# **FUTURE US COAGULATION MARKET: Growth Opportunities and Business Expansion Strategies**

#### **Table of Contents**

## **Worldwide Market and Technology Overview**

## A. Major Routine and Special Coagulation Tests

- 1. Introduction
- 2. Activated Partial Thromboplastin Time (APTT)
- 3. Alpha-2 Antiplasmin
- 4. Antithrombin III
- 5. Bleeding Time
- 6. D-Dimer
- 7. Ethanol Flocculation Test
- 8. Euglobulin Lysis
- 9. Factor Assays
  - a. Introduction
  - b. Factor II
  - c. Factor V/Factor V Leiden
  - d. Factor VII
  - e. Factor VIII
  - f. Factor IX
  - g. Factor IXa
  - h. Factor X (Stuart Factor)
  - i. Factor Xa
  - j. Factor XI
  - k. Factor XII
  - 1. Factor XIII
- 10. Fibrin Degradation Products
- 11. Fibrinogen
- 12. Heparin
- 13. Hirudin
- 14. Hypercoagulability and Thrombosis
- 15. Lipoprotein a
- 16. Plasmin
- 17. Plasminogen
- 18. Plasminogen Activator Inhibitor (PAI)
- 19. Platelet Function Tests
- 20. Platelet Aggregation

- 21. Proteins C and S
- 22. Prothrombin Fragment 1.2
- 23. Prothrombin Time (PT)
- 24. Reptilase Time
- 25. Thrombin Time
- 26. Tissue-Type Plasminogen Activator (t-PA)
- 27. Von Willebrand's Factor

#### **B.** Instrumentation Review

- Introduction
- Benk Hemolab
- Benk TRT Thrombotimer
- Bio/Data MCA 310
- Bio/Data MCA 210
- Bio/Data PAP-4C D/4D/4C
- Cardiovascular Diagnostics COAG
- Diagnostica Stago STA Compact
- Diagnostica Stago STA-R
- Diagnostica Stago Star 4/8
- Helena Laboratories Cascade 480
- Helena Laboratories Cascade M
- Helena Laboratories PACKS-4
- Helena THOR
- Instrumentation Laboratory ACL 100 and 1000 series
- Instrumentation Laboratory ACL6000
- Instrumentation Laboratory ACL7000
- Instrumentation Laboratory ACL9000
- Instrumentation Laboratory Electra 1000C
- Instrumentation Laboratory Electra 1400C
- Instrumentation Laboratory Electra 1600/C
- Instrumentation Laboratory Electra 1800C
- Instrumentation Laboratory Futura
- ITC Hemochron 8000
- Roche Diagnostics CoaguChek
- Siemens BCS
- Siemens BCT
- Siemens BF II/Fibrintimer Series
- Sysmex CA-50
- Sysmex CA-500
- Sysmex CA-1500

- Sysmex CA-5000/CA-1000
- Sysmex CA-6000
- Sysmex CA-7000
- Teco Coatron II/Jr./AccuStasis 5000
- Trinity Biotech Amax CS190
- Trinity Biotech Amax CS400
- Trinity Biotech Coag-A-Mate Max
- Trinity Biotech KC 40, 4A, 1A Series
- Trinity Biotech MDA 180
- Trinity Biotech Coag-A-Mate MTX
- Trinity Biotech Coag-A-Mate RA4
- Trinity Biotech Coag-A-Mate XC/Plus
- Trinity Biotech Coag-A-Mate XM

## C. Major in Vitro Diagnostic Technologies and Their Potential Applications

- 1. Chromogenic Substrates
- 2. Monoclonal and Polyclonal Antibodies
- 3. Immunoassays
  - a. Applications
  - b. Technological Principle
  - c. Enzyme Immunoassays (EIA)
    - Overview
    - ELISA
    - EMIT
    - Dot Immunobinding Assays
    - Capillary Immunoassays
    - Enzyme Amplification
    - Electrochemical Immunoassay
  - d. Fluorescent Immunoassays
    - Fluorescence Polarization
    - Time-Resolved Pulse Fluorescence
    - Fluorescence Lifetime
  - e. Latex Agglutination
  - f. Immunoprecipitation
- 4. Microcomputers
- 5. Automation
- 6. Robotics
- 7. DNA Probes
  - a. Overview
  - b. Amplification Methods

- PCR
- Ligase Chain Reaction
- Branched DNA
- Q-Beta Replicase
- NASBA
- SDA
- 3 SR
- HPA
- Two-Tiered System
- LAT
- 8. Artificial Intelligence
- 9. Dry Chemistry
- 10. Biosensors

#### D. Worldwide Market Overview

- 1. Business Environment
- 2. Market Structure
- 3. Market Size and Growth
- 4. POC Testing Market

### **USA**

- A. Executive Summary
- B. Business Environment
- 1. Health Care Expenditures
  - 2. Cost Consciousness
  - 3. Industry Consolidation
  - 4. Managed Care
  - 5. Hospitals
  - 6. Admissions
  - 7. Length of Stay
  - 8. Industry Diversification
  - 9. Physician Demographics
  - 10. Population Aging
    - a. Chronic Illnesses
    - b. Disease Incidence
    - c. Susceptibility to Iatrogenesis
    - d. Multiple Illness Cases
  - 11. Laboratory Regulations

#### C. Market Structure

- 1. Centralized Testing
  - a. Hospitals
  - b. Commercial laboratories
- 2. Decentralized Testing
  - a. Physician Offices/Group Practices
  - b. Point-of-Care Testing
  - c. Home/Self Testing
  - d. Other Decentralized Testing Locations
- D. Market Size, Growth And Major Suppliers

## **Major Product Development Opportunities**

### **Design Criteria For Decentralized Testing Products**

## **Alternative Market Penetration Strategies**

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

## **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

## **Competitive Assessments**

- Abbott
- American Diagnostica
- Avocet Medical
- Axis-Shield
- Beckman Coulter
- Becton Dickinson
- Bio/Data Corporation
- Biosite
- Chrono-Log
- Corgenix Medical
- Diagnostica Stago
- Helena Laboratories
- HYPEN BioMed
- Instrumentation Laboratory
- ITC
- Nanogen
- Roche
- Siemens
- Sienco
- Sysmex
- Thermo Fischer
- Trinity Biotech
- ZyCare

#### **List of Tables**

Major Companies Developing or Marketing Activated Clotting Time Tests

Major Companies Developing or Marketing APTT Tests

Major Companies Developing or Marketing Alpha-2 Antiplasmin Tests

Major Companies Developing or Marketing Antithrombin III Tests

Major Companies Developing or Marketing Bleeding Time Tests

Major Companies Developing or Marketing D-dimer Tests

Major Companies Developing or Marketing Factor Assays

Major Companies Developing or Marketing Fibrin Degradation Product Tests

Major Companies Developing or Marketing Fibrinogen Tests

Major Companies Developing or Marketing Heparin Tests

Major Companies Developing or Marketing Plasmin Tests

Major Companies Developing or Marketing Plasminogen Tests

Major Companies Developing or Marketing Plasminogen Activator Inhibitor Tests

Major Companies Developing or Marketing Platelet Aggregation Tests

Major Companies Developing or Marketing Protein C Tests

Major Companies Developing or Marketing Protein S Tests

#### <u>List of Tables</u> (continued)

Major Companies Developing or Marketing PT Tests

Major Companies Developing or Marketing Thrombin Time Tests

Major Companies Developing or Marketing TPA Tests

Major Companies Developing or Marketing Von Willebrand's Factor Tests

Worldwide, All Market Segments, Laboratories Performing Coagulation Tests By Country, 2010

Worldwide, All Market Segments, Total Coagulation Test Volume By Country, 2010-2020

Worldwide, All Market Segments, Total Coagulation Reagent Market By Country, 2010-2020

Worldwide, All Market Segments, Total Coagulation Instrument Market By Country, 2010-2020

Worldwide, All Market Segments, Total Coagulation Diagnostics Market By Country, 2010-2020

Executive Summary Table: U.S.A., Total Coagulation Diagnostics Market By Market Segment and Product Category, 2010-2020

U.S.A., Laboratories Performing Coagulation Tests By Market Segment, 2010

U.S.A., Hospital Laboratories Performing Coagulation Tests By Bed Size, 2010

U.S.A., Commercial/Private Laboratories Performing Coagulation Tests By Annual Test Volume, 2010

U.S.A., Physician Offices/Group Practices Performing Coagulation Tests By Practice Size, 2010

#### <u>List of Tables</u> (continued)

- U.S.A., Hospital Laboratories Average Daily Test Volume, 2010
- U.S.A., Commercial/Private Laboratories Average Daily Test Volume, 2010
- U.S.A., Physician Offices/Group Practices Average Daily Test Volume
- U.S.A., Total Coagulation Test Volume By Market Segment, 2010-2020
- U.S.A., All Market Segments Coagulation Test Volume, 2010-2020
- U.S.A., Hospital Laboratories Coagulation Test Volume, 2010-2020
- U.S.A., Physician Offices/Group Practices Coagulation Test Volume, 2010-2020
- U.S.A., Commercial/Private Laboratories Coagulation Test Volume, 2010-2020
- U.S.A., Coagulation Reagent Market By Market Segment, 2010-2020
- U.S.A., Major Suppliers of Coagulation Reagents Estimated Sales and Market Shares, 2010
- U.S.A., Coagulation Instrument Market By Market Segment, 2010-2020
- U.S.A., Major Suppliers of Coagulation Analyzers, Estimated Total Instrument Placements and Market Shares, 2010
- U.S.A., Major Suppliers of Coagulation Analyzers, Estimated Placements and Installed Base By Supplier and Model, 2010

## <u>List of Tables</u> (continued)

U.S.A., Major Suppliers of Coagulation Analyzers, Estimated Instrument Sales and Market Shares, 2010

U.S.A., Total Coagulation Diagnostics Market By Product Category, 2010-2020

U.S.A., Major Suppliers of Coagulation Diagnostic Products, Estimated Sales and Market Shares, 2010