medication.

GBI Research expects the global spinal surgery devices market to grow at a Compound Annual Growth Rate (CAGR) of 4% from $6.5 billion in 2011 to $8.7 billion in 2018.

* Spinal Surgery Devices Market to 2018 - New Entrants and Technological Advances to Intensify Competition in the Spinal Fusion Segment