



CHEMISTRY, BLOOD

Parameter	Male	Female*	Instrumentation
A:G ratio (g/dL)	1.0 - 2.2	♀	B/C AU 5800/AU680
Albumin (g/dL)	3.4 - 5.1	♀	B/C AU 5800/AU680
Alk Phos (IU/L)	38 - 126	♀	B/C AU 5800/AU680
ALT (SGPT) (IU/L)	17 - 63	♀	B/C AU 5800/AU680
Amylase (IU/L)	28.00 - 100.00	♀	B/C AU 5800/AU680
Anion Gap (mmol/L)	9 - 22	♀	B/C AU 5800/AU680
Anti Nuclear Antibody	Neg	♀	ALERE IFA Kit/ Flourescent Microscope
AST (SGOT) (IU/L)	15 - 41	♀	B/C AU 5800/AU680
Bilirubin, Direct (mg/dL)	0.0 - 0.4	♀	B/C AU 5800/AU680
Bilirubin, Indirect (mg/dL)	0.0 - 1.1	♀	B/C AU 5800/AU680
Bilirubin, Total (mg/dL)	0.3 - 1.8	♀	B/C AU 5800/AU680
BNP (pg/mL)	0 - 100	♀	B/C DXI800
BUN (mg/dL)	7-25	♀	B/C AU 5800/AU680
C Reactive Protein, Std (mg/dL)	0.0 - 1.0	♀	B/C AU 5800/AU680
Calcium (mg/dL)	8.5 - 10.5	♀	B/C AU 5800/AU680
Chloride (mmol/L)	98 - 110	♀	B/C AU 5800/AU680
Cholesterol (mg/dL)	<=200	♀	B/C AU 5800/AU680
CEA (ng/mL)	0-5	♀	B/C DXI800
CO ₂ (mmol/L)	22 - 32	♀	B/C AU 5800/AU680
CKMB (ng/mL)	0.0 - 6.3	♀	B/C DXI800
CK, Total (IU/L)	30-233	♀	B/C AU 5800/AU680
Creatinine, Serum (mg/dL)	0.7 - 1.5	0.6-1.2	B/C AU 5800/AU680
Estradiol (pg/mL)	20 - 75	Mid-Fol phase: 24 - 114 Mid-Cycle: 62 - 534 Mid-Luteal phase: 80 - 273 Postmenopausal: 20 - 88	B/C DXI800
Ferritin (ng/mL)	24 - 336	11 - 307	B/C DXI800
Folate, Serum (ng/mL)	>= 5.9	♀	B/C DXI800
FSH (mIU/mL)	1.3 - 19.3	Mid-Fol phase: 3.9 - 8.8 Mid-Cycle: 4.5 - 22.5 Mid-Luteal phase: 1.8 - 5.1 Postmenopausal: 16.7 - 113.6	B/C DXI800
GGT (IU/L)	7 - 50	♀	B/C AU 5800/AU680
Glucose (mg/dL)	70 - 99	65 - 99	B/C AU 5800/AU680
GFR (estimated)	<60	♀	(Calculation)
HCG, Qualitative	Negative	♀	Cardinal Health HCG Combo Rapid
HDL (mg/dL)	=> 40	♀	B/C AU 5800/AU680
Hgb A1c (%)	4.0 - 7.0	♀	Biorad Variant (HPLC)
Insulin, Serum (mIU/mL)	1.9 - 23.0	♀	B/C DXI800
Iron, Saturation %	28 - 58	♀	(Calculation)
Iron, Total (ug/dL)	45 - 182	♀	B/C AU 5800/AU680
Iron, TIBC(ug/dL)	250 - 420	♀	B/C AU 5800/AU680

Brett Cantrell
Reviewed by Brett Cantrell, M.D. - Medical Director, CLS

B/C = Beckman/Coulter

REV: 0117

*Female normal range same as male normal range if box displays the female icon ♀



**ADULT NORMAL RANGES
with Instrumentation**

LDH (IU/L)	100 - 190		♀	B/C AU 5800/AU680
LDL Direct (mg/dL)	75 - 193		♀	B/C AU 5800/AU680
LH (mIU/mL)	1.2 - 8.6	Mid-Fol phase: 2.1 - 10.9 Mid-Cycle: 19.2 - 103.0 Mid-Luteal phase: 1.2 - 12.9 Postmenopausal: 10.9 - 58.6		B/C DXI800
Lipase (IU/L)	11-82		♀	B/C AU 5800/AU680
Magnesium (mg/dL)	1.6 - 2.5		♀	B/C AU 5800/AU680
Phosphorus (mg/dL)	2.5 - 4.5		♀	B/C AU 5800/AU680
Potassium (mmol/L)	3.5 - 5.4		♀	B/C AU 5800/AU680
Protein, Total (g/dL)	6.0 - 8.5		♀	B/C AU 5800/AU680
PSA (ng/mL)	0.00 - 4.00		N/A	B/C DXI800
Sodium (mmol/L)	135 - 145		♀	B/C AU 5800/AU680
Testosterone (ng/dL)	168 - 746		10 - 90	B/C DXI800
Transferrin (mg/dL)	135 - 309		♀	B/C AU 5800/AU680
Triglyceride (mg/dL)	< =150		♀	B/C AU 5800/AU680
Troponin I (ng/mL)	< 0.10	Negative	♀	B/C DXI800
	0.10 - 0.49	Indeterminate		
	0.50 >	Positive		
T3, Free (pg/mL)	2.0 - 4.4		♀	B/C DXI800
T3, Total (ng/dL)	87 - 178		♀	B/C DXI800
T3, Uptake (%)	32.0 - 48.4		♀	B/C DXI800
T4, Free (ng/dL)	0.6 - 1.6		♀	B/C DXI800
T4 Total (ug/dL)	6.1 - 12.2		♀	B/C DXI800
TSH, Ultrasensitive (uIU/mL)	0.34 - 5.60		♀	B/C DXI800
Uric Acid (mg/dL)	3.5 - 8.5		♀	B/C AU 5800/AU680
Vitamin B12 (pg/mL)	180 - 914		♀	B/C DXI800

COAGULATION - HEMATOLOGY

Basophil, Absolute (k/mcL)	0 - 0.1		♀	B/C DXH
Basophils, % - auto	0 - 2		♀	B/C DXH
Eosinophil, Absolute (k/mcL)	0 - 0.45		♀	B/C DXH
Eosinophils, % - auto	0 - 7		♀	B/C DXH
Fibrinogen (mg/dL)	180 - 450		♀	IL ACL TOP 500
Hematocrit (%)	41.0 - 53.0		36.0-46.0	B/C DXH
Hemoglobin (g/dL)	13.5 - 17.5		12.0-16.0	B/C DXH
INR	Normal Range: 0.8 - 1.1 Low Intensity Range: 2.0 - 3.0 Moderate Intensity Range: 2.5 - 3.5		♀	IL ACL TOP 500
Lymphocyte, Absolute (k/mcL)	1.5 - 5		♀	B/C DXH
Lymphocytes, % - auto	25 - 45		♀	B/C DXH
MCH (pg)	25.0 - 35.0		♀	B/C DXH
MCHC (g/dL)	30.0 - 37.0		♀	B/C DXH
MEV (fl)	80.0 - 100.0		♀	B/C DXH

Brett Cantrell MD

Reviewed by Brett Cantrell, M.D. - Medical Director, CLS

B/C = Beckman/Coulter

REV: 0117

*Female normal range same as male normal range if box displays the female icon ♀



COAGULATION - HEMATOLOGY CONT'D

Monocyte, Absolute (k/mcL)	0 - 0.8	♀	B/C DXH
Monocytes, % - auto	0 - 10	♀	B/C DXH
MPV (fL)	8.8 - 12.0	8.0 - 12.0	B/C DXH
Neutrophils, Absolute (k/mcL)	1.80 - 8.00	♀	B/C DXH
Neutrophils, % - auto	36 - 70	♀	B/C DXH
Platelet Count (k/mcL)	150 - 450	♀	B/C DXH
Protime (sec)	9.4-12.5	♀	IL ACL TOP 500
PTT (sec)	25.1-36.5	♀	IL ACL TOP 500
RBC (k/mcL)	4.30 - 5.90	3.50-5.50	B/C DXH
RDW (%)	11.5 - 14.5	♀	B/C DXH
Retic Automated %	0.7 - 2.8	♀	B/C DXH
Sed Rate (mm/hr)	0 - 50 years: 0 -15 > 50 years: 0 - 20	0 - 50 years: 0 - 20 > 50 years: 0 - 30	ESR STAT PLUS
WBC (k/mm3)	4.5 - 11.0	♀	B/C DXH

URINE - URINALYSIS

Bacteria	None seen	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Bilirubin	Neg	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Cast (Hyaline/lpf)	0-5	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Cast (non-Hyaline/lpf)	0	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Creatinine, 24 hr urine (mg/24 hr)	1000 - 2500	♀	B/C AU 5800/AU680
Creatinine, Urine (Random) (mg/dL)	No calculated normal ranges are available	♀	B/C AU 5800/AU680
Crystals		♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Glucose	Neg	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Hgb (Blood)	Neg	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Ketones	Neg	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Leukocyte Esterase	Neg	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination

Brett Cantrell MD

Reviewed by Brett Cantrell, M.D. - Medical Director, CLS

B/C = Beckman/Coulter

REV: 0117

*Female normal range same as male normal range if box displays the female icon ♀



URINE – URINALYSIS CONTINUED

pH	5.0 – 8.0	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Protein	Neg	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Protein, 24 hr urine (mg/24 hr)	0 – 150	♀	B/C AU 5800/AU680
Protein, Urine Quant (Random) (mg/dL)	No calculated normal ranges are available	♀	B/C AU 5800/AU680
RBC (HPF)	0 – 5	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Spec gravity	1.005 - 1.035	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Squamous epith (HPF)	0 – 5	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
Urobilinogen (mg/dL)	<2.0	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination
WBC (HPF)	0 - 5	♀	B/C (IRIS) IQ Sprint 200 & Aution Max AX4280 Combination

URINE DRUG SCREENING

DRUG CLASS	POSITIVE THRESHOLD	♀	B/C AU480
Amphetamines	>1000 ng/mL	♀	B/C AU480
Barbiturates/metabolites	>200 ng/mL	♀	B/C AU480
Benzodiazepines/metabolites	>200 ng/mL	♀	B/C AU480
Cannabinoids	>50 ng/mL	♀	B/C AU480
Cocaine metabolites	>300 ng/mL	♀	B/C AU480
Opiates/metabolites	>300 ng/mL	♀	B/C AU480
Propoxyphene/metabolites	>300 ng/mL	♀	B/C AU480
Methadone	>300 ng/mL	♀	B/C AU480

Brett Cantrell MD

Reviewed by Brett Cantrell, M.D. - Medical Director, CLS

B/C = Beckman/Coulter

REV: 0117

*Female normal range same as male normal range if box displays the female icon ♀