

This is a prospective randomized controlled bilateral left-right comparison trial. It was performed in accordance with Good Clinical Practice. The treatment protocol has been reviewed with each patient who then signed the informed consent. The research was accomplished at Mae Fah Luang University Hospital, Bangkok (Outpatient department).

According to the Clinical Assessment of Repigmentation degree, the mean results of the three dermatologists assessment showed 14 patches (82%) out of the 17 patches were given score 1 which means 1%-24% repigmentation, while only 3 patches (18%) were given 0 score, 6 his means that carbon dioxide laser has achieved mild repigmentation effect in vitiligo patches.

One patient noticed repigmentation in areas not treated by laser, she claimed that repigmentation started to occur in her neck and chest during period of the study, this encouraging news need to be verified in the light of any immunological effects of carbon dioxide laser or it is just an accidental event or something else. But we know that Vitiligo is known as a slowly responding disease so three months of laser sessions may be not enough to achieve complete clinical improvement in repigmentation.

Table 2.2 The Features of the CICU RF Laser Device

Item	Feature
Laser type	RF CO2 ALL METAL SEALED TYPE
Laser power	up to 30 watt
Laser mode	TEM ₀₀ (10.6 μm)
Pulse duration	100-5000 μs
Repetition	0.2-1 s/single
Overlap	1-10 TH
Distance	0.1-2 mm
Treatment area	1*1 - 20*20 mm
Text	Text
Text	Text
Text	Text
Text	Text

Table 2.2 (continued)

Item	Feature
Pixel quantity	up to 40,401
Pixel size	> 100 micron
Cooling	Air Cooling
Optical guide	Articulated arm

Note Pt. for (patient), CAR for (Clinical Assessment of the Repigmentation)

Source Manstein et al. (2010)



Figure 2.1 CICU RF CO2 Laser Device

} Spacing 24 pt

After this relatively short period of follow up, the results, in conclusion, showed patient satisfaction score 16.7% (1 patient) were really satisfied, 66.7% (4 patients) were slightly satisfied and 16.7% (1 patient) with poor satisfaction.