

CRITICAL VALUES LIST

Arterial Blood Gases			
Test	Value		Associated Test Number
pH	≤ 7.25 or ≥ 7.6		0010011 0020305
PCO ₂	≤ 20 or ≥ 60 mmHg		2005757
PO ₂	≤ 40 mmHg		2005757
Hemoglobin	≤ 7.0 g dL		0040085
Chemistry			
Test	Value		Associated Test Number
Bicarbonate (total CO ₂)	< 10 or > 40 mmol/L		0020245
Bilirubin, Total	> 15 mg/dL		0020426
Calcium, Ionized	≤ 0.78 or ≥ 1.58 mmol/L		0020135
Calcium, Total	< 6.0 or > 13.0 mg/dL		0020027
Glucose (birth to 30 days)	< 46 or > 200 mg/dL		
Glucose (>30 days to adult)	< 55 or > 450 mg/dL		0020024
Iron	> 500 μ g/dL		0020037
Glucose, WB, neonatal POC	< 40 or > 200 mg/dL		0025094
Lactic Acid	≥ 5 mmol/L		0020045
Magnesium	< 1.0 or > 9.0 mg/dL		0020039
Phosphorus	< 1.0 or > 9.0 mg/dL		0020028
Potassium	< 3.0 or > 6.1 mmol/L		0020002
Sodium	< 120 or > 160 mmol/L		0020001
Troponin I	≥ 0.30 ng/mL		0090613
Hematology			
Test	Value		Associated Test Number
Hematocrit (birth to 6 days)	$\leq 35\%$ or $\geq 65\%$		
Hematocrit (>6 days to adult)	$\leq 21\%$ or $\geq 65\%$		0040080
Hemoglobin (birth to 6 days)	≤ 12.0 or ≥ 22.0 g/dL		
Hemoglobin	≤ 7 or > 21.0 g/dL		0040085
Platelet Count	≤ 20 or $\geq 1000 \times 10^3/\mu$ L		0040002
White Blood Cell Count	≤ 2.0 or $\geq 40 \times 10^3/\mu$ L		0040320
Coagulation			
Test	Value	Comments	Associated Test Number
Prothrombin Time	≥ 46.3 seconds	When ordered as part of a panel, other criteria apply.	0030215
INR	≥ 5.0		0030223
PTT	≥ 85 seconds	When ordered as part of a panel, other criteria apply.	0030235
Fibrinogen	< 100 mg/dL		0030130
Factor 2	$\leq 5\%$	When ordered as part of a panel, other criteria apply.	0030007
Factor 5	$\leq 5\%$	When ordered as part of a panel, other criteria apply.	0030075
Factor 7	$\leq 6\%$		0030080
Factor 8	$\leq 5\%$	When ordered as part of a panel, other criteria apply.	0030095
Chromogenic Factor 8	$\leq 5\%$		3002343
Factor 9	$\leq 5\%$	When ordered as part of a panel, other criteria apply.	0030100
Factor 10	$\leq 7\%$		0030105
Factor 11	$\leq 5\%$	When ordered as part of a panel, other criteria apply.	0030110
Factor 13	$\leq 5\%$		2006182

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Infectious Disease		
Detection of infectious agent in	by	Comments
Blood	Positive culture, smear, rapid antigen, or nucleic acid test (NAT) detection (not speciation)	Acid fast bacillus (AFB), bacterial, fungal, parasite (except anaplasma, ehrlichia, and babesia detected by NAT)
Bone marrow	Positive culture or smear	AFB, bacterial, fungal, viral, parasite
Sterile body fluid (except gastrointestinal fluid or urine sources)	Positive culture or smear	AFB, bacterial, fungal, viral, parasite
CSF or other central nervous system specimen	Positive culture, smear, or rapid antigen	AFB, bacterial, fungal, viral (except Enterovirus), parasite
CSF or other central nervous system specimen	NAT	All pathogens except Enterovirus, Parechovirus, EBV, HIV, JC virus, CMV, HHV6, and parvovirus
Eye/ocular	Positive culture, smear, or NAT	AFB, bacterial, fungal, viral, parasite
Tissue	Positive culture or smear	AFB, bacterial, fungal, viral, parasite

Infectious Disease		
Detection of infectious agent	by	Comments
<i>Mycobacterium sp.</i> , AFB	First positive stain or First positive culture	Within the last 90 days
<i>Mycobacterium tuberculosis</i>	Identification, positive NAT, and resistance to primary anti-tuberculosis agents (INF and RIF)	Within the last 90 days
Any clinically significant mold (excluding contaminants)	Positive culture or NAT from original specimen	BAL, bronch wash, sinus, or any sterile site
Any mold	Positive culture or NAT from original specimen	Bone Marrow Transplant locations at U of U hospital
<i>Histoplasma capsulatum</i> , <i>Blastomyces dermatitidis</i> , <i>Talaromyces (Penicillium) marneffei</i> , <i>Coccidioides immitis</i> , <i>Cryptococcus neoformans</i> , and <i>Cryptococcus gattii</i>	Identification by culture or NAT	
<i>Candida auris</i>	Positive culture or NAT	U of U hospital locations
<i>Cryptococcus</i>	First positive antigen	Within the last 90 days
<i>Nocardia</i>	Positive culture	
Select agents and other highly pathogenic organisms: <i>Bacillus anthracis</i> , <i>Brucella spp.</i> (<i>B. abortus</i> , <i>B. melitensis</i> , <i>B. suis</i>), <i>Burkholderia mallei</i> , <i>Burkholderia pseudomallei</i> , <i>Francisella tularensis</i> , <i>Yersinia pestis</i> , and <i>Corynebacterium diphtheriae</i> , <i>Salmonella typhi</i> , <i>Vibrio cholera</i> , <i>Clostridium botulinum</i>	Identification by any method	
5- fluorocytosine	≥ 100 µg/mL	

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Toxicology			
Test	Value	Comments	Associated Test Number
Acetone	> 100 mg/dL		0090005
Acetaminophen	> 150 µg/mL	4 hours post ingestion; 12 hours post ingestion	0090001
	> 40 µg/mL		
Amikacin	> 30 µg/mL	Peak—draw 30 minutes post infusion	0090295
	> 8 g/mL	Trough—draw 30 minutes before infusion	0090300
Caffeine (Neonate)	> 20 µg/mL		2011603
Digoxin	> 2.4 ng/mL	Trough—draw 8–12 hours post dose; minimum post dose 6 hours	0090080
Ethanol	> 250 mg/dL		0090120
Ethylene Glycol	> 20 mg/dL		0090110
Gentamicin	> 12 µg/mL	Peak—draw 30 minutes post infusion	0090305
	> 2 µg/mL	Trough—draw 30 minutes before infusion	0090310
Isopropanol	> 50 mg/dL		0090144
Methanol	> 20 mg/dL		0090165
Lidocaine	> 9 µg/mL	> 30 minutes post IV dose after steady state (5–10 hours)	0090155
Lithium	≥ 1.6 mmol/L	Trough	0020038
Pentobarbital	> 10 µg/mL	Test	2011549
Primidone	> 15 µg/mL	Test	0090202
Procainamide	> 12 µg/mL	Test	0090151
NAPA	> 35 g/mL	Trough	
Salicylate	> 300 µg/mL or > 30 mg/dL		0090251
TCA—Tricyclics	> 400 ng/mL		0090307
Theophylline	>20 µg/mL	0-6 months	0090265
	>25 µg/mL	6 months to adult	
Vancomycin	> 80 µg/mL	Trough	0090330
	> 80 µg/mL	Peak (not recommended)	0090325

Trace and Toxic Elements

Test	Value	Associated Test Number
Lead, blood	≥ 45 µg/dL (birth–18 years) ≥ 70 µg/dL (≥ 19 years)	0020098

Transfusion Services

Test	Value	Associated Test Number
Antibody Screen	Positive	0013044
DAT (Direct Coombs)	Positive	0014008