



MEDICAL DEVICES



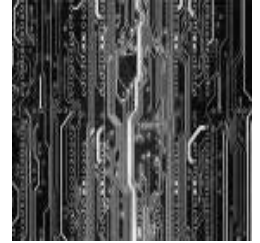
PHARMACEUTICALS



CHEMICALS



FOOD & BEVERAGE



ELECTRONICS

Table of Contents and List of Tables

Copyright 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***

VENTURE PLANNING GROUP 1271 Avenue of the Americas, Suite 4300 New York, NY 10020
Phone + 1 212 564 2838 ***reports@vpgcorp.com***

Table of Contents

I. Introduction

II. Major Product Development Opportunities

- A. Instrumentation
- B. Reagent Kits and Test Systems/panels
- C. Computers, Software and Automation
- D. Auxiliary Products

III. Design Criteria for Decentralized Testing Products

IV. Alternative Market Penetration Strategies

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

V. 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

VI. Worldwide Market and Technology Review

- A. DNA Sequencing
 - 1. Introduction
 - 2. Sequencing Methods
 - 3. Autoradiography
 - 4. The Human Genome Project
 - 5. Sequencing Automation

Table of Contents (continued)

6. Image Scanners
7. Fluorescent Detection
8. Gene Profiling
9. Gene Expression
10. Polymorphism Screening
11. Protein Interaction Networks

B. DNA and RNA Probe Technologies

1. Basic Principles
2. Probe Preparation
3. The DNA Probe Test
4. Test Formats
5. Labeling Techniques
6. Amplification Methods

C. Detection Technologies

1. Radioactive Methods
 - a. Overview
 - b. Major Isotopes
 - o P-32
 - o S-35
 - o H-3
 - o I-125
2. Non-Isotopic Methods
 - a. Enzymatic Labels
 - b. Chemical Labeling
 - o Indirect Chemical Labeling
 - o Direct Chemical Labeling
 - c. Fluorescence
 - d. Chemiluminescence
 - e. Electrical Conductivity

D. Molecular Diagnostic Instrumentation Review

1. Abbott LCx
2. Beckman Coulter/Biomek FK
3. BD Viper System with XTR Technology
4. BD Innova
5. Becton Dickinson SDA

Table of Contents (continued)

6. bioMerieux NucliSENS easyMAG
7. bioMerieux NucliSENS easyQ and MiniMAG
8. Bio-Rad GeneScope
9. Cepheid GeneXpert
10. Curetis Unyvero
11. GenMark Dx eSensor XT-8
12. Hologic/Gen-Probe Panther
13. Hologic/Gen-Probe Tigris/DTS
14. HTG Molecular Edge
15. Life Technologies QuantStudio Dx
16. Qiagen QIA Symphony RGQ
17. Roche Cobas Amplicor
18. Roche Cobas TaqMan 48
19. Roche Cobas TaqMan
20. Roche Cobas TaqMan AmpliPrep
21. Roche LightCycler 480
22. Roche Cobas 4800
23. Roche Cobas s 201
24. Siemens Versant
25. Tecan LS Series

E. Biochips: Genosensors, Microarrays, and Labs-on-the-Chip

- Liquid Transportation and Mixing
- Separation
- Reaction
- Detection

F. Pharmacogenomics

G. Major Applications, Microbiology/Infectious Diseases

- a. Overview
- b. Major Infectious Diseases
 - ° AIDS: HIV/HIV-1/2/Combo, HIVAg/HIV NAT, Western Blot, HTLV-I/II
 - ° Adenovirus
 - ° Aeromonas
 - ° Anthrax/Bacillus Anthracis

Table of Contents (continued)

- Arboviruses
- Babesiosis
- Bacillary Epithelioid Angiomatosis (BEA) and Other Bartonella (Rochalimaea)
- Blastocystis Hominis
- Brucella
- Campylobacter
- Candida
- Chagas Disease
- Chancroid
- Chlamydia
- Clostridium Difficile
- Coronaviruses
- Coxsackieviruses
- Creutzfeldt-Jakob's Disease
- Cryptosporidium Parvum
- Cyclospora Cayetanensis
- Cytomegalovirus
- Ebola Virus
- E. Coli
- EchoVirus
- Encephalitis
- Enteroviruses
- Epstein-Barr Virus
- Giardia Lamblia
- Gonorrhea
- Granuloma Inguinale
- Hantavirus
- Helicobacter Pylori
- Hepatitis: HAV NAT, HBV NAT, HBs Ag, HCV, HCV NAT, Anti-HBc, Anti-HBs, Anti-HAV, Hepatitis Delta, HBc Ag, HBe Ag, ALT/SGPT
- Herpes Simplex Virus
- Human Herpes Virus-6 (HHV-6)
- Influenza Viruses
- Legionella
- Lyme Disease
- Lymphogranuloma Venereum (LGV)
- Malaria
- Measles (Rubeola)
- Meningitis

Table of Contents (continued)

- Microsporidium
- Mononucleosis
- Mumps
- Mycoplasma
- Papillomaviruses
- Parvovirus B19
- Pneumonia
- Polyomaviruses
- Pseudomonas Aeruginosa
- Rabies
- Respiratory Syncytial Virus (RSV)
- Rhinoviruses
- Rotavirus
- Rubella
- Salmonellosis
- Septicemia
- Shigellosis
- Staphylococcus Aureus
- Streptococci
- Syphilis
- Toxoplasmosis
- Trichomonas Vaginalis
- Tuberculosis
- Vibrio
- West Nile Virus
- Yersina

H. Competing/complementing

1. Monoclonal Antibodies/Immunoassays
2. RNA Probes
3. Two-Dimensional Electrophoresis
4. Flow Cytometry

Table of Contents (continued)

VII. Germany Molecular Diagnostics Market

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

VIII. Competitive Assessments

- Abbott
- Affymetrix
- Agilent Technologies
- Applied Gene Technologies
- Arca Biopharma
- Beckman Coulter/Danaher
- Becton Dickinson
- Biokit
- bioMerieux
- Bio-Rad
- Biotest
- Cepheid
- Decode Genetics
- Diadexus
- Eiken Chemical
- Elitech Group
- Enzo Biochem
- Exact Sciences
- Fujirebio
- Grifols
- Hologic
- Illumina
- LabCorp
- Leica Biosystems
- Li-Cor Biosciences
- Myriad Genetics
- Ortho-Clinical Diagnostics
- PerkinElmer
- Proteome Sciences
- Qiagen
- Roche
- Scienion
- Sequenom

Table of Contents (continued)

- Shimadzu
- Siemens Healthineers
- Sierra Molecular
- Takara Bio
- Tecan Group
- Thermo Fisher

XIII. Appendix: Major Universities and Research Centers Developing Molecular Diagnostic Technologies

List of Tables

Major Companies Developing or Marketing AIDS Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Adenovirus Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Bartonella Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Campylobacter Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Candida Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Chlamydia Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Clostridium Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Coronavirus Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Cryptosporidium Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing CMV Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Echovirus Molecular Diagnostic and Other Direct Identification Tests

List of Tables (continued)

Major Companies Developing or Marketing Enterovirus Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing EBV Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Giardia Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Gonorrhea Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Hantavirus Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Helicobacter Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Hepatitis Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Herpes Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Influenza Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Legionella Molecular Diagnostic and Other Direct Identification Tests

Major Companies Developing or Marketing Lyme Disease Molecular Diagnostic and Other Direct Identification Tests

List of Tables (continued)

Major Companies Developing or Marketing Measles
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Meningitis
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Mononucleosis
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Mumps
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Mycoplasma
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Pneumonia
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing RSV
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Rotavirus
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Rubella
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Salmonella
Molecular Diagnostic and Other Direct
Identification Tests

List of Tables (continued)

Major Companies Developing or Marketing Septicemia
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Shigella
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Streptococci
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Syphilis
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Toxoplasmosis
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Trichomonas
Molecular Diagnostic and Other Direct
Identification Tests

Major Companies Developing or Marketing Tuberculosis
Molecular Diagnostic and Other Direct
Identification Tests

Germany
Molecular Diagnostics Test Volume And Sales
By Major Application

Germany
Laboratories Performing DNA Sequencing
By Market Segment

Germany
Molecular Diagnostics Market
Potential Laboratory Universe by Market Segment

List of Tables (continued)

Germany
Molecular Diagnostics Test Volume
By Major Application

Germany
Major Infectious Disease Test Volume by Assay

Germany
Major Infectious Disease Test Volume by Method

Germany
Molecular Diagnostics Market
By Major Application

Germany
Molecular Diagnostics Market
Estimated Sales And Market Shares of Major Suppliers

Germany
Major Infectious Disease Diagnostics Market by Assay

Germany
AIDS Testing Market
Estimated Sales by Major Supplier

Germany
CMV Testing Market
Estimated Sales by Major Supplier

Germany
EBV Testing Market
Estimated Sales by Major Supplier

Germany
Gonorrhea Testing Market
Estimated Sales by Major Supplier

List of Tables (continued)

Germany
Hepatitis Testing Market
Estimated Sales by Major Supplier

Germany
Hepatitis C Testing Market
Estimated Sales by Major Supplier

Germany
HIV/Hepatitis Blood Screening NAT Market
Reagent Sales by Major Supplier

Germany
Herpes Testing Market
Estimated Sales by Major Supplier

Germany
Influenza Testing Market
Estimated Sales by Major Supplier

Germany
Meningitis Testing Market
Estimated Sales by Major Supplier

Germany
Mycoplasma Testing Market
Estimated Sales by Major Supplier

Germany
Pneumonia Testing Market
Estimated Sales by Major Supplier

Germany
RSV Testing Market
Estimated Sales by Major Supplier

Germany
Rotavirus Testing Market
Estimated Sales by Major Supplier