Example Laboratory Values with Reference Results

The following test values for TSH and peripheral thyroid hormones may be used to assess a new build, implementation or installation of SPINA Thyr. They may also be suitable for validation purposes, if previous calculations delivered unexpected results.
Please note that small differences in the results (usually much less than 1%) may occur, depending from hardware, operating system or application version. As a courtesy to your colleagues we may ask you to report larger deviations using the bug tracker at **http://sf.net/projects/spina/support**. Please also deliver the entered and returned values and information regarding the computing environment.

TSH	FT4	FT3	TT4	TT3	$G_{T,F}$	$G_{T,T}$	$G_{D,FF}$	$G_{D,FT}$	$G_{D,TT}$	TSHI	TTSI	Remark
					N/C		N/C			N/C	N/C	1
0	0	0			N/C		N/C			N/C	0	1
1 mU/l	2 ng/dl	3 pg/ml			7.29 pmol/s		16.69 nmol/s			3.45	100	
1 mU/l	1.3 ng/dl	3 pg/ml			4.74 pmol/s		25.67 nmol/s			2.24	65	2
0.5 mU/l	1.5 ng/dl	4 pg/ml			9.47 pmol/s		29.67 nmol/s			1.89	37.5	3
0.3 mU/l	1.6 ng/dl	5 pg/ml			15.81 pmol/s		34.76 nmol/s			1.56	24	4
0.01 mU/l	2.2 ng/dl	6 pg/ml			589.99 pmol/s		30,34 nmol/s			–0.81	1.1	5
3.9 mU/l	0.8 ng/dl	2 pg/ml			1.33 pmol/s		27.81 nmol/s			2.74	156	6
7 mU/l	0.8 ng/dl	2 pg/ml			1.08 pmol/s		27.81 nmol/s			3.33	280	7
13 mU/l	0.4 ng/dl	1 pg/ml			0.47 pmol/s		27.81 nmol/s			3.25	260	8
1 mU/l	13 ng/l	4.5 pmol/l			4.74 pmol/s		25.01 nmol/s			2.24	65	9
1 mU/l	16.5 pmol/l	4.5 pmol/l			4.70 pmol/s		25.22 nmol/s			2.21	64.1	9
3.24 mU/l	7.7 pmol/l	28 pmol/l			1.08 pmol/s		336.2 nmol/s			2.21	97.2	10
0.7 mU/l	9 pmol/l	6.2 pmol/l			3.37 pmol/s		63.7 nmol/s			0.85	24.5	11
0.86 mU/l			163 nmol/l	3 nmol/l		7.53 pmol/s			19.54 nmol/s	N/C	N/C	12
0.2 mU/l	4 ng/l	2 pmol/l			5.73 pmol/s		36.12 nmol/s			–0.91	4	13
16.13 mU/l	24 ng/l			1.9 µg/l	2.73 pmol/s			14.65 nmol/s		6.92	1935.6	14

1: N/C: Application should return a message like “Result cannot be calculated” (or an appropriate localisation to the system’s language).
2: Normal values
3: Sublatent hyperthyroidism
4: Latent (subclinical) hyperthyroidism
5: Overt hyperthyroidism
6: Sublatent hypothyroidism
7: Latent (subclinical) hypothyroidism
8: Overt hypothyroidism
9: Normal values, different units
10: T3-thyrotoxicosis
11: Latent hyperdeiodation (hyperdeiodination)
12: Calculated from total hormone values
13: Secondary hypothyroidism due to thyrotropic insufficiency
14. Secondary hyperthyroidism in case of TSH producing adenoma

TSH: Thyrotropin level; FT4: Free thyroxine (T4) level; FT3: Free triiodothyronine (T3) level; TT4: Total thyroxine (T4) level; TT3: Total triiodothyronine (T3) level; TSHI: Jostel’s TSH index; TTSI: Thyrotroph thyroid hormone sensitivity index; $G_{T,F}$: SPINA-GT, calculated from TSH and FT4; $G_{T,T}$: SPINA-GT, calculated from TSH and TT4; $G_{D,FF}$: SPINA-GD, calculated from FT4 and FT3; $G_{D,FT}$: SPINA-GD, calculated from FT4 and TT3; $G_{D,TT}$: SPINA-GD, calculated from TT4 and TT3.