

## *Robotic Surgery*

### **MAKOplasty Partial Knee Resurfacing**

This robotic surgery called MAKOplasty is designed to give you the most precise resurfacing on the most arthritic portion of your knee. Using a CT scan and x-rays taken at our office, the robotic arm (called RIO) generates a 3D live-action view of your bone surface. This allows for the robot to be limited to only the diseased portion of the knee creating optimal implant positioning and placement specific to each patient's needs. Limiting the resurfacing to only the disease portion allows for the healthy bone and tissue to be preserved.

#### **Lifespan of an implant**

Life expectancy depends on numerous factors such as weight, activity level, quality of bone and compliance with doctor. With the RIO robot guidance system, the proper alignment and precise positioning improve the life expectancy.

#### **Benefits**

- Smaller incision
- Minimally invasive procedure creating less scarring
- Reduced blood loss
- Less implant wear and loosening
- More rapid recovery with a short hospital day (in most cases only 2 days)
- More natural feeling in your new knee since there is only a 1 millimeter difference between the implant location and the original location of your own bone
- In most cases, patients can walk soon after surgery and drive a car within the first few weeks

### **MAKOplasty Total Hip Replacement**

Also known as Total Hip Arthroplasty, this procedure replaces the whole arthritic hip. A metal cup with a plastic liner takes the place of the pelvis socket. A metal stem will replace the head and neck of the femur growing into the femur bone space. Using a CT scan and x-rays taken at our office, the robotic arm (called RIO) generates a 3D live-action view of your pelvic and femur bone surface. This allows for the robot to be most accurate in placing your hip implant reducing the likelihood of hip dislocation. Please visit <http://www.makosurgical.com/> for more information.

#### **Lifespan of an implant**

Life expectancy depends on numerous factors such as weight, activity level, quality of bone and compliance with doctor. With the RIO robot guidance system, the proper alignment and precise positioning improve the life expectancy.

#### **Benefits**

- Reduced likelihood of hip dislocation due to most accurate placement
- More consistency in leg length decreasing possible need for a shoe lift
- Smaller incision
- Minimally invasive procedure creating less scarring
- Reduced blood loss
- Less implant wear and loosening due to lessened risk of implant and bone rubbing together
- More rapid recovery with a short hospital day (in most cases only 2.5 days)
- More natural feeling in your new knee since there is only a 1 millimeter difference between the implant location and the original location of your own bone
- In most cases, patients can walk soon after surgery and return to daily activities in a few weeks
- To learn more about this procedure visit the MAKOplasty website at [www.makosurgical.com](http://www.makosurgical.com)