

Supplementary File

Table S1. *The changes in selenium, iodine, and thyroid autoantibodies*

Groups (n = 89)	Initially	After 3 months	p1 value	After 6 months	p2 value	p3 value
TGAb [U/mL]	306 (146.00, 514)	248 (112, 506)	0.104	257 (124, 488)	0.003	0.642
High antibody group	484 (369, 1063)	498 (255, 703)	0.148	439 (268, 688)	0.013	0.043
Low antibody group	133 (37.5, 242)	114 (20.5, 242)	0.307	120 (15.1, 248)	0.112	0.741
TPOAb [U/mL]	193 (59.1, 399)	150 (77.4, 327)	0.262	130 (51.7, 288)	0.120	0.136
High antibody group	396 (278, 476)	278 (182, 436)	0.013	236 (178, 427)	0.013	0.038
Low antibody group	60.1 (13.7, 116)	79.3 (15.4, 113)	0.056	66.2 (15.9, 113)	0.469	0.632
Serum selenium [ng/mL]	72.9 ± 43.2	132 ± 52.8	< 0.001	142 ± 57.2	< 0.001	0.026
Urine iodine [ug/L]	111 (77.8, 185)	104 (58.2, 164)	0.185	127 (82.8, 238)	0.736	0.558

p < 0.05 indicated a significant difference; high antibody group — patients with either antibody above the baseline population median, i.e. TgAb > 300 or TpoAb > 200; low antibody group — both antibodies were lower than the baseline population median in the slow-response population, i.e. thyroglobulin antibodies (TGAb) < 300 and thyroid peroxidase antibodies (TPOAb) < 200; p1 — comparison between results after 3 months and results of baseline; p2 — comparison between results after 6 months and results of baseline; P3 — comparison between results after 6 months and results after 3 months

Table S2. *Effectiveness analysis of selenium supplementation in the same patient population*

	After 3 months				After 6 months			
	TGAb ↓		TPOAb ↓		TGAb ↓		TPOAb ↓	
	n	(%)	n	(%)	n	(%)	n	(%)
Total (n = 89)	39	43.82	43	48.31	45	50.56	42	47.19
High antibody group (n = 49)	26	53.06	33	67.35	35	71.43	39	79.59
Low antibody group (n = 40)	12	30.00	9	22.50	14	35.00	13	32.50

The decrease of antibody is compared to the baseline level; TGAb — thyroglobulin antibodies; TPOAb — thyroid peroxidase antibodies