Lab Dept: Hematology
Test Name: CBC, PLATELET WITH DIFFERENTIAL

General Information
Lab Order Codes: CBC
Synonyms: Complete Blood Count (CBC) with Differential; Complete Blood Count (CBC); CBC, Hemogram with Differential; Complete Blood Count (CBC), Platelet with Differential (PLTC)
CPT Codes: 85023 – Hemogram and platelet count, automated, and manual differential WBC count (CBC)
85025 – Hemogram and platelet count, automated, and automated complete differential WBC count (CBC)
Test Includes: WBC, RBC, HGB, HCT, MCV, MCH, MCHC, RDW, Platelet Count, MPV, WBC Differential

Logistics
Test Indications: Useful for the evaluation of anemia, leukemia, reaction to inflammation and infections, peripheral blood cellular characteristics, state of hydration and dehydration, polycythemia, hemolytic disease of the newborn, and ABO incompatibilities.
Lab Testing Sections: Hematology
Phone Numbers: MIN Lab: 612-813-6280
STP Lab: 651-220-6550
Test Availability: Daily, 24 hours
Turnaround Time: 4 hours
Special Instructions: N/A

Specimen
Specimen Type: Whole blood
Container: Lavender (EDTA) top tube, Lavender (EDTA) Microtainer®
Draw Volume: 2 mL blood in a 2 mL Lavender top tube
OR
0.5 mL in a EDTA Microtainer®
**Processed Volume:** Minimum: 0.5 mL blood

**Stability:** Optimal when run within 4 hours of collection. Stable for 24 hours at room temperature. Stable for 36 hours at 2 – 8 degrees C.

**Collection:** Routine venipuncture or capillary draw

**Special Processing:** Lab Staff: Do Not centrifuge

**Patient Preparation:** None

**Sample Rejection:** Improper tube; clotted sample; underfilled tube; overfilled tube; mislabeled or unlabeled specimen

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**Interpretive**

**Reference Range:** Age and Sex Dependent; Refer to CBC Reference Value

<table>
<thead>
<tr>
<th>Critical Values:</th>
<th>Test:</th>
<th>Value</th>
<th>Hem/Onc Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hematocrit:</strong></td>
<td>&lt;21% or &gt;65%</td>
<td>None</td>
<td></td>
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<tr>
<td><strong>Hemoglobin:</strong></td>
<td>&lt;7.0 gm/dL</td>
<td>&lt;5.0 gm/dL</td>
<td></td>
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<tr>
<td><strong>Platelets:</strong></td>
<td>&lt;50,000 or &gt;1,000,000</td>
<td>&lt;5,000</td>
<td></td>
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<tr>
<td><strong>WBC:</strong></td>
<td>Newborn: &lt;5,000 or &gt;35,000</td>
<td>None</td>
<td></td>
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<tr>
<td></td>
<td>Others: &lt;2,000 or &gt;25,000</td>
<td>None</td>
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<tr>
<td><strong>Differential/Morphology:</strong></td>
<td>Presence of Blasts; however, if the presence of Blasts has been reported within the last 30 days no notification is necessary.</td>
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<td></td>
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**Limitations:** Characteristics that may affect results include: lipemia (or patients receiving lipids), icterus and cold agglutinins.

Lipemia, elevated WBC and cold agglutinins will prolong the turnaround time of an occasional specimen.

**Methodology:** Automated Cell Counter

**Contraindications:** Differential will not be done on samples with a WBC <0.1 x 10³/uL

Normal Reference Range Study (1994) Children’s Hospitals and Clinics, Minneapolis and St Paul, MN, Hematology Laboratory

Updates: 3/21/2011: Critical value statement for Blasts previously listed as “Presence of Blasts”.
11/12/2015: Updated differential WBC requirements.
9/26/2018: Update to lipemic sample information.