

Understanding Hair Loss and the ARTAS<sup>™</sup> Robotic Procedure

THE WORLD'S ONLY Robotic hair restoration procedure



# **Understanding Hair Loss**

Hair loss is a common condition that affects people of all ages. Statistics show that world-wide, over 1.2 billion men suffer from hereditary baldness.<sup>1,2</sup> This condition may impact a man's self esteem and confidence.<sup>3</sup>

If you are noticing that your hairline is receding, thinning, or you are seeing more hair than usual in the shower drain, you may be wondering about permanent options to treat your hair loss.

## Why Am I Losing My Hair?

Hair loss is a significant concern for many men. There are clear causes linked to genetics, aging, and medication. Other influences may include physical or emotional stress, thyroid problems, skin infections, and hormones.

Balding can begin as early as puberty, but usually takes place later in life. Contrary to popular belief, your maternal grandfather's balding history is not a clear indicator of what will happen to your hair. Genes are passed down from your mother and father, but even if there is no evidence of hair loss on either side of the family, you can still lose your hair.





## ARTAS, the First and Only Robotic Hair Restoration System

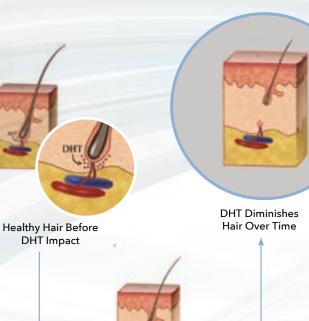
This FDA-cleared, physician-assisted technology provides permanent, natural-looking results without the plugs, pain, and stitches associated with traditional hair transplants, like strip surgery.

This minimally invasive procedure does not leave a linear scar, so you have the freedom to cut and style your hair the way you like.

# Why Is My Hair Thinning?

More than 95% of hair thinning in men is attributed to Androgenic Alopecia, also known as male pattern baldness. This common hereditary condition results when hair follicles at the top and front of the head become sensitive to the hormone dihydrotestosterone (DHT).<sup>1</sup>

Over time, hair becomes thinner, deteriorates, or eventually stops growing. Healthy hair follicles that are resistant to DHT usually remain around the sides and back of the head, but may become weaker and finer.







If you are experiencing hair loss, you are probably wondering how much you could lose? What you can expect to look like in several years and will you like how you look?

For men, hair usually begins to recede at the forehead or the crown. The question then becomes how much hair loss should you be concerned with and which treatments can help?

The average person sheds anywhere from 50 to 100 hairs a day, an undetectable amount compared to the roughly 100,000 hairs on your head.<sup>4</sup> If you suddenly notice a significant amount of hair being left in your comb or on your pillow, it may be the first sign of balding.

# **Rate Yourself! Where Are You Now?**<sup>5</sup>



## **ARTAS Robotic Hair Restoration System**

The ARTAS Robotic Hair Restoration System was designed with you, the patient, in mind. Developed by leading hair restoration physicians and researchers, this state-of-the-art technology eliminates the guesswork, fatigue, scarring, complications, and downtime associated with hand-held methods and other invasive procedures.

With the ARTAS Robotic Procedure, long incisions and stitches are not required, making your hair restoration procedure virtually undetectable. Patients can expect clinically proven results without the side effects and long recovery time common with older procedures.



# Donor Area Analysis

**ARTAS Procedure Before and After** 





1 Month Post-ARTAS\*\*

Strip Surgery vs ARTAS



Before ARTAS

NOT ARTAS Procedure Leaves Large Linear Scar

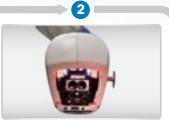


Post ARTAS Procedure <u>NO</u> Large Painful Scar

# **ARTAS Procedure - How It Works**



During your consultation, your physician will use the ARTAS Hair Studio<sup>TM</sup> technology to create your customized hair restoration solution as a 3D model. Your physician will demonstrate your simulated results, showing the number of grafts needed and the optimal hairline design to meet your expectations.



The high definition stereoscopic vision system utilizes ARTAS ArtTificial Intelligence<sup>TM</sup> algorithms to identify and select the best hair follicles for harvesting.



Hair is intelligently harvested with robotic precision to preserve the natural look of your donor area. The ARTAS System provides robotic speed and accuracy unmatched by hand-held techniques.



A customized hairline is designed with the ARTAS System's Recipient Site Making technology under physician supervision. This creates optimal site distribution for harvested hair follicles that avoids damaging healthy hair.



Your hair is then transplanted into thinning areas.



Noticeably thicker and permanent hair growth starts around six months with continued growth over time.<sup> $\dagger$ </sup>

<sup>†</sup>Actual results may vary

# **How Will You Look?**

The ARTAS Hair Studio technology is a photograph-based 3D simulation of your potential procedure results. During your consultation, your physician will design your customized hairline to illustrate different options while showing you various graft counts and hair distribution.



ARTAS Hair Studio: Customized Hairline Design





Simulation of 2,600 Grafts

# **ARTAS Robotic Harvesting**

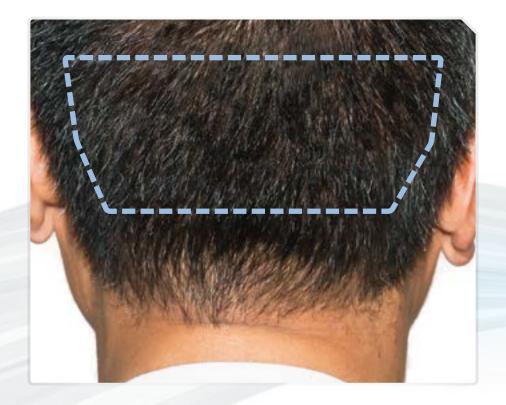
Robotic harvesting is a proprietary hair restoration advancement only available with the ARTAS System. ARTAS Artificial Intelligence algorithms are used to identify and select the best hair follicles for harvesting, while maintaining the appearance of your donor area – all under the control of your physician. Traditional hair transplant procedures cannot offer these highly sophisticated technological advancements.



# **ARTAS Procedure Patient Benefits**

- Best in class outcomes
- Natural & permanent results
- No linear scar / no plugs
- Less pain
- Minimal downtime

# **Your Donor Area**



It is critical to consider the area where hair is being harvested from your head. The back and sides of your head are referred to as the donor area and consist of hair not affected by male pattern baldness. This is permanent hair and when transplanted to your balding areas, continues to grow as it did before.

Your donor area is just as important as your transplant area. Other procedures will cause a long scar or patchy look in the donor area. This undesirable side effect of non-robotic procedures is a giveaway that you had a hair transplant. However, after an ARTAS procedure your business associates, family, and friends will just think you look revitalized and better, without your procedure being obvious.



Before ARTAS

1 Week Post-ARTAS\*\*\*



Before ARTAS

10 Days Post-ARTAS\*\*





Before ARTAS

3 Months Post-ARTAS\*\*\*\*\*

# **ARTAS Recipient Site Making**

A common question is "What happens to the existing hair I still have in my transplanted area? Will it be damaged during the procedure?" The good news is no.

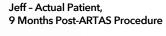
Your customized hairline is designed by you and your physician. The physician then transfers the new hairline design to the ARTAS Robotic Recipient Site Making System. The system creates the implantation sites for harvested hair follicles while avoiding and protecting your healthy, permanent hair. The appropriate placement of these hair follicles is essential when striving for natural looking results.



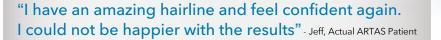
- Terminal Hair is existing healthy permanent hair
- Vellus Hair is shorter, finer, temporary hair

Detection and Avoidance of Existing Healthy (Permanent) Hair

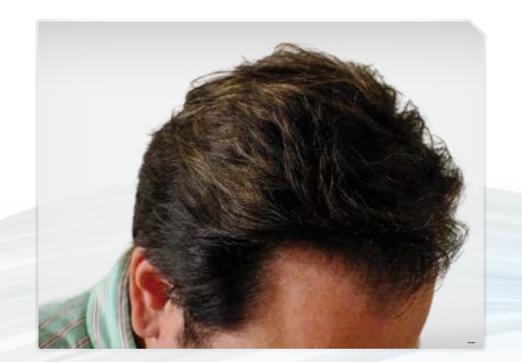
**Recipient Sites Created** 



# ARTAS Recipient Site Making with Your Hairline Customized



## **Your Transplant Area**



The ARTAS Robotic System uses advanced digital imaging to provide accurate mapping and calculations of critical hair follicle characteristics to determine your best hairs for harvesting. Your physician will use ARTAS Hair Studio to create your aesthetic design on the ARTAS System for Recipient Site Making. The ARTAS Artificial Intelligence algorithms are used to determine where the recipient sites are made to provide the best possible aesthetic outcome, while protecting your existing healthy (permanent) hair.

After a few months, the transplanted hair will begin to grow in its new location. Your newly transplanted hair, like the rest of your hair, grows steadily over time. At around six months, you will start to notice significant growth. The hair will continue to grow in the treated balding areas over the coming months<sup>6</sup>.





**BEFORE ARTAS** 





**BEFORE ARTAS** 











# **ARTAS Robotic Pre-Procedure Preparation**

The following information is provided to assist you in the preparations for your procedure and help minimize any noticeable effects of your procedure.

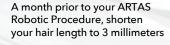
When your hair is trimmed close to your scalp, the ARTAS Robotic System is able to select the best hairs possible for your transplant.

- 2 Most patients find it helpful to get their hair cut shorter in stages, rather than all at once on the day of their procedure. This makes the transition less noticeable to family, friends, and co-workers. Many ARTAS providers work closely with reputable salons, and may be able to assist you in this process. We encourage a transitional haircut starting a month or so prior to your ARTAS Procedure. Ultimately, it is best to have your hair 1 millimeter in length the day of your procedure.
- **3** For most patients the hair in the back of their head (the donor area) has grown back to a blending length within one week, and they have returned to the same appearance as just prior to their procedure.





Start with your original haircut





2-3 days prior to your ARTAS Robotic Procedure, shorten your hair length to 1 millimeter

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# The Day of Your ARTAS Robotic Procedure

## **Post-Procedure Care**

## Day of your procedure

The morning of your procedure, you should wear comfortable clothes. Many patients designate someone to drive them to and from their procedure. Some patients choose to listen to music or watch a movie during the procedure. While your physician may provide an entertainment selection, you may want to bring something from home.

## During your procedure

During the procedure, your physician and his team will do everything to ensure that you are comfortable. There will be time for breaks and lunch during the procedure.

## Immediately following your procedure

You can return home immediately following your procedure. Your physician will provide you post-operative instructions. This will also include instructions on any medications, creams, or ointments you may require. Most patients experience little discomfort following the procedure. However, if pain does occur contact your physician.







# How Will My Donor Area Look Post-Procedure?

After the procedure, your donor area grows quickly and blends with surrounding hair. Your donor sites are undetectable within 7 to 10 days after your ARTAS Robotic Procedure.<sup>6</sup>



Donor Area - Before Procedure



Donor Area - 1 Week Post-ARTAS



Donor Area - 9 Months Post-ARTAS

Actual results may vary.

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Jeff, Actual Patient Post-ARTAS

# **Frequently Asked Questions**

## How does the ARTAS Robotic Procedure work?

The ARTAS Robotic Procedure is a minimally invasive hair restoration solution that leverages digital imaging and robotic precision to harvest healthy grafts for transplantation. Unlike other methods of hair restoration, there is no need for the surgical removal of a band of tissue from the back and sides of your head, no linear scar left after surgery, and no need for stitches or staples to close the wound. The benefit is a quick recovery time and the ability to return to normal activities and work sooner.

### What is the price of the ARTAS Robotic Procedure?

Treatment costs will be determined during your consultation with your doctor and depend on the amount of new hair that you desire. Discuss the procedure pricing with your doctor, as some doctors may offer payment options.

## **Does the ARTAS Robotic Procedure hurt?**

Most patients experience little discomfort and swelling post-procedure.

How will my hair look after the ARTAS Robotic Procedure?

The ARTAS Robotic Procedure provides natural looking results. After the procedure, you are able to wear your hair any length or style with confidence.

## How is the ARTAS Robotic Procedure different than "Hair Plugs"?

Old fashioned "hair plugs" included the harvesting of large patches of hair that resulted in an awkward and unnatural appearance once implanted. In the ARTAS Robotic Procedure, hairs are harvested in their natural groupings and then transplanted individually by your physician. Individual transplantation provides you with the look you desire, including a great looking hairline and a fuller looking head of hair.

#### Are ARTAS Robotic Procedure results permanent?

Yes. The ARTAS Robotic Procedure uses your own permanent growing hair, typically from the back of your head, and your physician then implants this hair to the thinning areas of your scalp. As this hair is not susceptible to the conditions that cause male pattern baldness, transplanted hair is permanent.

#### How long does it take to recover and heal?

Recovery time with the ARTAS Robotic Procedure is less than with most surgical cosmetic procedures. As there are no surgical incisions and stitches required, healing time is short.

## When will my new hair start to grow?

Transplanted hair grows naturally in phases. New hairs are seen about three months after the procedure, and will continue to increase over the course of a full year. At approximately six months, you will enjoy a noticeable improvement and after a full year, you will see final results.

#### Should I cut my hair before treatment?

Yes. Trimming your hair in the donor area allows the ARTAS Robotic System to accurately visualize, track, and harvest each grouping of hairs. You will receive instructions on having your hair cut shorter in preparation for your ARTAS Robotic Procedure.

## Will people know I have had a hair transplant procedure?

With the ARTAS Robotic Procedure, any scarring is minimal and is nearly undetectable. Your new hair grows in gradually, reducing the chance that people will notice the procedure, as the results are subtle and natural.

#### Will there be visible scarring in the donor area?

Since the ARTAS Robotic System selectively harvests individual hair groupings rather than removing a large area of scalp, there is minimal scarring in the donor area.

### How long does the ARTAS Robotic Procedure take?

The ARTAS Robotic Procedure length will vary by the number of hair follicles being harvested and the physician performing the procedure.

The ARTAS System from Restoration Robotics is indicated for harvesting hair follicles from the scalp in men diagnosed with androgenic alopecia (male pattern hair loss) who have black or brown straight hair. The ARTAS System from Restoration Robotics is intended to assist physicians in identifying and extracting hair follicular units from the scalp during hair transplantation. The ARTAS System is also indicated for creating recipient sites for subsequent manual implantation of the harvested follicles.



# www.ARTASHair.com

References 1. http://www.americanhairloss.org/men\_hair\_loss/ 2. https://www.reference.com/world-view/many-men-world-8e066f56a72027ce?qo=cdpArticles 3. https://www.americanhairloss.and-hair-growth-cycle 5. The Norwood Hair Loss Scale, http://www.americanhairloss.org/men\_hair\_loss/the\_norwood\_scale.asp 6. https://www.bernsteinmedical.com/fut-hair-transplant/procedure/after-surgery/ Results May Vary \* Model is not an actual patient.

\* Model is not an actual patient. \*\*Photos courtesy of Hair Sciences Center of Colorado, James A. Harris, MD \*\*\*Photos courtesy of Berman Skin Institute, David A. Berman, MD \*\*\*\*Photos courtesy of Dr. Yates Hair Science, William D. Yates, MD \*\*\*\*\*\*Photos courtesy of Bernstein Medical - Center for Hair Restoration, Robert M. Bernstein, MD \*\*\*\*\*\*Photos courtesy of New Horizons Center for Cosmetic Surgery, Gregory A. Turowski, MD

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