



## Choosing the right knee implant for women

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# The facts

- There are slight anatomical differences between men's and women's knees
- Most knee implants on the market today have excellent track-records for female patients
- Shape, size and feel have long been guiding principles for female knee implant design
- The "female knee" is not a new concept

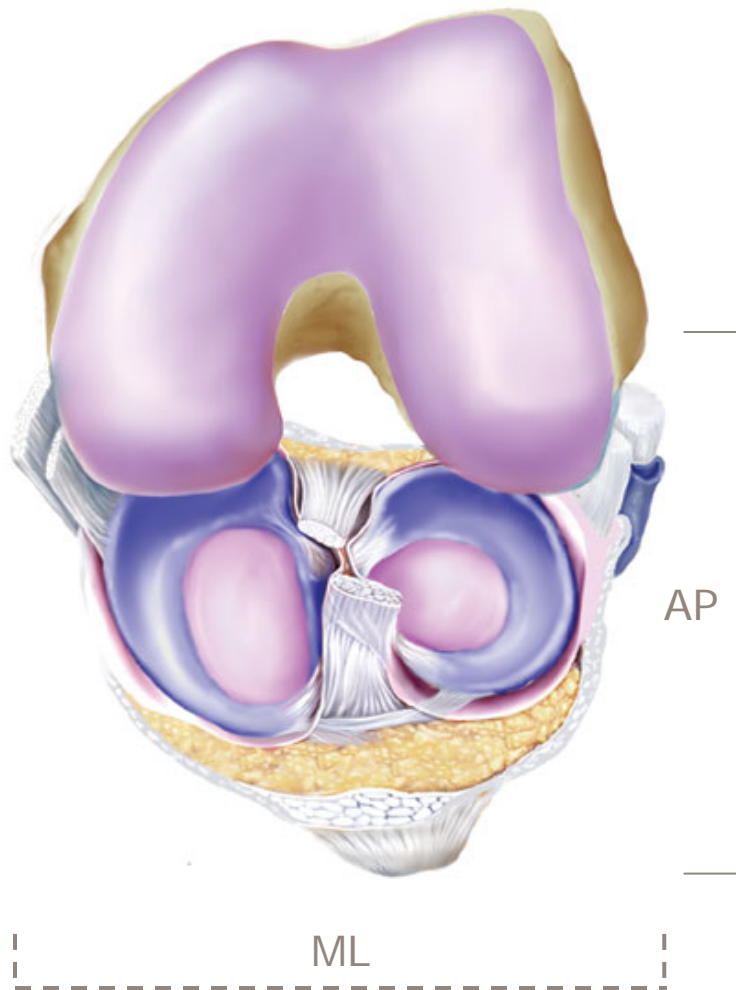


# Anatomy overview

- Women's hips change the angle ("Q angle") at which the femur attaches to the tibia
- Women's knees are more narrow than men's
- The front portion of a female femur is less prominent than a man's femur



# Anatomy – AP:ML ratio



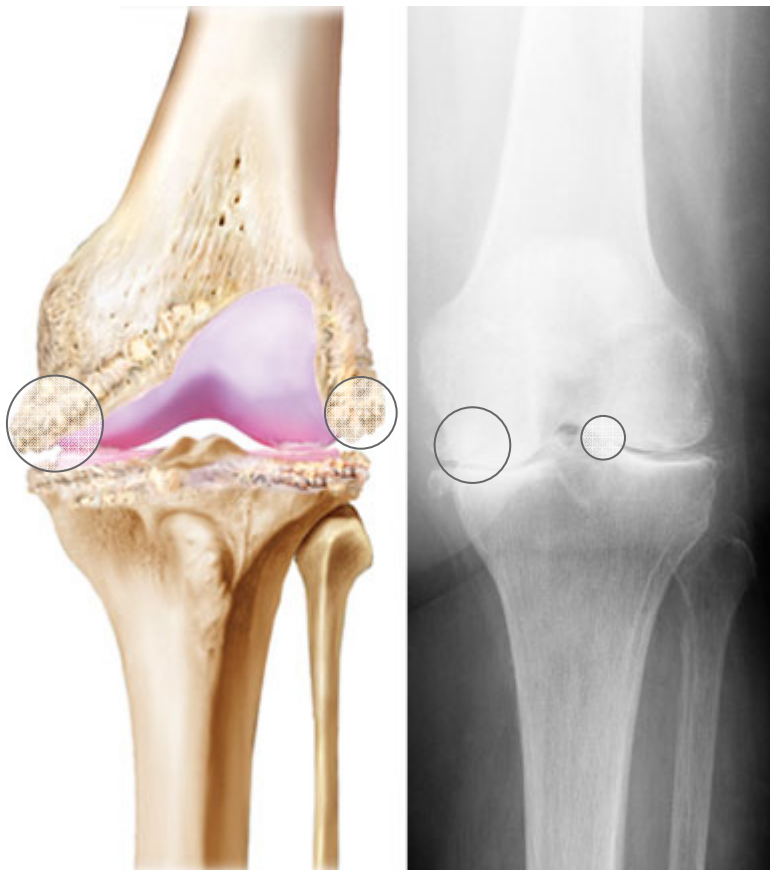
- AP = front to back
- ML = side to side
- Women's knees are narrower than men's knees
- If a man's knee and a woman's knee have the same measurement from front to back (AP), the woman's knee will have a smaller side-to-side (ML) measurement.



## Anatomy – Thinner anterior surface



# Osteoarthritis (OA)



Osteophytes

Bone-on-bone

- “Wear and tear” arthritis
- Knee surfaces become pitted, eroded, uneven... and painful
- Bone spurs, or osteophytes, often form
- In “end stage,” your knees may be bone-on-bone
- The common activities of daily living become limited by extreme pain



# Non-surgical alternatives

- Lifestyle modification
- Exercise and physical therapy
- Anti-inflammatory medication
- Joint fluid therapy (hyaluronic acid)



# Knee replacement procedure



Degenerative knee



Cuts



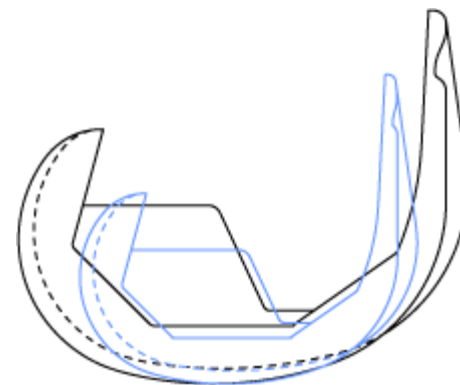
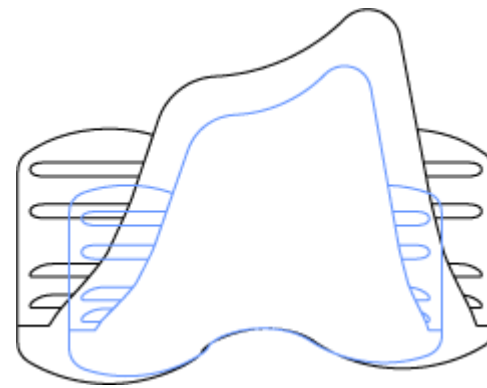
Implant components



Implanted

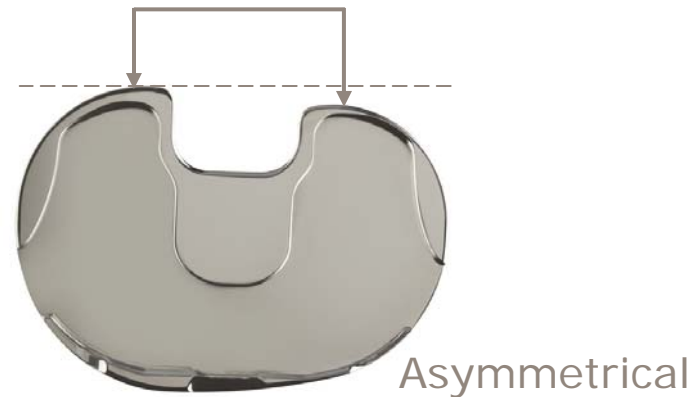
# Journey Implant Size

- Specific sizes have been engineered to match the female anatomy
- 9 to 10 different sizing options to make the right fit
- It would be rare to find a female patient for whom a knee implant was not appropriately sized



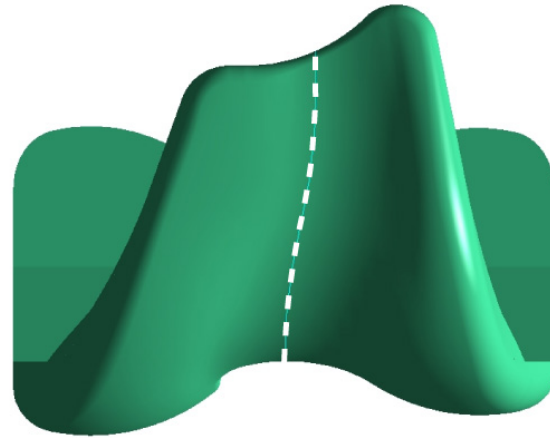
# Journey Implant Shape

- The front portion of the femoral component is thinned to decrease knee pain while bending
- Asymmetric tibial implant matches the natural shape of the prepared tibia



# Feel of the Journey Implant

- Natural “lateralized” track for your kneecap – reduces joint stress and pain
- High-flex system supports up to 155-degrees of knee flexion.



# Longevity of the Journey Implant

- Statistically, women live longer than men – so they should have a long-lasting implant, too!
- A leading cause of premature implant failure is joint wear
- The metal implant “articulates” on the plastic liner between 1 and 2 million times per year in active adults.



# Longevity of the Implant

## OXINIUM\* Oxidized Zirconium

- Zirconium – a biocompatible metal similar to titanium
- The outer surface takes on low-friction ceramic qualities during proprietary heating process
- Retains the full strength of the metal component



Traditional  
implant material

OXINIUM\* material

# Longevity of the Implant

## OXINIUM\* Oxidized Zirconium

- The oxidized surface reduces plastic wear by 85% compared to cobalt chrome knee implants
- May substantially extend the life of the implant and reduce the need for future surgeries
- Safe for patients with metal allergy (virtually no nickel)
- Appropriate for young, physically active patients



# After surgery

- You will undergo a rehabilitation protocol designed to strengthen muscles and maximize flexion; This is vital to your success!
- After physical therapy: Low-impact activities as your bones and muscles adjust to the new stresses (swimming, walking, bicycling)
- You may feel years younger than expected—the excruciating bone-on-bone pain is gone!





## Q&A

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