









MEDICAL DEVICES

PHARMACEUTICALS

CHEMICALS

FOOD & BEVERAGE

ELECTRONICS

Table of Contents and List of Tables

Copyright 2014 VENTURE PLANNING GROUP This material is confidential for use by our clients only and may not be reprinted or reproduced.

VPG Publications, Consulting, Clients www.VPGcorp.com

VPG Market Research Reports www.VPGMarketResearch.com

Partner Reports www.LeadingMarketResearch.com

Table of Contents

I. Introduction

II. 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, Total
- 8. Blood Gases
- 9. Blood Urea Nitrogen (BUN)
- 10. Calcium
- 11. Cardio CRP
- 12. Cholesterol
- 13. Cholinesterase
- 14. CRP
- 15. Creatinine
- 16. Electrolytes
 - a. Carbon Dioxide/Bicarbonate
 - b. Chloride
 - c. Potassium
 - d. Sodium
- 17. Ferritin
- 18. Fructosamine
- 19. Gamma-Glutamyl Transpeptidase (GGT)
- 20. Glucose
- 21. High Density Lipoprotein (HDL)
- 22. Homocysteine
- 23. Iron
- 24. Lactate Dehydrogenase (LDH)
- 25. Magnesium
- 26. Phosphorus
- 27. Protein
- 28. Triglycerides
- 29. Uric Acid
- 30. Troponin

B. Therapeutic Drug Monitoring (TDM)

- 1. Overview
- 2. Carbamazepine
- 3. Cyclosporin
- 4. Digoxin
- 5. Everolimus
- 6. Gentamicin
- 7. Lamotrigine/Lamictal
- 8. Levetiracetam
- 9. Lidocaine
- 10. Lithium
- 11. NAPA/Procainamide
- 12. Phenytoin
- 13. Quinidine
- 14. Sirolimus
- 15. Tacrolimus
- 16. Theophylline
- 17. Topirimate
- 18. Valproic Acid

C. Endocrine Function Tests

- 1. Cortisol
- 2. Estradiol
- 3. Follicle-Stimulating Hormone (FSH)
- 4. Gastrin
- 5. Growth Hormone/IGF-1
- 6. Human Chorionic Gonadotropin (HCG)
- 7. LH
- 8. Progesterone
- 9. PTH/IO PTH
- 10. Prolactin
- 11. T3
- 12. T3 Free
- 13. T3 Uptake
- 14. T4 (Thyroxine)
- 15. T4 Free
- 16. TBG
- 17. Testosterone
- 18. Thyroglobulin Ab
- 19. TPO Ab
- 20. TSH

D. Tumor Markers And Special Chemistry Tests

- 1. AFP
- 2. CA 15-3
- 3. CA 19-9
- 4. CA 27-29
- 5. Carcinoembrionic Antigen (CEA)
- 6. Folate/Folic Acid
- 7. HCG
- 8. 25-Hydroxy Vitamin D2 and D3
- 9. Occult Blood
- 10. Prostate-Specific Antigen (PSA)
- 11. Thyroglobulin
- 12. Vitamin B-12

E. Immunoprotein Tests

- 1. Complement
 - a. C3
 - b. C4
- 2. Free Light Chains
- 3. Immunofixation
- 4. Immunoglobulins (IgA, IgE, IgG, IgM)
- 5. Haptoglobin
- 6. Prealbumin
- 7. 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
- 13. Tricyclic Antidepressants

- **G.** Instrumentation Review: Operating characteristics and features of high-, medium-, and low-volume/POC analyzers
- H. Major In Vitro Diagnostic Technologies
 And Their Potential Applications
 - 1. Monoclonal and Polyclonal Antibodies
 - 2. Immunoassays
 - a. Technological Principle
 - b. Chemiluminescence
 - c. Enzyme Immunoassays (EIA)
 - ° Overview
 - ° ELISA
 - ° EMIT
 - ° Electrochemical
 - d. Radioimmunoassays (RIA)
 - e. Immunoprecipitation
 - f. Affinity Chromatography
 - 3. Tandem Mass Spec
 - 4. IT and Automation
 - 5. Dry Chemistry
 - 6. Biosensors
- XI. Mexico: Market Size, Growth and Sales Forecasts by Test
- XII. Major Product Development Opportunities
- XIII. Design Criteria for Decentralized Testing Products
- **VIX. 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

XV. 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

XVI. Competitive Assessments

- Abbott Laboratories
- AdnaGen
- Agilent Technologies
- Beckman Coulter/Danaher
- Biomedical Diagnostics
- BioMerieux
- Bio-Rad
- DiaSorin
- Eiken
- Fujirebio/Innogenetics
- Instrumentation Laboratory
- Kyowa Medex
- Matritech/Alere
- Ortho-Clinical Diagnostics
- Quest Diagnostics
- Roche
- Siemens
- Sysmex
- Thermo Fisher
- Tosoh
- Wako
- Wallac/PE

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 Immunological Testing

Executive Summary Table: Mexico, Clinical Chemistry and Immunoassay Test Volume and Diagnostics Sales Forecast By Test Category

Mexico, Total Chemistry and Immunoassay Specimen Volume Forecast

Mexico, All Market Segments, Specimen Volume Forecast By Test Category

Mexico, Total Clinical Chemistry and Immunoassay Test Volume Forecast By Test Category

Mexico, All Market Segments, Profiles, Panels and Individual Tests Forecast

Mexico, All Market Segments, Routine Chemistry Test Volume Forecast by Assay

Mexico, All Market Segments, Endocrine Function Test Volume Forecast by Assay

Mexico, All Market Segments, Tumor Markers and Special Chemistry Test Volume Forecast by Assay

Mexico, All Market Segments, Immunoprotein Test Volume Forecast by Assay

Mexico, All Market Segments, TDM Test Volume Forecast by Assay

Mexico, All Market Segments, Drugs of Abuse Test Volume Forecast by Assay

Mexico, Total Clinical Chemistry and Immunoassay Reagent Market Forecast By Test Category

Mexico, Clinical Chemistry and Immunoassay Calibrator and Control Market Forecast By Test Category

Mexico, All Market Segments, Routine Chemistry Reagent Market Forecast by Assay

Mexico, All Market Segments, Endocrine Function Reagent Market Forecast by Assay

Mexico, All Market Segments, Tumor Markers and Special Chemistry Reagent Market Forecast by Assay

Mexico, All Market Segments, Immunoprotein Reagent Market Forecast by Assay

Mexico, All Market Segments, TDM Reagent Market Forecast by Assay

Mexico, All Market Segments, Drugs of Abuse Reagent Market Forecast by Assay

Mexico, Clinical Chemistry and Immunoassay Instrument Market Forecast By Analyzer Type