CRITICAL LIMITS FOR LABORATORY TEST VALUES

*Critical values will be reported only for tests that are ordered. No results for unordered tests will be given.

*Critical values are posted in the on-line laboratory handbook.

*Laboratory personnel will initiate notification of an appropriate caregiver (physician, house staff, or nurse) of any defined critical value(s) detected within 20 minutes of detection of the result in the lab. After 20 minutes, the Organizational Policy #201, “Chain of Command of the Unstable Patient”, will be followed.

*Reference separate Microbiology/Virology/Histology and Pathology critical policy procedures.

<table>
<thead>
<tr>
<th>DEPARTMENT/TEST</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C</strong>ritical <strong>T</strong>ests (The following two tests will be called every time regardless of result)</td>
<td></td>
</tr>
<tr>
<td>Frozen Section of Surgical Specimens: 90% within CAP Guidelines of 20 minutes.</td>
<td></td>
</tr>
<tr>
<td>Gram Stains</td>
<td>All CSF gram stains (positive or negative)</td>
</tr>
<tr>
<td><strong>C</strong>ritical <strong>R</strong>esults (The following test results will be called based on defined result ranges and policies listed above)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHEMISTRY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>&gt;150 umol/L</td>
</tr>
<tr>
<td>Bilirubin, Total</td>
<td>&gt;12 mg/dL at &lt;one day old</td>
</tr>
<tr>
<td></td>
<td>&gt;15 mg/dL all others</td>
</tr>
<tr>
<td>BUN (Blood Urea Nitrogen)</td>
<td>&gt;100 mg/dL</td>
</tr>
<tr>
<td>Calcium</td>
<td>&lt;6 or &gt;14 mg/dL</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>&lt;10 or &gt;40 mEq/L</td>
</tr>
<tr>
<td>CPK</td>
<td>&gt;4000 U/L</td>
</tr>
<tr>
<td>HCO3</td>
<td>&lt;10 or &gt;40 mEq/L</td>
</tr>
<tr>
<td>Glucose</td>
<td>&lt;50 or &gt;300 mg/dL</td>
</tr>
<tr>
<td>Ionized Calcium</td>
<td>&lt;1.5 mEq/L</td>
</tr>
<tr>
<td>Lactate</td>
<td>&gt;45 mg/dL</td>
</tr>
<tr>
<td>Lead</td>
<td>&gt;30 ug/dL</td>
</tr>
<tr>
<td>Magnesium</td>
<td>&lt;1.2 or &gt;6.6 mg/dL</td>
</tr>
<tr>
<td>pCO2</td>
<td>&lt;15 or &gt;70 mm Hg</td>
</tr>
<tr>
<td>pH</td>
<td>&lt;7.2 or &gt;7.6</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>&lt;2 - &gt;10 mg/dL</td>
</tr>
<tr>
<td>pO2 (Arterial)</td>
<td>&lt;40 mm Hg</td>
</tr>
<tr>
<td>Potassium</td>
<td>&lt;2.5 or &gt;6.5 mEq/L</td>
</tr>
<tr>
<td>Sodium</td>
<td>&lt;124 or &gt;156 mEq/L</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>&gt;3000 mg/dL</td>
</tr>
<tr>
<td>Uric Acid</td>
<td>&gt;10 mg/dL</td>
</tr>
</tbody>
</table>
### COAGULATION

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibrinogen</td>
<td>&lt;80 mg/dL</td>
</tr>
<tr>
<td>Protime (PT)</td>
<td>&gt;17 seconds</td>
</tr>
<tr>
<td>PT (INR)</td>
<td>&gt;1.7</td>
</tr>
<tr>
<td>WPT (INR) Patients on warfarin therapy</td>
<td>&lt;1.4 or &gt;3.5</td>
</tr>
<tr>
<td>PTT</td>
<td>&gt;48 seconds</td>
</tr>
<tr>
<td>Thrombin Time</td>
<td>&gt;25 seconds</td>
</tr>
</tbody>
</table>

### HEMATOLOGY

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Hem/Onc Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin</td>
<td>&lt;7.0 gm/dL</td>
<td>&lt;5.0 gm/dL</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>&lt;21 or &gt;65%</td>
<td>Notification not required</td>
</tr>
<tr>
<td>Platelets</td>
<td>&lt;50,000 or &gt;1,000,000</td>
<td>&lt;5,000</td>
</tr>
<tr>
<td>WBCs</td>
<td>Newborn &lt;5,000 or &gt;35,000 Others &lt;2,000 or &gt;25,000</td>
<td>Notification not required</td>
</tr>
<tr>
<td>Morphology</td>
<td>Presence of Blasts; however, if the presence of Blasts has been reported within the last 14 days no notification is necessary.</td>
<td></td>
</tr>
</tbody>
</table>

### CEREBROSPINAL FLUID

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>&gt;150 mg/dL</td>
</tr>
<tr>
<td>Glucose</td>
<td>&lt;31 mg/dL</td>
</tr>
</tbody>
</table>

### MICROBIOLOGY/VIROLOGY

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFB</td>
<td>Positive</td>
</tr>
<tr>
<td>Blood Culture</td>
<td>Positive</td>
</tr>
<tr>
<td>Body Fluid (sterile) Culture</td>
<td>Positive</td>
</tr>
<tr>
<td>CSF Culture</td>
<td>Positive</td>
</tr>
<tr>
<td>Fungal Culture – Syst Infect</td>
<td>Positive</td>
</tr>
<tr>
<td>Viral Culture – Syst Infect</td>
<td>Positive</td>
</tr>
</tbody>
</table>

### TOXICOLOGY

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>&gt;25 ug/mL</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>&gt;20 ug/mL</td>
</tr>
<tr>
<td>Gentamicin</td>
<td>&gt;10 ug/mL</td>
</tr>
<tr>
<td>Methotrexate</td>
<td>&gt;1 umol/mL</td>
</tr>
<tr>
<td>Phenobarbital</td>
<td>&gt;60 ug/mL</td>
</tr>
<tr>
<td>Phenytoin</td>
<td>&gt;30 ug/mL</td>
</tr>
<tr>
<td>Salicylate</td>
<td>&gt;30 mg/dL</td>
</tr>
<tr>
<td>Theophylline</td>
<td>&gt;25 ug/mL</td>
</tr>
<tr>
<td>Tobramycin</td>
<td>&gt;10 ug/mL</td>
</tr>
<tr>
<td>Valproic Acid</td>
<td>&gt;200 ug/mL</td>
</tr>
<tr>
<td>Vancomycin</td>
<td>&gt;50 ug/mL</td>
</tr>
<tr>
<td>Urine Toxicology Screen</td>
<td>Any positive</td>
</tr>
<tr>
<td>BLOOD BANK</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Any undue delay in transfusing a patient due to the inability to find a compatible product or due to the unavailability of a product.</td>
<td></td>
</tr>
<tr>
<td>Acute hemolytic or anaphylactic reaction.</td>
<td></td>
</tr>
<tr>
<td>Identification of a blood product as potentially contaminated by bacteria after the unit has been transfused.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFERENCE LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any critical limit phoned as defined by the reference laboratory.</td>
</tr>
</tbody>
</table>

Updated: 7/16/2017