

genesis*plus*

Treatment Guidelines



CUTERA®
Lasers and Light™

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The Cutera GenesisPlus is an Nd:YAG (1064nm) laser with a patented pulse structure designed for safe and effective treatment on all skin types and tanned skin. It can be safely used on all body parts (excluding the eye and surrounding area). Common indications include:

- Rosacea / Diffuse Redness
- Poikiloderma of Civatte
- Scar reduction: including reduction in hypertrophic and keloid scars
- Wrinkle reduction
- Improvement in texture
- Reduction in pore size

PREREQUISITE

Review the GenesisPlus Operator Manual (shipped with laser) and Clinical Presentations on Laser Physics, Safety and Maintenance (found on Cutera VIP website) prior to operating the laser.

PATIENT ASSESSMENT

- Obtain a medical history and signed consent.
- **Contraindications for this device are Pregnancy and Skin Cancer**
- Laser may cause activation of herpes. Consider pretreatment with an anti-viral. See the GenesisPlus Operator manual for a full list of treatment considerations

SELECTING TREATMENT PARAMETERS

Recommended Treatment Guidelines					
Size	Skin Type	Fluence	Pulse Duration	Repetition Rate	# Tx
Large Area (face, neck, or chest)	I-IV	12-18 J/cm ²	0.3 ms	7 – 10 Hz	4-6
	V-VI	8-12 J/cm ²	0.3 ms	5 – 8 Hz	4-6
Small Area (scars, fingers or toes)	I-IV	12-18 J/cm ²	0.3 ms	2 – 3 Hz	1-4
	V-VI	10-16 J/cm ²	0.3 ms	2 – 3 Hz	1-4

- Start with low fluence and slow repetition rate to observe laser-tissue interaction. Adjust to patient tolerance
- Sensitive areas, darker skin types, and areas of dense hair or recent sun exposure may require lower fluences or lower repetition rates
- The laser system should only be operated by qualified practitioners who have received appropriate training and have thoroughly read the operator manual.

TEMPERATURE MONITORING

GenesisPlus features an integrated temperature sensor which monitors temperature 4cm from the skin. The 6 LED indicators on the handpiece correspond with temperatures as shown:

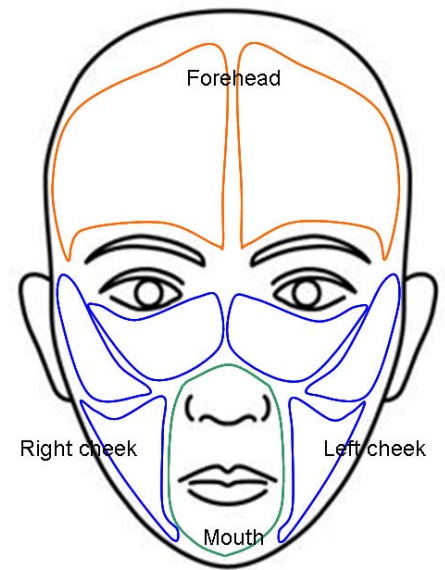


LED Color	Temp Range
Green	26-30 ° C
Green	31-34 ° C
Green	35-38 ° C
Yellow	39-42 ° C
Yellow	43-46 ° C
Red	47-50 ° C

PERFORMING THE PROCEDURE

1. Prepping the Patient

- Clean skin, remove make-up, polish, jewelry in treatment area
- Shave the treatment site if there is excessive hair
- No gel or topical anesthetic is required or recommended
- Take pre-treatment photographs for future reference
- ALL people in the treatment room must wear safety eyewear
 - Wavelength and optical density (≥ 6.1 @ 1064nm) marked on all goggles.



2. Performing Treatment

- Do not contact the skin with the handpiece
- Hold the handpiece perpendicular to skin's surface at a distance of 3-4 cm
- If treating face, divide into multiple regions as shown above.
 - Treat each region completely.
 - Do *NOT* treat upper lids
- Use controlled movement of the handpiece to cover region with multiple passes in a zigzag fashion
 - Adjust speed to patient tolerance
- Goal for effective treatment is to heat and hold tissue temperature at 43°- 46° as indicated by yellow LEDs
- Treat to point of discomfort and erythema, then move to adjacent regions (See image to the right)
- Treatment will require multiple passes
 - A typical region on face will receive 1000-3000 pulses or 8000-12,000 pulses for whole face
 - Number of pulses for small areas varies with size. A 7cm x 2cm linear scar or 5 toes on one foot would take about 700-800 pulses



3. Tips / Tricks / Suggestions

- Avoid hair bearing areas if patient is concerned about possible hair damage
- Bony areas, darker skin and areas of dense hair growth may require lower fluence and/or fewer pulses
- Dark skin and small areas (scars, fingers and toes) may need periodic short rests if area gets too hot during treatment. Cooled gel packs may be used if needed.
- Treating skin near the eye:
 - Distance from the orbit can often be increased by pulling the skin away from the eye for treatment
 - Stay outside the orbital rim
 - Direct the laser beam away from the orbit
- Treating around the mouth
 - The vermillion border may be treated, but avoid accidental exposure to teeth
 - Place wet gauze between the lips and teeth to protect the teeth
- Depending on the user setting, the laser emits distinct water drop sounds every 100, 1000, and 5000 pulses or every 25, 100 and 500 pulses. These sounds can help keep track of treatment progression without looking at the screen

4. Avoiding Complications

- Assess treatment area for decreased sensation/numbness prior to treatment
- Topical anesthetic is not recommended because patient feedback is important
- Always treat outside the orbital rim around the eye
- Do not treat over or close to tattoos or permanent make-up
- No self-tanners for at least two weeks prior to treatment
- Avoid direct exposure to teeth – the Nd:YAG can crack a tooth
- Avoid treating directly over pacemakers or metal implants
- Reduce fluence if surgical implants and/or threads in treatment area are within depth of treatment
- Reaction to fillers unknown

5. Post-Operative Care

- No special post operative care is typically required
- Erythema is normal and expected and resolves with time
- Edema is a normal reaction
- The average time interval between treatments is 2 - 4 weeks
- If a blister or crusting develops, treat as a wound
 - Do not ice a suspected burn – use a cold compress
 - Apply lubricating ointment until re-epitheliation occurs

LASER SAFETY AND MAINTENANCE

- It is important to properly maintain your system. Failure to do so may affect the life of your laser. Review the Operator Manual thoroughly for detailed instructions.
- Log on to the Clinical & Training section of the Cutera VIP website (www.cutera.com) for important information on Laser Safety and Laser Physics. These presentations review light-tissue interaction and safe laser practices.

PREREQUISITE

Review Operator Manual (shipped with the laser) and Clinical Presentations on Laser Physics, Safety and Maintenance (found on Cutera VIP website) prior to operating the laser.

The information below should only be used after thoroughly reviewing the Nd:YAG Vascular or GenesisPlus Treatment Guidelines. They are not intended to be used as a stand-alone guidance on treating Warts.

SELECTING TREATMENT PARAMETERS

The treatment of warts should only be attempted by experienced practitioners.

- The target chromophore for the wart is the vascular component
- These parameters are provided as a guide only. Observe laser-tissue interaction and clinical endpoints to determine appropriate settings
- Skin Types I-VI (parameters may need to be adjusted according to skin type and/or color of wart)
 - 3mm Spot Size
 - Fluence: 150 J/cm² - 200 J/cm²
 - Pulse Duration: 5ms – 15ms
 - 5mm Spot Size / GenesisPlus
 - Fluence: 140 J/cm² - 200 J/cm²
 - Pulse Duration: 6ms – 20ms
- CoolGlide or Xeo Nd:YAG for warts –
 - Handpiece should be flush with skin
- GenesisPlus for warts –
 - Select the back button icon on the upper left side to access Wart Settings
 - Handpiece should be 2 cm away from skin instead of the 4cm recommended for Laser Genesis treatment
 - Only the larger aiming beam will appear, the smaller working distance beam will not be displayed
- Smoke evacuator and laser plume masks (filters to 0.1 µm) are recommended
- Warts may need to be debrided prior to treatment
- Gel is not used
- Treat the entire wart
 - Overlap pulses slightly by 10%
 - Do not treat outside the wart border Try to stay within the border of the wart
- The wart may become ashen or dusky immediately after treating
- Immediate post cooling with the handpiece, frozen gel pack, etc. will help with patient comfort
- Warts usually have a black or crusty appearance within 24 hours after treatment and usually slough off in 1-2 weeks
- May apply ointment of choice and non-stick dressing for patient comfort
- If a blister develops, treat as a wound
- More than 1 treatment may be necessary (3-4 weeks apart)