

MAJOR ROUTINE AND SPECIAL HEMATOLOGY TESTS AND FLOW CYTOMETRY APPLICATIONS

Table of Contents

A. Major Routine and Special Hematology Tests

1. Introduction
2. CBC Analysis
 - a. Hemoglobin Concentration
 - b. Hematocrit Determination
 - c. Red Blood Cell Count
 - d. Red Cell Indices
 - ° MCV
 - ° RDW
 - ° MCHC
 - ° CHCM
 - ° HDW
 - ° MCH
 - e. Red Cell Size Histograms
 - f. Platelets
 - ° Platelet Count
 - ° Platelet Size/MPV
 - ° PDW
 - ° Automated Systems
3. White Blood Cell Analysis
 - a. WBC Count
 - b. Five-Partial Differential
 - ° Abbott
 - ° Beckman Coulter/Danaher
 - ° Simens
 - ° Sysmex
 - c. Pattern Recognition Systems
 - ° IRIS Diagnostics
 - d. Comparison of Major Differential Analyzers
4. Reticulocytes
5. Platelet Function Tests
6. Erythrocyte Sedimentation Rate
7. Red Cell Analysis

Table of Contents (continued)

- 8. 2, 3 DPG
- 9. Red Cell Deformability
- 10. Neutrophil Function Tests
- 11. Semen Analysis
- 12. Bone Marrow Analysis
- 13. Urinalysis
- B. Major Flow Cytometry Applications
 - 1. Cell Surface Markers
 - a. Lymphocyte Subclassification CD4/CD8
 - ° Instrumentation and Reagent Test Kits
 - * BD
 - * Beckman Coulter/Danaher
 - * T Cells Diagnostics TRAx
 - b. Other Cell Markers
 - 2. DNA Content Analysis
 - 3. RNA Content Analysis
 - 4. Chemotherapy Monitoring
 - 5. Cell Cycle Analysis
 - 6. Chromosome Analysis
 - 7. Fetal Cell Analysis
 - 8. HLA Typing
 - 9. Microbiology
 - 10. Protein Content Analysis
 - 11. Multiparameter Analysis
 - 12. Other Applications