New Frontiers in the French Hematology and Flow Cytometry Market: Business Challenges, Emerging Technologies, Competitive Landscape

Table of Contents

I. <u>Introduction</u>

II. Worldwide Market and Technology Overview

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
 - g. Reticulocytes
- 3. White Blood Cell Analysis
 - a. WBC Count
 - b. Five-Partial Differential Major Suppliers
 - ° Abbott
 - ° Beckman Coulter/Danaher
 - ° Siemens
 - ° Sysmex
 - c. Pattern Recognition Systems
 - ° IRIS
 - d. Comparison of Major Differential Analyzers

- 4. Reticulocytes
- 5. Platelet Function Tests
- 6. Erythrocyte Sedimentation Rate/CRP
- 7. Red Cell Analysis
- 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/CD34
 - ° Instrumentation and Reagent Test Kits
 - * BC
 - * Beckman Coulter/Danaher
 - * T Cells Diagnostics
 - 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

C. Instrumentation Review

- 1. Hematology Analyzers
 - a. Overview
 - Electrical Aperture-Impedance Analyzers
 - ° Light Scatter Analyzers
 - b. System Review
 - ° Abbott
 - ° Beckman Coulter/Danaher
 - ° Biocode Hycel

- ° CellaVision
- ° Drew-Scientific
- ° Horiba
- ° Medica
- ° Menarini
- ° Nihon Kohden
- ° Siemens
- ° Sysmex
- 2. Flow Cytometers
 - a. Introduction
 - b. System Overview
 - ° Becton Dickinson
 - ° Beckman Coulter/Danaher
- 3. Platelet Aggregometers
- 4. Sedimentation Rate Analyzers
 - ° Diesse Ves Matic
 - ° Polymedco

D. Current Market Needs and Future Demand For Hematology Analyzers

E. Reagents and Controls

F. Current and Emerging Technologies

- 1. Molecular Diagnostics (Amplification Methods, Sequencing, Microarrays/Biochips)
- 2. Information Technologies
- 3. Automation and Robotics
- 4. Lasers
- 5. Artificial Intelligence
- 6. Monoclonal Antibodies
- 7. Microdrop Technology

III. France

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Suppliers' Instrument Placements, Installed Base, Sales and Market Shares

IV. Major Product Development Opportunities

- A. Instrumentation
- B. Reagent Kits and Test Systems/Panels
- C. Information Technology
- D. Auxiliary Products

V. Design Criteria for Decentralized Testing Products

VI. Alternative Market Penetration Strategies

- A. Internal Development
- B. Collaborative Arrangements
- C. University Contracts
- D. Distribution Strategies for the Decentralized Testing Markets
 - 1. Four Marketing Approaches
 - 2. Product Complexity Factor
 - 3. Customer Preference Factor
 - 4. Established Suppliers
 - 5. Emerging Suppliers
 - 6. Major Types of Distributors
 - 7. Market Segmentation Factor

VII. Potential Market Entry Barriers and Risks

- A. Market Maturity
- B. Cost Containment
- C. Competition
- D. Technological Edge and Limitations
- E. Patent Protection
- F. Regulatory Constraints
- G. Decentralized Testing Market Challenges

VIII. Competitive Assessments

- ° Abbott
- ° Agilent Technologies
- ° Beckman Coulter/Danaher
- ° Becton Dickinson

- ° Bio-Rad
- ° CellaVision
- ° Horiba
- ° Iris
- ° Nihon Kohden
- ° Ortho-Clinical Diagnostics
- ° Roche
- ° Siemens
- ° Sysmex
- IX. Appendix: Major Universities and Research

Centers Developing Hematology/Flow Cytometry Technologies and Applications

List of Tables

Summary Table I: France, All Market Segments Total Hematology and Flow Cytometry Specimen Volume Forecast

Summary Table II: France, All Market Segments Total Hematology and Flow Cytometry Test Volume Forecast

Summary Table III: France, All Market Segments
Total Hematology and Flow Cytometry Market Forecast

France, Laboratories Performing Hematology and Flow Cytometry Testing By Market Segment

France, All Market Segments, Total Hematology And Flow Cytometry Specimen Volume

France, All Market Segments, Total Hematology and Flow Cytometry Test Volume

France, Hospital Laboratories Performing Hematology and Flow Cytometry Tests By Bed Size

France, Commercial/Private Laboratories Performing Hematology and Flow Cytometry Tests By Annual Test Volume

France, Total Routine Hematology Specimen Volume By Market Segment

France, Total Flow Cytometry and Special Hematology Specimen Volume By Market Segment

France, Hospital Laboratories, Hematology and Flow Cytometry Specimen Volume Forecast

France, Commercial/Private Laboratories Hematology and Flow Cytometry Specimen Volume Forecast

List of Tables (continued)

France, Total Routine Hematology Test Volume Forecast By Market Segment

France, Total Flow Cytometry and Special Hematology Test Volume By Market Segment

France, All Market Segments, Total Routine Hematology Test Volume Forecast

France, Hospital Laboratories, Routine Hematology Test Volume Forecast

France, Commercial/Private Laboratories, Routine Hematology Test Volume Forecast

France, All Market Segments, Total Flow Cytometry and Special Hematology Test Volume Forecast

France, Hospital Laboratories, Flow Cytometry And Special Hematology Test Volume Forecast

France, Commercial/Private Laboratories, Flow Cytometry And Special Hematology Test Volume Forecast

France, Major Hematology Analyzers, Estimated Placements and Installed Base

France, Major Flow Cytometers, Estimated Placements and Installed Base

France, Total Hematology Market Forecast By Market Segment

France, Hematology Consumable Market Forecast By Market Segment

France, Hematology Instrument Market Forecast By Market Segment

France, Total Flow Cytometry Market Forecast By Market Segment

List of Tables (continued)

France, Flow Cytometry Consumable Market Forecast By Market Segment

France, Flow Cytometry Instrument Market Forecast By Market Segment

France, Total Hematology Market By Major Supplier

France, Hematology Consumable Market By Major Supplier

France, Hematology Instrument Market By Major Supplier

France, Total Flow Cytometry Market By Major Supplier

France, Flow Cytometry Consumable Market By Major Supplier

France, Flow Cytometry Instrument Market By Major Supplier