

# 2012 US Clinical Chemistry and Immunodiagnostics Market Outlook: Growth Opportunities and Strategies

https://marketpublishers.com/r/F5F41C3607FEN.html

Date: April 2012

Pages: 600

Price: US\$ 8,560.00 (Single User License)

ID: F5F41C3607FEN

# **Abstracts**

This report presents a comprehensive analysis of the US clinical chemistry and immunodiagnostics markets, including:

Major issues pertaining to the US clinical chemistry and immunodiagnostic laboratory practice, as well as key economic, regulatory, demographic, social and technological trends with significant market impact during the next ten years.

Five- and ten-year volume and sales forecasts for over 100 clinical chemistry, TDM, endocrine, cancer, immunoprotein and abused drug assays performed in US hospitals, commercial laboratories, and physician offices, including controls, calibrators and consumables.

Five- and ten-year volume forecasts for serum, whole blood, plasma, CFS, urine and other specimens.

Five- and ten-year reagent and instrument sales forecasts.

Review of current instrumentation technologies, and a feature comparison of 50 high-, medium-, and low-volume/POC analyzers.

Sales and market shares of leading reagent and instrument suppliers.

Review of current and emerging technologies and their potential market applications.



Product development opportunities for clinical chemistry and immunodiagnostic instruments and consumables.

Profiles of 25 current and emerging suppliers, including their sales, market shares, product portfolios, marketing tactics, technological know-how, new products in R&D, collaborative arrangements and business strategies.

Market penetration strategies, entry barriers and risks.

Contains 600 pages and 120 tables.



## **Contents**

#### INTRODUCTION

#### WORLDWIDE MARKET AND TECHNOLOGY OVERVIEW

- A. Major Routine Chemistry Tests
  - 1. Albumin
  - 2. Alkaline Phosphatase
  - 3. ALT/SGPT
  - 4. Ammonia
  - 5. Amylase
  - 6. AST/SGOT
  - 7. Bilirubin
  - 8. Blood Gases
  - 9. Blood Urea Nitrogen (BUN)
  - 10. Calcium
  - 11. Cholesterol
  - 12. Cholinesterase
  - 13. Creatinine
  - 14. Electrolytes
    - a. Carbon Dioxide/Bicarbonate
    - b. Chloride
    - c. Potassium
    - d. Sodium
  - 15. Fructosamine
  - 16. Gamma-Glutamyl Transpeptidase (GGT)
  - 17. Glucose
  - 18. High Density Lipoprotein (HDL)
  - 19. Iron
  - 20. Lactate Dehydrogenase (LDH)
  - 21. Magnesium
  - 22. Phosphorus
  - 23. Protein
  - 24. Triglycerides
  - 25. Uric Acid
  - 26. Troponin
- B. Therapeutic Drug Monitoring (TDM)
  - 1. Overview



- 2. Carbamazepine
- 3. Digoxin
- 4. Gentamicin
- 5. Lidocaine
- 6. Lithium
- 7. Phenytoin/Dilantin
- 8. Procainamide
- 9. Quinidine
- 10. Theophylline
- 11. Valproic Acid
- C. Endocrine Function Tests
  - 1. Cortisol
  - 2. Follicle-Stimulating Hormone (FSH)
  - 3. Gastrin
  - 4. Human Chorionic Gonadotropin (HCG)
  - 5. LH
  - 6. Prolactin
  - 7. T3
  - 8. T3 Uptake
  - 9. Free T3
  - 10. Thyroxine (T4)
  - 11. Free T4
  - 12. TBG
  - 13. TSH
- D. Tumor Markers And Special Chemistry Tests
  - 1. Alpha-Fetoprotein (AFP)
  - 2. Carcinoembrionic Antigen (CEA)
  - 3. Ferritin
  - 4. Follate/Folic Acid
  - 5. Occult Blood
  - 6. Prostatic Acid Phosphatase (PAP)
  - 7. Prostate-Specific Antigen (PSA)
  - 8. Vitamin B-12
- E. Immunoprotein Tests
  - 1. Complement
  - a. C3
  - b. C4
  - 2. CRP
  - 3. Immunoglobulins (IgA, IgE, IgG, IgM)



- 4. Protein Electrophoresis
- F. Drugs of Abuse
  - 1. Overview
  - 2. Test Methodologies
  - 3. Amphetamines
  - 4. Barbiturates
  - 5. Benzodiazepines
  - 6. Cannabinoids/Marijuana
  - 7. Cocaine
  - 8. Lysergic Acid Diethylamide (LSD)
  - 9. Methadone
  - 10. Methaqualone
  - 11. Opiates
  - 12. Phencyclidine
- G. Instrumentation Review

Abaxis Piccolo

Abaxis Piccolo Xpress

Abbott AxSYM

Abbott Architect c4000

Abbott Architect i2000 Series

Abbott Architect ci8200 System

Abbott i-STAT

Alfa Wassermann ACE Alera

**AMS Liasys** 

Awareness Technologies ChemWell

Awareness Technology STAT FAX 4500

**Beckman Coulter Unicel Series** 

**Beckman Coulter Access** 

Binding Site ESP600

bioMerieux Mini Vidas

Carolina Chemistries BioLis 24i

DiaSorin Liaison

**Grifols Triturus** 

Horiba ABX Pentra 400

Inverness DS2

J&J DT System

J&J Vitros ECi/ECiO

**J&J Vitros 3600** 

J&J Vitros 5600



Medica EasyRA

Nova Biomedical Critical Care Xpress

Olympus AU480

Olympus AU5400

Olympus AU53000i

Olympus AU2700

Polymedco Poly-Chem

Polymedco Spotchem EZ

Randox RX Daytona

Randox RX Imola

Roche Modular Analytics

Roche Cobas Integra 400

Roche Cobas Integra 400 Plus

Roche Elecsys

Roche Cobas c311

Roche Cardiac 200

Siemens ADVIA Centaur

Siemens Dimension

Siemens Dimension RxL Max

Siemens Dimension Vista 500

Siemens Immulite

Siemens Stratus

**Tosoh AIA-Series** 

Vital Diagnostics ATAC 8000

Vital Diagnostics Envoy 500

- H. Major In Vitro Diagnostic Technologies And Their Potential Applications
  - 1. Monoclonal and Polyclonal Antibodies
  - 2. Immunoassays
    - a. Technological Principle
    - b. Radioimmunoassays (RIA)
    - c. Enzyme Immunoassays (EIA)

Overview

**ELISA** 

**EMIT** 

**Immunofiltration** 

**Dot Immunobinding Assays** 

Capillary Immunoassays

Particle-Membrane Capture Immunoassays

**Enzyme Amplification** 



#### **CEDIA**

Electrochemical Immunoassays

d. Fluorescent Immunoassays

Fluorescence Polarization

Time-Resolved Pulse Fluorescence

e. Luminescence

Chemiluminescence

Bioluminescence

- f. Latex Agglutination
- g. Immunoprecipitation
- h. Affinity Chromatography Immunoassays
- i. Liposome Flow-Injection Immunoassays
- 3. IT and Automation
- 4. Dry Chemistry
- 5. Biosensors
- 6. Robotics
- 7. Chemometrics
- 8. Molecular Diagnostics
  - a. Sample Preparation
  - b. Hybridization
  - c. Separation
  - d. Detection/Measurement

#### **Test Formats**

- a. Filter Hybridization
- b. Southern Blot
- c. Northern Blot
- d. In Situ Hybridization
- e. Others

Labeling Techniques

**Amplification Methods** 

Polymerase Chain Reaction

**Temperature Cyclers** 

**PCR Variations** 

Immuno-PCR

QC-PCR.

DAP-PCR

Strand Displacement Activation

**TMA** 

Ligase Chain Reaction



#### **Branched DNA**

Hybridization Protection Assay

Nucleic-Acid Sequence-Based Amplification

Self-Sustained Sequence Replicase

Others

Ampliprobe

CAR

CAS

**CPT** 

Dendritic Polymer Technology

ISO-CR

LAT

**Probe Networks** 

**RAMP** 

Repair Chain Reaction

Rolling Circles

Sequence Independent Gene Amplification

Sequence Initiation Reaction

**SISPA** 

Solid Phase Amplification

**Detection Technologies** 

a. Radioactive Methods

Overview

Major Isotopes

P-32

S-35

H-3

I-125

b. Non-Isotopic Methods

**Enzymatic Labels** 

**Chemical Labeling** 

Indirect Chemical Labeling

**Direct Chemical Labeling** 

Fluorescence

Chemiluminescence

**Electrical Conductivity** 

Instrumentation Review

- a. Abbott LCx
- b. Beckman Coulter/Biomek FK



- c. Becton Dickinson SDA
- d. Bio-Rad GeneScope
- e. Gen-Probe Tigris
- f. Roche Cobas Amplicor
- g. Tecan LS Series

Biochips: Genosensors, Microarrays, and Labs-on-the-chip

Liquid Transportation and Mixing

Separation

Reaction

Detection

Worldwide Market Overview

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

#### U.S.A.

- 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 Illness
    - b. Disease Incidence
    - c. Susceptibility to latrogenesis
    - d. Multiple Illness Cases
  - 11. Laboratory Regulations
- C. Market Structure
  - 1. Centralized Testing
    - a. Hospitals
    - b. Commercial/Private 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' Instrument and Reagent Sales, and Market Shares

#### **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 Laboratories

AdnaGen

**Ambrilia** 

**AMDL** 



**Beckman Coulter** 

**Biomedical Diagnostics** 

BioMerieux

Bio-Rad

Canag Diagnostics

Dako

DiaSorin

Eiken

Fujirebio

**Instrumentation Laboratory** 

J&J

Kyowa Medex

Matritech

Roche

Siemens

Sysmex

Thermo Fisher

Trinity Biotech

Tosoh

Wako

Wallac



# **List Of Tables**

#### LIST OF TABLES

Major Companies Developing or Marketing Albumin Tests

Major Companies Developing or Marketing Alkaline Phosphatase Tests

Major Companies Developing or Marketing ALT/SGPT Tests

Major Companies Developing or Marketing Amylase Tests

Major Companies Developing or Marketing AST/SGOT Tests

Major Companies Developing or Marketing Bilirubin Tests

Major Companies Developing or Marketing Blood Gas Analyzers

Major Companies Developing or Marketing BUN Tests

Major Companies Developing or Marketing Calcium Tests

Major Companies Developing or Marketing Cholesterol Tests

Major Companies Developing or Marketing Creatinine Tests

Major Companies Developing or Marketing Electrolyte Tests

Major Companies Developing or Marketing GGT Tests

Major Companies Developing or Marketing Glucose Tests

Major Companies Developing or Marketing HDL Tests

Major Companies Developing or Marketing Iron Tests

Major Companies Developing or Marketing LDH Tests

Major Companies Developing or Marketing Magnesium Tests

Major Companies Developing or Marketing Phosphorus Tests

Major Companies Developing or Marketing Protein Tests

Major Companies Developing or Marketing Triglycerides Tests

Major Companies Developing or Marketing Uric Acid Tests

Major Companies Developing or Marketing TDM Tests

Major Companies Developing or Marketing Digoxin Tests

Major Companies Developing or Marketing Lithium Tests

Major Companies Developing or Marketing Phenytoin/Dilantin Tests

Major Companies Developing or Marketing Theophylline Tests

Major Companies Developing or Marketing Valproic Acid Tests

Major Companies Developing or Marketing FSH Tests

Major Companies Developing or Marketing HCG Tests

Major Companies Developing or Marketing LH Tests

Major Companies Developing or Marketing Prolactin Tests

Major Companies Developing or Marketing T3 Tests

Major Companies Developing or Marketing T4 Tests

Major Companies Developing or Marketing TSH Tests



Major Companies Developing or Marketing AFP Tests

Major Companies Developing or Marketing CEA Tests

Major Companies Developing or Marketing Ferritin Tests

Major Companies Developing or Marketing Occult Blood Tests

Major Companies Developing or Marketing Prostatic Acid Phosphatase Tests

Major Companies Developing or Marketing PSA Tests

Major Companies Developing or Marketing Vitamin B-12/Folate Tests

Major Companies Developing or Marketing CRP Tests

Major Companies Developing or Marketing Drugs of Abuse Tests

Major Companies Developing or Marketing Biosensors for Clinical Chemistry Testing

Major Companies Developing or Marketing Biosensors for Immunological Testing

Major Companies Developing or Marketing DNA Probes for Cancer Testing

Major Companies Developing or Marketing DNA Probes for Genetic Disease Testing

Worldwide, All Market Segments, Estimated Laboratory Universe Performing Chemistry and Immunodiagnostics Tests By Country

Worldwide, All Market Segments, Estimated Chemistry and Immunodiagnostics Consumable Market By Country

Worldwide, All Market Segments, Estimated Chemistry and Immunodiagnostics Instrument Sales By Country

Worldwide, All Market Segments, Estimated Total Chemistry and Immunodiagnostics Market By Country

Executive Summary Table: U.S.A., Clinical Chemistry and Immunoassay Test Volume and Diagnostics Sales Forecast By Test Category

U.S.A., Laboratories Performing Chemistry and Immunoassay Testing By Market Segment

U.S.A., Hospital Laboratories Performing Chemistry and Immunoassay Tests By Bed Size

U.S.A., Commercial/Private Laboratories Performing Chemistry and Immunoassay Tests By Annual Test Volume

U.S.A., Total Chemistry and Immunoassay Specimen Volume Forecast

U.S.A., All Market Segments, Specimen Volume Forecast By Test Category

U.S.A., Total Clinical Chemistry and Immunoassay Test Volume Forecast By Test Category

U.S.A., Routine Chemistry Test Volume Forecast By Market Segment

U.S.A., TDM Test Volume Forecast By Market Segment

U.S.A., Endocrine Function Test Volume Forecast By Market Segment

U.S.A., Drugs of Abuse Test Volume Forecast By Market Segment

U.S.A., Tumor Markers and Special Chemistry Test Volume Forecast By Market Segment



- U.S.A., Immunoprotein Test Volume Forecast By Market Segment
- U.S.A., All Market Segments, Profiles, Panels and Individual Tests Forecast
- U.S.A., Hospital Laboratories, Profiles, Panels and Individual Tests Forecast
- U.S.A., Commercial/Private Laboratories, Profiles, Panels and Individual Tests Forecast
- U.S.A., Physician Offices/Group Practices, Profiles, Panels and Individual Tests Forecast
- U.S.A., All Market Segments, Routine Chemistry Test Volume Forecast by Assay
- U.S.A., Hospital Laboratories, Routine Chemistry Test Volume Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Routine Chemistry Test Volume Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Routine Chemistry Test Volume Forecast by Assay
- U.S.A., All Market Segments, TDM Test Volume Forecast by Assay
- U.S.A., Hospital Laboratories, TDM Test Volume Forecast by Assay
- U.S.A., Commercial/Private Laboratories, TDM Test Volume Forecast by Assay
- U.S.A., Physician Offices/Group Practices, TDM Test Volume Forecast by Assay
- U.S.A., All Market Segments, Endocrine Function Test Volume Forecast by Assay
- U.S.A., Hospital Laboratories, Endocrine Function Test Volume Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Endocrine Function Test Volume Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Endocrine Function Test Volume Forecast by Assay
- U.S.A., All Market Segments, Drugs of Abuse Test Volume Forecast by Assay
- U.S.A., Hospital Laboratories, Drugs of Abuse Test Volume Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Drugs of Abuse Test Volume Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Drugs of Abuse Test Volume Forecast by Assay
- U.S.A., All Market Segments, Tumor Markers and Special Chemistry Test Volume Forecast by Assay
- U.S.A., Hospital Laboratories, Tumor Markers and Special Chemistry Test Volume Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Tumor Markers and Special Chemistry Test Volume Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Tumor Markers and Special Chemistry Test Volume Forecast by Assay
- U.S.A., All Market Segments, Immunoprotein Test Volume Forecast by Assay
- U.S.A., Hospital Laboratories, Immunoprotein Test Volume Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Immunoprotein Test Volume Forecast by



### Assay

- U.S.A., Physician Offices/Group Practices, Immunoprotein Test Volume Forecast by Assay
- U.S.A., Total Clinical Chemistry and Immunoassay Reagent Market Forecast By Test Category
- U.S.A., Clinical Chemistry and Immunoassay Calibrator and Control Market Forecast By Test Category
- U.S.A., Routine Chemistry Reagent Market Forecast By Market Segment
- U.S.A., TDM Reagent Market Forecast By Market Segment
- U.S.A., Drugs of Abuse Reagent Market Forecast By Market Segment
- U.S.A., Tumor Markers and Special Chemistry Reagent Market Forecast By Market Segment
- U.S.A., Endocrine Function Reagent Market Forecast By Market Segment
- U.S.A., All Market Segments, Routine Chemistry Reagent Market Forecast by Assay
- U.S.A., Hospital Laboratories, Routine Chemistry Reagent Market Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Routine Chemistry Reagent Market Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Routine Chemistry Reagent Market Forecast by Assay
- U.S.A., All Market Segments, TDM Reagent Market Forecast by Assay
- U.S.A., Hospital Laboratories, TDM Reagent Market Forecast by Assay
- U.S.A., Commercial/Private Laboratories, TDM Reagent Market Forecast by Assay
- U.S.A., Physician Office/Group Practices, TDM Reagent Market Forecast by Assay
- U.S.A., All Market Segments, Drugs of Abuse Reagent Market Forecast by Assay
- U.S.A., Hospital Laboratories, Drugs of Abuse Reagent Market Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Drugs of Abuse Reagent Market Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Drugs of Abuse Reagent Market Forecast by Assay
- U.S.A., All Market Segments, Endocrine Function Reagent Market Forecast by Assay
- U.S.A., Hospital Laboratories, Endocrine Function Reagent Market Forecast by Assay
- U.S.A., Commercial/Private Laboratories, Endocrine Function Reagent Market Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Endocrine Function Reagent Market Forecast by Assay
- U.S.A., All Market Segments, Tumor Markers and Special Chemistry Reagent Market Forecast by Assay
- U.S.A., Hospital Laboratories, Tumor Markers and Special Chemistry Reagent Market Forecast by Assay



- U.S.A., Commercial/Private Laboratories, Tumor Markers and Special Chemistry Reagent Market Forecast by Assay
- U.S.A., Physician Offices/Group Practices, Tumor Markers and Special Chemistry Reagent Market Forecast by Assay
- U.S.A., All Market Segments, Immunoprotein Reagent Market Forecast
- U.S.A., Hospital Laboratories, Immunoprotein Reagent Market Forecast Immunoprotein
- U.S.A., Commercial/Private Laboratories, Immunoprotein Reagent Market Forecast
- U.S.A., Physician Offices/Group Practices, Immunoprotein Reagent Market Forecast by Assay
- U.S.A., Major Suppliers of Clinical Chemistry Reagents, Estimated Sales and Market Shares
- U.S.A., Major Suppliers of Clinical Chemistry Analyzers, Estimated Instrument Sales and Market Shares
- U.S.A., Major Suppliers of Clinical Chemistry Diagnostics Products, Estimated Sales and Market Shares
- U.S.A., Major Suppliers of Immunoassay Reagents, Estimated Sales and Market Shares90
- U.S.A., Major Suppliers of Immunoassay Analyzers, Estimated Instrument Sales and Market Shares
- U.S.A., Major Suppliers of Immunoassay Diagnostics Products, Estimated Sales and Market Shares
- U.S.A., Clinical Chemistry and Immunoassay Instrument Market Forecast By Analyzer Type



## I would like to order

Product name: 2012 US Clinical Chemistry and Immunodiagnostics Market Outlook: Growth

Opportunities and Strategies

Product link: https://marketpublishers.com/r/F5F41C3607FEN.html

Price: US\$ 8,560.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

# **Payment**

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/F5F41C3607FEN.html">https://marketpublishers.com/r/F5F41C3607FEN.html</a>