

Non Surgical Fat Reduction

Article contributed by Dr Shiau Ee Leng
MBBS (S'pore), Grad Dip (FP) Dermatology, M Med (FM), MCFPS
ClearSK Novena Laser & Aesthetic Centre

With the advance of medical technology, non-invasive medical-grade machines can deliver good results, results which are close to even surgical interventions but minus the downtime and risks associated with anaesthesia and surgery.

Common complaints of body fat problems include:

- Abdominal paunch- upper and lower
- Love handles at the waistline
- Saddles bags at buttocks
- Underarms
- Bra-lines
- Thighs

Cellulite

Has an orange skin appearance that appears mainly in women only and is found in:

- Lower abdomen
- Buttock
- Thighs
- Arms
- Legs

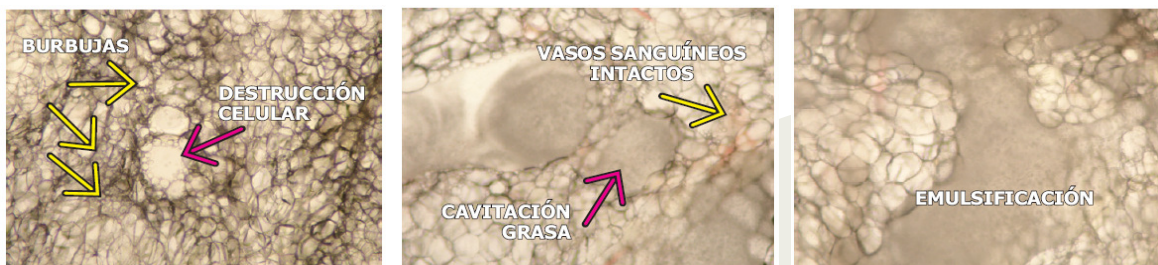
Ultrasonic Fat Lipolysis

Novashape

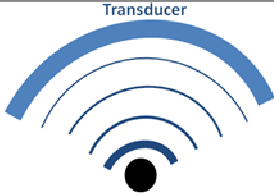
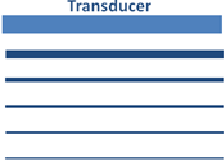
Novashape is by Ultramed of Switzerland, and is highly popular in Europe and now Asia. It works by using rapid cavitational ultrasonic waves in resonance mode that is able to break down cell membranes and fat layers.



Fig 1: Novashape machine



It has a patented cold tip that allows high-powered fat-selective ultrasonic waves to be delivered to the fat layers without compromising comfort and safety.

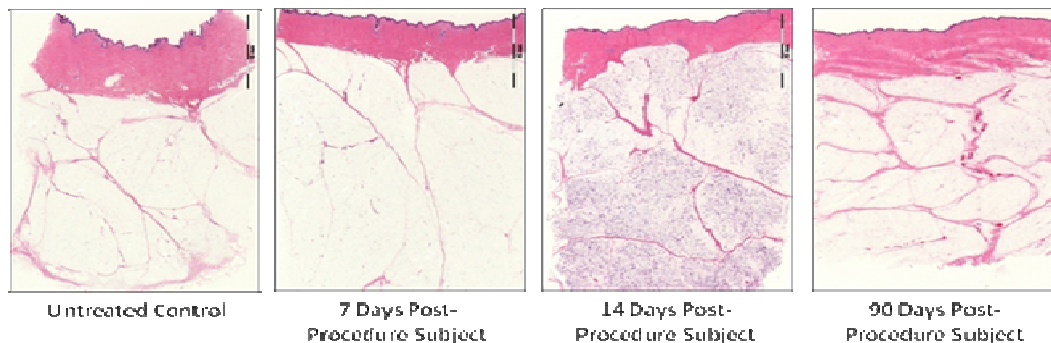
Focused (Ultrasound)	Non-Focused (others)
<ul style="list-style-type: none"> • Energy concentrated in targeted focus • Reverse energy gradient leads to highest energy intensity being at a distance from the transducer 	<ul style="list-style-type: none"> • Highest intensity is at contact site • Intensity decreases with distance
	

How it works:

A cold gel is applied over the area to be treated (treatment zone). There are various hand pieces targeted at different layers of fat. For each session different layers of fat in the treatment zones will be worked on for a full thirty minutes (on auto version 2 or 60 minutes on manual version 1) can be used for each session of treatment.

If redness or pain occurs the power or focus area of the machine can be adjusted. The session is completed by a 10-15 minutes of pressotherapy to enhance lymphatic drainage. Novashape can be performed once every 1 or 2 weeks.

Usually about 4-6 sessions are recommended for mild to moderate soft fat and 10 to 12 sessions for hard fat.



Those who are unsuitable for Novashape:

Pregnancy
Recent abdominal / body pain that is not investigated
Recent / suspected cancers
Recent surgery or implants(6 to 12 months) over treatment zone
Bleeding disorders
Severe metabolic disorders eg High BP, Diabetes, Hepatitis
Sensitive skins/ active skin infections



UniPolar Handpiece
Treats more deeply



UniLarge Handpiece
Treats more quickly



BiPolar Handpiece
Treats more superficially



Accent Ultra

This is a new addition to the ALMA lasers family, with the addition of Ultrasound Lipolysis to the FDA approved Accent XL technology.

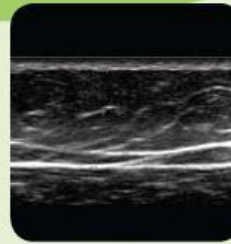
How it works :

We first start off with the Accent Ultra mode. Combining both hot and cold ultrasonic waves, the Hot mode provides compressive ultrasonic waves with a high level of cavitation, whereas the Cold mode operates with transverse acoustic waves and produces selective disruption of adipocyte membranes. This is then followed by the accent Unilase RF technology that induces further breakdown of fat globules, improves lymphatic drainage as well as increase collagen production.(15 minutes)

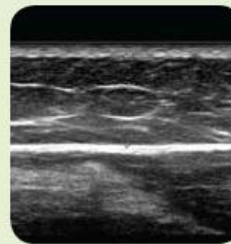
Those who are unsuitable for Accent Ultra:

Pregnancy
Recent abdominal / body pain that is not investigated
Recent / suspected cancers
Recent surgery or implants(6 to 12 months) over treatment zone
Bleeding disorders
Severe metabolic disorders eg High BP, Diabetes, Hepatitis
Sensitive skins/ active skin infections
On Oral Tretinoin

A closer look: collagen reorganization



Pre-Treatment: Ultrasound image of patient's abdomen prior to treatment with Accent^{XL}. Notice that the connective tissue is sparse, spread apart and not well organized.



Post-Treatment: 15 days post treatment (5 weeks, 2x/wk). The thickness of the patient's superficial fat has decreased 33 percent and there is a clear demarcation from the deep fat. Connective tissue has become uniform, linear and horizontally oriented, with an increase in collagen fibers.

Velashape

FDA approved for cellulite and circumference reduction, Velashape is a hot favourite with the Hollywood stars.

How it works:

It combines Radiofrequency and Infra Red to firm up tissues, together with vacuum suction massage to break down cellulite fibers, and improves lymphatic drainage. It can be done on all areas of cellulites. It can be done once to twice a week for treatment and once monthly for maintenance.



Those who are unsuitable for Velashape:

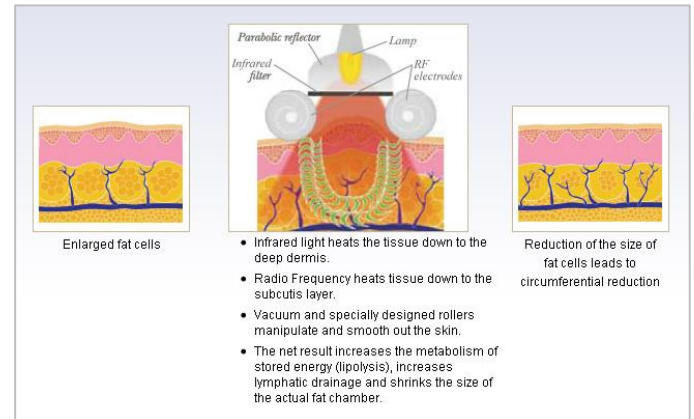
On oral Tretinoin
Severe skin allergies/ infections
Bleeding disorders
Severe metabolic disorders eg Diabetes,
collagen vascular disorders

Acne Scars

Acne scars are caused by our body's immune response to the bacterial byproducts of acne outbreak.

The various types of acne scars:

- Post-inflammatory hyperpigmentation
This is strictly speaking not a scar, more a pigmentation mark on the previous acne papule.
- Boxcar scars
Angular well defined margins, usually on the temples or cheeks
- Pitted or ice pick scars
Deep, narrow scars forming pits in the skin
- Rolling scars
Scars with Wavelike appearance on the skin
- Hypertrophied / keloid scars
A firm, hard elevated scar. Keloidal scars tend to grow beyond the margin of the original



Post-inflammatory
hyperpigmentation



Boxcar scars



Pitted scars



Rolling scars



Keloid scars



Harmony XL
cosmetic lasers



Emax multi-wavelength
Light / lasers treatment

acne area.

Treatments for acne scars

Following are the types of treatment for improving acne scars

- Chemical Peels
- Laser resurfacing-fractional
- Punch excision
- Subcision
- Derma Fillers
- Non ablative Lasers
- Emax Matrix
- New- Sublative RF

Recommendations based on types of scars:

- Mild acne depressed scars- chemical peels, microdermabrasion, IPL and or resurfacing lasers
- Boxcar scars- punch excision / subcision/ resurfacing lasers
- Pitted scars- subcision, fillers, nonablative lasers
- Rolling scars- subcision, non ablative lasers

For non- invasive treatments several sessions are needed (5 or more)

Please note that there is individual variation towards speed of scar recovery. Usually a combination of treatments can be done achieve better results.

ClearSK Novena Laser and Aesthetic Centre

#10-23 Novena Medical Center
10 Sinaran Drive, S(307506)

Tel: 63977050

E mail: info@clearskincentre.com

Web: www.clearskincentre.com