

# APERIUS™ PercLID™ System



A percutaneous therapy for the treatment of degenerative lumbar spinal stenosis

#### About this booklet

You have recently been diagnosed with a medical condition called Degenerative Lumbar Spinal Stenosis (DLSS), which is a consequence of the natural aging process. This condition causes leg pain and sometimes back pain that can seriously impair your daily activities, such as standing and walking.

The APERIUS™ PercLID™ System is a short, simple surgical procedure during which the APERIUS™ implant is inserted in the lower part of your spine. It is designed to achieve sustained pain relief, compared to the temporary relief experienced when bending forward or sitting down.

This patient guide is intended to help you better understand DLSS, and how the APERIUS™ PercLID™ System may help relieve your pain.



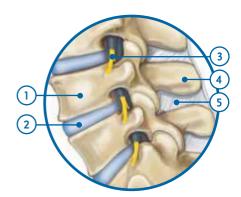
## **Anatomy**

The human spine is made up of 33 bones called vertebrae. In between most of the vertebrae are discs of soft tissue (intervertebral discs [2]) that act as cushions or shock absorbers. These vertebrae and intervertebral discs are stacked on top of each other to form the spinal column. The spinal column is the body's main skeletal upright support. Although the entire spine is involved in everyday activities of rest and movement, the lower back can be vulnerable to many pain-provoking disorders.

The lumbar spine is located at the lower part of your vertebral column and is composed of 5 vertebrae. Doctors refer often to these vertebrae as 11 to 15.

Each vertebra is formed by a round block of bone, called a **vertebral body (1).** A bony ring is attached to the back of each vertebral body. The bone that can be felt as you rub your fingers up and down the back of your spine is called the **spinous process (4).** 

In your spine the vertebrae are stacked on top of each other so that the bony rings form a hollow tube called the **spinal canal** that surrounds the **spinal cord** and **nerves (3).** The spinal cord is made up of millions of nerve fibers.



- 1 Vertebral Body
- 2 Intervertebral Disc
- 3 Nerve Root
- 4 Spinous Process
- 5 Interspinous Ligament

# **Degenerative Lumbar Spinal Stenosis**

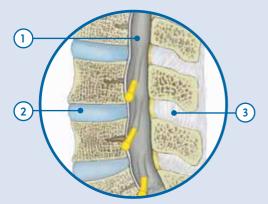
As a natural result of aging, degenerative changes affect your spine. The most common is Degenerative Lumbar Spinal Stenosis (DLSS), which occurs in most adults over the age of 50, affecting both genders equally.

Stenosis means a narrowing of the spinal canal that carries the nerves to your legs. As the size of the spinal canal and its nerve exits decreases, compression or squeezing of the spinal cord and nerve roots occur.

This squeezing of the spinal cord or nerve roots results in symptoms such as:

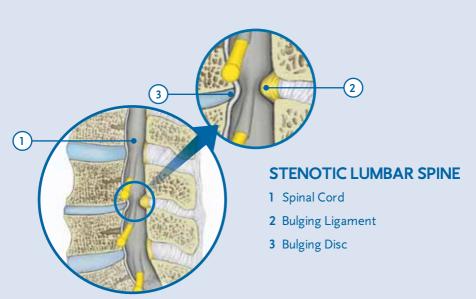
- Dull or aching back pain that may spread to your legs
- Numbness and "pins and needles" in your legs, calves or buttocks
- · Weakness or a loss of balance
- A decreased endurance for physical activity

When these symptoms appear during normal activities such as walking or standing, this condition is called **Neurogenic Intermittent Claudication** or NIC. The symptoms can be relieved by sitting down, by leaning forward, or by putting your feet in an elevated position, as the bending of your back naturally opens up the space of your spinal canal.



#### **HEALTHY SPINE**

- 1 Spinal Cord
- 2 Intervertebral Disc
- 3 Interspinous Ligament



#### **Treatments**

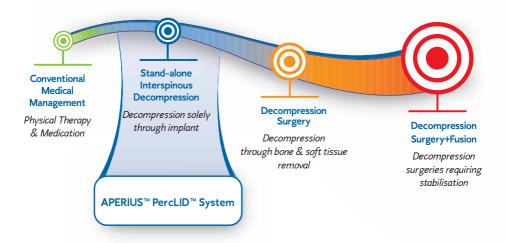
#### Non-surgical Treatment

For patients suffering from mild to moderate DLSS, treatments such as medication, physical therapy and spinal injections will provide pain relief.

Over time, as the disease progresses, these treatments will prove less effective. Once the pain becomes unmanageable, a surgical treatment option must be considered.

#### **Surgical Decompression**

Different surgical techniques are used to remove bone and soft tissue that are squeezing the spinal cord and nerves. This provides relief of leg pain symptoms.



#### The APERIUS™ PercLID™ System

The APERIUS™ device represents a significant breakthrough in the treatment of Degenerative Lumbar Spinal Stenosis (DLSS).

For DLSS patients who experience pain relief by bending forward and who are unsatisfied with the results of non-surgical treatment, the APERIUS™ implant can provide immediate symptom relief without open surgery.

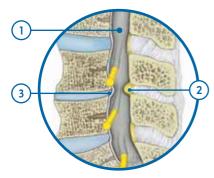


# The APERIUS™ PercLID™ System

The APERIUS™ device is a Titanium implant placed percutaneously (through a small incision) in between the spinous processes at the affected level of your spine.

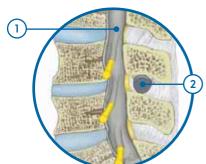
It is designed to hold the spinal canal open to ensure that soft tissue or bone does not continue to pinch the spinal cord or nerve roots.

By relieving the squeezed spinal cord and nerve roots, the APERIUS™ implant allows you to stand and walk freely without experiencing leg pain.



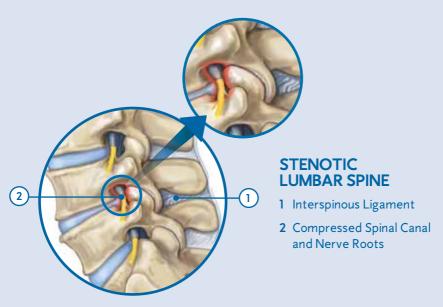
#### STENOTIC LUMBAR SPINE

- 1 Spinal Cord
- 2 Bulging Ligament
- 3 Bulging Disc



# TREATED WITH APERIUS™ IMPLANT

- 1 Spinal Cord
- 2 APERIUS™ Implant





### **Post-operative Care**

Relief of your leg pain symptoms normally occurs within 24 to 48 hours after the procedure. However, you may experience some back pain for a few days following the procedure due to the incision. You should be up and walking within 48 hours of the procedure.

Your doctor might advise you to limit certain physical activities for the first week following surgery. These may include, but are not limited to:

- Excessive bending forward or backwards
- · Lifting of heavy objects
- Driving

Return to normal working activities usually occurs within 7 days following the procedure.

# **Understanding the Risks**

As with any surgical procedure, there are potential risks. The procedure is designed to avoid these risks as much as possible, but there is a chance that complications may occur.

You and your doctor should discuss the possible risks associated with this treatment and if this treatment is right for you.

Please note that not all patients will benefit from this procedure. Only your doctor can determine the appropriate treatment for your individual condition.

# Benefits The APERIUS™ Pathway... Back to Life!

- 1 Provides quick pain relief without open surgery
- 2 A short, simple procedure that keeps further treatment options open
- 3 Allows quick return to daily activities



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