

INFECTIOUS DISEASES INSTITUTE CORE LABORATORY

Ugandan Reference Ranges, FlowCyto – Adults BD Facs Calibur		
Category	Adult Female & Male	Comments
CD4%-	33% - 58%	Validated & Adopted the Manufacturer (BD) RR Sep 2009
CD4 ABS cells/uL	404 – 1612	
CD8%-	13% - 39%	
CD8 ABS cells/uL	220 - 1129	
CD4CD8RT, ratio	0.78 – 3.11	

IDI Core Laboratory Reference Ranges, Chemistry – Adults

Test & Instrument	Adult Female	Adult Male	Comments
Chemistry- Roche Cobas			Reference range adopted source
Albumin, g/L	38.0 – 47.0	38.0 – 52.0	Roche
Alk. Phosphatase, U/L	65 – 270	99 – 275	Roche
ALT (SGPT), U/L	0 – 35	0 – 45	Roche
Amylase, U/L	28 - 100	28 - 100	Roche
AST (SGOT), U/L	0 – 32	0 – 40	Roche
Bilirubin, Direct mg/dL	0 – 0.2	0 – 0.3	Roche
Bilirubin, Total, mg/dL	0.0 – 1.3	0.0 – 1.4	Roche
Calcium , mmol/L	2.15 – 2.55	2.15 – 2.55	Roche
Cholesterol, mg/dL	110 - 239	110 - 239	Roche
CK, Creatine Kinase, U/L	15 – 195	22 – 225	Roche
CO ₂ , mmol/L	15 - 27	17 - 27	Roche
Creatinine, mg/dL	0.50 – 1.20	0.50 – 1.30	Roche
GGT, U/L	0 – 40	0 – 55	Roche
Glucose, mg/dL	58 – 121	58 – 120	Roche
HDL Chol, mg/dL	≥ 40	≥ 35	Updated Aug 2013
Lactate mg/dl	4.5 – 19.8	4.5 – 19.8	Roche
LDH, U/L	135 - 250	135 - 250	Roche
LDL Chol., Mg/dL	≤ 159	≤ 159	Roche
Lipase, U/L	13 - 60	13 - 60	Roche
Magnesium, mmol/L	0.63 – 1.05	0.63 – 1.05	Roche
Phos, Phosphate, mg/dl	2.5 - 5.6	2.3 – 6.3	MUWRP
Protein, Total g/L	66 - 87	66 - 87	Roche
Triglycerides mg/dL	≤ 199	≤ 199	Roche
Urea Nitrogen, mg/dL	6 - 20	6 - 20	BUN= Urea*0.467
Uric Acid, mg/dl	0.0 – 5.7	0.0 – 7.0	Roche
Electrolytes			
Sodium, mmol/L	138 - 150	138 - 150	Roche
Potassium, mmol/L	3.6 – 5.3	3.7 – 5.4	Roche
Chloride, mmol/L	90 - 108	90 - 108	Roche

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Analyte	Units	Adult Female	Adult Male	Pregnant Female (~3 rd trimester)
WBC5,	10 ³ cells/uL	3.2 – 9	2.8 – 8.2	--
RBC5,	10 ⁶ cells/uL	3.3 – 5.3	3.8 – 6.1	3.0 – 5.1
HGB5,	g/dL	9.8 – 16.2	11.6 – 17.1	9.2 – 14.6
HCT5,	%	28.3 – 46.8	33.8 – 49.5	27 – 42
MCV5,	fL	74 – 94.5	71 – 97	72 – 99
MCH5,	pg	24.8 – 32.7	23 – 33.8	24 – 35
MCHC5,	g/dL	33.0 – 35.5	32.4 – 35.3	32– 36
RDW5,	%	11.0 – 17.3	10.9 – 16.8	10.4 – 18.8
PLT5, 10 ³	cells/uL	138 – 457	106 – 362	99 – 347
MPV5,	fL	6.6 -9.9	6.8 – 10.2	--
NEUT%,	%	23.8 – 61.6	21.7 – 59.2	--
LY%	%	26.5 – 62	26.6 – 61.3	15 – 44
MO%	%	4.4 – 11.4	4.7 – 12.8	2 – 14
EOS%	%	0.75 -22.6	1.1 - 25	--
BASO%	%	0.3 – 1.3	0.3 – 1.5	--
NEUT-ABS,	10 ³ cells/uL	1.1 – 4.4	0.9 – 3.8	--
LY-ABS,	10 ³ cells/uL	1.3 – 3.7	1.2 – 3.6	0.9 – 3.5
MO-ABS,	10 ³ cells/uL	0.2 – 0.6	0.2 – 0.7	0.0 – 1.1
EOS-ABS,	10 ³ cells/uL	0.04 – 1.4	0.04 – 1.7	--
BASO-ABS,	10 ³ cells/uL	0.01 – 0.07	0.01 – 0.08	--
**SOURCE: Validated MUWRP ranges				