

frequently asked questions

# Partial Knee Replacement



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## Partial Knee Replacement

Recently, you may have seen advertisements about MAKOplasty® robotic partial knee replacement surgery. Biomet would like to provide some facts about joint replacement to assist you when speaking with an orthopedic surgeon. It is important to ask your surgeon about any concerns you have regarding the device, the surgical procedure, rehabilitation after surgery, the number of surgeries he/she has performed, expectations after surgery, and any other concerns you might have.

### What is partial knee replacement?

Partial knee replacement is intended to preserve healthy knee structures and may restore normal knee motion and function. In patients with only limited knee arthritis, known as medial compartment arthritis, surgeons may elect to perform a partial knee replacement. Unlike total knee replacement that removes all the knee joint surfaces, a partial knee replacement replaces only one side of the knee joint surface.



**Total Knee Replacement**



**Oxford® Partial Knee Replacement**





## Are there different types of partial knee replacement?

Yes, there are many different designs on the market. The most significant difference is whether the polyethylene (plastic) lining of the new knee is free to move or not. A moving plastic bearing (as in the Oxford® Knee) is known as a mobile bearing type. When the plastic cannot move, the replacement is a fixed bearing type.

## How is the Surgical Procedure Performed?

Let's compare MAKOplasty® robotic knee surgery with Oxford® Partial knee surgery from Biomet. During Oxford® partial knee surgery, a small incision is made that allows access to the damaged bone and cartilage. Once inside the joint, the surgeon uses metal instruments to make the bone cuts and to properly align the implants on the bones. During MAKOplasty® robotic surgery, an incision is made and the surgeon uses a motorized burr to guide the removal of the damaged bone and cartilage.<sup>1</sup> Each method has the same goal: proper alignment and placement of the implants.

With the Oxford® Knee's minimally invasive technique, it is typically not necessary for your surgeon to make a large incision that would surgically expose healthy parts of the knee. With use of the Oxford® proprietary instruments, the operation can usually be performed through a small, three to four inch incision. The system allows accurate balancing of the knee while avoiding disruption of the thigh muscles (quadriceps), which also contributes to a quicker recovery.<sup>2</sup>

## What about Clinical Results?

Joint replacement is more than just the surgical procedure. Patients should carefully consider the implant they will be receiving, its clinical history and performance over time. Let's look at some available options.

### The MAKOplasty® Knee

The robotically implanted knee implant has no long-term clinical results listed on its website [www.makosurgical.com](http://www.makosurgical.com).

### The Oxford® Partial Knee

The Oxford® Partial Knee from Biomet is the most widely used and clinically proven partial knee replacement system in the world. It is also the only fully mobile bearing partial knee system available in the United States. Clinically proven at 10, 15 and 20 years, the Oxford® Partial Knee lets you keep up to 75% of your healthy knee, for a more rapid recovery with less postoperative pain and more natural motion when compared with total knee replacement.<sup>3-5</sup>

Published long-term clinical results on the Oxford® Knee demonstrated a 98% success rate at 10 years in one study and 95% at 15 years and beyond in another, equaling the results of the most successful total knee replacements.<sup>6,7</sup>

## Does a partial knee replacement last longer than a total knee replacement?

Not necessarily. All implants have a limited life expectancy depending on an individual's age, weight, activity level, and medical condition. Research has shown that the Oxford® Partial Knee has low wear rates.<sup>8,9</sup> You can, of course, go on to have a total knee replacement after a previous partial knee replacement, should it become necessary.

Not all patients are candidates for partial knee replacement. Only your orthopedic

surgeon can tell you if you're a candidate for joint replacement surgery, and if so, which implant is right for your specific needs. You should discuss your condition and treatment options with your surgeon. The life of any joint replacement will depend on your physical condition, activity levels, willingness to follow surgeon's instructions, and other factors. The Oxford® Meniscal Partial Knee is intended for use in individuals with osteoarthritis or avascular necrosis limited to the medial compartment of the knee and is intended to be implanted with bone cement. Potential risks include, but are not limited to, loosening, dislocation, fracture, wear, and infection, any of which can require additional surgery. For additional information on the Oxford® knee, including risks and warnings, talk to your surgeon and see the full patient risk information on Biomet.com.

Individual results of total joint replacement may vary. The life of any implant will depend on your weight, age, activity level, and other factors. For more information on risks, warnings, and possible adverse effects, see the Patient Risk Information section found within Biomet.com. Always ask your doctor if you have any questions regarding your particular condition or treatment options.

1. <http://www.makosurgical.com/site/makoplasty/rio/>
2. Keys, G.W.: "Reduced Invasive Approach for Oxford II Medial Unicompartmental Knee Replacement—A Preliminary Study." *The Knee*, Vol. 6; No.3: 193–196, 1999.
3. Data on file at Biomet. Note: bench test results do not necessarily indicate clinical performance.
4. Murray, DW. "Mobile bearing Unicompartmental knee replacement." *Orthopedics*. 2005;28:985-987.
5. Deshmukh, RV, Scott, RD. "Unicompartmental knee Arthroplasty: long-term results." *Clinical Orthopedics and Related Research*. 2001; 392:272-278.
6. Murray, D.W.; O'Connor, J.J.; and Goodfellow, J.W.: "The Oxford Medial Unicompartmental Arthroplasty. A Ten Year Survival Study." *JBJS (Br)*, No. 6, 80-B: 983-989, 1988.
7. Price, A J., Svard U. The Oxford Medial Unicompartmental Knee Arthroplasty Fifteen-Year Survival Results From an independent series B.O.A. Meeting 2000, London.
8. Price, A.; *et al.*: "Ten-Year In Vivo Wear of a Fully Congruent Mobile Bearing Unicompartmental Knee Arthroplasty." *AAOS*, Paper No. 58, 2004.
9. Kendrick, BJL; *et al.*: "Polyethylene Wear of Mobile-Bearing Unicompartmental Knee Replacement at 20 Years." *J Bone Joint Surg (Br)* 2011 Vol. 93-B, No. 4, April 2011.

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