



## TREATMENT PARAMETERS

### SIMPLE PARAMETERS

Lesion	Wavelength	Fluence (J/cm <sup>2</sup> )	Hz	Spot	Number	Interval
Genesis	1064nm	7.0 j ~ Step 1.0j	7hz	5mm	3-10 passes	1-2 weeks
PTP	1064nm	1.5 j ~ Step 0.1j	8-10hz	6-8mm	3-10 passes	1-2 weeks
Melasma	1064nm	1.0~2.5 j ~ Step 0.1j	8-10hz	6-8mm	3-10 passes	1-2 weeks
PIH	1064nm	1.5 j ~ Step 0.1j	8-10hz	6-8mm	3-10 passes	1-2 weeks
Tattoo Body	1064nm	3.0 j ~ Step 0.5j	2hz~	3-5mm	1 pass	8-12 weeks
Tattoo Eyebrow	1064nm	1.7 j ~ Step 0.5j	2hz~	3mm	1 pass	8-12 weeks
Ota	1064nm	1.5 j ~ Step 0.1j	2hz~	3-4mm	3-7 passes	8-12 weeks
Lentigo	532nm	0.4 j ~ Step 0.1j	1hz~	3-4mm	1-2 passes	4 weeks
Seborrheic Keratoses	532nm	0.4 j ~ Step 0.1j	1hz~	3-4mm	1-2 passes	4 weeks
Freckles	532nm	0.3 j ~ Step 0.1j	1hz~	3-4mm	1-2 passes	4 weeks

For all treatments using PASTELLE Q-Switched Nd:YAG Laser, please note the following:

- Apply anaesthetic cream for at least 30 minutes on every lesion prior to commencing treatment.
- Overlap approximately 30-50% if the lesion is bigger than laser spot size.
- The laser arm should be kept at a right angle to the skin.

# Q-SWITCHED PARAMETERS

Lesion	Wavelength	Spot size	Fluence (J/cm <sup>2</sup> )	Method/Comments
<b>Pigmented lesions</b>				
<b>Epidermal:</b>				
Lentiginos, ephelides, CALM	532 nm	3mm	0.6 - 1.0J	<ul style="list-style-type: none"> <li>Lighter lesions require more power</li> <li>Lighter lesions 2-3 tx</li> <li>Lighter lesions may require more tx sessions</li> <li>532nm will cause purpura</li> <li>May blister 24-48 hrs post-op</li> <li>Avoid sun exposure 6w post tx</li> <li>Epidermal usually single tx (re-treat residual at 4-6w)</li> <li>Black or darker skin types should be treated with 1064nm first</li> <li>Dermal lesions 4-6+ tx</li> <li>Dermal lesions - same end pt as tattoo (white spot, no bleeding)</li> </ul>
		4mm	0.4 - 1.2J	
		5mm		
Epidermal melanosis (PIH)	532 nm	3mm	1J	
Deeper pigment	1064 nm (plus 532 for sup)		3 - 4J	
<b>Dermal:</b>				
Nevus of Ota, nevi, Mongolian spot	1064 nm	4mm	5 - 7J	
		4mm	3 - 4J	
		5-7mm	2 - 3J	
Melasma	1064 nm	7mm	2 - 3J	<ul style="list-style-type: none"> <li>10Hz, 2 passes whole face (small area at a time - 3x3cm)</li> <li>1 pass one direction then 1 pass perpendicular</li> <li>8 tx, - 4 weekly then 4 fortnightly (3 months)</li> <li>Can use Cryo-Jet or Siberian</li> <li>End-pt lightening of pigment, perilesional erythema, hair whitening</li> </ul>
<b>Rejuvenation and toning</b>				
Soft Peel	1064 nm	10mm	1.2J	<ul style="list-style-type: none"> <li>8 Hz, 2 passes</li> </ul>
Laser Toning – for texture, pigmentation and redness. 70-80% improvement	1064 nm	6-8mm	1.5-3J	<ul style="list-style-type: none"> <li>8-10 Hz</li> <li>2-3 passes with 50% overlap</li> <li>end-pt of moderate redness / erythema</li> <li>lower energy if hives, petechiae</li> <li>post-op don't cool or apply anything for 1hr</li> <li>avoid sun and cosmeceuticals for 1hr</li> <li>can use emla but not necessary</li> <li>every 2-4 weeks</li> </ul>
Genesis – for collagen stimulation	Genesis (1064 open)	6-8mm	9J	<ul style="list-style-type: none"> <li>8 Hz</li> <li>Heat to 42 degrees and maintain until erythema</li> <li>Use 8mm spot at max energy - if still sensitive then lower fluence</li> <li>2-4 passes</li> <li>Every 2-4 weeks</li> </ul>
<b>Active Acne</b>	1064 nm	6mm	2-4J	<ul style="list-style-type: none"> <li>10 tx, weekly</li> </ul>
<b>Laser assisted hair removal</b>				
Dark vellus hair, Paradoxical hypertrichosis	1064 nm	6-8mm	2.5-3.5J	<ul style="list-style-type: none"> <li>Shave prior to tx</li> <li>EMLA optional</li> <li>Rpt tx every 2-3 weeks</li> <li>Lightening, thinning, reduction in no. of hairs</li> </ul>
<b>Stretch Marks</b>				
White > 3 yrs old	1064 nm	6mm	2.5 - 3.5J	<ul style="list-style-type: none"> <li>Treat same as laser toning with 1064 for white scars</li> <li>Treat same as tattoo with 532/585 for red scars</li> </ul>
Red, raised < 3 yrs old	532 nm 585 nm	3mm 3mm	2 - 2.5J	
<b>Tattoo</b>				
Black, dark blue, grey, blue	1064nm	4-8mm	2 - 3J	<ul style="list-style-type: none"> <li>Treat each colour individually</li> <li>Pain large areas with 30-50% overlapping passes</li> <li>larger spot size better (better penetration)</li> <li>Inc power if yellowish or brownish change</li> <li>Tx intervals 6-8 weeks</li> <li>5-15 Tx</li> <li>6mm spot = standard mode</li> <li>Best in conjunction with Cryo-Jet</li> </ul>
Red, purple, orange, brown	532 nm	3mm	2 - 5J	
		4mm	1 - 3J	
Green	660nm	3mm	Max J Low Hz	
Sky-blue	585nm	3mm		
Difficult inks – White, yellow, fluorescent colours	1064nm	3mm 4mm 6mm	3 - 4 J 3 - 4 J 2 - 4 J	
<b>Vascular lesions</b>				
Tels, angioma, PWS	532nm 585nm	3mm 2-3mm	2 - 3 J Max J	<ul style="list-style-type: none"> <li>Best for bv 150u or smaller</li> <li>Angiomas single tx</li> <li>PSW multiple sessions</li> </ul>
<b>Other</b>				
Onychomycosis (Nail Fungus)	Genesis (1064 open)	6mm	Max J 2 Hz	Heat until intolerable
Warts	Genesis (1064 open)	6mm	Max J 2 Hz	Heat to 44-45 degrees for as long as possible

# EPIDERMAL LESIONS

Lesion	Wave Length	Fluence J/cm2	Hz	Spot	Treatment times	Interval
Age Spot	532nm	0.3~ Step 0.1	1~	3-4	1-2	4 weeks
Café Au-Lait	532nm	0.4~ Step 0.1	1~	3-5	3-7	8 weeks
Freckles	532nm	0.3~ Step 0.1	1~	3-4	1-2	4 weeks
Lentigo	532nm	0.4~ Step 0.1	1~	3-4	1-2	4 weeks
Seborrheic Keratoses	532nm	0.4~ Step 0.1	1~	3-4	1-2	4 weeks

## OPERATION OF EQUIPMENT

- ✿ Most skin pigment shows a reaction called frosting when properly treated with a laser. This is an indication that your parameter settings are effective. If you should need to increase fluence, do so 0.1 step at a time, remembering that too much energy can cause side effects such as PIH.
- ✿ A scab will form on top of the lesion between 3-5 days from treatment, and come off at 7-9 days. Any pigment remaining may be reassessed for treatment with your doctor. The use of sunscreen on the treated area for 2 weeks after treatment is highly recommended.

## TREATMENT TIPS FOR EACH LESION

- ✿ **Café Au-Lait:**  
Crusting forms on the lesion spot between 3 and 5 days after treatment. The scab comes off the spot after 7 - 8 days. If the lesion is widespread over the skin, several treatments are recommended. This approach causes less discomfort for the patient and minimizes downtime.
- ✿ **Freckles:**  
In Skin types I and II, an overall treatment may be used to reduce freckles. Spot treatments of individual freckles may be used for skin types III and IV, or for persistent freckles.
- ✿ **Seborrheic Keratosis:**  
Seborrheic keratosis is a lesion of thickened epidermal tissue. A flat lesion may be removed using just Pastelle but for a thickened lesion, an ablative laser such as CO2 or Er:YAG may be required first. Remove the remaining pigment using the Pastelle Q-Switched laser four weeks later. You may see hyperpigmentation when you treat the skin first with the ablative laser. In this case we recommend treating hyperpigmentation using the toning treatment and topical pigment inhibitor. Frosting may not be seen when treating SK, due to the thickness of the tissue.

# DERMAL LESIONS

Lesion	Wave Length	Fluence J/cm2	Hz	Spot	Treatment times	Interval	Characteristics
Ota Ito Blue	1064nm	3.0~ Step 0.5	2~	3-4	3-7	8-12 weeks	Darkening of pigment

## OPERATION OF EQUIPMENT

- ✿ Select the briefcase icon at the top left of the main screen.
- ✿ Click the treatment programs, and then hit the **"V"** icon in the lower right-hand corner.
- ✿ Check your spot size is as per the parameters above then press **Ready** before operating the laser.
- ✿ Most dermal pigment does not react by whitening. But you can identify the appropriate energy value by listening for the snapping sound of pigment or seeing the changing colour of pigment.
- ✿ A scab will form on top of the lesion between 3-5 days from treatment, and come off at 7-9 days. It is highly recommended to use sunscreen on the treated area for 2 weeks after treatment.

## TREATMENT OF EACH LESION (Tip)

- ✿ **Nevus of Ota / Ito and Blue Nevi**  
Nevus of Ota/Ito and Blue Nevi are dermal lesions, which may frost after treatment, but may not be seen due to depth of the lesion. The appropriate energy is selected based on the snapping sound and pinpoint bleeding immediately after the treatment. Generally, for the second treatment, we recommend increasing Fluence from the level of the first treatment.

# LASER TONING

Lesion	Wave Length	Fluence J/cm <sup>2</sup>	Hz	Spot	Treatment times	Interval	Features
L-toning Melasma	1064nm	1.0-2.5 Step 0.1	8-10	6-8	3-10	1-2 weeks	End Point: mild erythema
L-toning Acne	1064nm	1.5	8-10	6-8	3-10	1-2 weeks	End Point: dark erythema
L-toning Ota	1064nm	1.5~ Step 0.1	8-10	6-8	2-5	2-4 weeks	End Point: petechiae
L-toning PIH	1064nm	1.5~ Step 0.1	8-10	6-8	2-5	1-2 weeks	End Point: gradient of pigment (Decreased brightness)

## TREATMENT OF EACH LESION (Tip)

### ☼ Laser-toning Melasma

Treat by dividing the treatment area into three parts, e.g., the right cheek, left cheek and the forehead. Be careful not to shoot concentrically in one region. Prior to treating, use a test pulse on an inconspicuous area to ensure treatment settings are appropriate. Light pressure applied to the treated area can assist in relieving any discomfort. Mild erythema can be experienced after treatment. As far as possible, avoid shooting concentrically in one region. Approximately 2-3 passes are appropriate.

### ☼ Laser-toning Acne, Ota, PIH

Dark erythema or petechiae can be experienced after treatment.

## OPERATION OF EQUIPMENT for LASER TONING AND PTP

- ☼ Select the briefcase icon at the top left of the main screen.
- ☼ Click the treatment programs, and then hit the "V" icon in the lower right-hand corner.
- ☼ Click the ready button on the upper right corner of the main screen and then, if confirmation pops up, proceed to set the spot size of the handpiece, click the "V" icon and shoot the laser.
- ☼ In the case of Laser toning, it is important to set the energy shot correctly, but be careful not to shoot concentrically in one region.
- ☼ It may take between three and seven treatments to see an observable outcome.

## PTP (Photo Acoustic Twin Pulse)

Lesion	Wave Length	Fluence J/cm <sup>2</sup>	Hz	Spot	Treatment times	Interval	Characteristic
L-toning	1064nm	1.5~ Step 0.1	8-10	6-8	3-10	1-2 weeks	End Point: mild erythema
Genesis	FR Mode	1.5	8-10	5-6	3-10	1-2 weeks	End Point: mild erythema

## LASER-TONING PTP TIP

General treatment technique is the same as for Laser-toning of Melasma, covering the face with 2 - 3 passes. To obtain maximum benefit without any increased risk of side effects, shoot into dispersed pigment, using PTP mode.

Use the following combination of treatment:

Laser-toning Melasma = 2,000 shots;

Laser-toning PTP =1,000 shots;

Total: 3,000 shots.