Clinical Laboratory Critical Value Immediate Notification Test List

Chemistry/Hematology Tests

Assay	Lower Limit	Upper Limit	Call if similar result within 2 days?
Blood Gas			
pH (mm Hg)	7.21	7.59	Yes
pCO2 (mm Hg) *arterial only*	21	69	Yes
pO2 (mm Hg) adult *arterial only*	46	--	Yes
pO2 (mm Hg) newborn < 5 days old *arterial only*	41	90	Yes
MetHb (%)	--	29	Yes
COHb (%)	--	19	Yes
General Chemistry			
Calcium (mg/dl)	6.6	12.9	Yes
Ionized calcium (mg/dl)	3.2	6.2	Yes
Chloride (mmol/l)	81	119	Yes
CO2 (mmol/l)	11	39	Yes
Glucose (mg/dl) newborn 0-1 days	26	199	Yes
Glucose (mg/dl) newborn day 2-7	41	199	Yes
Glucose (mg/dl) adult	41	499	Yes
Glucose, CSF (mg/dl)	38	--	Yes
Lactate (mmol/l)	--	3.4	Yes
Osmolality (mOsm/kg)	251	324	Yes
Mg (mEq/l)	0.9	3.9	Yes
Phosphate (mg/dl)	1.2	8.9	Yes
Potassium (mmol/l) newborn 0-2 days	2.9	7.9	Yes
Potassium (mmol/l) 3-8 days	2.9	6.9	Yes
Potassium (mmol/l) 9-120 days	2.9	6.9	Yes
Sodium (mmol/l)	121	159	Yes
Total Bilirubin (mg/dl) < 1 week	--	14.9	No
Hematology			
Hematocrit (%)	20	--	No
INR	--	4.9	No
Malaria smear	--	Organisms +	No
Platelet count (thousand/microl)	20	--	No
Organisms seen in bld, CSF smear		any	No
WBC (thousand/microl)	--	149	No
Toxicology			
Acetaminophen (ug/ml)	--	49	Yes
Alcohols (mg/dl)			
--Ethanol	--	299	Yes

--Methanol	--	9	Yes
--Isopropanol	--	49	Yes
--Acetone	--	19	Yes
Ethylene Glycol (mg/dl)	--	1.0	Yes
Carbamazepine (ug/ml)	--	14.9	Yes
Digoxin (ng/dl)	--	2.4	Yes
Lithium (mmol/l)	--	1.49	Yes
Phenobarbital (ug/ml)	--	49.9	Yes
Phenytoin-Dilantin (ug/ml)	--	39.9	Yes
Free Phenytoin (ug/ml)	--	2.9	Yes
Salicylate (mg/dl)	--	49.9	Yes
Theophylline (ug/ml)	--	24.9	Yes
Valproate (ug/ml)	--	149	Yes
Blood Bank			
Hemolytic transfusion reaction	Confirmation by lab analysis		Yes

Clinical Laboratory Critical Value Immediate Notification Test List
Microbiology Tests

Organism	Criteria	Call if similar result within 2 days?
Any bacteria or fungus from blood	Positive (+) smear	Yes
Any bacteria or fungus from sterile fluid or tissue (other than blood)	Initial positive (+) smear and culture	No
Any virus from blood or other sterile site/fluid, initial positive PCR result	Initial positive (+) culture	No
Adenovirus, HSV, Parvovirus B19 or VZV from blood or other sterile tissue	Initial positive (+) PCR result	No
Group A Streptococcus from any specimen where diagnosis is fasciitis	Initial positive (+) smear and culture	No
Herpes virus	Positive (+) culture in term pregnant female or baby <6 months of age	No
Aminoglycoside level	>2x upper limit of therapeutic range	Yes

Approved by Dr. Neil Blumberg 1/17/08

UNIVERSITY of ROCHESTER MEDICAL CENTER