

Policy IV.24 Appendix A List of Critical Tests and Results

Critical Tests

Test	Results	Units	Comments	Laboratory
Gram stains from the OR	All results	N/A	Call directly to the OR room	Microbiology
Frozen section diagnosis	All results	N/A	Call directly to the OR room	Gross Room (Surgical Pathology)
Cytogenetic karyotypes and/or FISH	All "STAT" NICU bloods	N/A	Call to NICU nurse or Medical Geneticist	Cytogenetics
Ethylene glycol	All results for those ordered "STAT" to UPMC	As reported by UPMC	Call caregiver on floor with result	Send out testing
HCG	> 1000	mIU/mL	ED patients only, call as a "preliminary" result, to be diluted	Chemistry
Lactic Acid (Lactate)	≥ 4.0	mmol/L	Call only the first result ≥ 4.0	Chemistry
Lipase	≥ 396	U/L	ED patients only	Chemistry
Sweat Chloride	"CWGT" or ≥ 60	mmol/L		Chemistry
T3	≥ 400	ng/dL		Chemistry
T4	≤ 1.0 or ≥ 20.0	ug/dL		Chemistry

Critical Results

Test	Result (Low)	Result (High)	Units	Comments/Criteria	Laboratory
Acetaminophen		≥ 120	ug/mL		Chemistry
Alcohol (Ethanol)		≥ 250	mg/dL		Chemistry
Amikacin		≥ 8 Trough	ug/mL		Chemistry
Amikacin		≥ 35 Peak or Random	ug/mL		Chemistry
APTT		> 100	seconds		Hematology
Blood Culture		All positive blood cultures are called with the exception of deceased patient samples and ME cases.		Any licensed health care provider	Microbiology
Calcium	≤ 6.5	≥ 13.0	mg/dL		Chemistry
Carbamazepine		≥ 15.0	ug/mL		Chemistry
CO2	≤ 10	≥ 60	mmol/L		Chemistry
Cyclosporine		≥ 650 Trough	ng/mL		Chemistry
Cyclosporine		≥ 1500 Peak or Random	ng/mL		Chemistry
Digoxin		≥ 2.4	ng/mL		Chemistry
Fetal Fibronectin		Positive			Chemistry
Fibrinogen	< 100		mg/dL		Hematology
Free Phenytoin		≥ 3.5	ug/mL		Chemistry
Gentamicin		≥ 2 Trough	ug/mL		Chemistry
Gentamicin		≥ 12 Peak	ug/mL		Chemistry
Test	Result (Low)	Result (High)	Units	Comments/Criteria	Laboratory
Gentamicin		≥ 40 High Dose	ug/mL		Chemistry
Glucose	≤ 30	≥ 300	mg/dL	< or = 30 days old	Chemistry
Glucose	≤ 40	≥ 450	mg/dL	> 30 days old	Chemistry

Glucose on Accucheck	< 40	> 200	mg/dL	NICU and MICC neonates	Point of Care
Glucose on Accucheck	< 50	> 400	mg/dL	All other units	Point of Care
Glucose Tolerance		≥ 150	mg/dL	Fasting level	Chemistry
Gram Stain or Culture from CSF		Positive for bacteria			Microbiology
Hemoglobin	< 10	> 22	gm/dl	< 30 days old	Hematology
Hemoglobin	< 7	> 20	gm/dl	> or = 30 days old	Hematology
Hepatitis A IgM Antibody		Positive			Chemistry
Hepatitis B Surface Antigen		Positive			Chemistry
HIV Screen Combo, Antigen/Antibody		Reactive		call all results, including negative, on exposures	Chemistry
Influenza Screen		Positive		Expected 30 minute turn around time (On 3rd shift, UML clients will be called the following AM)	Microbiology
INR		> 5.0			Hematology
Lithium		≥ 1.50	mmol/L		Chemistry
Magnesium	≤ 1.0	≥ 6.0	mg/dL		Chemistry
Malaria Stain		Positive		Also call Infectious Disease staff physician	Hematology
Methotrexate		≥ 5	umol/L		Chemistry
Osmolality	≤ 250	≥ 350	mOsm/kg	serum or plasma	Chemistry
Phenobarbital		≥ 40	ug/mL	< 3 months old	Chemistry
Phenobarbital		≥ 50	ug/mL	> or = 3 months old	Chemistry
Phenytoin		≥ 30	ug/mL		Chemistry
Phosphorus	≤ 1.0		mg/dL		Chemistry
Platelet count	< 30		THOU/uL	Excluding bone marrow transplant patients	Hematology
Platelet dependent Antibody (HIT)		Positive		Pathologist will call ordering physician	Hematology
Potassium	≤ 2.5	≥ 8.0	mmol/L	< or = 30 days old	Chemistry
Potassium	≤ 2.8	≥ 6.0	mmol/L	> 30 days old	Chemistry
Quantitative CMV by PCR		Positive		For BMT patients, call to BMTU Pharmacist and/or attending Physician	Molecular
RSV Screen	Positive	Expected 30 minute turn around time (On 3rd shift, UML clients will be called the following AM)			Microbiology
Salicylate		≥ 50	mg/dL		Chemistry
Sodium	≤ 120	≥ 160	mmol/L		Chemistry
Test	Result (Low)	Result (High)	Units	Comments/Criteria	Laboratory
Tacrolimus (FK506)		≥ 20.0	ng/mL		Chemistry
Theophylline		≥ 20	ug/mL	< 6 months old	Chemistry
Theophylline		≥ 25	ug/mL	> or = 6 months old	Chemistry
Throat Screen		Positive		Expected 30 minute turn around time (On 3rd shift, UML clients will be called the following AM)	Microbiology

Tobramycin		≥ 2 Trough	ug/mL		Chemistry
Tobramycin		≥ 12 Peak or Random	ug/mL		Chemistry
Total bilirubin		≥ 15.0	mg/dL	< or = 30 days old	Chemistry
Tricyclic screen		≥ 700	ng/mL		Chemistry
Troponin-I		>0.030	ng/mL	ED and OBSU only	Chemistry
		≥ 0.300	ng/mL	First time elevated result on inpatients and outpatients within past 24 hours	
Urinalysis		Positive ketones or glucose		< 30 days old	Hematology
Urinalysis		Unusually high ketones 50 to ≥ 150, Protein ≥ 500		> 30 days but < 6 months	Hematology
Valproic acid		≥ 150	ug/mL		Chemistry
Vancomycin		≥ 40 Trough	ug/mL		Chemistry
Vancomycin		≥ 100 Peak or Random	ug/mL		Chemistry
White Cell/Nucleated Cell Count-Body Fluid		> 1000	Leukocyte s/ul	Without RBC increase	Hematology
White Cell/Nucleated Cell Count-CSF		>10 Nucleated cells without proportionate RBC increase (bloody specimen)	Leukocyte s/ul	>29 days old	Hematology
White Cell/Nucleated Cell Count-CSF		>20 Nucleated cells without proportionate RBC increase (bloody specimen)	Leukocyte s/ul	0 to 29 days old	Hematology