



It's your  
knee

Help keep  
it that way

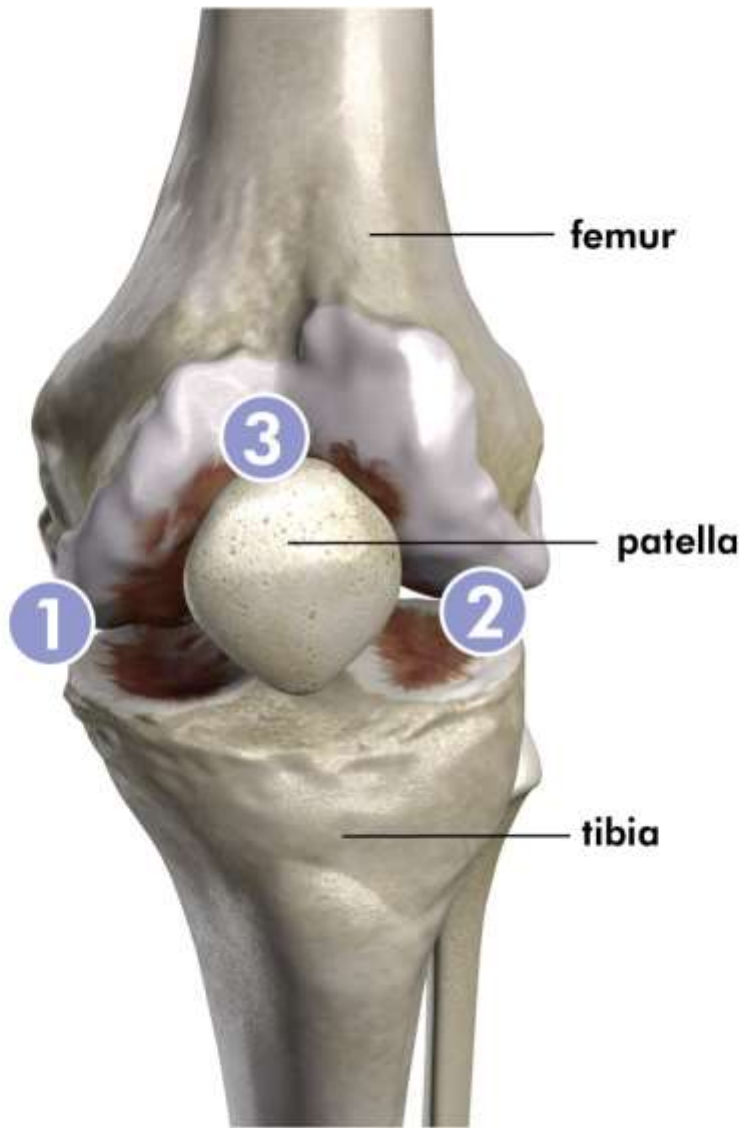
PERSONALIZED  
TOTAL KNEE IMPLANTS

  
CONFORMIS

# Personalized knee implants

- Designed for each individual based on your anatomy
- Customized fit avoids sizing compromises common with traditional standard implants
- Designed to mimic the natural shape of your knee
- More bone preservation than a standard total knee replacement, allowing for potential treatment options in the future





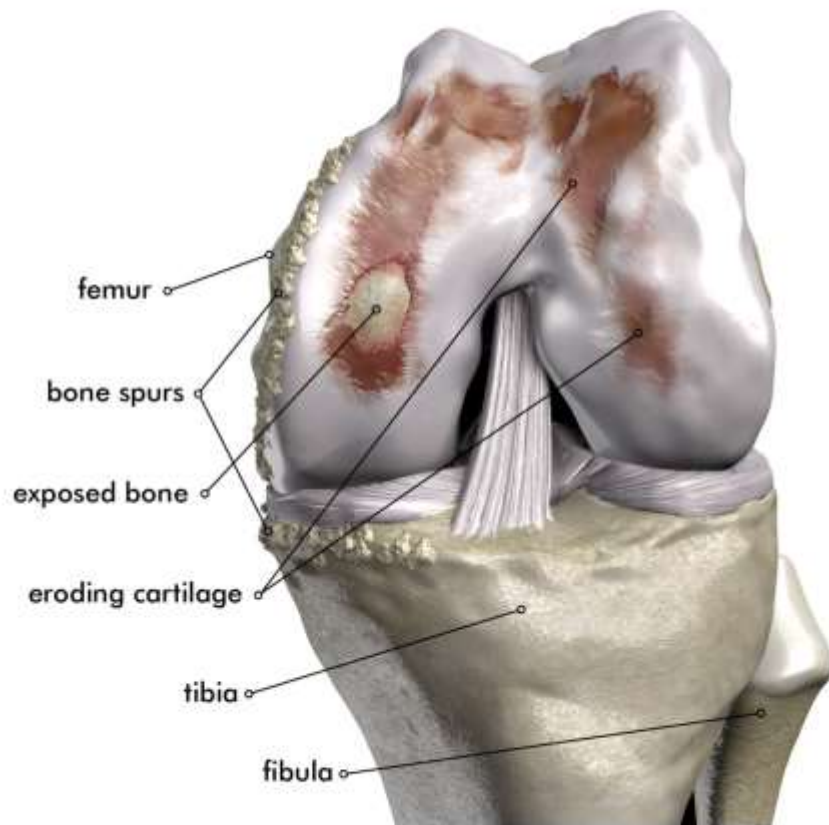
**Left Knee:** Osteoarthritis can affect one, two or all three compartments of the knee.

# Understanding your knee.

Your knee joint is formed by the intersection of the femur (thigh bone), the tibia (shin bone), and the patella (the knee cap). These bones form three “compartments” or sections.

- 1 Medial compartment (inner half of your knee)
- 2 Lateral compartment (outer half of your knee)
- 3 Patella femoral compartment (behind the knee cap)

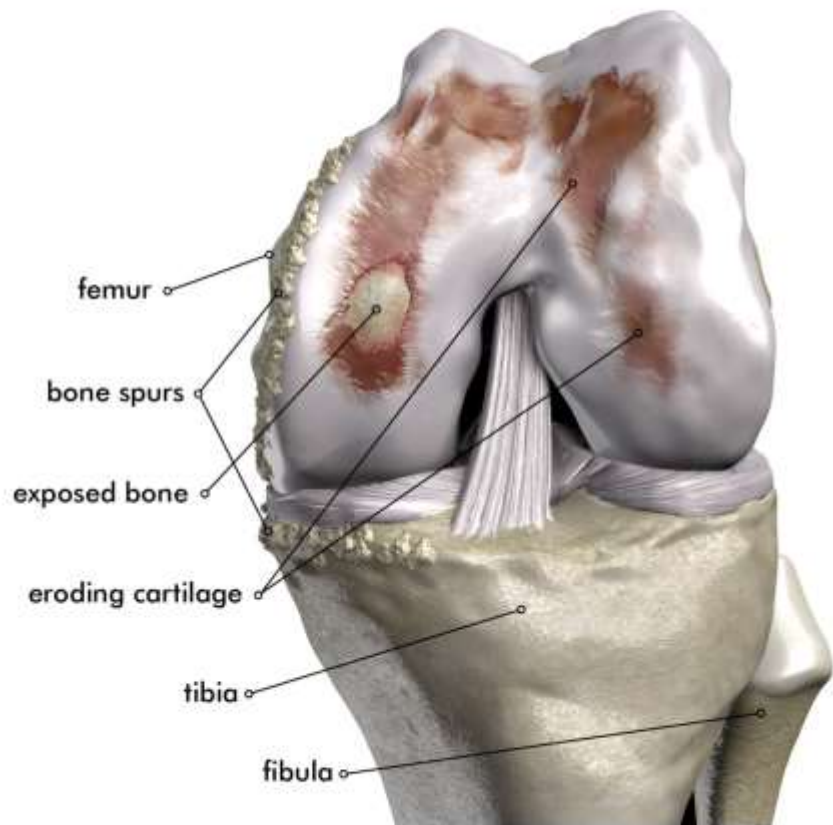
In a normal functioning knee, each bone glides smoothly against the other on a layer of cartilage that covers the ends of the bone. In a knee joint affected by osteoarthritis, the smooth cartilage lining on the inside of the joint has worn away. Your surgeon can determine the extent and severity of your OA.



# Osteoarthritis

## the disease

Osteoarthritis (OA) is the most common form of arthritis, affecting tens of millions of people worldwide. It is a degenerative joint disease characterized by the breakdown and eventual loss of joint cartilage. The breakdown and wearing away of cartilage causes the bones to rub together resulting in extreme pain. OA resulting from “wear and tear” is the most common reason individuals need to undergo knee replacement surgery.



## Symptoms of osteoarthritis in the knee:

- Knee pain associated with:
  - Standing or walking short distances
  - Climbing up or down stairs
  - Sitting in or standing up out of chairs
- Initial pain and/or stiffness with activities initiated from a sitting position
- Stiffness in the knee after getting out of bed
- A crunching sensation when the knee is used



The iTotal is designed to fit your anatomy and only your anatomy.

Combining proven total knee replacement (TKR) principles with the unique advantages of a ConforMIS patient-specific knee system, ConforMIS has developed the only personalized total knee system designed to conform precisely to your unique anatomy.

Source of patient dissatisfaction:  
Residual pain resulting from overhang.

The iTTotal CR solution:  
Customized fit.

Data suggests that among knees with overhang, approximately 39% of the outcome of clinically important knee pain are attributable to femoral implant overhang.<sup>2</sup>

The design features of the iTTotal CR address implant overhang through:

- Patient-specific design that eliminates overhang
- Customized fit for every patient

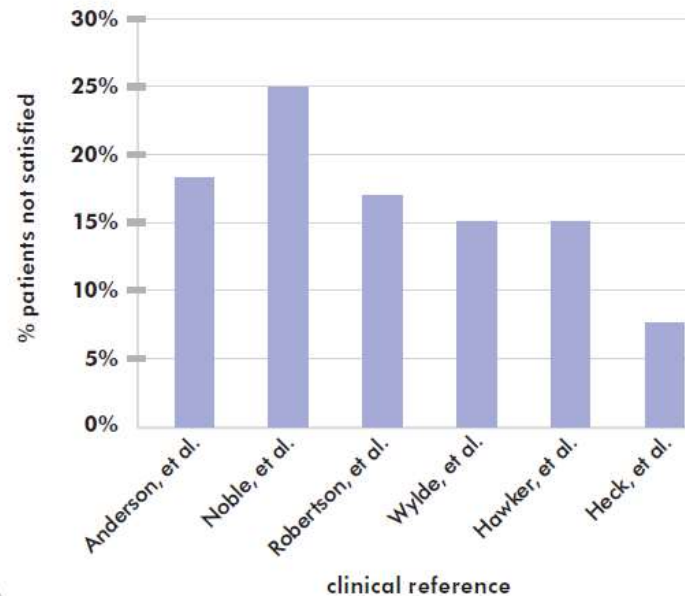




## Patients have reported dissatisfaction with traditional TKR

With 1 in 5 patients dissatisfied,<sup>1</sup> there is a strong need for a design solution to address the current problems with traditional TKA implants. The design features of the iTotal CR are intended to address some of the leading causes of patient dissatisfaction.

Patients not satisfied after primary TKR





## TRADITIONAL TKR

## iTotal PERSONALIZED TKR



*The ConforMIS approach makes sure that your implant is made to fit you precisely, avoiding sizing and fit issues common to standard total knee implants.*

### **STEP 1: Scheduling a CT scan**

Developing your personalized implant begins with images of your knee. Your doctor will give you a prescription to have a diagnostic scan at a nearby imaging center.

### **STEP 2: Getting your knee scanned**

The imaging center will take a CT scan of your leg and send a diagnostic report to your surgeon for evaluation.

### **STEP 3: Recreating your knee**

Using your CT scan, a computer generated 3-D virtual model of your knee is developed and will be used to individualize your implant for a personalized fit and correct alignment.

### **STEP 4: Personalizing the implant**

Using a proprietary process, your implants are designed and manufactured for delivery in 7 weeks.

### **STEP 5: Preparing for surgery**

Your implant will be delivered to your surgeon for the day of surgery. Speak to your surgeon about scheduling your surgery and what to expect.

### **STEP 6: Getting back on your feet**

While every person's experience is different, many people return to their daily activities within 6 weeks. More physical activities such as sports may take up to 3 months. Consult your doctor or physical therapist about your individual goals and limitations.

- The iTotal personalized knee implant is specifically designed to fit your knee, avoiding the sizing and positioning compromises common with traditional “off the shelf” total knee replacements that can lead to long-term painful outcomes.<sup>1</sup>
- The iTotal is designed to mimic the natural shape of your femur, one of the key determinants of the way your knee moves when you bend and flex. By restoring your shape rather than replacing the femur with a standardized geometry, your knee may feel more like your natural knee.
- The iTotal follows an innovative design approach, allowing for a personalized femoral component that is thinner than traditional total knee replacements. A thinner implant can preserve more of your bone, which may be beneficial for future treatment options.

<sup>1</sup> Mahoney OM, Kinsey T. Overhang of the femoral component in total knee arthroplasty: risk factors and clinical consequences. *J Bone Joint Surg [Am]* May 2010, Vol. 92-A, No. 5, pp. 1115-1121.



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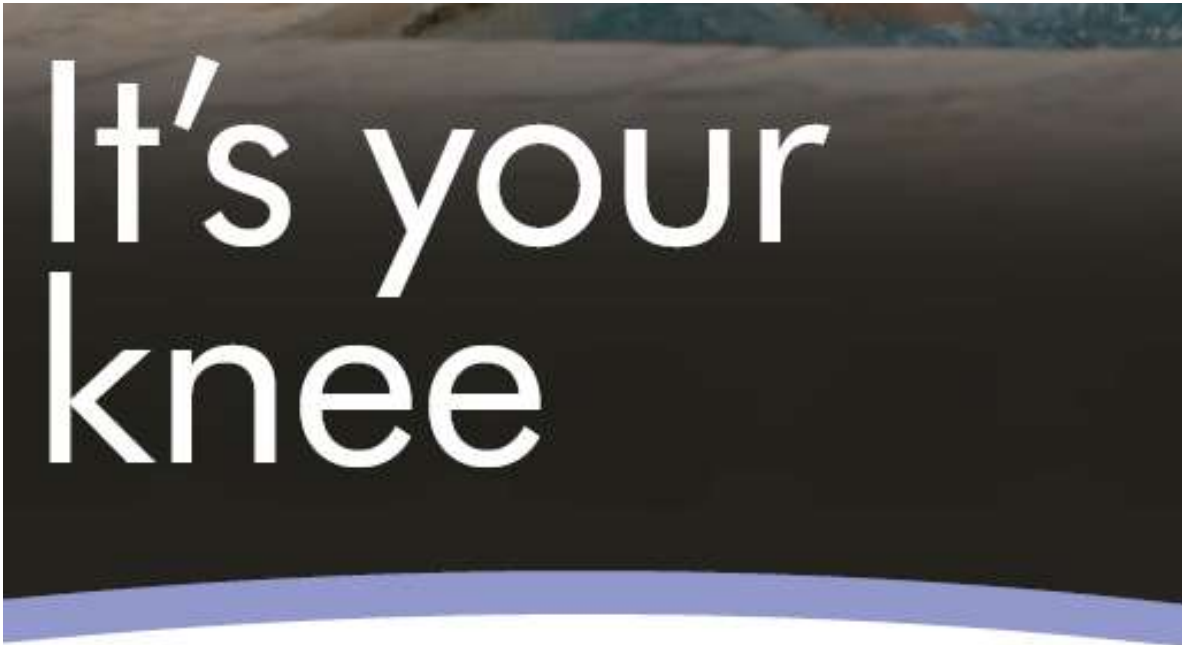


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**Caution:** The iTotal CR Knee Replacement System (KRS) is intended for use as a total knee replacement in patients with knee joint pain and disability whose conditions cannot be solely addressed by the use of a prosthetic device that treats only one or two of the three compartments. Only a licensed physician can help you determine the appropriate medical treatment. There are potential risks to knee replacement surgery, and individual results may vary. Before making any decisions concerning medical treatment, consult your physician regarding your options and the risks of those options. The longevity, performance and feel of any knee implant will depend on various factors, including your physical condition, your activity level, adherence to your physician's instructions, and other factors.

USA Federal law restricts the use of these devices to sale by or on the order of a physician.

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[www.conformis.com](http://www.conformis.com)





