

A New Hip for a More Active You



**ROSA<sup>®</sup>**  
**ROBOTICS**  
for Hip Replacement



## Have you experienced ...

- Hip pain when walking or climbing stairs
- Difficulty getting in and out of chairs and bathtubs
- Hip stiffness after sitting too long
- Pain that prevents you from sleeping
- Limitations to activities you love due to hip pain

If you've experienced any combination of these symptoms or others and medication and walking aids like a cane aren't delivering enough relief, it may be time to consider hip replacement.



## Why Robotic Hip Replacement

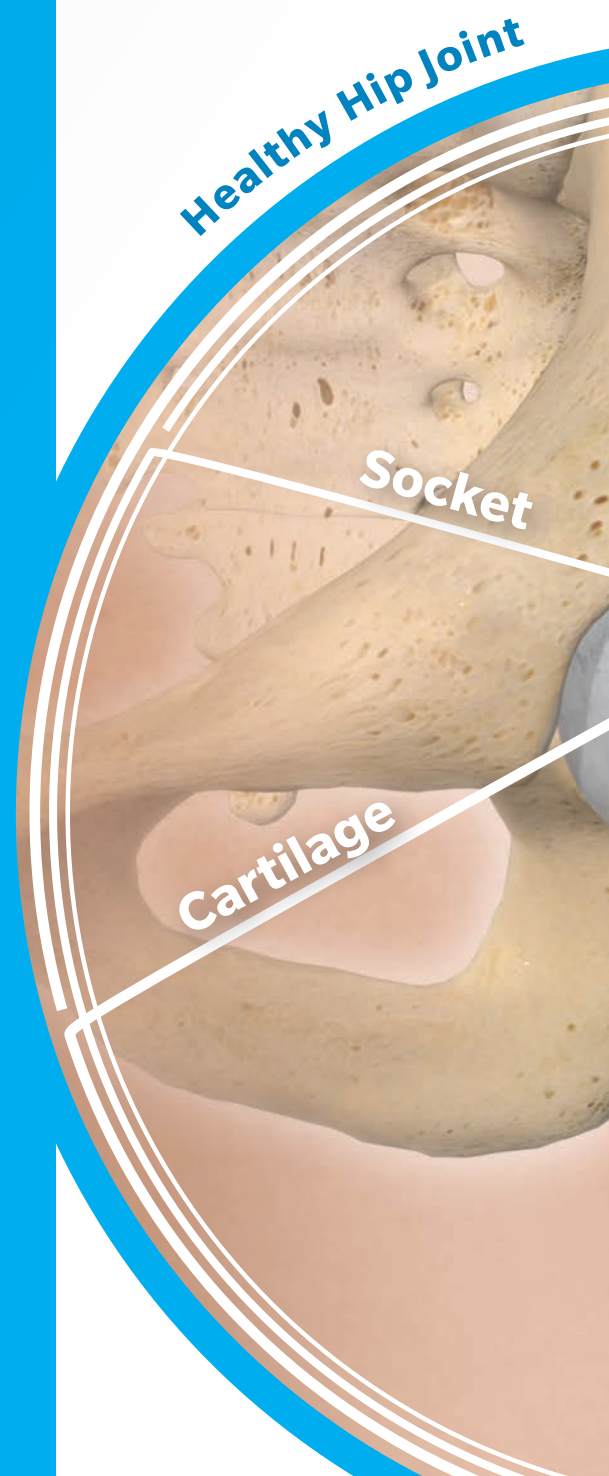
ROSA<sup>®</sup> Hip is a robotic surgical assistant designed to help your specially-trained surgeon tailor the placement of your hip implant just for you. Here, we will explain what makes the ROSA Hip robot unique, what to expect before your surgery, what will happen with the ROSA Hip robot during surgery and what to expect after your surgery.

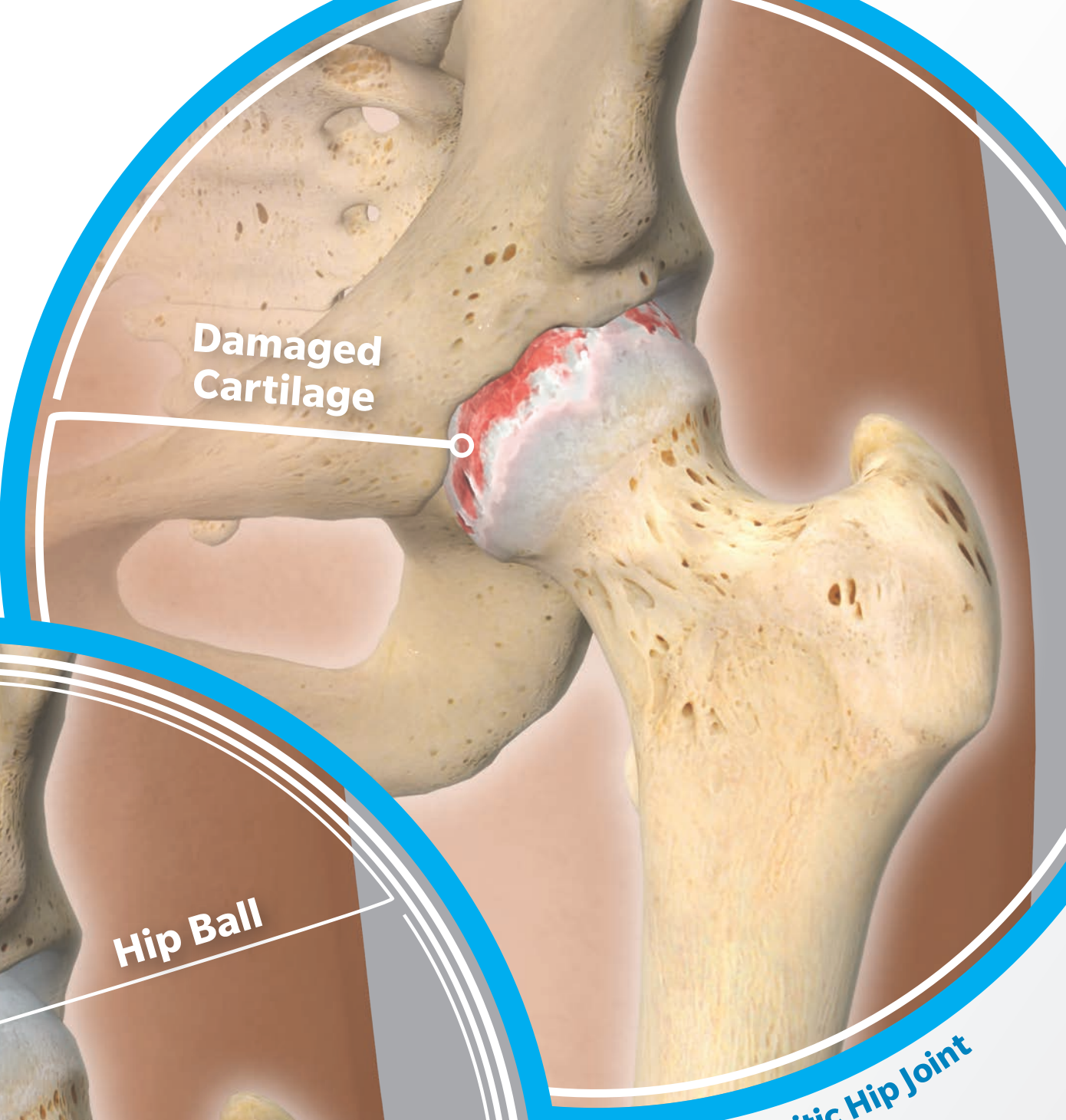


# What's Causing All That Pain? (Hip Arthritis)

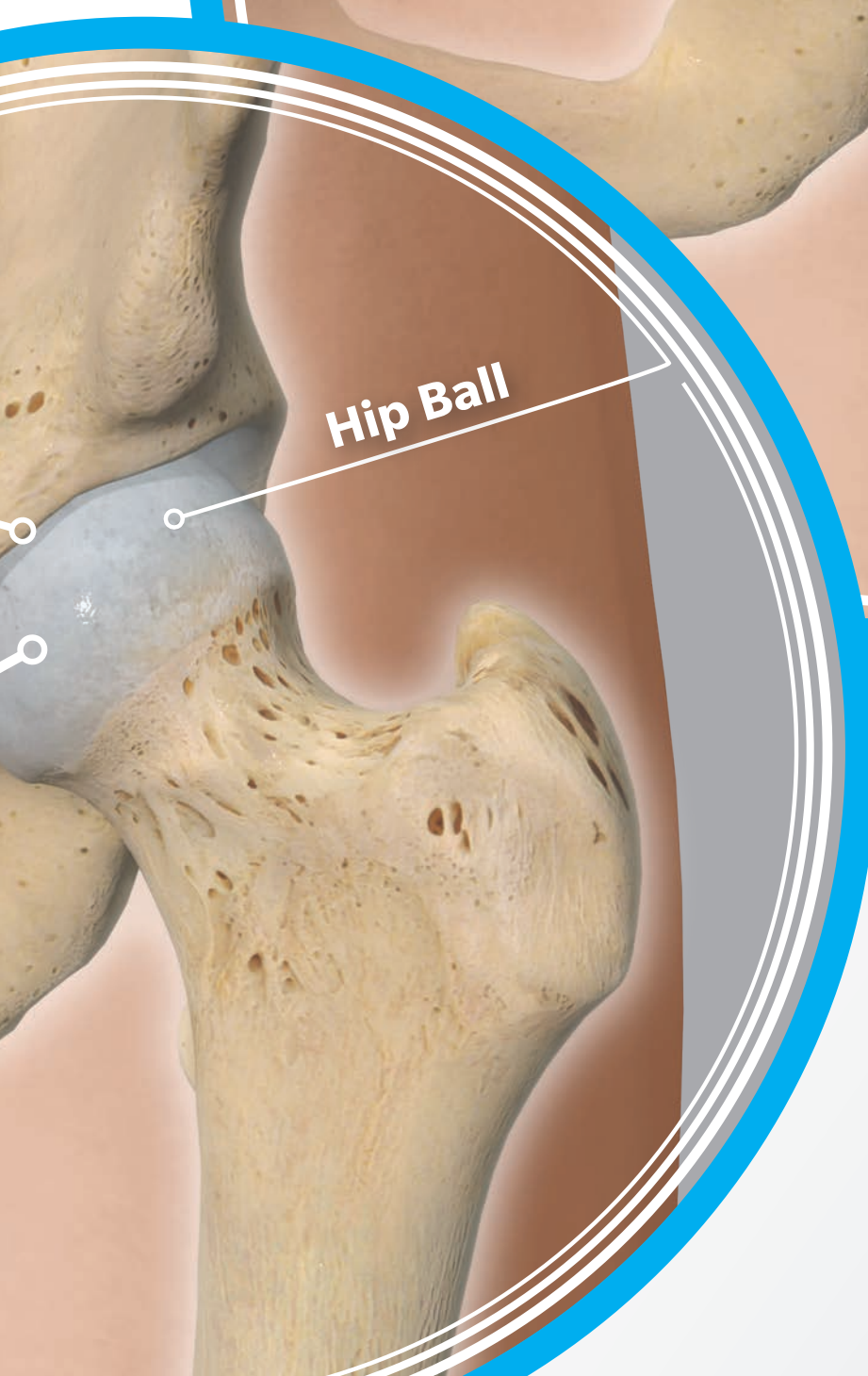
Millions of Americans suffer from some type of arthritis. Osteoarthritis is the most common type and is the leading cause of hip pain.<sup>1</sup> Osteoarthritis occurs when the cartilage around a joint (in this case, the hip) gets worn away, resulting in bone-on-bone grinding. Pain and inflammation are caused by your bones rubbing against each other, which can make basic actions like walking, sitting, or even laying down difficult.

Other causes of hip pain include rheumatoid arthritis, osteonecrosis (death of bone caused by insufficient blood supply), injury and bone tumors.





**Damaged  
Cartilage**



**Hip Ball**

## **Arthritic Hip Joint**

### **What risks are involved?**

It is important to understand the risks involved. There are potential complications both during and after surgery. Generally, these include infection, blood clots, pneumonia, implant loosening, nerve damage, bone fracture and implant breakage; any of which can require additional surgery. While joint replacement is generally successful in lowering pain levels and increasing mobility, some patients will continue to experience pain and your doctor may permanently restrict certain activities that could damage and wear out your new hip parts. Ask your doctor to explain other surgery risks.

# How ROSA Hip Technology Works

## Before surgery

Prior to surgery, you'll get a series of X-rays done, which will help your surgeon create a personal plan for your surgery. Your personalized plan plus data collected during your surgery will provide immediate feedback to your surgeon, resulting in a surgery completely customized to you.



## During surgery

The surgical procedure using the ROSA Hip robot is similar to conventional hip replacement, but with a robotic assistant. Your surgeon has been specially-trained to use the ROSA Hip robot to personalize the surgical approach for your unique anatomy. It's important to understand that the robot does not operate on its own. Your surgeon is in the operating room the entire time and is making all of the decisions throughout your surgery.

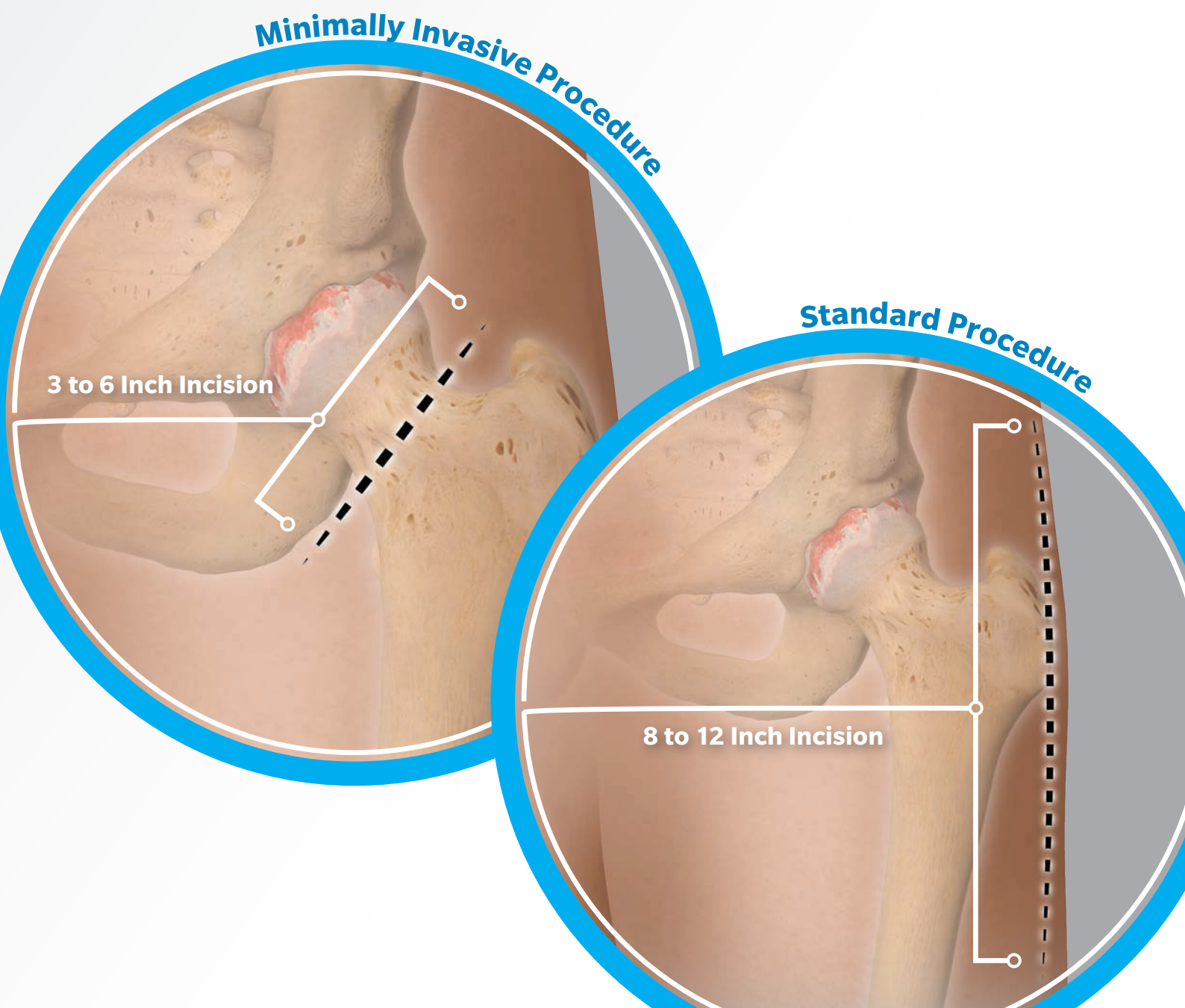
During your procedure, your surgeon will take several X-rays, which the robot will use to provide real-time data to your surgeon. This information, combined with your surgeon's skill, helps him/her know how to position your implant based on your unique anatomy.



# The Minimally Invasive Hip Procedure Difference

ROSA Hip is a minimally invasive hip procedure using a 3 to 6 inch incision<sup>2</sup> on the front of your leg, compared to an 8 to 12 inch incision<sup>3</sup> on the side or back of your leg with a conventional hip replacement procedure. This minimally invasive hip procedure is called Anterior Supine. It allows your surgeon to have an optimized view of your hip joint during surgery.

This procedure also allows your surgeon to preserve the tissue that keeps your joint tight, which reduces the risk of dislocation<sup>4</sup> after surgery. Dislocation occurs when your hip comes out of the socket.





## Benefits of Minimally Invasive Robotic Hip Replacement

Every patient's surgical experience may differ, but the minimally invasive, Anterior Supine Hip Procedure with the ROSA Hip robot is designed to:



Accelerate recovery time and reduce pain due to minimal trauma to muscles, tendons and nerves.<sup>4</sup>



Reduce scarring from the use of a smaller incision.



More rapid stability of the hip, because muscles are not disrupted during the procedure.<sup>4</sup>



Less radiation exposure as a CT Scan is not required.

## After surgery

Following surgery, you may be hospitalized based upon the recovery plan your surgeon decides is best for you. Upon returning home you will need to continue taking your regular medications and exercising as directed by your surgeon or physical therapist. Walking, remaining active and practicing the required exercises are the quickest ways to full recovery.

Recovery time varies, but most people should be able to drive after two weeks, garden after three to four weeks, and golf after six to eight weeks. Your surgeon will tell you when and what activities you can return to and what activities to avoid.

Results are not necessarily typical, indicative, or representative of all recipient patients. Results will vary due to health, weight, activity and other variables.



## The decision to have surgery is sometimes difficult.

We hope this has helped you understand the ROSA Hip robot so you can make the best decision for yourself. This information is not intended to replace the experience and counsel of your orthopedic surgeon. If you have any further questions, please speak with your orthopedic surgeon.





To learn more about Zimmer Biomet joint replacements, obtain helpful information for patients and caregivers, or for assistance in finding a surgeon familiar with our products and surgical techniques, **call 800-447-5633 or visit [zimmerbiomet.com](https://www.zimmerbiomet.com).**

**Important Note:** This is intended to provide an overview of hip replacement surgery and should be reviewed with your doctor. It does not include all of the information needed to determine eligibility for hip replacement or for the proper use and care of artificial hip replacements. Please consult your surgeon for more information. Information may also be obtained by calling the toll-free number or visiting the website. The toll-free number can also be used to obtain complete product contraindications, warnings, precautions, and possible adverse effects. Individual results may vary. Your results will depend on your personal circumstances. How long a hip replacement will last varies from patient to patient. It depends on many factors, such as the patient's physical condition, activity level and body weight, and the surgical technique. The people shown are not actual patients.

This device is available only on the order of a physician.

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#### References

1. National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). How CDC Improves Quality of Life for People with Arthritis. <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/arthritis.htm#:~:text=In%20the%20United%20States%2C%202023,arthritis%20report%20severe%20joint%20pain>
2. OrthoInfo. Minimally Invasive Total Hip Replacement. <https://orthoinfo.aaos.org/en/treatment/minimally-invasive-total-hip-replacement/#:~:text=In%20this%20type%20of%20minimally,the%20outside%20of%20the%20hip>
3. OrthoONE. Anterior Hip Replacement. <https://orthoonedenver.com/service/anterior-hip-replacement>
4. Ozaki, Yu, *et al.* Posterior Versus Direct Anterior Approach in Total Hip Arthroplasty. SICOT-J (2018) 4, 54

