Comprehensive Guide for Patients Undergoing miraDry Treatment





This treatment is recommended for those with the following concerns:

Worried about underarm sweat and odor

Feel they sweat more than others

Conscious of their clothes getting wet from underarm sweat

Have yellow armpit stains on their white clothing

miraDry is a treatment that can help improve the underarm problems that are bothering you



What are the primary causes of underarm sweating?

Stress, nervousness, uneasiness, etc.

Genetics or Obesity Hormonal imbalance during menopause

Disorders such as Hyperhidrosis Dietary factors significant consumption of spicy or acidic foods

Where does underarm sweat come from?

Underarm sweat comes from two types of sweat glands – eccrine and apocrine sweat glands –, which are located just underneath the skin.

Eccrine sweat glands are distributed throughout the body and secrete a colorless, odorless liquid that helps regulate body temperature. Apocrine sweat gland, on the other hand, are located primarily under the armpits and in the pubic area and release a more concentrated fluid that is the source of the characteristic odor of underarm sweat.

miraDry, which utilizes microwave energy, is recommended for addressing underarm sweat issues



Obtainment of regulatory approval as a microwave-based medical device in Japan.

Aimed at treating severe primary axillary hyperhidrosis, miraDry was approved by the Japan Ministry of Health, Labour and Welfare on June 4, 2018.



Received regulatory approval in Japan

Indication: severe primary axillary hyperhidrosis

*Approved by the US FDA for the treatment of axillary hyperhidrosis, axillary odor, and hair reduction. In Japan, however, miraDry has regulatory approval for axillary hyperhidrosis only.

Medical Device Approval No: 23000BZX00161000.



miraDry Features

Non-Surgical

This treatment uses microwaves (electromagnetic waves), eliminating the need to cut the skin

Instant Results

Results are seen immediately after the treatment

*Individual results may vary

Minimal Downtime

Little to no impact on one's daily life.

Patients can even take a shower on the same day of treatment

Long-Lasting Effect

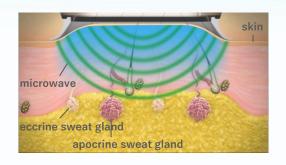
A single treatment can yield long-term effects

*Duration of the effects may vary from person to person

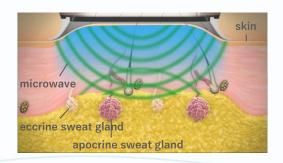




Theory Behind miraDry



Microwaves (electromagnetic waves) are directed towards the skin, targeting the two types of sweat glands (eccrine and apocrine) responsible for underarm perspiration and odor. These sweat glands are concentrated in the deep layers of the skin, where the microwaves can effectively reach.



The microwaves are converted to heat, damaging the eccrine and apocrine sweat glands.



The unique cooling system ensures that the skin surface is sufficiently cooled, protecting the skin against any burns.



Comparison of miraDry and Other Treatments

	△ miraDry°	Surgical Surgery	Botox Injection
Use	Reduces underarm sweat & odor	Reduces underarm sweat & odor	Reduces underarm sweat
Duration	Semi-permament	Semi-permanent	3 to 9 months
Treatment Time (both armpits)	About 1 hour	About 1 to 2 hours	5 to 10 minutes
Scar	None	Yes (up to 5 cm)	None
Postoperative Care	Not needed	About 3 times	Not needed
Hospitalization	Not needed	Required in Some Cases	Not needed
Downtime	Swelling and redness may occur but will subside in about a week	Fixation is required for about 1 week, and 2 to 3 weeks for rest/recovery	None

^{*}May vary from individual to individual

miraDry is a treatment that can be equally effective as surgery, but without the need to cut the skin.



^{*}May vary by medical institution

Determination of Treatment Date and Preparation in Advance

Pre-Treatment Checklist

Due to the potential for post-treatment swelling and redness, it is best to reconsider the treatment date if any of the following apply to you within one week after treatment.

- Plans to wear sleeveless clothing
- Plans to travel
- Plans to engage in sports or activities that put stress on the treated area.

Advance Preparation

Shave armpit hair 4-6 days prior the treatment.



Treatment Flow

1 Anesthesia



2 Marking



3 Treatment



4 Cooling



Including anesthesia and post-operation cooling, the total estimated treatment time is **90 to 180 minutes** for both armpits.

The exact treatment procedure may vary from one medical institution to another



Post-Treatment Care

2 to 3 Days After Treatment

- If you experience any pain or burning sensations, placing an ice pack under the armpit every few hours for 15 to 20 minutes each time may help relieve the pain.
- Pain relievers may be prescribed if you experience significant pain or swelling. Talk to your doctor for more information.



Post-Treatment – Progression Example

Immediately after treatment



Swelling and redness in the armpit area. This is normal.

1 day after treatment



Subcutaneous (intradermal)
bleeding and pain may occur
due to microwave irradiation or
local anesthesia.

7 days after treatment



Swelling and redness will gradually disappear.



^{*}Post-treatment progression may vary from individual to individual.

Post-treatment: What You Should Know

- Immediately after the treatment, there may be temporary redness in the armpit area due to the vacuum suction. This will disapear in a few days.
- In rare cases, swelling may occur in areas other than the treated area (near the arms and underarms). However, it will subside within a week.
- There may be a tingling or swelling sensation but will subside in about 2 to 3 weeks.
- Pain or discomfort may be felt when pressing on the treated area but will subside in about 2 to 3 weeks.



^{*}Reactions may vary from individual to individual.

Post-treatment: What You Should Know (cont.)

- The treated area may become hardened or dimpled. This is temporary and will subside in about two months.
- The treated area or surrounding area may feel numb, or there may be dull sensation. This is temporary and will improve in about 3 months.

^{*}Reactions may vary from individual to individual.



If you have any concerns, such as symptoms that do not improve, please contact the clinic for further information



Post-Treatment: Precautions

 Driving may be impaired immediately after treatment due to the effects of anesthesia and/or other factors.



Avoid heavy drinking for several days after treatment.



Avoid bathing (shower only) for the first few days after treatment. Wash the treatment area twice a day to prevent infection and to keep it clean and dry.



Avoid rubbing the treated area until the discomfort subsides. Instead, lather gently with foam and avoid scrubbing the treated area until the discomfort goes away.



Post-Treatment: Precautions (cont.)

Avoid shaving and antiperspirant use until the discomfort subsides.



Wear loose-fitting clothing to avoid irritation of the treated area.



Avoid activities that put stress on the treated area for about a week after treatment. This includes exercise and heavy lifting.



Avoid activities that may cause pressure changes, such as flying or mountain climbing, for the first few days after treatment.



Frequently Asked Questions

- **Q** What is the treatment time for miraDry?
- The treatment time, including preparation, usually takes about 90 to 180 minutes for both armpits.
- Will I feel discomfort or pain during or after miraDry treatment?
- A local anesthesia is applied to the area to be treated. Most patients do not feel any pain during miraDry treatment, although individual differences may occur.
- Will I have to go to the clinic after the treatment?
- A In most cases, another visit to the clinic is not necessary, but please follow the doctor's instructions.
- Is there only one treatment? Can I have the treatment more than once if I want?
- In principle, only one treatment is required, but if you want to see further results, you can undergo another treatment after an interval of 3 months or more.
- Are there any problems with having the underarm sweat glands removed?
- There are approximately 4 million sweat glands in the entire body, of which only about 2% of them located under the armpits. The removal of this 2% will not affect the body's functions or the regulation of body temperature through perspiration.



Contraindications & Cautions

Contraindications

- Individuals who have a cardiac pacemaker or any other electronic device implanted in the body.
- Individuals with metal implants or tattoos near the armpit.
- Individuals with malignant tumors or malignant skin tumors under the armpit.
- Individuals who have experienced illness after local anesthesia.



Contraindications & Cautions (cont.)

Treatment may not be suitable for the following individuals

- Individuals who have undergone surgical treatment to remove lymph nodes for breast cancer, etc.,
 through an underarm incision, including breast reconstruction and breast augmentation.
- Individuals who are thin, muscular, or have little or no subcutaneous fat.
- Obese individuals, as the skin may not be suctioned out due to tension.
- Individuals who are immunocompromised or taking immunosuppressive drugs.
- Individuals who have difficulty in healing scars, such as keloid constitution, where skin hardening, and bumps may be difficult to return to their pre-treatment state.
- Individuals with extreme underarm irregularities.
- Individuals with underarm skin conditions such as eczema, psoriasis, atopy, etc.
- Individuals who are allergic to soybeans.
- Individuals who are pregnant or planning to become pregnant.*

