

	Analyte	Number of Papers	Biological Variation		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
S-	11-Desoxycortisol	2	21.3	31.5	10.7	9.5	27.1
S-	17-Hydroxyprogesterone	2	19.6	50.4	9.8	13.5	29.7
U-	4-hydroxy-3-methoximandelate (VMA)	1	22.2	47.0	11.1	13.0	31.3
S-	5' Nucleotidase	2	23.2	19.9	11.6	7.6	26.8
U-	5'-Hydroxyindolacetate, concentration	1	20.3	33.2	10.2	9.7	26.5
S-	α1-Acid Glycoprotein	3	11.3	24.9	5.7	6.8	16.2
S-	α1-Antichymotrypsin	1	13.5	18.3	6.8	5.7	16.8
S-	α1-Antitrypsin	3	5.9	16.3	3.0	4.3	9.2
S-	α1-Globulins	2	11.4	22.6	5.7	6.3	15.7
U-	α1-Microglobulin, concentration, first morning	1	33.0	58.0	16.5	16.7	43.9
P-	α2-Antiplasmin	1	6.2	---	3.1	---	---
S-	α2-Globulins	2	10.3	12.7	5.2	4.1	12.6
S-	α2-Macroglobulin	4	3.4	18.7	1.7	4.75	7.56
U-	α2-Microglobulin output, first morning	1	29.0	32.0	14.5	10.8	34.7
P-	α-aminobutyric acid	1	24.7	32.3	12.4	10.2	30.5
S-	α-Amylase	7	8.7	28.3	4.4	7.4	14.6
S-	α-Amylase (pancreatic)	2	11.7	29.9	5.9	8.0	17.7
U-	α-Amylase (pancreatic)	2	69.5	105.0	34.75	31.48	88.82
U-	α-Amylase concentration, random	1	94.0	46.0	47.0	26.2	103.7
P-	α-Carotene	1	24.0	65.0	12.0	17.3	37.1
S-	α-Carotene	1	48.0	65.0	24.0	20.2	59.8
S-	α-Fetoprotein(non hepatic carcinoma)	2	12.2	45.6	6.1	11.8	21.9

Biological variation: CV_i , CV_g

Desirable specification: I(%) , B(%) , TE(%)

S-	α-Tocopherol	3	13.8	15.0	6.9	5.1	16.5
S-	Acid phosphatase	2	8.9	8.0	4.5	3.0	10.3
S-	Acid phosphatase tartrate-resistant (TR-ACP)	2	8.0	13.3	4.0	3.9	10.5
S-	Acid phosphatase prostatic activity (PAP)	1	33.8	---	16.9	---	---
P-	Activated partial thromboplastine time	3	2.7	8.6	1.4	2.3	4.5
P-	Adiponectin	1	18.8	51.2	9.4	13.6	29.1
S-	Adenosine deaminase (ADA)	1	11.7	25.5	5.9	7.0	16.7
P-	Alanine	1	14.7	55.8	7.4	14.4	26.6
S-	Alanine aminopeptidase	1	4.1	---	2.1	---	---
S-	Alanine aminotransferase (ALT)	9	19.40	41.6	9.7	11.48	27.48

[Back to top](#)

	Analyte	Number of papers	Biological Variation		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
S-	Albumin	24	3.2	4.75	1.6	1.43	4.07
U-	Albumin, concentration, first morning	3	36.0	55.0	18.0	16.4	46.1
U-	Albumin, output, night urine	3	29.5	58.0	14.8	16.3	40.6
S-	Albumin, glycated	1	5.2	10.3	2.6	2.9	7.2
S-	Aldosterone	2	29.4	40.1	14.7	12.4	36.7
U-	Aldosterone	1	39.4	40.1	19.7	14.05	46.56
S-	Alkaline phosphatase	22	6.45	26.1	3.23	6.72	12.04
S-	Alkaline phosphatase, bone	4	6.2	37.4	3.1	9.5	14.6
S-	Alkaline phosphatase, liver	1	10.0	27.0	5.0	7.2	15.4
S-	Alkaline phosphatase, placental	1	19.1	---	9.6	---	---
U-	Ammonia, output, 24h	1	24.7	27.3	12.4	9.2	29.6

Biological variation: CV_i , CV_g

Desirable specification: I(%) , B(%) , TE(%)

S-	Amyloid A	1	25.0	61.0	12.5	16.5	37.1
S-	Androstendione	2	15.8	38.8	7.9	10.47	23.51
S-	Anion gap		9.5	10.1	4.8	3.5	11.3
P-	Antithrombin III	4	5.2	15.3	2.6	4.0	8.3
S-	Apolipoprotein A1	11	6.5	13.4	3.3	3.7	9.1
S-	Apolipoprotein B	9	6.9	22.8	3.5	6.0	11.6
P-	Arginine	1	19.3	34.1	9.7	9.8	25.7
S-	Aristeerase activity, non inhibited	1	3.8	37.2	1.9	9.3	12.5
P-	Ascorbate (Vitamin C)	1	20.0	21.0	10.0	7.3	23.8
S-	Ascorbate (Vitamin C)	3	26.0	31.0	13.0	10.1	31.6
P-	Asparagine	1	12.3	28.0	6.2	7.6	17.8
S-	Aspartate aminotransferase (AST)	13	12.3	23.1	6.15	6.54	16.69
P-	Aspartic acid	1	31.2	55.1	15.6	15.8	41.6
S-	β -2-Microglobulin	1	5.9	15.5	3.0	4.1	9.0
P-	β -Carotene	1	18.0	48.0	9.0	12.8	27.7
S-	β -Carotene	4	36.0	39.7	18.0	13.4	43.1
S-	β -Cryptoxantin	1	36.7	---	18.4	---	---
S-	β -Globulins	2	10.1	9.1	5.1	3.4	11.7
B-	Base excess	1	76.4	43.2	38.2	21.9	85.0
B-	Basophile, count	3	28.0	54.8	14.0	15.4	38.5
S-	Bilirubin total	11	21.8	28.4	10.90	8.95	26.94
S-	Bilirubin conjugated	2	36.8	43.2	18.4	14.2	44.5
P-	C Protein	1	5.6	55.2	2.9	13.9	18.7
S-	C reactive protein	3	42.2	76.3	21.1	21.8	56.6

S-	C reactive protein - high sensitivity	1	49.70	89.23	24.85	25.53	66.54
S-	C3 Complement	2	5.2	15.6	2.6	4.1	8.4
S-	C4 Complement	2	8.9	33.4	4.5	8.6	16.0
S-	CA 125 antigen	4	24.7	54.6	12.4	15.0	35.4
S-	CA 15.3 antigen	5	6.1	62.9	3.1	15.8	20.8
S-	CA 19.9 antigen	2	16.0	130.5	7.98	32.87	46.03
S-	CA 549 antigen	1	9.1	33.4	4.6	8.7	16.2

[Back to top](#)

	Analyte	Number of papers	Biological Variation		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
S-	Calcium	24	2.1	2.5	1.05	0.82	2.55
S-	Calcium, complexed	1	5.3	4.5	2.7	1.7	6.1
U-	Calcium, concentration, 24h	4	27.5	36.6	13.8	11.4	34.1
S-	Calcium, ionized	2	1.7	1.9	0.9	0.6	2.0
S-	Calcium, protein bound	1	4.1	6.1	2.1	1.8	5.2
S-	Calcium, ultrafiltrable	1	2.2	2.7	1.1	0.9	2.7
S-	Carbohydrate deficient transferrin	1	7.1	38.7	3.6	9.8	15.7
B-	CO ₂ , total	1	4.0	4.8	2.0	1.56	4.86
S-	Carcinoembryonic antigen (CEA)	10	12.7	55.6	6.4	14.3	24.7
S-	Carnitine, Acyl-free	1	11.35	24.3	5.68	6.71	16.07
S-	Carnitine, free	1	8.05	16.65	4.03	4.62	11.26
S-	Carnitine, total	1	8.85	11.80	4.43	3.69	10.99
S-	Ceruloplasmin (ferroxidase)	2	5.8	11.1	2.9	3.1	7.9
S-	Chloride	19	1.2	1.5	0.6	0.5	1.5

Biological variation: CV_i , CV_g

Desirable specification: I(%) , B(%) , TE(%)

S-	Cholesterol	46	5.95	15.3	2.98	4.1	9.01
S-	Cholinesterase, concentration	2	7.1	---	3.6	---	---
S-	Cholinesterase, activity	3	6.1	18.2	3.1	4.8	9.8
P-	Chromogranin A	1	12.8	26.3	6.4	7.3	17.9
P-	Citrulline	1	21.4	43.9	10.7	12.2	29.9
S-	Collagen type I C propeptide (PICP)	3	7.8	26.7	3.9	7.0	13.4
S-	Collagen type I N propeptide (PINP)	3	7.4	57.3	3.7	14.4	20.5
S-	Collagen type III N propeptide (PIIINP)	1	13.6	87.2	6.8	22.1	33.3
U-	Color, first morning	1	30.9	47.4	15.5	14.1	39.6
P-	Copper	3	8.0	19.0	4.0	5.2	11.8
S-	Copper	2	4.7	13.6	2.35	3.6	7.47
P-	Cortisol	1	21.7	46.2	10.85	12.76	30.66
S-	Cortisol	3	15.2	38.1	7.6	10.26	22.8
S-	C Peptide	3	16.6	23.2	8.3	7.1	20.8
S-	Creatine kinase (CK)	9	22.8	40.0	11.4	11.5	30.3
S-	Creatine kinase MB, %	1	6.9	48.2	3.5	10.8	16.5
S-	Creatine kinase MB, activity	4	19.7	24.3	9.9	7.8	24.1
S-	Creatine kinase MB, mass	1	18.4	61.2	9.2	14.88	30.06
S-	Creatinine	28	5.95	14.7	2.98	3.96	8.87
U-	Creatinine, concentration, 24h	8	24.0	24.5	12.0	8.6	28.4
U-	Creatinine, concentration, first morning	8	23.2	25.7	11.6	8.7	27.8
U-	Creatinine, concentration, random	8	36.3	32.4	18.2	12.2	42.1
U-	Creatinine, output, 24h	8	11.0	23.0	5.5	6.4	15.4
S-	C-Terminal telopeptide type I collagen (CTX I)	5	10.85	30.6	5.43	8.12	15.45

Biological variation: CVI, CVg

Desirable specification: I(%), B(%), TE(%)

S-	Cyfra 21.1 Antigen	2	22.2	31.1	11.1	9.6	27.9
P-	Cystatin C	1	5.5	---	2.8	---	---
S-	Cystatin C	4	5.0	13.0	2.5	3.48	7.61
P-	Cysteine	1	5.9	12.3	3.0	3.4	8.3
P-	Cystine	1	38.3	48.5	19.2	15.4	47.0

[Back to top](#)

	Analyte	Number of Papers	Biological Variation		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
S-	D-Dimer (MoM)	1	23.3	26.5	11.65	8.82	28.04
S-	Dehydroepiandrosterone sulfate (DHEAS)	3	6.35	30.70	3.188	7.84	13.08
U-	Deoxypyridinoline/creatinine, 24h	2	16.0	30.7	8.0	8.7	21.9
U-	Deoxypyridinoline/creatinine, first morning	2	13.8	34.6	6.9	9.3	20.7
U-	Deoxypyridinoline/minute, first morning	2	15.4	30.3	7.7	8.5	21.2
P-	Dipeptidyl-peptidase IV (ACE)	2	8.2	14.5	4.1	4.2	10.9
S-	Dipeptidyl-peptidase IV (ACE)	1	12.5	27.7	6.3	7.6	17.9
P-	Elastase	1	12.4	15.1	6.2	4.88	15.11
B-	Eosinophils, count	3	21.0	76.4	10.5	19.8	37.1
(B)Plat-	Epinephrine	1	25.3	---	12.7	---	---
P-	Epinephrine	1	48.3	---	24.2	---	---
B-	Erythrocytes, count	7	3.2	6.3	1.6	1.7	4.4
B-	Erythrocyte distribution wide		3.5	5.7	1.8	1.7	4.6
U-	Estradiol	1	30.4	---	15.2	---	---
S-	Estradiol	5	22.5	24.4	11.25	8.3	26.86
S-	Estradiol, free	1	22.8	---	11.40	---	---

Biological variation: CV_i, CV_g

Desirable specification: I(%), B(%), TE(%)

U-	Estradiol, free	1	38.6	---	19.3	---	---
P-	Factor V coagulation	1	3.6	---	1.8	---	---
P-	Factor VII coagulation	2	6.8	19.4	3.4	5.1	10.7
P-	Factor VIII coagulation	2	4.8	19.1	2.4	4.9	8.9
P-	Factor X coagulation	1	5.9	---	3.0	---	---
S-	Ferritin	6	14.2	15.0	7.1	5.2	16.9
P-	Fibrinogen	5	10.7	15.8	5.4	4.8	13.6
(B)Erthry-	Folate	1	12.0	66.0	6.0	16.8	26.7
S-	Folate	1	24.0	73.0	12.0	19.2	39.0
S-	Follicle stimulating hormone (FSH)	5	11.0	47.2	5.5	12.12	21.19
S-	Fructosamine	3	3.4	5.9	1.7	1.7	4.5
S-	Galactosyl hydroxylysine	1	11.8	25.8	5.9	7.1	16.8
P-	γ -Fibrinogen	1	14.1	27.25	7.05	7.67	19.3
S-	γ -Globulins	2	14.6	12.3	7.3	4.8	16.8
S-	γ -glutamyltransferase (GGT)	10	13.4	42.15	6.7	11.06	22.11
S-	Globulins, total	1	5.5	12.9	2.8	3.5	8.0
P-	Glucose	1	4.5	5.8	2.3	1.8	5.5
S-	Glucose	15	5.6	7.5	2.8	2.34	6.96
(B)Erythr-	Glucose-6-phosphate-1-dehydrogenase (G6PDH)	1	32.8	31.8	16.4	11.4	38.5
B - spot	Glucose-6-phosphate-1-dehydrogenase (G6PDH)	1	7.3	10.3	3.7	3.2	9.2
P-	Glutamic acid	1	46.4	79.9	23.2	23.1	61.4
P-	Glutamine	1	12.1	22.0	6.1	6.3	16.3
S-	Glutathion peroxidase	1	7.2	21.7	3.6	5.7	11.7

Biological variation: CVI , CVg

Desirable specification: I(%) , B(%) , TE(%)

P-	Glycine	1	11.8	40.3	5.9	10.5	20.2
P-	Haptoglobin	1	20.0	27.9	10.0	8.6	25.1
S-	Haptoglobin	3	20.4	36.4	10.2	10.4	27.3
S-	HDL cholesterol	25	7.3	21.2	3.65	5.61	11.63
S-	HDL 1 cholesterol	1	5.5	27.2	2.8	6.9	11.5
S-	HDL 2 cholesterol	6	15.7	40.7	7.9	10.9	23.9
S-	HDL 3 cholesterol	6	7.0	14.3	3.5	4.0	9.8
B-	Hematocrit	11	2.7	6.41	1.35	1.74	3.97
B-	Hemoglobin	13	2.85	6.8	1.43	1.84	4.19
B-	Hemoglobin A1 C	8	1.9	5.7	0.9	1.5	3.0
B-	Hemoglobin A2	1	0.7	7.7	0.35	1.93	2.51
P-	Histidine	1	9.7	27.2	4.9	7.2	15.2
P-	Homocysteine	3	8.3	33.5	4.15	8.63	15.48
S-	Hyaluronic acid	1	62.00	---	31.00	---	---
S-	Hydroxybutyrate dehydrogenase	1	6.6	---	3.3	---	---
P-	Hydroxyproline	1	34.5	56.7	17.3	16.6	45.1
U-	Hydroxyproline/minute, first morning	1	36.1	38.8	18.1	13.2	43.0
U-	Hydroxyproline/minute, second void	1	40.5	32.9	20.3	13.0	46.5

[Back to top](#)

	Analyte	Number of papers	Biologic al Variatio n		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
S-	Immunoglobulin A	7	5.4	35.9	2.7	9.1	13.5
S-	Immunoglobulin G	6	4.5	16.5	2.3	4.3	8.0
S-	Immunoglobulin M	5	5.9	47.3	3.0	11.9	16.8

Biological variation: CV_i , CV_g

Desirable specification: I(%) , B(%) , TE(%)

S-	Immunoglobulins κ chains	3	4.8	15.3	2.4	4.0	8.0
S-	Immunoglobulins λ chains	3	4.8	18.0	2.4	4.7	8.6
S-	Inhibin B	1	10.0	25.0	5	6.73	14.98
S-	Insulin	4	21.1	58.3	10.6	15.5	32.9
S-	Insulin-like growth factor (IGF-1)	2	14.6	45.4	7.3	11.9	24.0
S-	Insulin-like growth factor binding protein 3 (IGFBP-3)	1	10.1	63.9	5.1	16.2	24.5
S-	Intercellular adhesion molecule-1 (ICAM-1)	1	1.9	21.0	1.0	5.3	6.8
(B)Leuc-	Interferon receptor	1	14.0	20.0	7.0	6.1	17.7
S-	Interleukin 1-β	1	30.0	36.0	15.0	11.7	36.5
S-	Interleukin-8	1	24.0	31.0	12.0	9.8	29.6
S-	Iron	11	26.5	23.2	13.3	8.8	30.7
P-	Isoleucine	1	15.5	45.5	7.8	12.0	24.8
S-	Kallicrein 6	1	11.80	27.6	5.9	7.5	17.24
B-	Lactate	1	27.2	16.7	13.6	8.0	30.4
S-	Lactate dehydrogenase (LDH)	11	8.6	14.7	4.3	4.3	11.4
S-	Lactate dehydrogenase 1 isoform (LDH1)	2	2.3	8.3	1.2	2.2	4.1
S-	Lactate dehydrogenase 2 isoform (LDH2)	1	3.3	2.4	1.7	1.0	3.7
S-	Lactate dehydrogenase 3 isoform (LDH3)	1	2.8	3.8	1.4	1.2	3.5
S-	Lactate dehydrogenase 4 isoform (LDH4)	1	5.9	5.3	3.0	2.0	6.9
S-	Lactate dehydrogenase 5 isoform (LDH5)	1	8.0	9.6	4.0	3.1	9.7
P-	Lactoferrin	1	11.8	23.7	5.9	6.6	16.4
S-	LDL Cholesterol	6	7.8	20.4	3.9	5.46	11.9
P-	LDL Cholesterol (oxidized)	1	21.0	50.0	10.5	13.6	30.9
S-	LDL Cholesterol, small dense	1	9.1	20.0	4.55	5.49	13.0

Biological variation: CVI , CVg

Desirable specification: I(%) , B(%) , TE(%)

S-	LDL receptor mRNA	1	21.5	13.6	10.8	6.4	24.1
P-	Leucine	1	14.8	44.0	7.4	11.6	23.8
B-	Leukocytes count	8	11.4	21.3	5.73	6.05	15.49
S-	Lipase	3	32.2	31.8	16.1	11.31	37.88
S-	Lipoprotein (a)	3	20.8	18.1	10.4	6.9	24.1
P-	Lutein	1	13.0	21.0	6.5	6.2	16.9
S-	Lutein	1	23.7	---	11.9	---	---
S-	Luteinizing hormone (LH)	5	23.0	27.4	11.5	8.94	27.92
P-	Lycopene	1	22.0	33.0	11.0	9.9	28.1
S-	Lycopene	2	40.1	33.0	20.1	13.0	---
B-	Lymphocytes, count	1	10.2	35.3	5.1	9.19	17.6
B-	Lymphocytes CD4	5	25.0	---	12.5	---	---
P-	Lysine	1	11.5	38.2	5.8	10.0	19.5

[Back to top](#)

	Analyte	Number of Papers	Biological Variation		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
(B)Erythr-	Magnesium	2	5.6	11.3	2.8	3.2	7.8
(B)Leuc-	Magnesium	1	18.5	12.4	9.25	5.57	20.83
(B)Mon -	Magnesium	1	18.1	20.3	9.1	6.8	21.7
S-	Magnesium	9	3.6	6.4	1.8	1.8	4.8
U-	Magnesium, ionized	1	1.9	5.1	1.0	1.4	2.9
U-	Magnesium, output, 24h	2	38.3	37.6	19.2	13.4	45.0
(B)Erythr-	Mean corpuscular hemoglobin (MCH)	4	1.4	5.2	0.7	1.35	2.5

Biological variation: CV_i , CV_g

Desirable specification: I(%) , B(%) , TE(%)

(B)Erythr-	Mean corpuscular hemoglobin concentration (MCHC)	5	1.06	1.2	0.53	0.4	1.27
(B)Erythr-	Mean corpuscular volume (MCV)	7	1.4	4.85	0.7	1.26	2.42
(B)Plat-	Mean platelet volume (MPV)	3	4.3	8.1	2.15	2.29	5.84
P-	Metionine	1	14.7	43.4	7.4	11.5	23.6
B-	Monocytes, count	3	17.8	49.8	8.9	13.2	27.9
S-	Myeloperoxidase	1	36.0	30.0	18.0	11.7	41.4
S-	Myoglobin	2	13.9	29.6	7.0	8.2	19.6
U-	N-Acetyl Glucosaminidase, concentration, first morning	2	52.9	22.0	26.5	14.3	58.0
U-	N-Acetyl Glucosaminidase/Creatinine	2	51.1	21.8	25.6	13.9	56.0
B-	Neutrophyles, count	5	17.1	32.8	8.55	9.25	23.35
U-	Nitrogen, output	1	13.9	24.2	7.0	7.0	18.4
B(Plat)-	Norepinephrine	1	9.5	---	4.8	---	---
P-	Norepinephrine	1	19.5	---	9.8	---	---
U-	N-Telopeptide type I collagen	3	15.5	37.6	7.75	10.17	22.95
S-	N-terminal (NT)-proBNP	2	10.0	16.0	5.0	4.7	13.0
P-	Ornithine	1	18.4	54.9	9.2	14.5	29.7
P-	Osmolality	1	1.3	1.5	0.7	0.5	1.6
Saliva-	Osmolality	1	9.5	35.8	4.8	9.3	17.1
S-	Osmolality	1	1.3	1.2	0.7	0.4	1.5
U-	Osmolality, first morning	1	28.3	57.9	14.2	16.1	39.5
S-	Osteocalcin	5	6.35	30.9	3.18	7.89	13.13
U-	Oxalate, concentration, 24h	1	44.0	18.0	22.0	11.9	48.2
U-	Oxalate, output, 24h	1	42.5	19.9	21.3	11.7	46.8

[Back to top](#)

Biological variation: CVI, CVg

Desirable specification: I(%), B(%), TE(%)

	Analyte	Number of papers	Biological Variation		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
B-	pCO ₂	1	4.8	5.3	2.4	1.8	5.7
B-	pH [H ⁺]	1	3.5	2.0	1.8	1.0	3.9
B-	pH (pH units)	1	0.2	---	0.1	---	---
S-	Paraoxonase 1	1	13.4	84.0	6.7	21.3	32.3
S-	Paraoxonase 1 substrate inhibition (PON 4SI)	1	3.9	80.1	1.9	20.0	23.2
S-	Paraoxonase, activity (salt stimulated)	1	8.0	86.4	4.0	21.7	28.3
P-	Parathyroid hormone (PTH)	1	25.3	43.4	12.65	12.56	33.43
S-	Parathyroid hormone (PTH)	1	25.9	23.8	13.0	8.8	30.2
S-	Phenylacetate	1	6.6	25.2	3.3	6.5	12.0
P-	Phenylalanine	1	9.5	40.6	4.8	10.4	18.3
S-	Phosphate	17	8.15	10.8	4.08	3.38	10.11
U-	Phosphate, output, 24h	5	18.0	22.6	9.0	7.2	22.1
Patient-	Phosphate tubular reabsorption	1	2.7	3.3	1.4	1.1	3.3
S-	Phospholipids	1	6.5	11.1	3.3	3.2	8.6
P-	Plasminogen	1	7.7	---	3.9	---	---
B-	Platelets, count	7	9.1	21.9	4.6	5.9	13.4
B-	Platelet distribution wide	2	2.8	---	1.4	---	---
B-	Plateletcrit	2	11.9	---	6.0	---	---
U-	Porphobilinogen	1	17.0	31.0	8.5	8.8	22.9
U-	Porphyrins (total)	1	40.0	---	20.0	---	---
(B)Leuc-	Potassium	1	13.6	13.4	6.8	4.8	16.0
S-	Potassium	20	4.6	5.6	2.3	1.81	5.61

Biological variation: CV_i , CV_g

Desirable specification: I(%) , B(%) , TE(%)

U-	Potassium, output	4	24.4	22.2	12.2	8.2	28.4
S-	Prealbumin	1	10.9	19.1	5.5	5.5	14.5
S-	Pregnancy-associated plasma protein A (PAPP-A)	1	12.6	14.0	6.3	4.71	15.1
P-	Prolactin	1	39.2	65.1	19.6	19.0	51.34
S-	Prolactin	4	23.0	35.0	11.5	10.5	29.4
P-	Proline	1	17.0	104.4	8.5	26.4	40.5
P-	Prolyl endopeptidase	2	16.8	13.9	8.4	5.5	19.3
S-	Properdin factor B	1	9.5	11.2	4.7	3.7	11.5
S-	Prostatic specific antigen (PSA)	3	18.1	72.4	9.1	18.7	33.6
S-	Protein	18	2.75	4.7	1.38	1.36	3.63
S-	Protein, glycated	1	0.9	11.6	0.5	2.9	3.7
U-	Protein, output, 24h	2	35.5	23.7	17.8	10.7	40.0
P-	Prothrombin time	2	4.0	6.8	2.0	2.0	5.3
U-	Pyridinoline	1	19.4	23.6	9.7	7.6	23.6
B-	Pyruvate	1	15.2	13.0	7.6	5.0	17.5
S-	Receptor for advanced glycation end-products (RAGE)	1	14.6	56.5	7.3	14.59	26.63
B-	Red cell distribution wide (RDW)	4	3.5	5.7	1.8	1.7	4.6
B-	Reticulocyte highly fluorescent, count	1	10.0	62.0	5.0	15.7	24.0
B-	Reticulocyte low fluorescent, count	1	1.6	4.9	0.8	1.3	2.6
B-	Reticulocyte medium fluorescent, count	1	13.0	33.0	6.5	8.9	19.6
B-	Reticulocyte, count	1	11.0	29.0	5.5	7.8	16.8
P-	Retinol	1	6.2	21.0	3.1	5.5	10.6
S-	Retinol	2	13.6	19.0	6.8	5.8	17.1

Biological variation: CVI , CVg

Desirable specification: I(%) , B(%) , TE(%)

S-	Rheumatoid factor	1	8.5	24.5	4.3	6.5	13.5
----	-------------------	---	-----	------	-----	-----	------

[Back to top](#)

<

	Analyte	Number of papers	Biological Variation		Desirable specification		
			CV _i	CV _g	I(%)	B(%)	TE(%)
S-	SCC antigen	1	39.4	35.7	19.7	13.3	45.8
P-	S Protein	1	5.8	63.4	2.9	15.9	20.7
P-	Selenium	1	12.0	14.0	6.0	4.6	14.5
B-	Selenium	1	12.0	12.0	6.0	4.2	14.1
P-	Serine	1	12.8	42.8	6.4	11.2	21.7
S-	Sex hormone binding globulin (SHBG)	2	13.05	36.35	6.53	9.66	20.42
(B)Erythr-	Sodium	1	1.8	12.4	0.9	3.1	4.6
(B)Leuc-	Sodium	1	51.0	36.4	25.5	15.7	57.7
S-	Sodium	21	0.6	0.7	0.3	0.23	0.73
B-	Sodium Bicarbonate	1	4.0	4.8	2.0	1.6	4.9
S-	Sodium Bicarbonate	7	4.8	4.7	2.4	1.7	5.6
Sweat-	Sodium Chloride	1	15.0	25.0	7.5	7.3	19.7
U-	Sodium, output, 24 h.	4	28.7	16.7	14.4	8.3	32.0
P-	Soluble CD163	1	9.0	35.9	4.5	9.3	16.7
U-	Specific gravity	1	0.4	1.0	0.2	0.27	0.60
Semen-	Spermatozoa, concentration	1	26.8	56.4	13.4	15.6	37.7
Semen-	Spermatozoa, morphology	1	19.6	44.0	9.8	12.0	28.2
Semen-	Spermatozoa, progressive motility	1	15.2	32.8	7.6	9.0	21.6
Semen-	Spermatozoa, fast progressive motility	1	18.8	51.8	9.4	13.8	29.3

Biological variation: CV_i , CV_g

Desirable specification: I(%) , B(%) , TE(%)

Semen-	Spermatozoa, total motility	1	18.4	29.8	9.2	8.8	23.9
Semen-	Spermatozoa, vitality	1	10.3	25.8	5.2	6.9	15.4
S-	Superoxide dismutase	1	17.1	10.5	8.6	5.0	19.1
(B)Erythr-	Superoxide dismutase	1	12.3	4.9	6.2	3.3	13.5
P-	Taurine	1	30.6	44.0	15.3	13.4	38.6
P-	Testosterone	1	12.6	40.80	6.3	10.68	21.07
S-	Testosterone	7	9.25	22.05	4.63	5.98	13.61
Saliva-	Testosterone	1	17.3	28.8	8.7	8.4	22.7
U-	Testosterone	1	25.0	---	12.5	---	---
S-	Testosterone, free	3	9.3	---	4.7	---	---
U-	Testosterone, free	1	51.7	---	25.9	---	---
S-	Thyroglobulin	2	14.0	39.0	7.0	10.4	21.9
S-	Thyroglobulin antibody	1	8.5	82.0	4.3	20.6	27.6
S-	Thyroid peroxidase antibody	1	11.3	147.0	5.7	36.9	46.2
P-	Thyroid stimulating hormone (TSH)	1	29.30	48.4	14.65	14.14	38.2
S-	Thyroid stimulating hormone (TSH)	9	19.3	24.6	9.7	7.8	23.7
S-	Thyrotropin receptor antibody	1	4.8	---	2.4	---	---
S-	Thyroxine (T4)	11	4.9	10.9	2.5	3.0	7.0
P-	Thyroxine, free (FT4)	1	7.1	9.1	3.55	2.89	8.74
S-	Thyroxine, free (FT4)	5	5.7	12.1	2.9	3.3	8.0
S-	Thyroxine binding globulin (TBG)	2	0.09	0.06	0.0	0.0	0.1
P-	Tirosine	1	10.5	61.0	5.3	15.5	24.1
S-	Tissue polypeptide antigen (TPA)	1	31.1	63.7	15.6	17.7	43.4
S-	Tissue polypeptide specific antigen (TPS)	1	36.1	108.0	18.1	28.5	58.3

U-	Total catecholamines, concentration, 24h	1	24.0	32.0	12.0	10.0	29.8
S-	Transferrin	5	3.0	4.3	1.5	1.3	3.8
P-	Treonine	1	17.9	33.1	9.0	9.4	24.2
S-	Triglyceride	31	19.9	32.7	9.95	9.57	25.99
P-	Triiodothyronine (T3)	1	9.4	18.5	4.7	5.19	12.94
S-	Triiodothyronine (T3)	10	6.9	12.3	3.45	3.53	9.22
S-	Triiodothyronine, free (FT3)	4	7.9	17.6	4.0	4.8	11.3
P-	Troponin I	1	37.1	179.2	18.55	45.75	76.36
S-	Troponin I	5	14.05	63.75	7.03	16.32	27.91
S-	Troponin T	1	30.5	90.0	15.3	23.7	48.9
P-	Tryptophan	1	22.7	152.6	11.4	38.6	57.3
S-	Tumor Necrosis Factor-a (TNF-a)	1	43.0	29.0	21.5	13.0	48.4
S-	Urate	16	8.6	17.5	4.3	4.87	11.97
U-	Urate, output, 24h	2	16.8	14.4	8.4	5.53	19.39
S-	Urea	20	12.1	18.7	6.05	5.57	15.55
U-	Urea, output, 24h	4	17.4	25.4	8.7	7.7	22.1
P-	Valine	1	10.6	40.1	5.3	10.4	19.1
U-	Vanilmandelic Acid concentration, 24h	1	22.2	47.0	11.1	13.0	31.3
S-	Vascular cell adhesion molecule-1 (VCAM-1)	1	5.2	16.0	2.6	4.2	8.5
P-	Vascular endothelial growth factor	1	14.1	18.1	7.1	5.7	17.4
B-	Vascular endothelial growth factor	1	14.3	28.8	7.2	8.0	19.8
S-	Vascular endothelial growth factor	1	10.7	47.6	5.4	12.2	21.0
P-	Vitamin B1	1	4.8	12.0	2.4	3.2	7.2
B-	Vitamin B2 (Riboflavin)	1	5.8	10.0	2.9	2.9	7.7

Biological variation: CVI , CVg

Desirable specification: I(%) , B(%) , TE(%)

(B)Eryth-	Vitamin B2 (Riboflavin)	1	6.4	11.0	3.2	3.2	8.5
(B)Eryth-	Vitamin B2 status (gluthation reductase activation)	1	5.2	40.0	2.6	10.1	14.4
(B)Eryth-	Vitamin B12	1	15.0	69.0	7.5	17.7	30.0
(B)Eryth-	Vitamin B6	1	14.0	24.0	7.0	6.9	18.5
B-	Vitamin B6	1	20.0	34.0	10.0	9.9	26.4
(B)Eryth-	Vitamin E (Tocopherol)	1	7.6	21.0	3.8	5.6	11.9
(B)Eryth-	Vitamin K (Phylloquinone)	1	38.0	44.0	19.0	14.5	45.9
S-	VLDL Cholesterol	2	27.6	---	13.8	---	---
P-	Von Willebrand factor	3	2.5	27.3	1.3	6.9	8.9
S-	Water	1	3.1	0.1	1.6	0.8	3.3
S-	Zeaxanthine	1	34.7	---	17.4	---	---
S-	Zinc	1	9.3	9.4	4.7	3.3	11.0
P-	Zinc	3	11.0	14.0	5.5	4.5	13.5