

Supplementary table 2. Linear mixed model regression analyses of TPOAb level during intervention with selenium or placebo in patients with hypothyroidism. Patients are stratified according to a) duration of the disease (levothyroxine treatment longer or shorter than three months); b) quality of life at baseline (ThyPRO-

Outcomes	Placebo Coefficient (95% CI), p*	Selenium Coefficient (95% CI), p*	Diff. placebo vs selenium Coefficient, (95% CI), p**	Placebo Coefficient (95% CI), p*	Selenium Coefficient (95% CI), p*	Diff. placebo vs selenium Coefficient, (95% CI), p**
a) Log s-TPOAb	Duration of the disease <3 month from inclusion			Duration of the disease ≥3 month from inclusion		
Baseline	3.57 (3.46-3.69)	3.57 (3.46-3.69)	-	3.41 (3.34-3.47)	3.41 (3.34-3.47)	-
3 months	-0.06 (-0.11 to -0.01); p=0.010	-0.09 (-0.17 to -0.03); p=0.007	-0.04 (-0.12 to 0.05); p=0.392	-0.03 (-0.06 to -0.01); p=0.030	-0.09 (-0.13 to 0.04); <0.0001	-0.05 (-0.11 to -0.01); p=0.065
12 months	-0.15 (-0.23 to -0.06); p=0.001	-0.15 (-0.30 to -0.07); p=0.002	-0.04 (-0.18 to 0.10); p=0.599	-0.05 (-0.09 to -0.01); p=0.036	-0.14 (-0.19 to -0.09); <0.0001	-0.09 (-0.16 to -0.03); p=0.006
18 months	-0.17 (-0.25 to -0.09); p<0.0001	-0.26 (-0.39 to -0.13); p<0.0001	-0.09 (-0.24 to 0.07); p=0.273	-0.13 (-0.19 to -0.07); <0.0001	-0.16 (-0.25 to -0.15); <0.0001	-0.07 (-0.15 to -0.01); p=0.065
b) Log s-TPOAb	Composite score <30			Composite score ≥30		
Baseline	3.45 (3.37-3.53)	3.45 (3.37-3.53)	-	3.46 (3.38-3.55)	3.46 (3.38-3.55)	-
3 months	-0.05 (-0.08 to -0.01); p=0.012	-0.10 (-0.17 to -0.03); p=0.005	-0.06 (-0.13 to -0.02); p=0.165	-0.04 (-0.07 to -0.01); p=0.022	-0.09 (-0.12 to -0.05); p<0.0001	-0.05 (-0.09 to -0.01); p=0.061
12 months	-0.09 (-0.12 to -0.03); p=0.002	-0.10 (-0.16 to -0.04); p=0.001	-0.01 (-0.09 to -0.07); p=0.795	-0.06 (-0.12 to -0.01); p=0.048	-0.22 (-0.29 to -0.14); p<0.0001	-0.16 (-0.26 to -0.06); p=0.001
18 months	-0.14 (-0.20 to -0.07); p<0.0001	-0.16 (-0.23 to -0.09); p<0.0001	-0.03 (-0.11 to 0.06); p=0.581	-0.15 (-0.20 to -0.08); p<0.0001	-0.29 (-0.37 to -0.20); p<0.0001	-0.14 (-0.25 to 0.03); p=0.017
c) Log s-TPOAb	s-selenium <83.3 µg/L			s-selenium ≥83.3 µg/L		
Baseline	3.51 (3.42-3.61)	3.51 (3.42-3.61)	-	3.42 (3.32-3.51)	3.42 (3.32-3.51)	-
3 months	-0.03 (-0.06 to -0.01); p=0.064	-0.09 (-0.16 to -0.03); p=0.003	-0.06 (-0.13 to -0.01); p=0.069	-0.04 (-0.09 to -0.01); p=0.010	-0.08 (-0.12 to -0.04); p<0.0001	-0.03 (-0.09 to -0.02); p=0.235
12 months	-0.07 (-0.12 to -0.01); p=0.019	-0.16 (-0.24 to -0.09); p<0.0001	-0.09 (-0.19 to -0.01); p=0.048	-0.09 (-0.15 to -0.02); p=0.007	-0.15 (-0.21 to -0.09); p<0.0001	-0.06 (-0.15 to -0.03); p=0.176
18 months	-0.15 (-0.20 to -0.09); p<0.0001	-0.22 (-0.29 to -0.14); p<0.0001	-0.07 (-0.17 to 0.02); p=0.142	-0.13 (-0.20 to -0.09); p=0.001	-0.22 (-0.29 to -0.15); p<0.0001	-0.09 (-0.19 to 0.01); p=0.088
d) Log s-TPOAb	s-TPOAb <2950 kIU/L			s-TPOAb ≥2950 kIU/L		
Baseline	2.91 (2.90-3.04)	2.91 (2.90-3.04)	-	3.93 (3.88-3.98)	3.93 (3.88-3.98)	-
3 months	-0.02 (-0.06 to 0.02); p=0.380	-0.06 (-0.11 to -0.01); p=0.01	-0.04 (-0.10 to -0.02); p=0.164	-0.07 (-0.09 to -0.04); p<0.0001	-0.11 (-0.17 to -0.05); p<0.0001	-0.05 (-0.12 to 0.02); p=0.190
12 months	-0.06 (-0.13 to 0.01); p=0.074	-0.09 (-0.16 to -0.04); p=0.002	-0.04 (-0.13 to -0.06); p=0.048	-0.10 (-0.15 to -0.05); p<0.0001	-0.21 (-0.28 to -0.14); p<0.0001	-0.11 (-0.19 to -0.02); p=0.019
18 months	-0.13 (-0.21 to -0.05); p<0.0001	-0.20 (-0.28 to -0.12); p<0.0001	-0.07 (-0.18 to 0.04); p=0.205	-0.15 (-0.21 to -0.11); p<0.0001	-0.24 (-0.31 to -0.17); p<0.0001	-0.07 (-0.17 to 0.01); p=0.087

39 Composite median score <30 or ≥30); c) median serum selenium at baseline (<83.3 or ≥83.3 µg/L); d) median TPOAb level at baseline (<2950 or ≥2950 kIU/L).

Data presented as coefficients with 95% confidence intervals. * P-value <0.05 is significant difference from baseline; ** P-value<0.05 is significant difference between groups. Statistically significant differences between groups are highlighted in bold.

Abbreviations: TPOAb, Thyroid peroxidase antibodies

