# CLATUU Alpha





CLASSYS CLATUU C

#### **7** Various Applicators



-For Small Fat Pockets
-Applicable for Local
Regions
-For Broad & Curving
Contours
Ex) Axilla
(Front & Back)
Above the Knees







- -For Small Fat Pockets -Flat-end Applicator -For Flat Contours
- Ex) Double Chin (Side) Knees (Side) Other Local Regions







- -For Large Fat pockets -Extending Applicator -For Broad & Curving Contours
- Ex) Upper Abdomen, Lower Abdomen, other large areas







- -For Small Fat Pockets -Blunt-end Applicator -For Flat Contours
- Ex) Bra Line, Love Handles, Back







- -For Large Fat Pockets -Flat-end Applicator -For Flat Contours
- Ex) Abdomen, Inner Thighs







- -For Thigh Region
  -Wide area at once
- Ex) Around the thighs, flat and wide areas







- -For Large Fat Pockets -Wide abdomen area at once
- Ex) Lower Abdomen

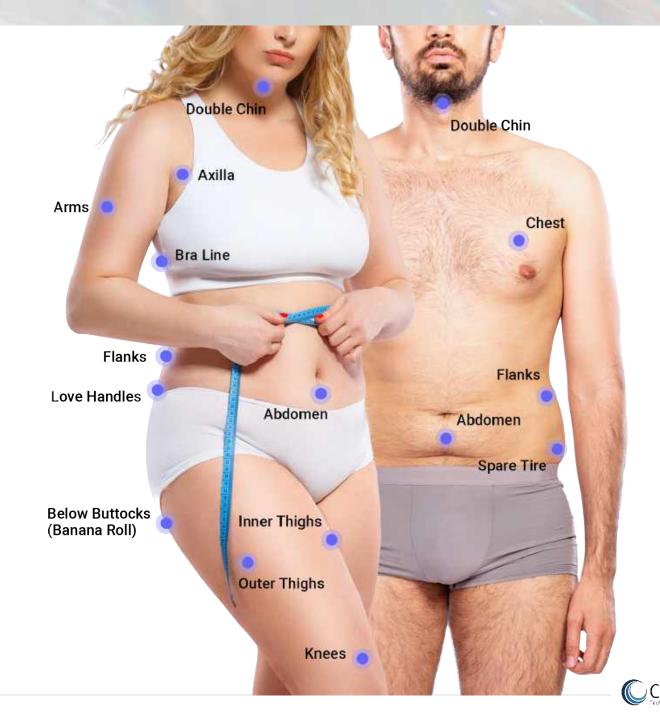






# Applicators Optimized for Any Treatment

After laborious testing and research, each individual cooling cup has been ergonomically designed to adhere to each curve of the body. The CLATUU Alpha has been optimized to achieve desired outcomes from head to toe.



Features of each applicator and clinical evidence

# Wing Mini Flat Mini

Smaller area : Pinch test 1cm





#### **Clinical Background: Treatment on the Double Chin**

Eligible Subjects for Treatment (Scale of 2-4)

Scale	0	1	2	3	4
Submental Convexity	Absent	Mild	Moderate	Severe	Extreme
Description	No localized submental fat evident	Minimal localized submental fat	Prominent localized submental fat	Market localized submental fat	Extreme submental convexity
Representative Photographs					





#### How to assess the patients



- Consult with patients about the main concern of double chin (Lateral? Central?)
- Assess the patient while both physician and patient are in standing or sit-up position.
- Ask the patient to tuck the chin in slightly while staring forward to see the treatment area
- Pinch the skin and measure the fat layer using caliper.
- Eligibility of caliper test is more than 1 centimeter.



#### **Clinical Background: Treatment on the Double Chin**



• The subject may be suitable for treatment if excess fat accumulates in the submental triangle.

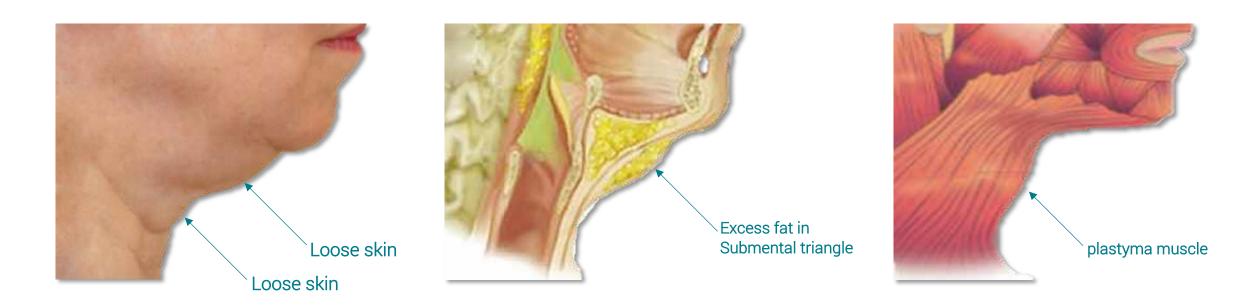


 Avoiding areas like the mandible bone edge to be suctioned, it is recommended to treat the loose skin, and neck with concentration of fat.





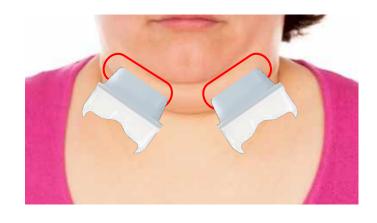
#### Distinction between Plastyma Muscle, Loose skin, Excessive fat



- 1. Assess whether double chin is from excessive fat or loose skin
- If it is not excessive fat but only loose skin, clinical result is not satisfying.



#### Practical use for double chin with skin laxity and excessive fat





In this case, two flat mini applicators can be used during the treatment to yield the best result





#### Wing mini and flat mini can be applied to various areas





**Wing Mini** 



**Anterior Axilla** 



**Posterior axilla** 



**Above knee** 



**Flat Mini** 





**Around knee (inner thighs)** 





#### Consideration of patients medical and surgical history

#### **Botulinum Toxin**



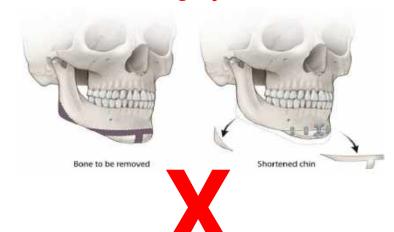
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#### **Filler**



Filler (biodegradable) can be structurally altered or repositioned.

#### **Bone surgery**



Bone surgery causes abrupt structure change which can lead to fat layers change





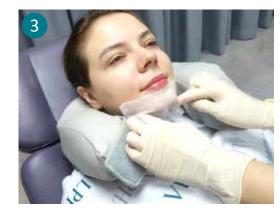
## Double chin treatment steps Right bed angle and firmly attaching the cup to double chin is important



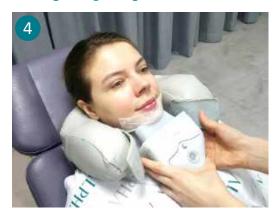
Posture to suction fat properly Right angle to get submental fat



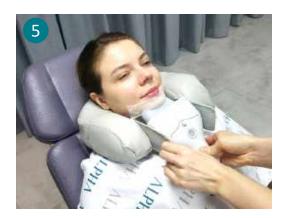
Neck cushion to tuck chin in



Apply shield pad, op pad is aligned with design.



**Suctioning and cooling start** 



Close the velcro



Patients in comfortable position.





#### **Treatment for Double Chin**

**How to design? Position?** 



C TYPE Alpha Shield 360



Open the Velcro while finding the right spot!



If uncomfortable?



45 ° for Wing Mini



30 ° for Flat Mini



After the treatment





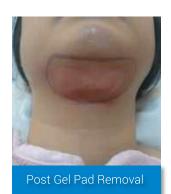


#### Comparison: Double Chin: Wing mini VS. Flat mini

2 minutes of massage will improve blood circulation and help fat tissues draining



Small, curving region located at the center of the submental.









Double chin (side) area with less curved and small fat pockets









# **Clinical Photos**

#### **Double Chin**

# Wing Mini







Time	Suction	Cooling	Treatment
40 Minutes	3	5	1 Session





#### **Double Chin**

# Wing Mini







Time	Suction	Cooling	Treatment
40 Minutes	3	5	1 Session





#### **Double Chin**

### **Flat Mini**







Time	Suction	Cooling	Treatment
40 Minutes	3	5	1 Session





#### **Double Chin**

### **Flat Mini**







Time	Suction	Cooling	Treatment
40 Minutes	3	5	1 Session





#### **Double Chin**

# Wing Mini







Time	Suction	Cooling	Treatment
40 Minutes	3	5	1 Session





#### **Double Chin**

# Wing Mini







Time	Suction	Cooling	Treatment
40 Minutes	3	5	1 Session





#### **Double Chin**

# Wing Mini







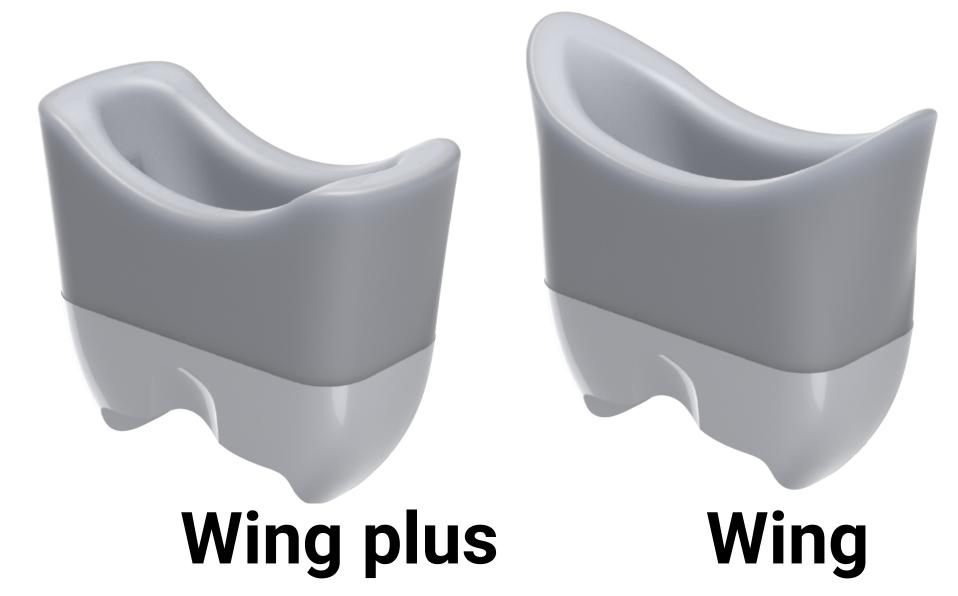
Time	Suction	Cooling	Treatment
40 Minutes	4	5	1 Session





#### **Curved area with accumulated fat**

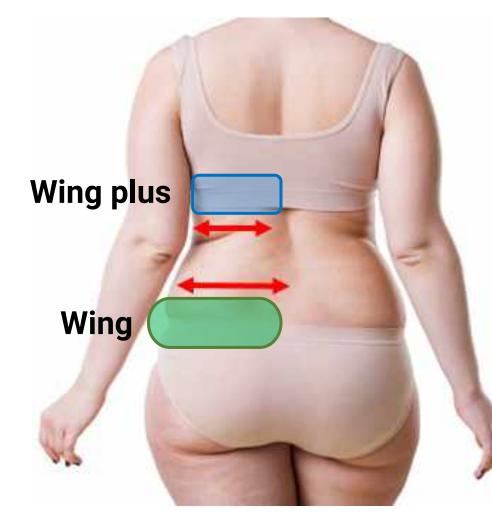
Pinch test 2.5cm







#### Why do need Wing Plus







With wing applicator

Fat distribution on the back varies in length

For most of the patients...

**Upper back around bra-fat: Wing plus** 

Lower back around love handle: Wing



#### Clinical Background – why we need Wing Plus

- This applicator is specially designed for the treatment of smaller areas and body types as they tend to have less fat with less curved fat accumulation on the back and abdomen
- Various areas can be treated including abdomen with less fat







#### If extreme fat accumulation occurs on the back (BMI 30 or more)



If fat accumulation is so deep and huge that breast tissues are not suctioned, in this case Wing applicator can be applied to brafat.

Using grid to decide whether wing or wing plus applicator can be applied



#### Flat and less curved area

Pinch test 2.5cm

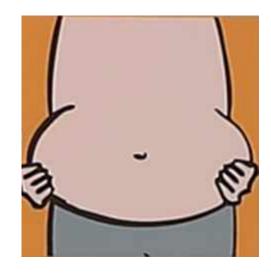


**Flat** 

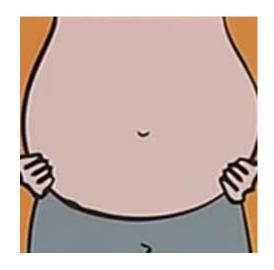




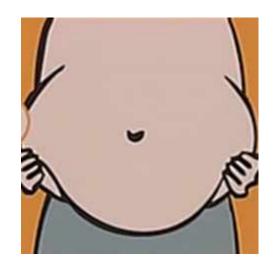
#### Various types of abdomen (which can yield best clinical outcome...)



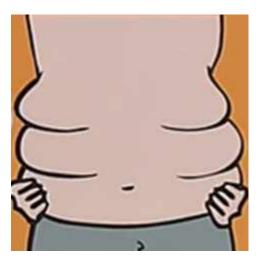
Skin is firm and lower abdomen is protruding



Skin is firm and both lower and upper abdomen is protruding



Skin is pinchable and sagging



Skin is pinchable and sagging layer upon layer

Visceral fat

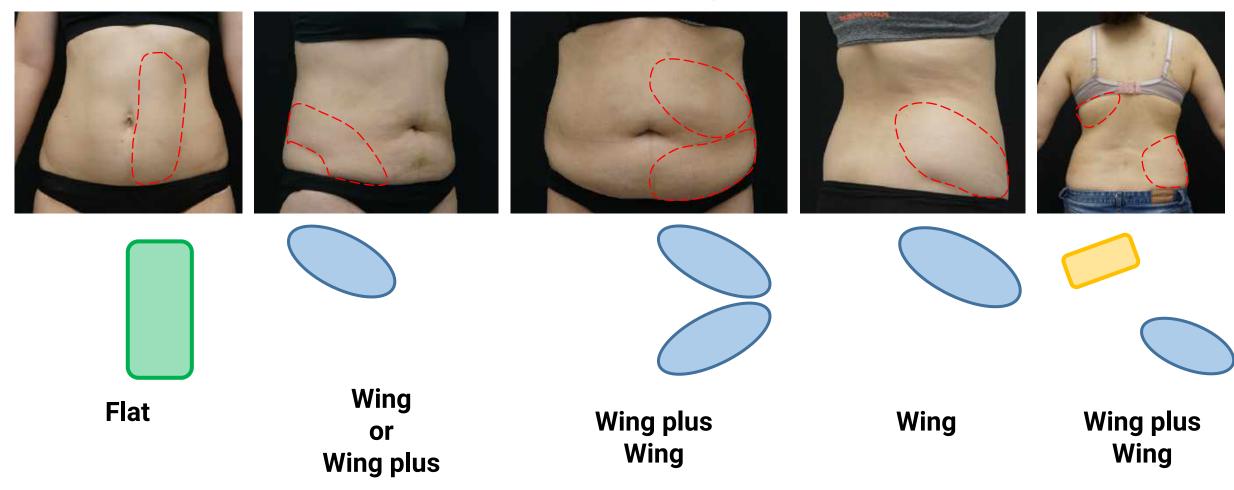
**Subcutaneous fat** 





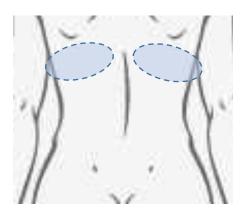
#### Choose the right applicator (analyzing the bulge and edge of fat bulge)

Where is the fat bulge and edge? Draw the imaginary line and get the right applicator.

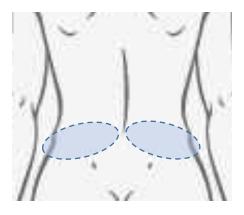


**CLATUU Alpha** ACADEMY

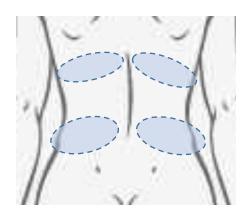
#### **Various Areas of Wing and Wing Plus**



WING PLUS: brafat (smaller and less curved area)



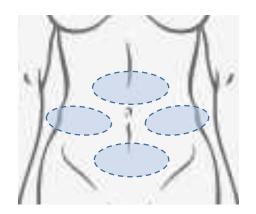
WING PLUS: lovehandle (bigger and curved area)



WING/ WING plus

Combination treatment

for back fat



WING/ WING PLUS

Combination treatment for

both upper and lower abdomen





# **Clinical Photos**

# Wing



- ✓ For Large Fat pockets
- ✓ Extending Applicator
- ✓ For Broad & Curving Contours

Ex) Upper Abdomen, Lower Abdomen, other large areas

First session WING CUP

**Second session WING CUP** 





#### **Abdomen**





Time	Suction	Cooling	Treatment
50 Minutes	4	5	First Session
50 minutes	3	4	Second Session





#### **Combinatory Treatments - Abdomen**







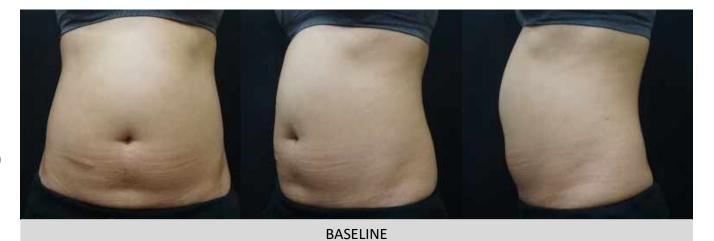
Wing
Abdomen (Curving Portion)

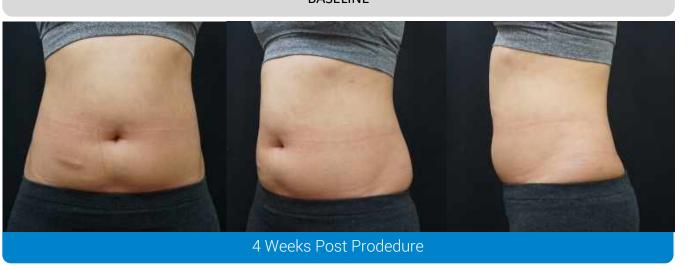
Flat
Abdomen (Flat Portion)





	Time	Sucti on	Coolin g	Treatment
Wing	50 Minutes	4	4	1 Session
Flat	50 Minutes	3	5	1 Session

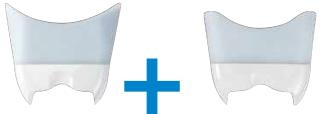








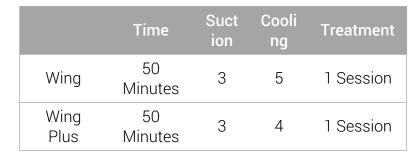
#### **Combinatory Treatments - Back**

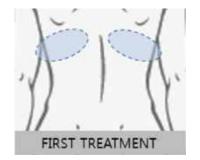


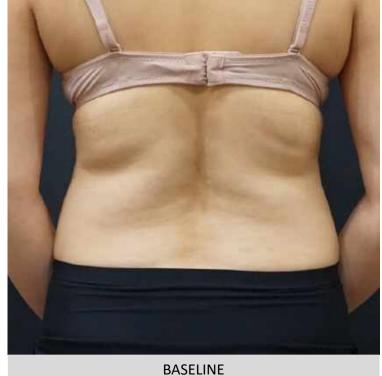
Wing

Back (Long, Curving Portion) • Wing Plus

Back (Narrow, Gradual)















## Wing Plus



- ✓ For Small Fat Pockets
- ✓ Blunt-end Applicator
- ✓ For Flat Contours

Ex) Bra Line, Love Handles, Below the Buttocks, Back



#### **Bra Line**



- Treats smaller fat pockets on bony and curving target area(s).
- Designed for treatments particularly on the back with varying degrees of curvature.
- Applications: Bra Line, Back, Love Handles, Other.

Time	Suction	Cooling	Treatment
50 Minutes	4	4	1 Session





## **Flat**

# Wing





- ✓ For Large Fat Pockets
- ✓ Flat-end Applicator
- ✓ For Flat Contours

Ex) Abdomen, Inner Thighs





#### **Abdomen**



Time	Suction	Cooling	Treatment
50 Minutes	4	4	First Session (wing)
50 Minutes	3	4	Second Session (flat)





# Wing



- ✓ For Large Fat pockets
- Extending Applicator
- **✓** For Broad & Curving Contours

Ex) Upper Abdomen, Lower Abdomen, other large at



### **Love handle**



Time	Suction	Cooling	Treatment
50 Minutes	3	4	1 Session (Wing)
50 Minutes	3	4	2 Session (Wing)





# Wing Plus



- ✓ For Small Fat Pockets
- ✓ Blunt-end Applicator
- ✓ For Flat Contours

Ex) Bra Line, Love Handles, Below the Buttocks, Back



### **Love handle**



Time	Suction	Cooling	Treatment
50 Minutes	3	4	1 Session





# Wing



- ✓ For Large Fat pockets
- Extending Applicator
- **✓** For Broad & Curving Contours

Ex) Upper Abdomen, Lower Abdomen, other large areas



### **Gynecomastia**



Time	Suction	Cooling	Treatment
40 Minutes	2	4	1 Session





### Features of each applicator and clinical evidence

# **Arc-T** Wide and flat with U-shaped areas

**Circumference 55 centimeters for thighs** 





### **Growing market demand for Arc-T**





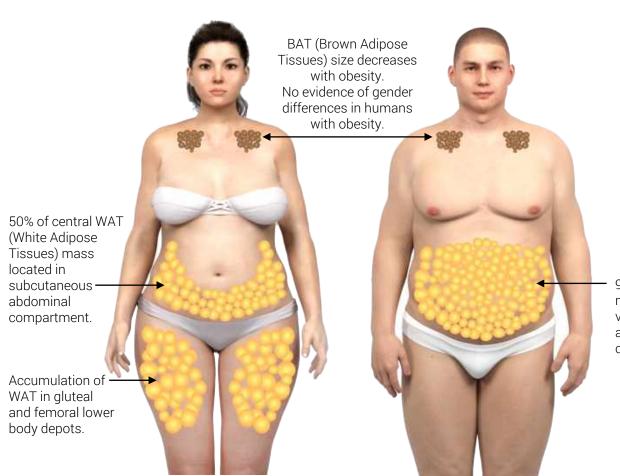








# Clinical Background: Treatment on Thighs

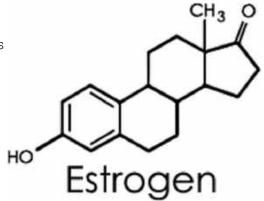


### **Gender difference:**

Lower body fat is more common in women that in a men and upper body fat is more common in men due to hormonal changes.

Fat accumulation differs for the different genders as estrogen has a role in lower body fat accumulation especially in thighs.

98% of central WAT mass located in visceral subcutaneous abdominal compartment.



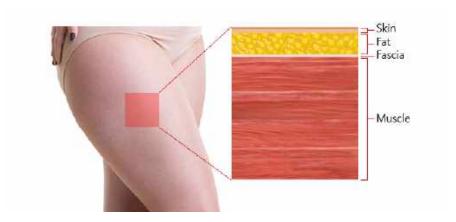
### Clinical Background – Thighs anatomical features

### Customized cooling cups for the thighs

The front and outer thigh regions comprise mostly of muscle, where tension is strong.

The average cooling cup's deep suction capabilities is likely to cause pain and bruising effect.

Due to the thick muscle layer, cooling energy may not be evenly distributed and concentrated on the intended areas.



A thigh treatment that only treats the superficial layers, but takes curvatures of the contour into account.







### Clinical Background – the location of sciatic nerves

Does this treatment affect sciatic nerve?

 the depth of the sciatic nerve is approximately 43% of thigh diameter if the patient is in supine position

 Applicator above at least 10 centimeters above plantaris **Applicator placed 10cm Upper** than plantaris Sciatic nerve plantaris

Derived from https://www.ncbi.nlm.nih.gov/pubmed/16857556





### Why we need Arc-T? Wing VS. Arc-T

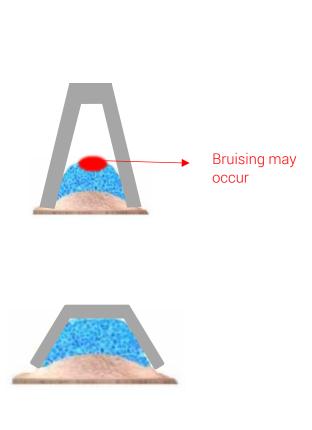
Specialized applicator depth inside for thighs → less bruising and redness Cover 2 times more treatment areas at once













### Thighs: Comparison Clinical Cases with 15 patients post treatment results (1mt FU)

Wing

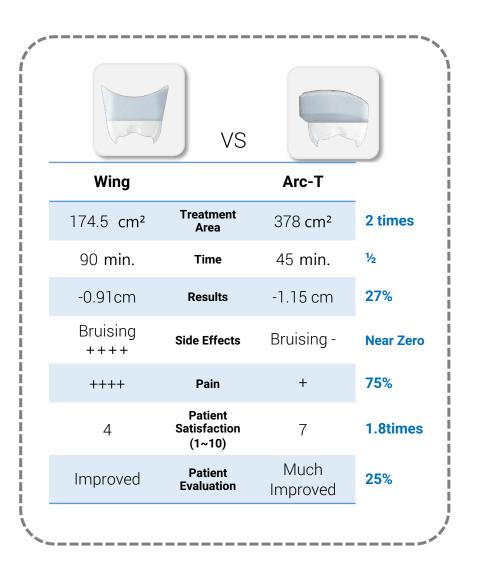




Arc-T



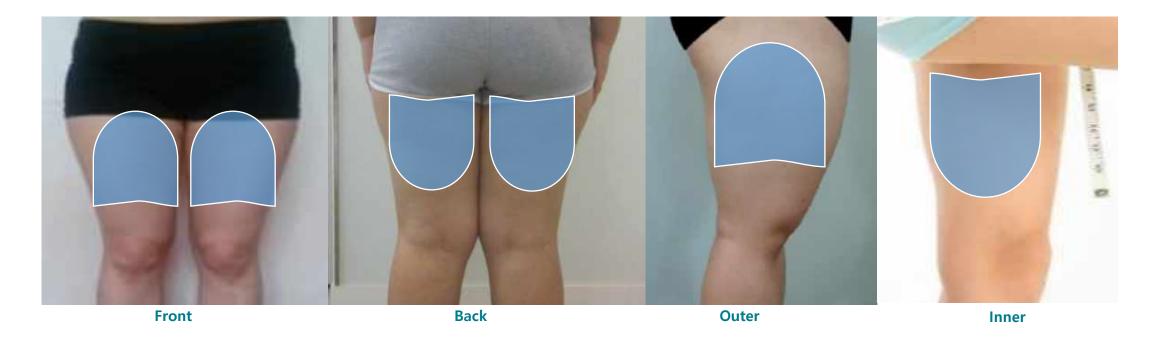






### 4 types of thigh treatment

- Frontal, back, outer and inner thigh
- Consideration of fat thickness, curving and length of the treated area
- Effective and consistent suction with larger treatment area covered







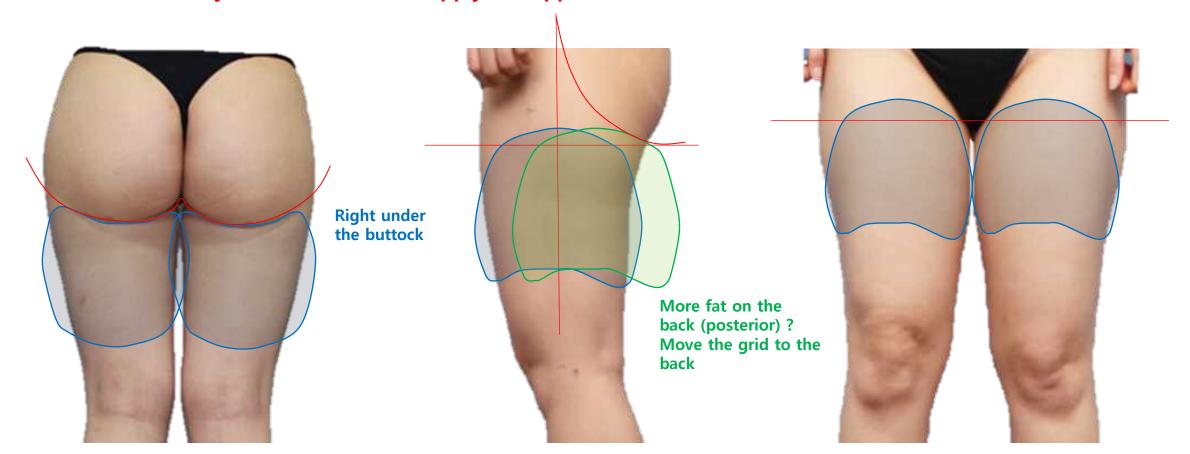
### How to design

Check the fat accumulation accurately

Design while the patient is in standing position

**CLATUU Alpha** ACADEMY

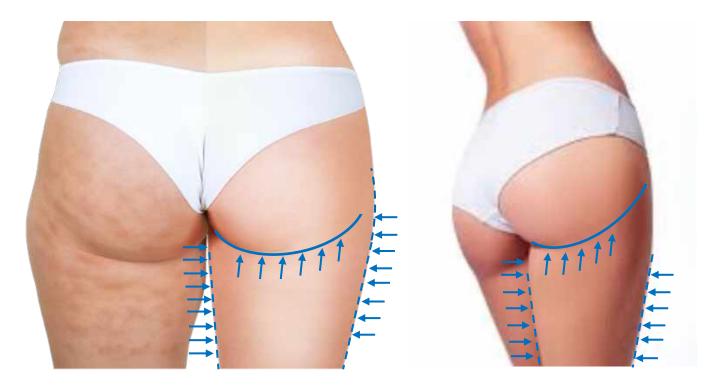
Able to assess fat layers from muscle so apply the applicator to the area with more fat



### Why design matters

- Design makes thighs more slimmer
- Getting rid of banana roll fat → Hip up effect

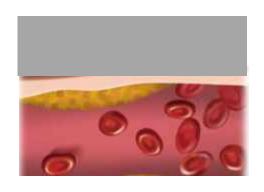


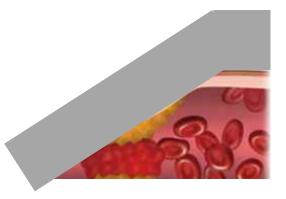




### **Suction results in effective treatment (comparison)**







### **Only Cooling Plate**

Blood flows and temperature tends to remain same

### **Cooling With Suction**

Suction blocks the blood flow so cold temperature can reach fat tissues fast

Blocked blood circulation leads to accelerated fat freezing and better clinical results





### **Clinical Background – Treatment on the Thighs**

Able to cover Thigh fat concentrates on the outer and inner portions of the contour and below the buttocks.













### **Treatment for Thighs**



✓ How to select the area?



✓ Alpha Shield T Pad



✓ Holding the hand-piece with two hand



✓ No cushion needed for support with various treatment areas



✓ No cushion needed for support with various treatment areas



✓ By simply adjusting the arm stand line





# **Clinical Photos**



### **Combinatory Treatments - Thighs**

	Time	Suction	Cooling	Treatment
Arc-T	50 Minutes	4	5	1 Session
Flat	50 Minutes	3	5	1 Session



Inner Thighs Outer Thighs & Below the Buttocks









# Arc-T + Wing





- ✓ For thighs
- ✓ Wide area at once

Ex) Around the thighs, flat and wide areas





### **Thighs**





- Designed for outer thighs and below the buttocks.
- For effective suction, adjust the cup to where the target area is broadest.
- One-time treatment on broad areas of focus.

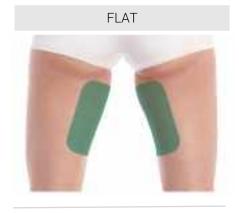
ı	Time	Suction	Cooling	Treatment
	40 Minutes	5	5	1 Session (Arc-T)
	40 Minutes	4	5	2 Session (Wing cup)





### **Thighs**







	Time	Suction	Cooling	Treatment
Arc-T	50 Minutes	4	5	1 Session
Flat	40 Minutes	3	5	1 Session

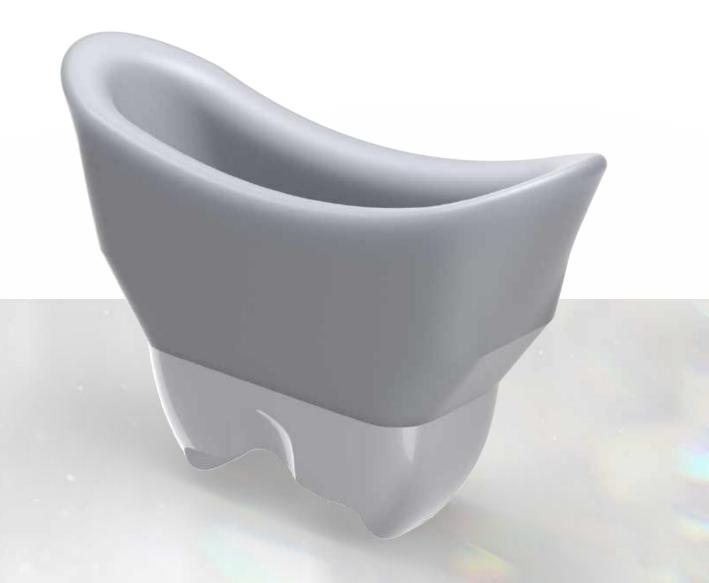




### Features of each applicator and clinical evidence

# Wing Max

Pinch test 4cm





### Clinical Background: Treatment on Abdomen

### Women after childbirth

Women after the child birth have stretched muscle layers on abdomen (diastasis recti) which causes baby fat

But those may feel more comfortable from suctioning during the treatment

If patients complain of discomfort, adjust the suction to the lower level.









### **Clinical Background: Treatment on the Abdomen**

### Devise a treatment plan according to body shape & profile

- Consider the direction/position of fat and muscle shape for the most appropriate treatment possible.



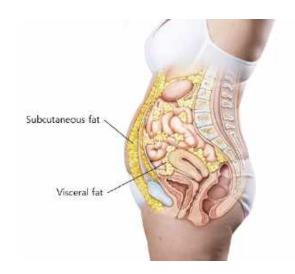






Male: Apple body shapes

**Female: Pear body shapes** 



### Subcutaneous vs. Visceral Fat

- Excluding fat that is stored in the abdominal cavity, fat decomposition from exposure to cooling energy applies only on the subcutaneous fat region.





### **Subcutaneous fat vs visceral fat**























### How to design



- 1. Check and palpate the treatment area
- 2. Mark the both end of the grid
- 3. 1 inch longer (due to strong suction)



### **Treatment for Abdomen**

- ✓ How to select the area?
- ✓ How to design?
- ✓ Treatment site overlapped possible?
- ✓ Holding the hand-piece with two hand













# **Clinical Photos**

## Wing Max



- ✓ Large area
- ✓ Bigger area at once

Ex) Abdomen, Lower belly



### **Abdomen change**



- Designed for Bigger area
- For effective suction, adjust the cup to where the target area is broadest.
- One-time treatment on broad areas of focus.

Time	Suction	Cooling	Treatment
50 MINUTES	4	5	1 Session





# Wing Max



- ✓ Large area
- ✓ Bigger area at once

Ex) Abdomen, Lower belly



### **Abdomen**



Time	Suction	Cooling	Treatment
50 MINUTES	4	4	1 Session





# Wing Max



- ✓ Large area
- ✓ Bigger area at once

Ex) Abdomen, Lower belly



### **Abdomen**





Time	Suction	Cooling	Treatment
50 MINUTES	2	5	2 Session





# PRE TREATMENT

- ✓ Contraindications
- ✓ Consultation
- ✓ Preparation
- ✓ Clinical F A Q

# Pre Treatment

Cold Sensitive Antibodies

Cryoglobulinemia



Paroxysmal Cold Hemoglobinuria



Pregnant or breast feeding woman

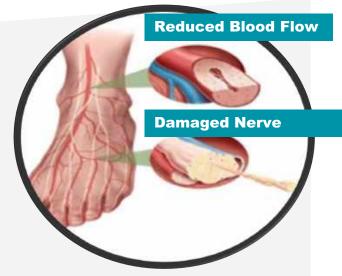






A sensitivity to cold urticaria or Raynaud's disease Cold hands and feet Due to low blood flow to limbs

Peripheral circulatory failure



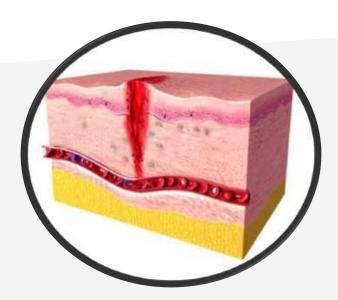
Neuropathy (diabetic neuropathy or postherpetic neuralgia)





No response in the usual way to stimuli

Cutaneous dysesthesia



Open or infected wounds



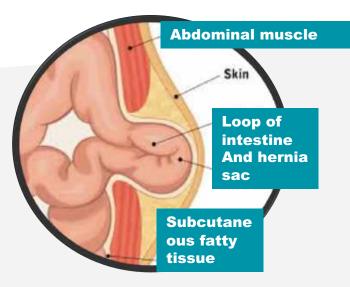
A bleeding disorder or anticoagulant







Recent surgery or scar tissue



Hernia of treatment area



Skin diseases (eczema and psoriasis) Inflammatory skin conditions (dermatitis or hives)

<sup>\*</sup> For other conditions refer to your local doctor or practitioner for consultation.





### **Consultation**



### Consultation information

- Pregnancy or breastfeeding
- Medical history
- Allergic reactions to drugs
- Desired treatment areas of the patient
- Lifestyle



### **Post Treatment**

- Skin Reaction
- Massage
- Precautions
- Treatment Area Management
- Anti-Frostbite
- Side Effects/ Rare Side Effects

### **Skin Reaction**





- Redness and slight bruising may occur.
- Suction may cause swelling of the skin.
- The more visible the suction marks the more effective suction occurs during treatment.



### **Massage: Clinical Evidence**



Boey and Wasilenchuk evaluated whether the addition of a post-treatment manual massage enhanced the efficacy of a single cryolipolysis treatment.

Immediately after treatment, patients received a 2-minute manual massage. This consisted of 1 minute of vigorous kneading of the treated tissue between the thumb and fingers followed by 1 minute of circular massage of the treated tissue against the patient's body.

- Gently massage the target area for 2 minutes.
- Remove any gel residues with a warm towel.



### **Massage: Clinical Evidence**



Post Gel Pad Removal



Post Gel Pad Removal



Post Massage



Post Massage

In this Boey and Wasilenchuk 's study, to examine the effects of massage on subcutaneous tissue over time, histological analysis was completed through 4 months after treatment.

Histological analysis revealed no evidence of necrosis or fibrosis resulting from the massage, thus showing post treatment manual massage to be a safe and effective method to further reduce the fat layer after cryolipolysis.





#### **Rare Side Effects**



- Reduced tongue and lip movement (involving double chin treatment)
- Dryness in the mouth (involving double chin treatment. Classys has not received this report.)
- Paradoxical adipose hyperplasia (PAH)
- Scarring or changes to skin color
- Reduced saliva production
- Frostbite or first and second degree freeze burns
- Hyperpigmentation or dark skin coloration (that often resolves on its own)
- Abrupt and undesirable changes in fat layering



### **Combination Treatment**

#### **HIFU** Combination



#### **RF** Combination



#### **INJECTION** Combination



#### Endermologie (LPG) Combination



#### **ShockWave Therapy** Combination







#### Q: who is a right candidate for CLATUU Alpha?

**A:** Clatuu Alpha is not a weight-loss treatment. Ideal candidates for this are in general health condition, willing to lose the weight and have noticeable bulges in certain areas.

#### Q: what does this treatment feel like? Any pain or discomfort during the procedure?

**A:** during the first five to ten minutes, the patient generally feels intense cold which soon disappears in 10 minutes when bloodstream is interrupted by applicator's suctions. After this, most of patients feel comfortable. Following the treatment, the patients may feel some tingling sensations but this dissipates soon within 2 to 3 hours and the patients are able to return to their daily activities.

#### Q: What about the patient with lap band procedure (gastric band surgery)?

**A:** it will not affect lap band procedure.



### Q: what about T1DM or T2DM? Is it ok to take blood sugar control medicines or insulin injection?

A: as long as it is not neuropathy diabetic, patients with T1DM or T2DM or pre-diabetic can be candidates for this treatment because in general the treated areas are not near the peripheral nervous systems which is prone to be damaged by diabetic conditions. Also the patient can keep their medication regime without any change.

#### Q: If patients have weakened immune systems or immune related disorders...

A: People with those conditions can experience serious medical complications as the ability to handle the cold and to recover is impaired due to weakened immune systems.

#### Q: Is there any risk of skin dimpling or bumps when fat cells are destroyed?

A: those risks are very low as fat cells are evenly destroyed across the treatment areas. But to prevent every possible and rare risk, it is significant to design the treatment area as well as massage post treatment for 2 minutes.





#### **Q: Patients with Hypertension (HTN)**

A: HTN is not a contraindication for CLATUU Alpha but it is very important to keep a close eye on it with your GP or cardiologist (heart doctor).

#### Q: Is CLATUU working for the patient with high cholesterol?

A: as frozen and destroyed fat cells are drained primarily via lymphatic system instead of the bloodstream, it will not affect blood cholesterol level in any ways.

In our study, we discovered that because the lipid clearance process is gradual, there is no harmful change in blood lipids or liver function.



Q: If Cryolipolysis causes inflammation, could this cause cancer as all diseases and cancer are caused by inflammation?

A: There is no scientific evidence that Cryolipolysis can lead to cancer or other diseases due to the inflammation. Destroyed fat cells are filtered through the lymphatic system gradually and naturally and this proves to be safe and effective.

### Q: Given that the fat cells extract through the liver, will this affect the liver function in anyway?

A: Cryolipolysis doesn't affect the liver function in any ways as destroyed fat cells are disposed through the body's lymphatic tissue and the liver does not play a significant part.



#### Q: how many patients experience discomfort post treatment and when does it subside?

A: this case rarely happens and only small percentages of patients experience this due to nerve irritation that usually starts about 3 to 10 days after the treatment. This can be improved with compression devices and oral analgesia such as paracetamol (generic name) or Tylenol (brand name). Prescription nerve pain medicine may be taken for a week or so. Pain resolves usually within 5 to 7 days.



Q: Overlapping the treatment area are recommended from the other product provider. Can we do the same treatment with CLATUU Alpha?

A: as 360 CLATUU Alpha cooling system delivers consistent cooling energy to the treatment area evenly, there is no need to overlap the treatment zone.

#### Q: does CLATUU Alpha treat cellulite?

A: Though CLATUU Alpha is an effective treatment for fat reduction, it is not an ideal treatment for cellulite, but can certainly help reduce the appearance of cellulite.



### Q: If the patient is planning to be pregnant in near future, is CLATUU Alpha working for them?

A: while being pregnant or breastfeeding is a contraindication, fat freezing treatment does not have an impact on ability to get pregnant. However, if the patient is actively trying to conceive now, she should hold off on this treatment as there is a high chance of being pregnant.

#### Q: When patients can do CLATUU Alpha treatment after pregnancy

A: patients can safely treat with CLATUU Alpha 6 months after vaginal delivery, and 12 months post C-section if well-healed.

