

Supplemental Table 3. The changes from the baseline of VAS scores for QOL questionnaire

Category	Group	0 week	Δ4 weeks – 0 week	Δ8 weeks – 0 week
Initiation of sleep	T0 (n = 19)	5.52 ± 2.14	-1.49 ± 1.6	-1.21 ± 1.90
	T3 (n = 14)	5.81 ± 2.32	-1.71 ± 1.81	-1.49 ± 1.89
	T5 (n = 17)	6.36 ± 2.14	-2.09 ± 2.08	-1.27 ± 1.99
Feeling of sufficient sleep	T0 (n = 19)	4.77 ± 2.49	-1.11 ± 2.14	-0.87 ± 2.04
	T3 (n = 14)	4.62 ± 2.71	-0.67 ± 2.24	-0.58 ± 2.68
	T5 (n = 17)	4.49 ± 2.54	-0.95 ± 2.3	-0.05 ± 3.01
Refreshment on waking up	T0 (n = 19)	4.51 ± 2.38	-0.77 ± 1.95	-0.74 ± 1.87
	T3 (n = 14)	5.30 ± 2.37	-1.59 ± 1.66	-1.29 ± 1.96
	T5 (n = 17)	4.95 ± 2.71	-0.40 ± 2.16	-0.19 ± 2.76
Fatigue on waking up	T0 (n = 19)	3.86 ± 2.22	-0.86 ± 1.84	-0.46 ± 2.05
	T3 (n = 14)	4.60 ± 2.03	-1.19 ± 1.49	-1.10 ± 1.78
	T5 (n = 17)	4.36 ± 2.55	-0.49 ± 2.14	0.18 ± 2.48
Daytime sleepiness	T0 (n = 19)	4.66 ± 2.39	-0.66 ± 1.97	-0.74 ± 1.88
	T3 (n = 14)	4.74 ± 2.26	-0.61 ± 1.72	-0.40 ± 2.15
	T5 (n = 17)	4.42 ± 2.34	-1.55 ± 2.44	-1.03 ± 2.37
Stress related activities	T0 (n = 19)	3.83 ± 1.85	-1.12 ± 1.14	-0.71 ± 1.27
	T3 (n = 14)	3.55 ± 1.91	-0.32 ± 1.52	-0.11 ± 1.16
	T5 (n = 17)	4.45 ± 2.18	-0.89 ± 1.98	-0.51 ± 1.72
Motivation toward work and study	T0 (n = 19)	4.88 ± 2.51	-1.29 ± 2.45	-1.28 ± 1.67
	T3 (n = 14)	5.04 ± 1.72	-1.13 ± 1.64	-1.26 ± 1.31
	T5 (n = 17)	5.64 ± 1.88	-1.32 ± 1.18	-1.17 ± 1.61
Physical fatigue	T0 (n = 19)	3.59 ± 2.10	-0.39 ± 1.73	-0.05 ± 1.58
	T3 (n = 14)	4.31 ± 1.79	-0.81 ± 1.60	-1.05 ± 1.55
	T5 (n = 17)	5.02 ± 1.62*	-0.97 ± 2.23	-0.56 ± 1.87
Mental fatigue	T0 (n = 19)	3.77 ± 2.38	-0.75 ± 2.10	-0.53 ± 1.92
	T3 (n = 14)	4.51 ± 2.25	-0.91 ± 1.52	-1.14 ± 1.49
	T5 (n = 17)	5.49 ± 2.31	-1.61 ± 1.84	-1.24 ± 1.86

Data are represented as Mean ± SD. T0, Placebo; T3, PHGG 3 g/day; T5, PHGG 5 g/day. Between-group comparison with placebo: * $p < 0.05$.