

Table SI. Characteristics of studies included in this review

Study, year, Country (ref)	Study design	Vitiligo subtype	Participant number, mean age, years (age range)	Mean disease duration, years (range)	Treatment measures	Treatment protocol			
						Type	Frequency	Duration	Assessment
Cunha et al., 2016, Brazil (6)	RCT, SB, WP	Symmetrical, stable, refractory vitiligo on the hands	4 adults, 32.3±11.4 (21-47), III-V	8.5±6.6 (1-15)	CO ₂ fractional laser Topical steroid Topical salicylic acid	10,600 nm fractional CO ₂ laser (PIXEL CO ₂ , Alma lasers) 0.05% betamethasone solution (ND), Salicylic acid solution (2%, Mantecorp Chemical and Pharmaceutical Industry, Brazil)	5 sessions of treatment, with an interval of 4 weeks Once a day, daily at night	5 months	ND
Felly et al., 2016, Iran (8)	RCT, SB, WP	Stable, refractory vitiligo	20 adults, 30.6±11.1, IV	11.9±6.6	CO ₂ fractional laser Autologous hair transplantation	10,600 nm fractional CO ₂ laser (MX-7000, Daeshin Enterprise Corporation, Seoul, Korea) Follicular grafts harvested from the scalp and transplanted in 1-cm grid pattern using a 1-mm punch	1 session of treatment Once, 5 days after fractional CO ₂ laser	3 months + 10 days	3 months after CO ₂ fractional laser
Helou et al., 2014, Lebanon (7)	Non-RCT*, SB, WP	Stable, refractory vitiligo	10 adults, 27±6.6, (20-42), III-V	6.3±7.7 (2-25)	NB-UVB Topical steroid CO ₂ fractional laser Sun exposure	NB-UVB (Dermalight 1000, Dr Honle medizintechnik, GmbH, Germany) Clobetasol 45% solution 10,600 nm fractional CO ₂ laser (FX_Lumemis Inc., Santa Clara, CA) Between 15:00 h and 18:00 h	Twice a week, starting 5 days after hair transplant Twice daily 3 sessions of treatment, with an interval of 1 month 2 h daily, starting 5 days after each fractional CO ₂ laser	3 months	2 months after the final laser session.
Kanokrungrsee et al., 2016, Thailand (5)	RCT, SB, WP	Symmetrical vitiligo on the face	14 adults, 53.7±13.8, (26-70), IV	3.6±3.1 (0.2-9)	CO ₂ fractional laser Targeted broadband UVB	10,600 nm eCO ₂ laser (Lutronic Corporation, Goyang, Korea) Targeted broadband UVB (DualLight™, TheraLight Inc., Carlsbad, CA, USA),	10 sessions of treatment with 2-week interval 10 sessions of treatment with 2-week interval	5 months	3 months after the last treatment
Shin et al., 2011, Korea (3)	RCT, SB, WP	Symmetrical, stable, refractory vitiligo	10 adults, 59.5±10.4, (37-74), IV	16.8±18.3 (2.5-58)	CO ₂ fractional laser NB-UVB	0.05% clobetasol propionate cream (ND) 10,600 nm eCO ₂ laser (Lutronic Corporation, Goyang, Korea) NB-UVB (UV 7001K; Waldman, Villingen - Schwenningen, Germany)	Twice daily 2 sessions at 2 months interval Twice a week, starting 5 days after each laser treatment.	4 months	2 months after the overall treatment
Vachiramon et al., 2015, Thailand (4)	RCT, SB, WP	Symmetrical, stable vitiligo on the hands	27 adults, 51.2±8.5, III-V	5.9±2.1	CO ₂ fractional laser NB-UVB Topical steroid	10,600 nm eCO ₂ laser (Lutronic Corporation, Goyang, Korea) NB-UVB (M-series, Bryan, OH), 0.05% clobetasol propionate cream (ND)	1 week interval for 10 consecutive weeks. Twice weekly for 20 sessions Twice daily	2.5 months	3 months after the final treatment

RCT: randomized controlled trial; SB: single-blind; WP: within-patient trial; ND: not determined; CO₂: carbon dioxide; NB-UVB: narrow-band ultraviolet B.
*Newcastle-Ottawa Scale: 5.