

Laboratory Critical Values – Asante Laboratories

Revised: 9-27-18

| Test | Asante Laboratories | | | | | |
|---|---|---|----------------------------------|---|----------------------------|---|
| BLOOD BANK | | | | | | |
| Suspected hemolytic transfusion reaction | Call | | | | | |
| Suspected TRALI | Pathologist to call provider | | | | | |
| HEMATOLOGY | | | | | | |
| | ADULT | | PEDIATRIC (1 mo. to 14 years) | | NEONATAL INTENSIVE CARE | |
| | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN |
| WBC | 2000 K/microL | 30,000 K/microL | 2000 K/microL | 30,000 K/microL | 5,000 K/microL | 30,000 K/microL |
| HGB | 7 grams | 20 grams | 8.5 grams | 23 grams | 8.5 grams | 23 grams |
| HCT | 21% | 60% | 21% | 60% | 25% | 70% |
| Platelets | 20,000 K/microL | 1,000,000 K/microL | 50,000 K/microL | | 80,000 K/microL | |
| Differential Morphology on blood and fluid smears | <ul style="list-style-type: none"> Call blasts with first smear on admission Call blasts with first outpatient smear within last 7 days | | | | | |
| COAGULATION | | | | | | |
| | ADULT | | PEDIATRIC (1 mo. – 14 years) | | NEONATAL INTENSIVE CARE | |
| | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN |
| PT-INR | | 5 | | | | 1.5 |
| PTT | | 100 sec | | 100 sec | | 100 sec |
| FIB | 100 mg/dL | | 150 mg/dL | | 150 mg/dL | |
| D-Dimer | | 500 ng/mL Fibrinogen Equivalent units (FEU) | | 500 ng/mL Fibrinogen Equivalent units (FEU) | | 500 ng/mL Fibrinogen Equivalent units (FEU) |
| CHEMISTRY | | | | | | |
| | ADULT | | PEDIATRIC (1 mo. – 14 years) | | NEONATAL INTENSIVE CARE | |
| | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN |
| Bilirubin, Total | | | | 17.0 mg/dL | | 17.0 mg/dL |
| BUN | | | | | | 50 mg/dL |
| Calcium (Total) | 7.0 mg/dL | 13.0 mg/dL | 7.5 mg/dL | 11.5 mg/dL | 6.6 mg/dL | 11.5 mg/dL |
| Calcium, Ionized | 0.79 mmol/L | 1.58 mmol/L | 0.79 mmol/L | 1.58 mmol/L | 0.79 mmol/L | 1.58 mmol/L |
| Chloride | | | | | 95 mmol/L | 119 mmol/L |
| Creatinine | | 7.0* mg/dL | | 1.9 mg/dL | | 1.9 mg/dL |
| Glucose, CSF | 40 mg/dL | | 40 mg/dL | | 40 mg/dL | |
| Glucose, Serum | 50 mg/dL | 500 mg/dL | 50 mg/dL | 300 mg/dL | 50 mg/dL | 250 mg/dL |
| Glucose, POCT | 50 mg/dl | 450 mg/dL | 50 mg/dl | | 50 mg/dl | |
| Magnesium | 1.0 mg/dL | 5.0 mg/dL | 1.0 mg/dL | 3.0 mg/dL | 1.2 mg/dL | 3.0 mg/dL |
| Osmolality | 265 mOsm/kg | 320 mOsm/kg | 265 mOsm/kg | 320 mOsm/kg | 265 mOsm/kg | 320 mOsm/kg |
| Phosphorous | 1.0 mg/dL | 8.9 mg/dL | 1.0 mg/dL | 8.9 mg/dL | 3.0 mg/dL | 8.9 mg/dL |

| | ADULT | | PEDIATRIC (1 mo. – 14 years) | | NEONATAL INTENSIVE CARE | |
|--|------------|--------------|---|---|--------------------------------------|--------------------------------------|
| | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN |
| Potassium (K) | 3.0 mmol/L | 6.0 mmol/L | Pediatric (>1 month-1 year) 3.0 mmol/L | Pediatric (>1 month-1 year) 6.8 mmol/L | Neonates up to 1 month 3.0 mmol/L | Neonates up to 1 month 6.8 mmol/L |
| | | | Pediatric (>1 year to 14 years) 3.0 mmol/L | Pediatric (>1 year to 14 years) 6.0 mmol/L | | |
| Sodium (Na) | 125 mmol/L | 155 mmol/L | 125 mmol/L | 150 mmol/L | 125 mmol/L | 150 mmol/L |
| TCO ₂ | 10 mmol/L | 40 mmol/L | 15 mmol/L | 33 mmol/L | 15 mmol/L | 33 mmol/L |
| Troponin-I | | > 0.04 ng/mL | | > 0.04 ng/mL | | > 0.04 ng/mL |
| * <i>Adult</i> Inpatients with a previous “critical” troponin or creatinine result do not need an immediate call if the prior “critical” result has been reported and documented. <u>Prior result</u> must have occurred within the past 7 days. | | | | | | |

THERAPEUTIC DRUGS

| | ADULT | | PEDIATRIC (1 mo. – 14 years) | | NEONATAL INTENSIVE CARE | |
|---------------------------|---------------|------------------------------------|---------------------------------|------------------------------------|----------------------------|------------------------------------|
| | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN |
| Acetaminophen | | 200 µg/mL | | 200 µg/mL | | 200 µg/mL |
| Carbamazepine | | 15 µg/mL | | 15 µg/mL | | 15 µg/mL |
| Digoxin | | 2.5 ng/mL | | | | |
| Gentamicin and Tobramycin | | Post: 12.0 µg/mL Pre: 2.0 µg/mL | | Post: 12.0 µg/mL Pre: 2.0 µg/mL | | Post: 12.0 µg/mL Pre: 2.0 µg/mL |
| Lactic Acid | | 4 mmol/L | | 4 mmol/L | | 4 mmol/L |
| Lithium | | 1.5 mmol/L | | 1.5 mmol/L | | 1.5 mmol/L |
| Methotrexate | | (After start of infusion) | | (After start of infusion) | | (After start of infusion) |
| | | 5.0 micromol/L at 24 hrs | | 5.0 micromol/L at 24 hrs | | 5.0 micromol/L at 24 hrs |
| | | 0.5 micromol/L at 48 hours | | 0.5 micromol/L at 48 hours | | 0.5 micromol/L at 48 hours |
| | | 0.05 micromol/L at 72 hours | | 0.05 micromol/L at 72 hours | | 0.05 micromol/L at 72 hours |
| Phenobarbital | | 60 µg/mL | | 60 µg/mL | | 60 µg/mL |
| Phenytoin (Dilantin) | | 30 µg/mL | | 30 µg/mL | | 30 µg/mL |
| Salicylate | | 30 mg/dL | | 30 µg/mL | | 30 µg/mL |
| Valproic Acid | | 150 µg/mL | | 150 µg/mL | | 150 µg/mL |
| Vancomycin | Pre (trough): | Post (peak): | Pre (trough): | Post (peak): | Pre (trough): | Post (peak): |
| | < 10 µg/mL | > 50 µg/mL | < 5 µg/mL | > 26 µg/mL | < 5 µg/mL | >40 µg/mL |

MICROBIOLOGY

| | |
|---|--|
| All gram stains from sterile body fluid/tissue sites | Any organism present on the smear must be called within 30 minutes of resulting. |
| Blood Cultures | Positive direct smears or cultures |
| CSF/Sterile Body Fluids/Tissue | Positive direct smears or cultures |
| Biothreat Agents: <i>Bacillus anthracis</i> , <i>Brucella</i> spp., <i>Burkholderia mallei</i> , <i>Burkholderia pseudomallei</i> , <i>Francisella tularensis</i> , and <i>Yersinia pestis</i> . | All positive results |
| C Diff | Positive |

BLOOD GAS (ARTERIAL)

| | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN | LESS THAN | GREATER THAN |
|------------------|-----------|--------------|-----------|--------------|-----------|--------------|
| pH | 7.25 | 7.6 | 7.25 | 7.6 | 7.2 | 7.6 |
| pCO ₂ | 20 mmHg | 70 mm Hg | 20 mmHg | 70 mm Hg | 20 mmHg | 70 mm Hg |
| pO ₂ | 40 mm Hg | | 40 mm Hg | | 40 mm Hg | |