



Signature™ Personalised Positioning Guides

Signature™ personalised positioning guides are placed directly onto your thighbone and shinbone, and therefore do not require instrumentation of the bone canal, allowing for a potentially less invasive procedure. The Signature™ personalised positioning guides enable the surgeon to position a reduced number of instruments during surgery to carry out the preoperative plan.

Summary

The decision to have surgery is sometimes difficult. We hope that this brochure has helped you understand Signature™ Personalised Patient Care so that you can make the best decision for yourself. This brochure is not intended to replace the experience and counsel of your orthopaedic surgeon. If you have any further questions, please speak with your orthopaedic surgeon.

Disclaimer

Biomet does not practice medicine and does not recommend any particular surgical technique for use on a specific patient. The surgeon who performs any implant procedure is responsible for determining and utilising the appropriate techniques for implanting prosthesis in each individual patient.

Biomet is not responsible for selection of the appropriate surgical technique, nor does it advocate a particular technique to be utilised on an individual patient.

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Your guide to **Signature™ Personalised Patient Care**

for total knee replacement surgery



Understanding

Arthritis and Signature™

Personalised Patient Care

You are unique and so is your individual anatomy.

That's why Biomet now offers Signature™ Personalised Patient Care, which utilises MRI (magnetic resonance imaging) technology to create personalised positioning guides for total knee replacement. It is important to note that your surgeon will still be using the implants he or she feels are best for you.

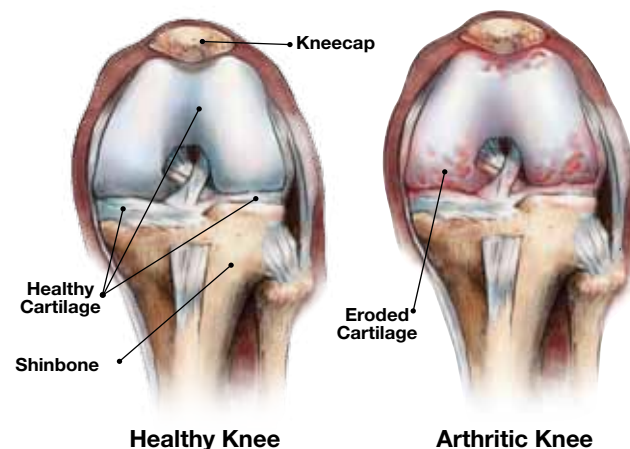
This brochure will explain what makes the Signature™ system unique, what to expect from the preoperative MRI, what to expect after surgery, and the benefits offered to you and your surgeon by using the Signature™ personalised positioning guides.



The Knee

The knee is a hinge joint formed by the shinbone, thighbone, and kneecap. The ends of the bones in the knee joint are covered with cartilage, a tough lubricating tissue that helps cushion the bones during movement.

Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage and bone, and it typically develops after years of constant motion and pressure in the joints. As the cartilage continues to wear away, the joint becomes increasingly painful and difficult to move. If conservative treatment options fail to provide relief, your surgeon may recommend total knee replacement using Signature™ Personalised Patient Care.



Signature™ Personalised Patient Care

The Signature™ system utilises custom femoral and tibial positioning guides developed from your MRI. The MRI is used to generate a computerised three-dimensional joint reconstruction, which enables the surgeon to preoperatively plan your knee replacement using Signature computer software. In the past, surgeon planning has typically been based off of two-dimensional X-rays.

Before Surgery

Your preoperative experience will be like that of most total knee patients except that an MRI of your affected leg will be required. The advantage of using MRI is that, unlike an X-ray, it can be used to create a detailed three-dimensional image of your unique anatomy that enables the surgeon to preoperatively plan your knee replacement.

Typically, surgeons use X-rays to size components before surgery. During the knee replacement procedure an assortment of instruments are used to verify component sizing and establish proper positioning and alignment. With the MRI and Signature™ personalised positioning guides, surgeons have access to a greater level of detail and precision for implant position and alignment before the procedure. This allows for personalised implant positioning and may help enhance surgical efficiency.

You can expect the MRI scan to take approximately 20 minutes. The scan will only be performed on your hip, knee and ankle, so your head will remain outside of the machine. The MRI is used for preoperative planning by your surgeon and for the design and manufacture of the Signature™ personalised positioning guides that will be used during your knee replacement.

During Surgery

The surgical procedure using the Signature™ personalised positioning guides is similar to traditional total knee replacement with a few exceptions. During traditional total knee surgery, multiple instruments are used to position the guides for removing damaged bone and cartilage. Traditional total knee replacement sometimes uses instruments placed inside the thighbone and/or shinbone to assist with implant alignment and positioning.