



CBC — COMPLETE BLOOD COUNT

Lab Test	Normal Range	Unit	Critical Flag
WBC	4.5 – 11.0	K/uL	CRIT <2 or >30
RBC Male	4.7 – 6.1	M/uL	LOW <4.0 anemia
RBC Female	4.2 – 5.4	M/uL	LOW <3.5 anemia
Hgb Male	13.5 – 17.5	g/dL	CRIT <7 transfuse
Hgb Female	12.0 – 15.5	g/dL	CRIT <7 transfuse
Hct Male	41 – 53	%	LOW <36 monitor
Hct Female	36 – 46	%	LOW <30 notify
Platelets	150 – 400	K/uL	CRIT <50 bleed risk
MCV	80 – 100	fL	HIGH >100 B12/fo...
Neutrophils	55 – 70	%	LOW <1.0 infection

ELECTROLYTES

Lab Test	Normal Range	Unit	Critical Flag
Sodium (Na)	136 – 145	mEq/L	CRIT <125 or >155
Potassium (K)	3.5 – 5.0	mEq/L	CRIT <3.0 or >6.0
Chloride (Cl)	98 – 106	mEq/L	LOW with vomiting
Bicarbonate	22 – 29	mEq/L	LOW acidosis risk
Calcium (Ca)	8.5 – 10.5	mg/dL	CRIT <7 or >13
Magnesium (Mg)	1.7 – 2.2	mg/dL	LOW with K deficit
Phosphorus	2.5 – 4.5	mg/dL	LOW refeeding synd

RENAL & METABOLIC

Lab Test	Normal Range	Unit	Critical Flag
BUN	7 – 20	mg/dL	HIGH >50 renal co...
Creatinine Male	0.7 – 1.3	mg/dL	CRIT >10 notify MD
Creatinine Female	0.6 – 1.1	mg/dL	HIGH >1.5 monitor
eGFR	>60	mL/min	LOW <30 notify MD
Glucose	70 – 110	mg/dL	CRIT <50 or >500
HbA1c	<5.7%	%	HIGH >8 poor control
Uric Acid	3.5 – 7.2	mg/dL	HIGH gout risk

LIVER FUNCTION TESTS

Lab Test	Normal Range	Unit	Critical Flag
ALT (SGPT)	7 – 56	U/L	HIGH >3x ULN hep...
AST (SGOT)	10 – 40	U/L	HIGH liver or muscle
ALP	44 – 147	U/L	HIGH liver or bone
Total Bilirubin	0.1 – 1.2	mg/dL	HIGH >3 jaundice
Albumin	3.5 – 5.0	g/dL	LOW <3 malnutrition
Total Protein	6.0 – 8.3	g/dL	LOW chronic illness

CARDIAC & COAGULATION

Lab Test	Normal Range	Unit	Critical Flag
Troponin I	<0.04	ng/mL	CRIT >0.4 ACS
BNP	<100	pg/mL	HIGH >500 HF likely
CK-MB	<5%	% CK	HIGH MI marker
PT / INR	0.8 – 1.2	INR	HIGH >3 bleed risk
aPTT	25 – 35	sec	HIGH on heparin
D-Dimer	<0.5	mg/L	HIGH DVT/PE con...
Lipase	0 – 160	U/L	HIGH >3x pancreat...

★ CLINICAL TIP

Always trend lab values over time, not just single readings. A sodium dropping from 140 to 128 in 6 hours is a crisis. The same value stable for 3 days is a monitoring situation. Context and trend matter as much as the number itself.