

# Swift

MICROWAVE THERAPY  
FOR CUTANEOUS LESIONS

A cleaner, faster and more  
predictable treatment for  
verruca lesions.



Treatment in seconds



No Anaesthetic



No Dressings



Certified Swift Clinic contact details:

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the company behind SWIFT

Working closely with leading Podiatry and Dermatology specialists, medical technology expert Emblation Limited has developed SWIFT – a brand new system for the treatment of soft tissue in Podiatry and Dermatology.

Emblation was founded in 2007 with two purposes in mind: to create a more stable, reliable and compact microwave system and to develop a treatment that could be used in Podiatry and Dermatology that would overcome the weaknesses in traditional treatments for skin lesions.

Since then they have been working with a number of leading UK Podiatrists and Dermatologists to develop SWIFT, carry out clinical research and finally bring this product to market in late 2015.

Swift Microwave Therapy ARTG #'s:

- Swift Microwave Generator: 302036
- Swift Applicator Handpiece: 301757
- Swift Single-use Applicator Tip: 302312



Introducing

# swift



SINCE  
**2017**

ESTABLISHED IN  
**23**  
COUNTRIES &  
TERRITORIES

OVER  
**300,000**  
TREATMENTS  
PERFORMED TO  
DATE

OVER  
**1,500**  
AUTHORISED  
SWIFT CLINICS\*

IN  
**AUS**  
SINCE  
**2018**

OVER  
**70,000**  
TREATMENTS  
PERFORMED  
TO DATE

OVER  
**250**  
CERTIFIED SWIFT  
CLINICS



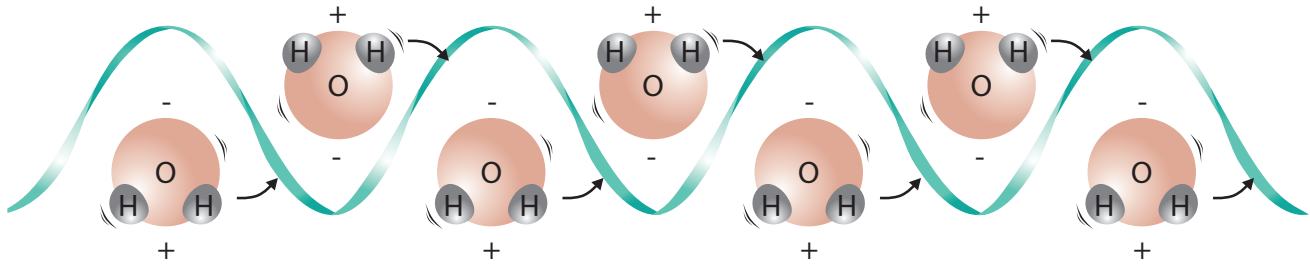
OVER  
**1,000**  
TRAINED SWIFT  
CLINICIANS\*

## Key benefits

- **Shorter Treatment Times:** Microwaves deliver rapid internal heat generation - allowing shorter treatments time with minimal patient discomfort
- **Simple Operation:** Enter a set time and power, place the applicator against the skin and press down on the button - a simple, repeatable method of treating skin lesions.
- **Fully Portable:** The Swift treatment system is lightweight and compact (weighing just 4kg), allowing practitioners to share the system between clinics and offer the flexibility of home visits.
- **No Plume:** Microwave therapy produces no smoke or plume, and therefore poses none of the possible associated health and occupational hazards.
- **Precision Treatments:** Swift will deliver microwave energy to an exact and predetermined depth, creating accurate and precise thermal energy zones.
- **Innovation in Safety:** Utilising innovative thermal management and measurement technologies, the system has been put through rigorous testing to ensure the highest possible levels of safety for both user and patient.

\* data shown is correct as of January 2024

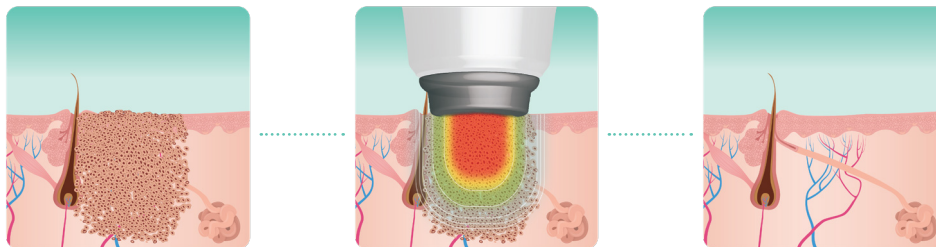
# How do Microwaves work?



Microwaves are a form of non-ionising radiation, which have the ability to agitate water molecules within skin cells without causing damage to DNA.

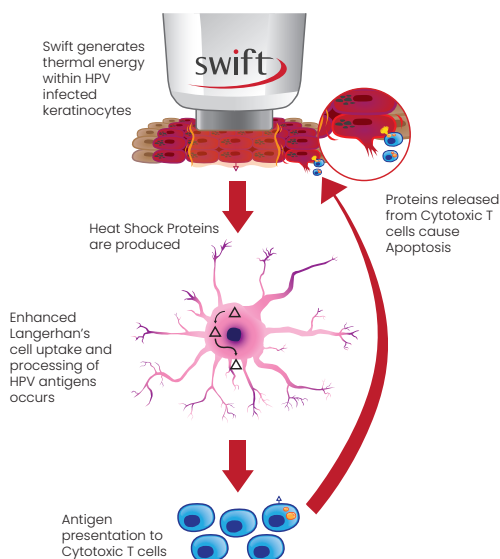
Water (H<sub>2</sub>O) is a polar molecule that will attempt to align itself with the electric field of a microwave. The rapid cyclic waveform of a microwave causes H<sub>2</sub>O molecules to vibrate and collide, this results in friction and generation of thermal energy. Since skin cells have high water content, the desired temperature is quickly achieved within target cells.

Microwaves sit between radio waves and infrared waves (300 MHz–300GHz) in the electro-magnetic spectrum. SWIFT specifically operates at a frequency of 8 GHz.



SWIFT microwaves will penetrate to a predetermined depth with no lateral splay of energy. They don't break the surface of the skin and destroy tissue from the point of application - like cryotherapy, salicylic acid or laser ablation. As soon as the treatment begins, microwaves are working within that defined field, and no deeper.

## Immune System Modulation



SWIFT microwave therapy has a number of proposed effects, including the ability to facilitate the immune system to recognise HPV. This is achieved by transforming the virally infected cells into a state of stress through heating the tissue to 42–45 C°.

This hyperthermic range causes a release of “danger signaling” heat shock proteins from virally infected cells, which induces maturation of Langerhan's cells and enhances their migration to the lymph nodes.

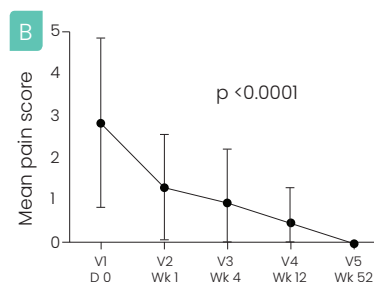
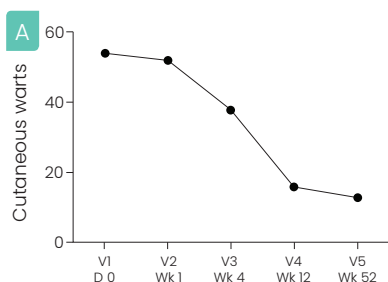
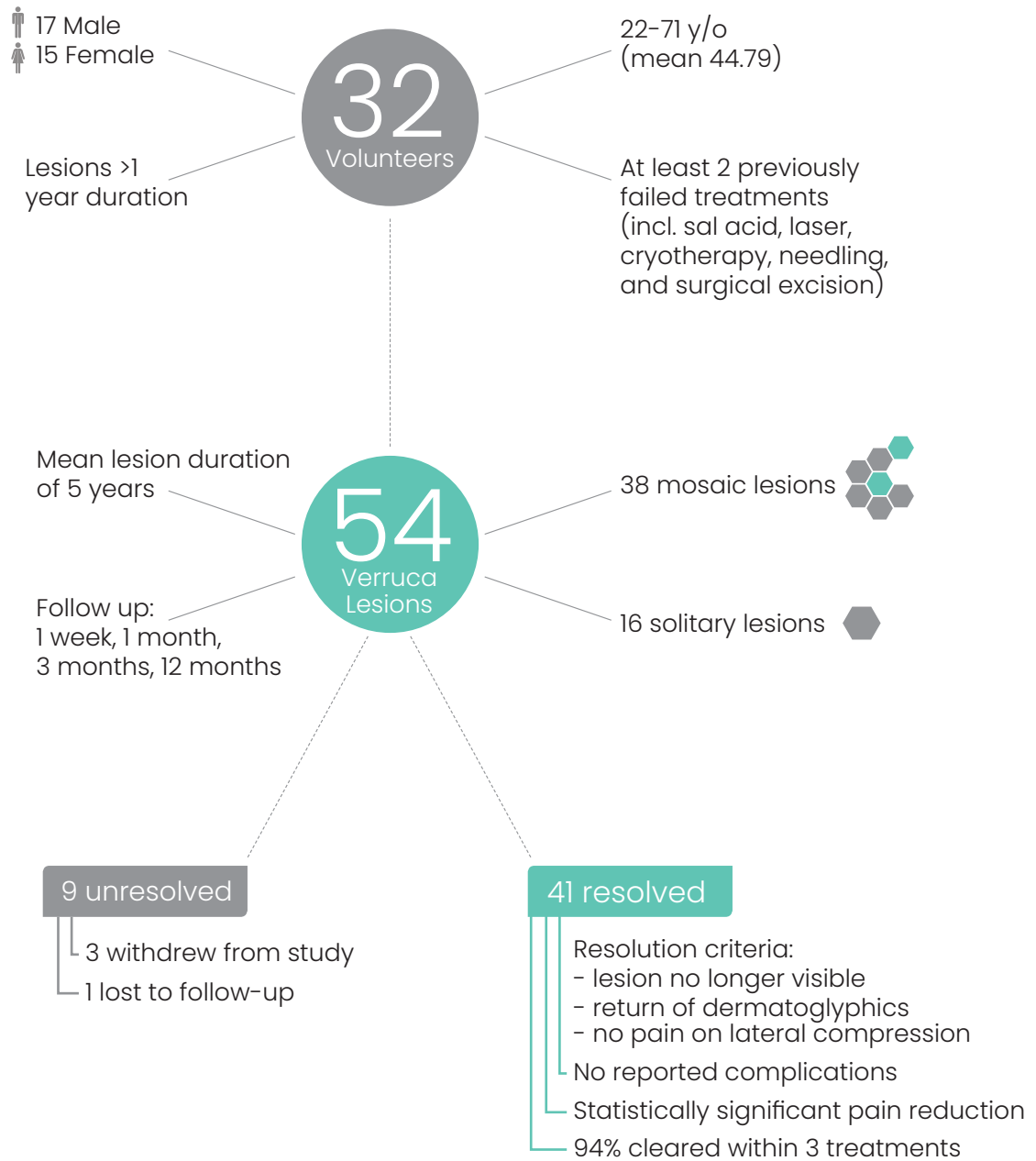
Cytotoxic T cells migrate to the epidermis and initiate programmed cell death to all virally infected cells (\*Bristow et al, 2017). Heating these infected cells has also shown to promote the release of natural anti-viral cytokines known as interferons.

# Latest Study Summary



## MICROWAVE THERAPY FOR CUTANEOUS HUMAN PAPILLOMA VIRUS INFECTION (2017)

An independent 10 month project that investigated microwave therapy treatment in a cohort of stubborn verrucae – European Journal of Dermatology 27:5



**A** Intention to treat analysis of 32 patients with 54 HPV foot warts treated by microwave therapy over five visits: baseline, one week, one month, three months, and 12 months. Resolved warts were enumerated.

**B** Pain scores were assessed using a 10-point visual analogue score at each visit.





## Case Studies



### Case study 1:

Middle aged female patient had multiple large lesions on the right plantar forefoot and heel for over 10 years. The pain from walking on the lesions was significantly affecting her ADLs and exercise. Over the years she had tried multiple interventions with no success.

**After 3 Swift treatments, all her verruca lesions had resolved within 11 weeks.**

### Case study 2:

Middle aged male patient presented with 2 large lesions on left plantar forefoot and single large lesion on right foot. Lesions would regularly build up with overlying hyperkeratosis causing increased pressure.

**After 9 years with these irritating plantar warts, it took only 3 swift treatments and all three lesions had resolved.**



### Case study 3:

Highly physically active 69 year old female patient who is an avid horse rider. Limped into the clinic with a 6 year old verruca lesion which was causing pain on the plantar metatarsal area due to pressure from her stirrups. She had been to several health professionals to seek treatment however nothing was effective.

**After 4 Swift treatments, the patient was pain and verruca-free.**



#### Case study 4:

Middle aged male with a severely anhidrotic verruca lesion on the left plantolateral heel with significant deep fissuring.

**After 3 Swift treatments, the lesion was completely cleared within 12 weeks.**



#### Case study 5:

17-year-old male presented with approximately 140 verruca lesions on hands and feet. Over a 13-year period he had tried cryotherapy, salicylic acid, dry needling, and numerous over-the-counter treatments.

**After 5 swift treatments by the end of the year, all 140 lesions had resolved.**



#### Case study 6:

15 year-old female patient presented with a lesion covering a majority of the left plantar metatarsal area, plantar 4th & 5th toes. An extensive medical history including an autoimmune liver disease saw her taking several different medications including an immunosuppressive. Over 4 years the lesion was increasing in size. Cryotherapy, laser, dry needling, acids (salicylic & monochloroacetic), and numerous "at home" treatments all failed.

**After 3 swift treatments and a 6 month review, the lesions had resolved.**

Peri-ungual verrucae are traditionally difficult to treat. Using acids, laser, or cryotherapy may cause permanent damage to the nail matrix.

**After only 2 Swift treatments, 5 lesions in total had resolved.**





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