WBC CORRECTIONS FOR NUCLEATED RED BLOOD CELLS

PRINCIPLE

If nucleated Red Blood Cells are present, the White Blood Cell Count has to be corrected because Red Blood Cells cannot be distinguished from leukocytes.

PROCEDURE

The number of nucleated Red Blood Cells is obtained from the differential Count. White counts with nucleated RBC's in excess of 5/100 should be routinely corrected.

MANUAL CALCULATION

$$\text{Corrected WBC Count} = \frac{\text{Counted WBC's} \times 100}{100 + \text{Number of Nucleated RBC's/100 WBC}}$$

Controlled Documents

The following controlled documents support this procedure.

Reference
1. Koepke, John. Practical Laboratory Hematology. Churchill Livingstone Inc. 1991. p. 24-25, 36-39.
2. Cornbleet J., *Spurious results from automated hematology cell counters. Lab Medicine.* 1983;8:509-514.
3. Stewart, Charles and Koepke, John. *Basic Quality Assurance Practices for Clinical Laboratories*, Van Nostrand Reinhold, 1989, p 189.

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Document History Page

Change type: New, Major, Minor etc.	Changes Made to SOP – describe	Name of responsible person/date	Med. Dir. Reviewed/ Date	Director of Lab Ops. reviewed/ date	Date change Implemented
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