

Critical Laboratory Values  
NorDx campuses: Scarborough, MMC, Brighton, South Portland Oncology

TEST	UNIT	Less Than or Equal to	Greater Than or Equal to	Other
<b>Coagulation</b>				
Fibrinogen	mg/dL	99		
INR			5.0	
PTT, MMC inpatient	seconds		150.0	
PTT, outpatient	seconds		60.0	
<b>Hematology</b>				
Hematocrit	%	<= 19		Call All
Hemoglobin	g/dL	<= 6.5		Call All
Platelet Count	Thou/uL	<= 39	>= 1,000	Initial Only*
WBC	Thou/uL	<= 1.9	>= 50.1	Initial Only*, See Note 1
Schistocytes			3+	Call All
Wright-Stained Slides, Blood		Neutrophils w/phagocytosed (intracellular) microorganisms (bacteria, yeasts, etc) found in a normally sterile body fluid, i.e. CSF, ventricular, synovial, serous fluids, and/or blood specimen. Only call if in neutrophils		Call All
Malignant Cells, Body Fluids		Refer smear to Pathologist		
Blast Cells, Blood %			>= 6.0	Initial Only*
Blast Cells, Cerebral Spinal Fluid %			>= 1.0	Initial Only*
Blood Pathogens		All RBC and WBC parasites by morphology and/or pos PCR		Initial Only*
<b>Blood Gases</b>				
pH (arterial)		7.20	7.60	
pH (venous)		7.20	7.50	
pCO <sub>2</sub> (arterial)	mmHg	20	70	
pO <sub>2</sub> (arterial)	mmHg	50		
tHb (arterial or venous)	g/dL	6.5		
COHb	%		15.0	
MetHb	%		5.0	
pH cord (venous)		6.99		
<b>Chemistry</b>				
Bilirubin (≤ 6 months)	mg/dL		15.1	
Calcium	mg/dL	5.9	13.1	
Calcium, ionized	mmol/L	0.75	1.60	
Glucose, ≤ 6 months	mg/dL	44	201	
Glucose, > 6 months	mg/dL	44	501	
Lactate	mmol/L		4.0	Initial Only*
Magnesium	mg/dL	0.9	8.1	
Phosphorus, inorganic	mg/dL	1.0	9.1	
Potassium	mEq/L	2.7	6.3	
Sodium (<= 18 years)	mEq/L	119	161.0	
Sweat chloride	mmol/L		30.0	
High Sensitivity Troponin, outpatient	ng/L		50	

<b>Drug Levels</b>				
Acetaminophen	µg/mL		250.1	
Amikacin, trough	µg/mL		8.1	
Amikacin, peak and random	µg/mL		80.1	
Carbamazepine	µg/mL		15.1	
Cyclosporine	ng/mL		301	
Digoxin	ng/mL		2.6	
Ethanol	mg/dL		401	
Gentamicin, trough and random	µg/mL		2.1	
Gentamicin, peak	µg/mL		20.1	
Lithium ≤ 65 years	mEq/L		1.5	
Lithium > 65 years	mEq/L		1.3	
Methotrexate	µmol/L		10.1	
Phenobarbital	µg/mL		60.1	
Phenytoin, Total	µg/mL		35.1	
Phenytoin, Free	µg/mL		3.1	
Salicylate	mg/L		400.1	
Tacrolimus (FK506)	ng/mL		20.1	
Theophylline	µg/mL		20.1	
Tobramycin, trough and random	µg/mL		2.1	
Tobramycin, peak	µg/mL		25.1	
Tobramycin, CF patient	µg/mL		30.1	
Valproic Acid, Total	µg/mL		150.1	
Valproic Acid, Free	µg/mL		20.1	
Vancomycin, trough	µg/mL		50.1	
Vancomycin, random	µg/mL		30.1	
<b>Volatiles</b>				
Ethylene Glycol	mg/dL		Any detectable level	
Acetone	mg/dL		Any detectable level	
Isopropanol	mg/dL		Any detectable level	
Methanol	mg/dL		Any detectable level	
<b>Microbiology</b>				
Blood Culture				Positive
Rapid Blood Culture Identification				Positive
AFB Smear/culture				Positive
Bacterial Antigen Screen (CSF)				Positive
Cryptococcal Antigen				Positive
Gram stain/culture/HSV PCR - sterile body fluid				Positive
Babesia Microti DNA (BMDNA) by PCR, <b>MMC inpatient</b>				Positive (Detected)
Anaplasma Phagocytophilum DNA (APDNA) by PCR, <b>MMC inpatient</b>				Positive (Detected)
<b>Send outs</b> If any referral laboratory notifies NorDx with a report that they consider a critical value, NorDx staff will handle the result as a critical value.				

**NOTES:**

\* For HOSPITAL INPATIENTS, once the "initial" critical value is called, additional calls are not required for the same admission. For OUTPATIENTS, call all critical values everytime

1. Call all outpatients, except known CLL/CML oncology patients with a critical WBC within the last year
2. ( ) = extremely abnormal result, refer to Critical Values Validation policy before entering result

Revision Date	Change	Approval
November 2017	Added Glucose Inpatient - raised lower critical value	Tim Hayes, MD
May 2018	Reconciled Glucose w/ SCC Flag	
July 2019	Added Babesia & Anaplasma PCR, reconciled toxicology w. SCC	
May 2020	Added COVID-19	
December 2020	Added pH Cord Critical Low	
May 2022	Change critical Hgb & Hct Removed COVID-19 as Critical, Add HS Troponin Critical for Outpatient	
March 2023	Updated to Global Heme Critical Values	
August 14, 2023	Updated to Global Coag Critical Values	
September 19, 2023	Updated to Global Volatile Critical Values	
October 2, 2023	Updated to Global Blood Gas Critical Values	
October 24, 2023	Updated to Global Chemistry Critical Values	
January 30, 2024		