

Supplemental Table 1. Analytic variability, intra-individual variability, reference change values of TSH, fT4 and fT3

	CV1 (low)	CV2 (high)	CV_A (%)	CV_i (%)	RCV (%)
TSH	4.23	5.82	7.2	17.7	53.3
fT4	5.17	2.23	5.63	4.9	20.7
fT3	4.12	2.07	4.61	5.0	18.9

CV1 and CV2 are percent coefficients of variations (SD/mean) with 2 levels (low and high) control sera for 20 days. CV_A is calculated by the formula $\sqrt{(\text{CV of Level 1})^2 + (\text{CV of Level 2})^2}$. CV_i is inter individual variations from EFLM website. RCV is calculated according to the formula $2^{1/2} \times Z \times (\text{CV}_A^2 + \text{CV}_i^2)^{1/2}$ (a Z value of 1.96 was selected for 95% probability corresponding to a significant change). TSH - thyroid stimulating hormone. fT4 - free thyroxine. fT3 - free triiodothyronine. RCV – reference change value. CV_A – analytical coefficient of variation. CV_i - intra-individual coefficient of variation.

Supplemental Table 2. Comparison of the statistic z and calculated z (z*) values according to gender for the analysed thyroid parameters

Age group (years)	TSH	fT4	fT3
18-30			
z	6.64	36.47	15.52
z*	15.20	16.26	6.49
31-40			
z	11.28	26.73	15.62
z*	13.98	15.16	5.99
41-50			
z	13.46	16.17	16.14
z*	14.32	14.77	6.61
61-60			
z	11.28	6.27	7.62
z*	13.99	14.12	6.56
61-70			
z	8.89	1.01	6.17
z*	12.27	12.62	5.78
> 70			
z	4.17	1.83	1.69
z*	9.42	9.79	4.67
All			
z	25.88	38.43	18.98
z*	32.66	34.16	14.83

Bolded values are statistically significant (P < 0.05). TSH - thyroid stimulating hormone. fT4 - free thyroxine. fT3 - free triiodothyronine.

Supplemental Table 3. Comparison of the statistic z and calculated z (z*) values according to the decades of life for the analysed thyroid parameters for the males group

Age group (years)	TSH	FT4	FT3
18-30 vs 31-40			
z	8.06	8.32	7.18
z*	12.44	12.46	5.40
18-30 vs 41-50			
z	10.43	13.19	9.35
z*	13.47	13.28	5.83
18-30 vs 51-60			
z	9.82	14.40	17.17
z*	13.87	13.66	5.96
18-30 vs 61-70			
z	9.67	16.11	22.02
z*	13.18	13.21	5.67
18-30 vs > 70			
z	7.76	14.17	26.85
z*	11.61	11.64	5.05

Bolded values are statistically significant (P < 0.05). TSH - thyroid stimulating hormone. fT4 - free thyroxine. fT3 - free triiodothyronine.

Supplemental Table 4. Comparison of the statistic z and calculated z (z*) values according to the decades of life for the analysed thyroid parameters for the females group.

Age group (years)	TSH	FT4	FT3
18-30 vs 31-			
40	3.68	2.16	5.79
z	16.48	18.41	6.99
z*			
18-30 vs 41-			
50	3.04	5.96	11.75
z	15.95	17.50	7.19
z*			
18-30 vs 51-			
60	3.51	14.47	11.81
z	15.31	16.64	7.04
z*			
18-30 vs 61-			
70	4.40	17.30	15.89
z	14.42	15.78	6.58
z*			
18-30 vs > 70			
z	5.98	14.52	19.86
z*	13.59	14.98	6.19

Bolded values are statistically significant (P < 0.05). TSH - thyroid stimulating hormone. fT4 - free thyroxine. fT3 - free triiodothyronine.