

Table 1: List of assay methods and assay imprecision near the mid-normal ranges

Abbr	Analytes	Method	Reagent	Traceability	Within day CV	Between day CV
Alb	Albumin	Timed endpoint bromcresol green method	BeckmanCoulter	CRM470	1.53	1.37
Urea	Urea	Enzymatic rate method	BeckmanCoulter	JCCRM521	1.54	2.46
UA	Uric acid	Timed endpoint Uricase POD method	BeckmanCoulter	JCCRM521, 21	0.68	1.11
CRE	Creatinine	Modified rate Jaffé method	BeckmanCoulter	JCCRM521	2.41	2.97
Na	Sodium	Indirect potentiometry	BeckmanCoulter	JCCRM111,321	0.22	0.91
K	Potassium	Indirect potentiometry	BeckmanCoulter	JCCRM111,321	0.46	0.89
Cl	Chloride	Indirect potentiometry	BeckmanCoulter	JCCRM111,321	0.25	0.72
Ca	Total serum calcium	Indirect potentiometry	BeckmanCoulter	JCCRM321	0.57	1.26
Glu *4	glucose	Timed endpoint Hexokinase method	BeckmanCoulter	JCCRM521	0.77	1.26
TCho	total cholesterol	Timed endpoint enzyme colorimetry	BeckmanCoulter	JCCRM223	1.20	0.74
TG	Triglyceride	Timed endpoint enzyme colorimetry	BeckmanCoulter	JCCRM223,224	1.21	0.80
HDL-C	HDL-cholesterol	Timed endpoint direct method	BeckmanCoulter	JCCRM223,224	0.99	1.61
LDL-C	LDL-cholesterol	Timed endpoint direct method	BeckmanCoulter	JCCRM224	1.17	1.31
AST	Aspartate aminotransferase	IFCC recommended method	BeckmanCoulter	JCTLM ref lab*2	2.22	0.73
AST-JSCC		JSCC recommended method	BeckmanCoulter	JCCLS CRM-001b	3.40	0.37
ALT	Alanine aminotransferase	IFCC recommended method	BeckmanCoulter	JCTLM ref lab*2	2.88	1.27
ALT-JSCC		JSCC recommended method	BeckmanCoulter	JCCLS CRM-001b	3.44	0.44
LD	Lactate dehydrogenase	IFCC recommended method	BeckmanCoulter	JCTLM ref lab*2	1.42	0.29
LD-JSCC		JSCC recommended method	BeckmanCoulter	JCCLS CRM-001b	1.93	0.80
ALP	Alkaline phosphatase	IFCC recommended method	BeckmanCoulter	-	1.91	2.60
ALP-JSCC		JSCC recommended method*1	BeckmanCoulter	JCCLS CRM-001b	1.45	0.83
GGT	Gamma-glutamyltransferase	IFCC recommended method	BeckmanCoulter	JCTLM ref lab*2	2.14	4.63
GGT-JSCC		JSCC recommended method	BeckmanCoulter	JCCLS CRM-001b	1.60	1.86
CK	Creatine kinase	IFCC recommended method	BeckmanCoulter	JCTLM ref lab*2	0.86	0.88
CK-JSCC		JSCC recommended method	BeckmanCoulter	JCCLS CRM-001b	1.22	0.91
AMY	Amylase	JSCC recommended method	BeckmanCoulter	JCCLS CRM-001b	0.89	0.61
IgG	Immunoglobulin G	Turbidimetric method	Nittobo Medical	CRM470	0.63	1.76
IgA	Immunoglobulin A	Turbidimetric method	Nittobo Medical	CRM470	1.76	3.40
IgM	Immunoglobulin M	Turbidimetric method	Nittobo Medical	CRM470	1.09	1.46
C3	complement component 3	Turbidimetric method	BeckmanCoulter	CRM470	0.81	1.77
C4	complement component 4	Turbidimetric method	BeckmanCoulter	CRM470	2.04	2.82
CRP	C-reactive protein	Latex immunoturbidimetric method	Nittobo Medical	CRM470	0.68	2.29
TTR	Transthyretin(prealbumin)	Turbidimetric method	BeckmanCoulter	CRM470	1.72	2.98
Tf	Transferrin	Turbidimetric method	BeckmanCoulter	CRM470	2.65	3.61
Testo	Testosterone	Chemiluminescent Enzyme Immunoassay	BeckmanCoulter	JCTLM ref lab*3	2.70	2.38
E2	Estradiol	Chemiluminescent Enzyme Immunoassay	BeckmanCoulter	JCTLM ref lab*3	7.43	6.40
Prog	Progesterone	Chemiluminescent Enzyme Immunoassay	BeckmanCoulter	JCTLM ref lab*3	5.98	6.35
Cortisol	Cortisol	Chemiluminescent Enzyme Immunoassay	BeckmanCoulter	JCTLM ref lab*3	2.17	1.94

*1: Kinetic rate method (using AMP buffer)

*2: Used for recalibration were pooled sera of three concentrations, which were prepared for each enzyme, and values were assigned by the reference measurement system (RMS)

*3: Used for recalibration were lyophilized specimens of 5-8 concentrations that were value-assigned by RMS.

*4: The analyte was measured in specimens collected without addition of sodium fluoride. The result was used as one of the exclusion criteria.