

ANTERIOR ADVANTAGE™

Anterior Approach Solution to
Hip Replacement



Johnson & Johnson
MedTech



ANTERIOR ADVANTAGE™ Hip Replacement helped Jeannette get back to the outdoor activities she loves

Take action against your hip pain

If you have experienced hip pain, chances are you have probably told yourself it is just part of getting older. If other treatments simply aren't working and you frequently have hip pain that keeps you from getting a restful night's sleep, walking up stairs and doing the activities that you enjoy, the ANTERIOR ADVANTAGE™ Hip Replacement Surgery may be an option.

In this brochure, you will learn about the ANTERIOR ADVANTAGE Hip Replacement, a leading solution for Anterior Approach Hip Replacement Surgery, and the potential benefits of this procedure.

Congratulations on taking the first step toward a life with less pain by learning about your treatment options.

Potential benefits of hip replacement

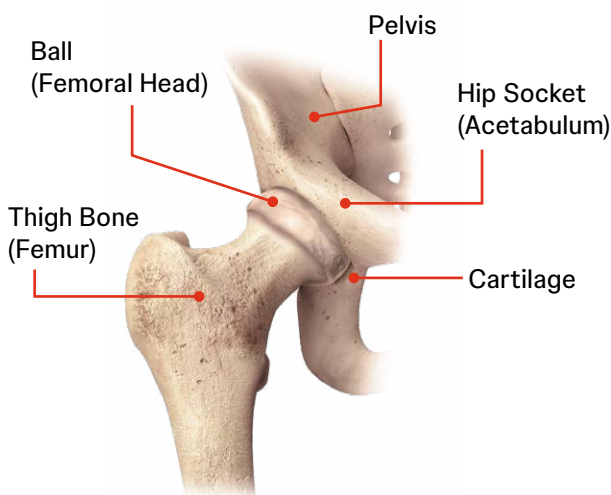
Hip replacement is one of the most successful surgeries today, with 89% of patients reporting overall satisfaction.¹ Studies have also shown that 96% of hip implants still function 10 years post-surgery.² One of the most common surgeries in the U.S., over 540,000 hip replacements are performed annually. This number continues to grow as our population ages.³

Potential benefits of a total hip replacement may include:⁴

- Pain relief
- Improved mobility
- More freedom to pursue everyday activities, such as walking and climbing stairs

Hip anatomy

A joint is a point where multiple bones meet and work together so that you can perform daily tasks like sit, climb stairs, walk comfortably, etc. The hip joint is described as being a “ball and socket” joint due to the joint’s appearance of a ball (femoral head) fitting snugly in a cup-like socket (acetabulum). The ball (femoral head) is located at the top of the thigh bone (femur) and the socket (acetabulum) is part of the pelvis. The area where the bones meet is covered by a slick but firm tissue called cartilage, allowing the joint to move smoothly.

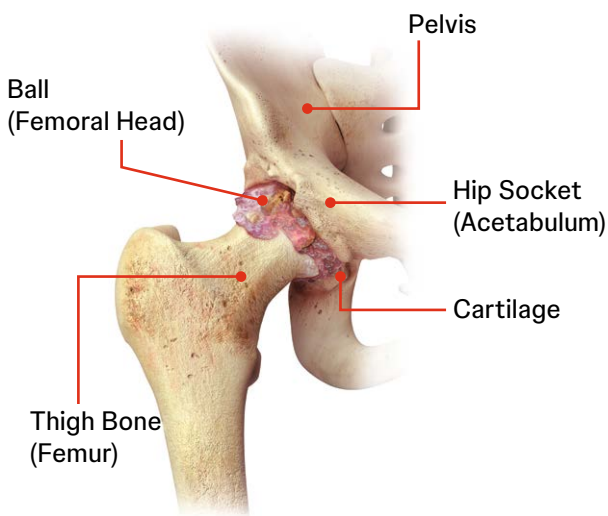


Healthy hip

Arthritis of the hip

Arthritis is the leading cause of disability in the United States, and the most frequent cause of discomfort and chronic hip pain. In fact, it's estimated that 1 in 4 people in the United States has arthritis, and 75% are under the age of 65.⁵

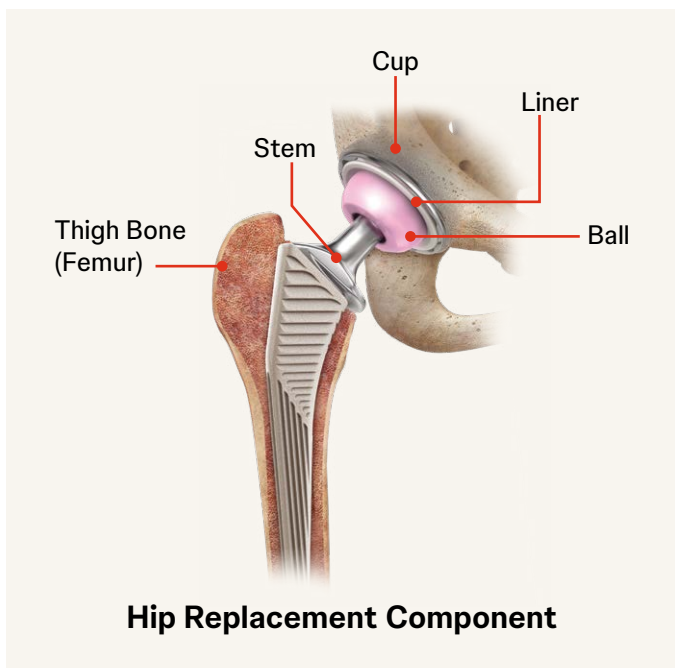
Arthritis is a disease which involves the wearing away of the normal smooth joint surfaces. This results in bone-on-bone contact, producing pain and stiffness. Even though there is no cure for arthritis, treatments like hip replacement allow patients to enjoy their lives with less pain and better mobility.



Osteoarthritic hip

Hip replacement overview

All total hip replacements have the same goal: remove the portions of damaged hip joint and replace them with an implant. The implant used is made up of several different components. The individual components are available in many different sizes and materials so that your surgeon can decide which options will be the best fit for your individual needs.



Stem: Inserted into the thigh bone (femur) and anchors the implant in place

Ball: Attaches to the stem and recreates the ball (femoral head)

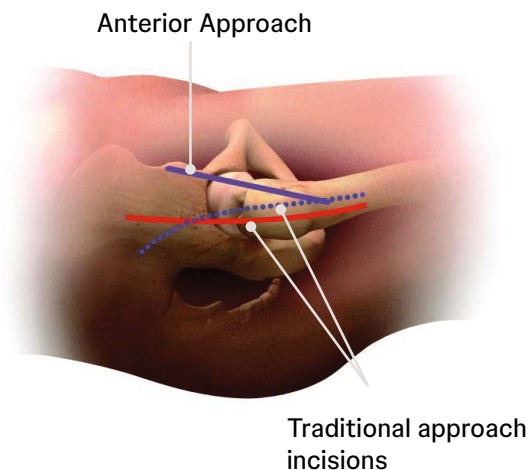
Liner: Works like the smooth cartilage and allows the new ball (femoral head) to glide and rotate

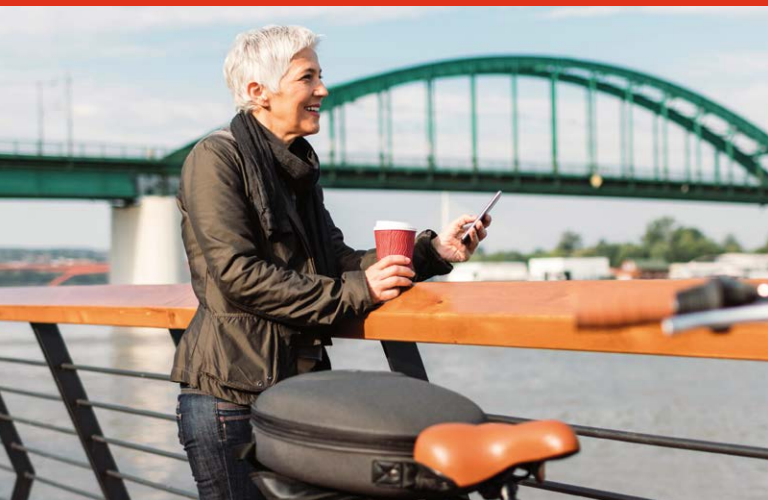
Cup: Works like the hip socket (acetabulum) and is attached to the pelvis

What is the Anterior Approach?

The surgical approach, also known as the surgical technique, is how the surgeon makes their incision to operate on the bones that make up the hip joint. Many surgeons use what is called a traditional or posterior approach (incision through the back of the hip), while an increasing number of surgeons are using an Anterior Approach (incision through the front of the hip).⁶⁻⁸ The Anterior Approach has become increasingly popular over the years because of its potential for a quicker recovery with less pain and a faster return to normal activities compared to traditional hip replacement approaches.⁶⁻¹¹

Unlike a traditional approach where the muscles are cut, the Anterior Approach gives the surgeon the option to work between the muscles keeping them intact. Muscle sparing may allow for shorter recovery, less pain, a shorter hospital stay and fewer post-operative restrictions.⁷





ANTERIOR ADVANTAGE™ Hip Replacement

ANTERIOR ADVANTAGE Hip Replacement utilizes industry-leading Johnson & Johnson MedTech hip implants² that are designed specifically for muscle-sparing techniques like the Anterior Approach and to act much like a natural hip, recreating smooth movement, increasing the joint's stability and reducing pain. The J&J MedTech implants used with the ANTERIOR ADVANTAGE Hip Replacement solution have demonstrated positive patient outcomes and survivorship of 99.6% (99.1, 99.8) at 4 years.^{9,12,13}

Potential benefits of ANTERIOR ADVANTAGE Hip Replacement versus traditional approaches:

- Spend less time in the hospital⁶⁻⁹
- Have a faster recovery⁶⁻⁸
- Experience less pain^{6,7,10}
- Use less narcotics to relieve pain after surgery^{6,8,10}

ANTERIOR ADVANTAGE Hip Replacement Surgery may help you get back to living your life.^{7,8}

Did you know?

Shorter hospital stay

ANTERIOR ADVANTAGE Hip Replacement patients spent almost one less day in the hospital compared to posterior approach patients.*^{6,7,9}

Proven reduced recovery time

Scientific data supports that ANTERIOR ADVANTAGE Hip Replacement patients spend less time in recovery facilities and return to daily activity faster than patients who underwent traditional hip approaches.**⁶⁻⁹

Back to daily activities quicker

ANTERIOR ADVANTAGE Hip Replacement can help you perform daily activities earlier in your recovery. This means that you may have more freedom to walk without support, climb stairs, and put on your own socks and shoes, compared to patients who underwent another approach. †. ‡.^{6,7}

Reduced pain

When compared to posterior approach patients, ANTERIOR ADVANTAGE Hip Replacement patients have reported less pain at day one and week two post-operatively.^{6,7}

Reducing the use of narcotics

Compared to posterior approach patients, ANTERIOR ADVANTAGE Hip Replacement patients consume less narcotics in the first three days after surgery and are less likely to be using narcotics for pain control at 2- and 6-weeks follow-up.*^{6,8}

* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

** Obtained from retrospective data analysis without specific focus on implant type.

† Data derived from single-surgeon studies.

‡ Every patient and every surgery is different. Recovery depends on many factors. It is important to discuss your recovery with your surgeon

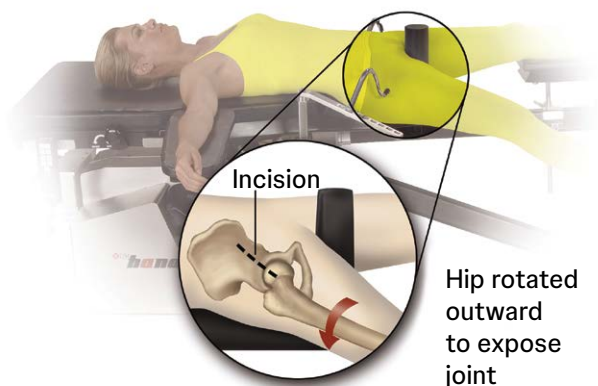
Advanced technologies

The ANTERIOR ADVANTAGE Hip Replacement solution is also supported by a number of advanced technologies designed to help optimize your surgical experience.

In an ANTERIOR ADVANTAGE Total Hip Replacement, both an orthopaedic table (called a Hana® Table) and a “C” shaped x-ray machine (also called a C-arm) may be used. The orthopaedic table allows the surgeon to better access the hip joint and gives them the ability to better align and position the implant. The C-arm allows surgeons to visualize that the implant is placed properly while the patient is still in the operating room rather than waiting for a post-operative x-ray to confirm implant placement.

In addition, only ANTERIOR ADVANTAGE Hip Replacement Solution is supported by exclusive tools and technologies like the KINCISE™ Surgical Automated System, a surgical device that enables your surgeon to automate key steps in a hip replacement surgery, and VELYS™ Hip Navigation, which aids in implant placement.

These technologies, along with the ANTERIOR ADVANTAGE Training Curriculum for Surgeons, help facilitate your hip replacement surgery.



Improved Surgical Access

Things to consider with your surgeon before an ANTERIOR ADVANTAGE Hip Replacement

- Am I a candidate for the ANTERIOR ADVANTAGE Hip Replacement?
- What are the other hip replacement techniques and technologies available? How do they compare to ANTERIOR ADVANTAGE Hip Replacement?
- What are the benefits and risks of ANTERIOR ADVANTAGE Hip Replacement Surgery?
- How long will it take to recover and rehabilitate from an ANTERIOR ADVANTAGE Hip Replacement Surgery?
- What is my role in recovery and rehabilitation?
- If I choose to undergo an ANTERIOR ADVANTAGE Hip Replacement Surgery, when will I be able to resume daily activities?

Preparing for surgery

To prepare for surgery you may need to:

- Visit your family doctor for a check-up to ensure you are healthy enough for surgery
- Compile a list for your surgeon of all your medications, including over-the-counter medications and supplements
- Quit smoking for at least two weeks prior to surgery (if you currently smoke)
- Lose weight (based on your surgeon's directions)
- Prepare your home for your return from the hospital
- Discuss your recovery with relatives and friends who may be caring for you after you leave the hospital

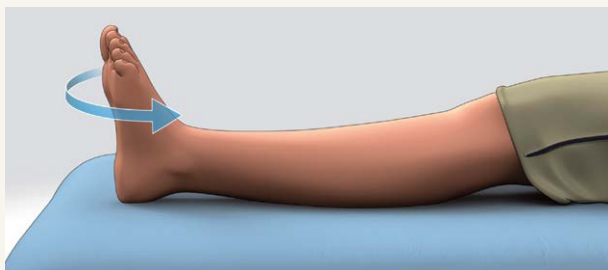
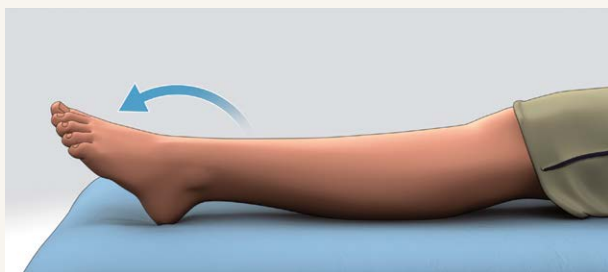
Hospital stay

The hospital stay following ANTERIOR ADVANTAGE Hip Replacement Surgery varies. Your hip rehabilitation will begin as ordered by your surgeon. A physical therapist may instruct you to:

- Begin isometric exercises (tighten muscles without moving the joint) a number of times per day while you are still in bed
- Move your ankle and other joints
- Understand the do's and don'ts of joint replacement recovery

The therapist will teach you how to dress, get out of bed without help, and use a walker or crutches. Walking and exercise will quickly follow.

The typical hospital stay for THR surgery varies. Some patient stays will be longer or shorter depending on the patient's specific situation.



One example of an ankle-pumping exercise

Preparing to go home

Just before being discharged, you will receive instructions for your at-home recovery. You will continue to strengthen yourself in preparation for your return home.

It is important that you follow your doctor's directions and proper positioning techniques throughout your rehabilitation. By the time you leave the hospital, you should be progressing well in regaining your mobility and stability.

Returning home

Once you return home, it is still important to continue rehabilitation as instructed by your doctor and physical therapist.

The goals of rehabilitation are to:

- Improve your muscle strength
- Increase the movement in your new hip joint
- Protect your new hip joint
- Help you resume most of your normal activities

Rehabilitation takes time and commitment. Each person is different, and the length of recovery is dependent on your particular situation, overall health and your rehabilitation. When your surgeon feels you are ready, you should be able to resume some, if not most, of your daily activities.

Resuming activities

After undergoing hip replacement surgery, it is important you have realistic expectations about the types of activities you may participate in during your recovery phase. These activities may include:

- Driving
- Sexual Activity
- Leisure and Sport Activities
- Work Activities

Activities that may cause high-impact stress on the implant should be avoided.

Your questions answered

Here are some common questions people have about hip replacement surgery, rehabilitation and recovery.

Q. Am I a candidate for ANTERIOR ADVANTAGE Hip Replacement Surgery?

A. Your orthopaedic surgeon will determine if you are a candidate for ANTERIOR ADVANTAGE Hip Replacement.

Q. How common is hip replacement?

A. Hip replacement is regarded as one of the most prevalent surgical procedures in the United States, with more than 540,000 cases performed each year.

Q. Is the ANTERIOR ADVANTAGE Hip Replacement Procedure (a solution for Anterior Approach) considered a “new” or “experimental” procedure?

A. No, the Anterior Approach procedure was originally pioneered in the 1940's by Robert Judet. The technique remained in Europe for several decades, and was brought to the United States by Dr. Joel Matta in 1996. Through collaboration with Johnson & Johnson MedTech, Dr. Matta is known as the modern day pioneer who has worked to expand the technique's adoption through a comprehensive education program.

Q. How many surgeons currently perform the Anterior Approach procedure?

A. The adoption of the Anterior Approach has grown in the U.S. In a survey of almost 1000 surgeons, 56% use the Anterior Approach.¹⁴ Surgeons may choose to use this approach due to its less invasive nature and potential for faster recovery.

Q. Am I too young for hip replacement?

A. Hip replacement is related to need, not age. Total hip replacement surgery is considered to be an effective procedure that can help patients resume a more active lifestyle.

Q. How do I know if I'm ready for hip replacement?

A. Only your orthopaedic surgeon can decide if hip replacement is the appropriate treatment for you. Your doctor will assess your situation and discuss the various treatment options available. He or she will explain the risks and benefits so that you, together with your doctor, can make an informed decision about your future course of treatment.

Q. Do I need to take any precautions before future medical procedures?

A. From now on, you must inform any doctors, including dentists, treating you that you have undergone hip replacement surgery. More than likely, antibiotics will be prescribed before a procedure to avoid infection.

Q. I live by myself. To whom can I turn for help during recovery and rehabilitation?

A. You will likely need assistance with your daily activities for several days to a few weeks following your hip replacement surgery. If family members or friends are unable to assist you, ask your surgeon about being admitted to a rehabilitation facility for at least a few days following your surgery so you can get the assistance you need.

Q. How can I help protect my new hip implant?

A. Hip replacements are designed for the normal activities of daily living. Avoiding trauma and high impact activities are helpful in caring for your new hip implant.

For caregivers

One of the important ways to support your loved one is to help him or her receive the best medical care by acting as their patient advocate. This means asking questions when you don't understand something, educating yourself, being an active member of your loved one's care team and seeking guidance from qualified medical professionals. This is especially important when your loved one is not able to communicate with their health care providers on their own.

While a caregiver may not have a medical or healthcare background, his or her day-to-day experiences with a loved one can provide critical information, so it is important to stay involved. Your healthcare professional may rely on this information in order to care for your loved one.



Communicating with health care providers

Avoid communication barriers

- Talk about how your loved one communicates his/her feelings and concerns-physically, verbally, and emotionally
- Ask questions when you or your loved one have them and make sure you fully understand the information being given to you or the patient

Feel comfortable with the staff

- Make sure doctors and staff listen to the patient's concerns and provide answers to any questions
- See if care options can be adapted to fit within your loved one's religious or cultural beliefs

Stay involved

- Talk about which family member(s) should be included in discussions about the patient's condition/disease and subsequent treatment
- Talk about whether the patient prefers to discuss his/her diagnoses, test results, and treatment options with or without another family member present

Additional resources

The website links below have additional information on treatment options for hip pain including rehabilitation, finding a surgeon in your area, and patients who overcame their hip pain.

www.MyANTERIORADVANTAGEHip.com



About Johnson & Johnson MedTech

Orthopaedic Solutions from
Johnson & Johnson MedTech

Across Johnson & Johnson, we are tackling the world's most complex and pervasive health challenges. In Orthopaedics, we are on a mission to keep people moving by leveraging our deep expertise in joint reconstruction, robotics and enabling tech, spine, sports, trauma, and extremities, to develop the next generation of medtech solutions. We offer one of the most comprehensive Orthopaedics portfolios in the world that helps heal and restore movement for the millions of patients we serve.

Important safety information

As with any medical treatment, individual results may vary. The performance of knee replacements depends on your age, weight, activity level, and other factors. There are potential risks, and recovery takes time. People with conditions limiting rehabilitation should not have this surgery. Only an orthopaedic surgeon can determine if knee replacement is right for you.

Results of surgery are contingent upon the proficiency and expertise of the performing surgeon. Variations may occur based on individual surgical skills and experience.

Important Information: Prior to use, refer to the instructions for use supplied with the device(s) for indications, contraindications, side effects, warnings and precautions.

Dr. Matta is a consultant for Johnson & Johnson MedTech, and receives royalties as the designer of the Hana® and PROfx® tables which are manufactured by Mizuho OSI. This brochure was written in consultation with Joel Matta, MD & David Dodgin, MD. Image of Hana® surgical table courtesy of Mizuho OSI. Hana® is a trademark of Mizuho OSI.

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References:

1. American Association of Hip and Knee Surgeons website. <https://hipknee.aahks.org/how-to-get-the-most-out-of-your-joint-replacement/> Accessed August 6, 2024.
2. NJR National Joint Registry for England, Wales, Northern Ireland and the Isle of Man, 20th Annual Report, 2023. Available from <https://reports.njrcentre.org.uk/>
3. American College of Rheumatology Web site. <https://rheumatology.org/patients/joint-replacement-surgery> Accessed August 6, 2024.
4. OrthoInfo by the American Academy of Orthopaedic Surgeons. <https://orthoinfo.aaos.org/en/treatment/total-hip-replacement> Accessed August 6, 2024.
5. Arthritis Foundation. Arthritis By The Numbers: Book of Trusted Facts & Figures 2020. Arthritis Foundation; 2020. <https://www.arthritis.org/getmedia/73a9f02d-7f91-4084-91c3-0ed0b11c5814/abtn-2020-final.pdf>. Accessed September 2024.
6. Zawadsky MW, Paulus MC, Murray PJ, Johansen MA. Early outcome comparison between the direct anterior approach and the mini-incision posterior approach for primary total hip arthroplasty: 150 consecutive cases. *J Arthroplasty*. 2014;29(6):1256-1260. doi:10.1016/j.arth.2013.11.013
7. Barrett WP, Turner SE, Leopold JP. Prospective randomized study of direct anterior vs postero-lateral approach for total hip arthroplasty. *J Arthroplasty*. 2013;28(9):1634-1638. doi:10.1016/j.arth.2013.01.034
8. Schweppe ML, Seyler TM, Plate JF, Swenson RD, Lang JE. Does surgical approach in total hip arthroplasty affect rehabilitation, discharge disposition, and readmission rate?. *Surg Technol Int*. 2013;23:219-227.
9. Kamath AF, Chitnis AS, Holy C, et al. Medical resource utilization and costs for total hip arthroplasty: benchmarking an anterior approach technique in the Medicare population. *J Med Econ*. 2018;21(2):218-224. doi:10.1080/13696998.2017.1393428
10. Miller LE, Gondusky JS, Bhattacharyya S, Kamath AF, Boettner F, Wright J. Does Surgical Approach Affect Outcomes in Total Hip Arthroplasty Through 90 Days of Follow-Up? A Systematic Review With Meta-Analysis. *J Arthroplasty*. 2018;33(4):1296-1302. doi:10.1016/j.arth.2017.11.011
11. Moore ML, Brinkman JC, Pollock JR, Deckey DG, Makovicka JL, Bingham JS. Patients are Most Interested in Which Hip Arthroplasty Approach? A 15-year Google Trends Analysis. *Arthroplast Today*. 2022;17:192-197. Published 2022 Sep 21. doi:10.1016/j.artd.2022.07.017
12. Hunter M, Irving J, Barrett W, et al. Low Early Complication Rate and High 4-year Survivorship Following Implantation of a New Femoral Stem Design: A Multi-center Registry Review. Poster Presented at EFORT 2022; June 2022; Lisbon, Portugal.
13. Suarez j, Peaguda C, Osondu C, et. al. Low Risk of Fracture using a Cementless Triple-Tapered Collared Femoral Stem with Automated Impaction in Direct Anterior Approach Total Hip Arthroplasty. Poster Presented at AAOS 2023; Mar 2023; Las Vegas, NV.
14. Patel NN, Shah JA, & Erens GA. (2019). Current Trends in Clinical Practice for the Direct Anterior Approach Total Hip Arthroplasty. *The Journal of Arthroplasty*. doi:10.1016/j.arth.2019.04.025

Please note: Anterior Approach cannot be used with ceramic-on-ceramic articulations.

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