

# Table of Contents



*Thousands of corporations worldwide are relying on our market intelligence, expert analysis, and strategic insight, critical to the development and implementation of effective business, R&D and marketing programs.*

[www.LeadingMarketResearch.com](http://www.LeadingMarketResearch.com)

[www.VPGMarketResearch.com](http://www.VPGMarketResearch.com)

[reports@vpgcorp.com](mailto:reports@vpgcorp.com)

+1 212 564 2838

## Table of Contents

### **I. Introduction**

### **II. Market Overview**

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

### **III. Major Product Development Opportunities**

### **IV. Design Criteria for Decentralized Testing Products**

### **V. Alternative Market Penetration Strategies**

- A. Internal Development
- B. Collaborative Arrangements
- C. University Contracts
- D. Distribution Strategies for Decentralized Testing Markets

### **VI. 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

### **VII. Market and Technology Overview**

#### **A. Major Routine Chemistry Tests**

1. Albumin
2. Alkaline Phosphatase
3. ALT/SGPT
4. Ammonia

## **Table of Contents** (continued)

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

## **Table of Contents** (continued)

14. Sirolimus
15. Tacrolimus
16. Theophylline
17. Topiramate
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. Carcinoembryonic 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

## **Table of Contents** (continued)

### 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. Clinical Chemistry and Immunodiagnostic Instrumentation Review: operating characteristics and features of high-, medium-, and low-volume/POC analyzers

### H. Major Clinical Chemistry and Immunodiagnostic Technologies and Their Potential Applications

1. Monoclonal and Polyclonal Antibodies
2. Immunoassays
3. Tandem Mass Spec
4. IT and Automation
5. Dry Chemistry
6. Biosensors

## **Table of Contents** (continued)

### **VIII. Germany Clinical Chemistry and Immunodiagnosics Market**

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Test Volume and Sales Forecasts by Market Segment, Major Supplier Instrument, Reagent Sales and Market Shares

### **IX. Competitive Assessments**

- Abbott Laboratories
- Agilent Technologies
- Beckman Coulter/Danaher
- bioMerieux
- Bio-Rad
- DiaSorin
- Eiken Chemical
- Fujirebio
- Grifols
- Instrumentation Laboratory/Werfen
- Kyowa Medex
- Ortho-Clinical Diagnostics
- PerkinElmer
- Quest Diagnostics
- Roche
- Siemens Healthineers
- Sysmex
- Thermo Fisher
- Tosoh
- Wako

## **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

**List of Tables** (continued)

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

**List of Tables** (continued)

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

**List of Tables** (continued)

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: Germany, Clinical  
Chemistry and Immunoassay Test Volume and  
Diagnostics Sales Forecast By Test Category

Germany, Laboratories Performing Chemistry  
and Immunoassay Tests By Market Segment

Germany, Hospital Laboratories Performing  
Chemistry and Immunoassay Tests By Bed Size

Germany, Commercial/Private Laboratories  
Performing Chemistry and Immunoassay  
Tests By Annual Test Volume

Germany, Total Chemistry and Immunoassay  
Specimen Volume Forecast

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

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

Germany, Routine Chemistry Test Volume  
Forecast By Market Segment

## **List of Tables** (continued)

Germany, Endocrine Function Test Volume  
Forecast By Market Segment

Germany, Tumor Markers and Special  
Chemistry Test Volume Forecast  
By Market Segment

Germany, Immunoprotein Test Volume  
Forecast By Market Segment

Germany, TDM Test Volume Forecast  
By Market Segment

Germany, Drugs of Abuse Test Volume  
Forecast By Market Segment

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

Germany, Hospital Laboratories, Profiles,  
Panels and Individual Tests Forecast

Germany, Commercial/Private Laboratories,  
Profiles, Panels and Individual Tests Forecast

Germany, Physician Offices/Group Practices,  
Profiles, Panels and Individual Tests Forecast

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

Germany, Hospital Laboratories, Routine  
Chemistry Test Volume Forecast by Assay

Germany, Commercial/Private Laboratories,  
Routine Chemistry Test Volume Forecast by Assay

Germany, Physician Offices/Group Practices,  
Routine Chemistry Test Volume Forecast by Assay

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

**List of Tables** (continued)

Germany, Hospital Laboratories, Endocrine Function Test Volume Forecast by Assay

Germany, Commercial/Private Laboratories, Endocrine Function Test Volume Forecast by Assay

Germany, Physician Offices/Group Practices, Endocrine Function Test Volume Forecast by Assay

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

Germany, Hospital Laboratories, Tumor Markers and Special Chemistry Test Volume Forecast by Assay

Germany, Commercial/Private Laboratories, Tumor Markers and Special Chemistry Test Volume Forecast by Assay

Germany, Physician Offices/Group Practices, Tumor Markers and Special Chemistry Test Volume Forecast by Assay

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

Germany, Hospital Laboratories, Immunoprotein Test Volume Forecast by Assay

Germany, Commercial/Private Laboratories, Immunoprotein Test Volume Forecast by Assay

## **List of Tables** (continued)

Germany, Physician Offices/Group Practices,  
Immunoprotein Test Volume Forecast  
by Assay

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

Germany, Hospital Laboratories, TDM  
Test Volume Forecast

Germany, Commercial/Private Laboratories,  
TDM Test Volume Forecast by Assay

Germany, Physician Offices/Group  
Practices, TDM Test Volume Forecast  
by Assay

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

Germany, Hospital Laboratories, Drugs  
of Abuse Test Volume Forecast by Assay

Germany, Commercial/Private Laboratories,  
Drugs of Abuse Test Volume Forecast by Assay

Germany, Physician Offices/Group Practices,  
Drugs of Abuse Test Volume Forecast by Assay

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

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

**List of Tables** (continued)

Germany, Routine Chemistry Reagent Market  
Forecast By Market Segment

Germany, Endocrine Function Reagent Market  
Forecast By Market Segment

Germany, Tumor Markers and Special Chemistry  
Reagent Market Forecast By Market Segment

Germany, TDM Reagent Market Forecast  
By Market Segment

Germany, Immunoprotein Reagent Market  
Forecast By Market Segment

Germany, Drugs of Abuse Reagent Market  
Forecast By Market Segment

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

Germany, Hospital Laboratories, Routine  
Chemistry Reagent Market Forecast  
by Assay

Germany, Commercial/Private Laboratories,  
Routine Chemistry Reagent Market Forecast  
by Assay

Germany, Physician Offices/Group Practices,  
Routine Chemistry Reagent Market Forecast  
by Assay

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

Germany, Hospital Laboratories, Endocrine  
Function Reagent Market Forecast by Assay

## **List of Tables** (continued)

Germany, Commercial/Private Laboratories,  
Endocrine Function Reagent Market Forecast  
by Assay

Germany, Physician Offices/Group Practices,  
Endocrine Function Reagent Market Forecast  
by Assay

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

Germany, Hospital Laboratories, Tumor Markers  
and Special Chemistry Reagent Market Forecast  
by Assay

Germany, Commercial/Private Laboratories,  
Tumor Markers and Special Chemistry Reagent  
Market Forecast by Assay

Germany, Physician Offices/Group Practices,  
Tumor Markers and Special Chemistry Reagent  
Market Forecast by Assay

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

Germany, Hospital Laboratories, TDM  
Reagent Market Forecast by Assay

Germany, Commercial/Private Laboratories,  
TDM Reagent Market Forecast by Assay

Germany, Physician Offices/Group  
Practices, TDM Reagent Market Forecast by Assay

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

**List of Tables** (continued)

Germany, Hospital Laboratories,  
Immunoprotein Reagent Market Forecast

Germany, Commercial/Private Laboratories,  
Immunoprotein Reagent Market Forecast by Assay

Germany, Physician Offices/Group Practices,  
Immunoprotein Reagent Market Forecast by Assay

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

Germany, Hospital Laboratories, Drugs of  
Abuse Reagent Market Forecast by Assay

Germany, Commercial/Private Laboratories,  
Drugs of Abuse Reagent Market Forecast by Assay

Germany, Physician Offices/Group Practices,  
Drugs of Abuse Reagent Market Forecast by Assay

Germany, Major Suppliers of Clinical  
Chemistry Reagents, Estimated Sales and  
Market Shares

Germany, Major Suppliers of Clinical  
Chemistry Analyzers, Estimated Instrument  
Sales and Market Shares

Germany, Major Suppliers of Clinical  
Chemistry Diagnostics Products, Estimated Sales  
and Market Shares

Germany, Major Suppliers of  
Immunoassay Reagents, Estimated Sales  
and Market Shares

Germany, Major Suppliers of Immunoassay  
Analyzers, Estimated Instrument Sales  
and Market Shares

**List of Tables** (continued)

Germany, Major Suppliers of Immunoassay  
Diagnostic Products, Estimated Sales and  
Market Shares

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