

# The 2012 US Clinical Chemistry and Immunodiagnosics Markets

<https://marketpublishers.com/r/UFB283C0030EN.html>

Date: March 2012

Pages: 600

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

ID: UFB283C0030EN

## Abstracts

This report presents a comprehensive analysis of the US clinical chemistry and immunodiagnosics 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. Carcinoembryonic Antigen (CEA)
3. Ferritin
4. Folate/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

- Abbott LCx
- Beckman Coulter/Biomek FK
- 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 Iatrogenesis
  - 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 Immunodiagnosics Tests By Country  
Worldwide, All Market Segments, Estimated Chemistry and Immunodiagnosics Consumable Market By Country  
Worldwide, All Market Segments, Estimated Chemistry and Immunodiagnosics Instrument Sales By Country  
Worldwide, All Market Segments, Estimated Total Chemistry and Immunodiagnosics 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

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 Shares<sup>90</sup>

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: The 2012 US Clinical Chemistry and Immunodiagnosics Markets

Product link: <https://marketpublishers.com/r/UFB283C0030EN.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](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/UFB283C0030EN.html>