

### Critical Laboratory Results

| <b>BLOOD BANK</b>                        |                                   |                                   |              |
|--|-----------------------------------|-----------------------------------|--------------|
| <b>ANALYTE</b>                           | <b>AGE RANGE</b>                  | <b>CRITICAL VALUE</b>             | <b>UNITS</b> |
| DAT- Direct Antiglobulin Test            | Newborn                           | Positive                          |              |
| <b>CHEMISTRY/THERAPEUTIC DRUGS</b>       |                                   |                                   |              |
| <b>ANALYTE</b>                           | <b>AGE RANGE</b>                  | <b>CRITICAL VALUE</b>             | <b>UNITS</b> |
| Acetaminophen                            | Any age                           | greater than 40                   | mcg/ml       |
| Bilirubin                                | less than 1 month                 | greater than 20                   | mg/dl        |
| Blood Gases                              |                                   |                                   |              |
| pH                                       | Any age                           | less than 7.2<br>greater than 7.6 |              |
| pO <sub>2</sub> (Arterial or Capillary)  | Any age                           | less than 40                      | mm Hg        |
| pCO <sub>2</sub> (Arterial or Capillary) | Any age                           | less than 20<br>greater than 70   | mm Hg        |
| HCO <sub>3</sub>                         | Any age                           | less than 10<br>greater than 45   | mEq/L        |
| Calcium                                  | Any age                           | less than 6<br>greater than 14    | mg/dl        |
| Calcium- Ionized                         | Any age                           | less than 0.8                     | mmol/L       |
| Carbamazepine (Tegretol)                 | Any age                           | greater than 12                   | mcg/ml       |
| Digoxin                                  | Any age                           | greater than 3.0                  | ng/ml        |
| Gentamicin- trough                       | Any age                           | greater than 2.0                  | mcg/ml       |
| Glucose                                  | less than 1 month                 | less than 40<br>greater than 200  | mg/dl        |
|  | equal to or older than<br>1 month | less than 50<br>greater than 400  | mg/dl        |
| Glucose / Reducing Substance, Urine      | less than 1 year                  | Positive                          |              |
| Ketone, Urine                            | less than 1 year                  | greater than Trace                |              |
| Lactic Acid                              | Any age                           | greater than 3.4                  | mmol/L       |
| Lidocaine                                | Any age                           | greater than 6                    | mcg/ml       |
| Lithium                                  | Any age                           | greater than 2                    | mEq/L        |
| Magnesium                                | Any age                           | less than 1.0                     | mg/dl        |
| Phenobarbital                            | Any age                           | greater than 40                   | mcg/ml       |
| Phenytoin (Dilantin)                     | Any age                           | greater than 25                   | mcg/ml       |
| Potassium                                | less than 1 month                 | less than 2.5<br>greater than 8.0 | mEq/L        |
|  | equal to or older than<br>1 month | less than 2.5<br>greater than 6.5 | mEq/L        |
| Procainamide                             | Any age                           | greater than 16                   | mcg/ml       |
| Procainamide + NAPA (sum)                | Any age                           | greater than 30                   | mcg/ml       |
| Protein, 24 hr Urine                     | OB Patients                       | greater than 4999                 | mg/24 hr     |
| Sodium                                   | less than 1 month                 | less than 125<br>greater than 150 | mEq/L        |
|  | equal to or older than<br>1 month | less than 115<br>greater than 150 | mEq/L        |
| Salicylate                               | Any age                           | greater than 35                   | mg/dl        |
| Theophylline                             | Any age                           | greater than 25                   | mcg/ml       |
| Tobramycin- trough                       | Any age                           | greater than 2.0                  | mcg/ml       |
| Valproic Acid (Depakene)                 | Any age                           | greater than 125                  | mcg/ml       |
| Vancomycin (peak)                        | Any age                           | greater than 60                   | mcg/ml       |

| <b>COAGULATION</b> |                                |                       |              |
|--------------------|--------------------------------|-----------------------|--------------|
| <b>ANALYTE</b>     | <b>AGE RANGE</b>               | <b>CRITICAL VALUE</b> | <b>UNITS</b> |
| APTT               | Any age                        | greater than 150      | seconds      |
| Protime/ INR       | less than 1 month              | INR greater than 1.5  |              |
|                    | equal to or older than 1 month | INR greater than 5.0  |              |

| <b>HEMATOLOGY</b>              |                                |   |                      |
|--------------------------------|--------------------------------|---|----------------------|
| <b>ANALYTE</b>                 | <b>AGE RANGE</b>               | <b>CRITICAL VALUE</b>                             | <b>UNITS</b>         |
| WBC                            | Any age                        | less than 1.0<br>greater than 37.0                | /mm <sup>3</sup>     |
| Hemoglobin                     | less than 1 month              | less than 8<br>greater than 23                    | gm/dL<br>gm/dL       |
|                                | 1 month to 6 months            | less than 6.5<br>greater than 19.9                | gm/dL<br>gm/dL       |
|                                | older than 6 months            | less than 6.5<br>greater than 18.5                | gm/dL<br>gm/dL       |
| Hematocrit                     | less than 1 month              | less than 25%<br>greater than 70%                 |                      |
|                                | 1 month to 6 months            | less than 19.5%<br>greater than 60%               |                      |
|                                | older than 6 months            | less than 19.5 %<br>greater than 56%              |                      |
| Platelet Count                 | less than 1 month              | less than 50<br>greater than 850                  | thou/mm <sup>3</sup> |
|                                | equal to or older than 1 month | less than 20<br>greater than 850                  | thou/mm <sup>3</sup> |
| ANC- Absolute Neutrophil Count | Any age                        | less than 0.5                                     | thou/mm <sup>3</sup> |
| RBC- Abnormal morph (new)      | Any age                        | 3+ schistocytes                                   |                      |
| RBC- Hemolytic morphology      | Any age                        | 3+ spherocytes or sickle cells                    |                      |
| Leukemia, New Diagnosis of     | Any age                        | Presence of Blasts                                |                      |
| Parasites, Blood Smear         | Any age                        | Parasites present                                 |                      |
| CSF WBC (Non-bloody Tap)       | less than 1 year               | greater than 20                                   | /mm <sup>3</sup>     |
|                                | older than 1 year              | greater than 10                                   | /mm <sup>3</sup>     |
| CSF                            | Any age                        | Malignant cells, bacteria or Cryptococcus present |                      |

**MICROBIOLOGY**

Any positive blood culture.

CSF: All positive gram stain and/or cultures. Positive bacterial or fungal antigens detected.

Positive AFB stain or culture.

MRSA: Inpatient specimens positive for MRSA, any source

All positive body fluid or normally sterile site gram stains. (Also a critical value: culture from a normally sterile site is **positive** & gram stain is **negative**.)

**REFERRALS**

STAT Inpatient or ED send out test that requires immediate testing- all results


| <b>PROCEDURE ACCEPTANCE AND REVIEW</b>  |        |
|---|--------|
| ADMIN DIRECTOR:  | 2.7.07 |
| MEDICAL DIRECTOR: Clark E. McDonald, MD   | 2.7.07 |

Exhibit 4

|                                |               |
|--------------------------------|---------------|
| REVIEWED: Barb Nelson-Whitford | DATE: 4.20.08 |
|                                | DATE:         |
|                                | DATE:         |
|                                | DATE:         |



