



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

VENTURE PLANNING GROUP 545 Eighth Avenue, Suite 401 New York, NY 10018
Phone + 1 212 564 2838 Fax + 1 212 564 8133 info@vpgcorp.com

Table of Contents

I. Worldwide Market and Technology Overview

A. Introduction

1. Major Factors Affecting Market Penetration of Microbiology Instrumentation
2. Traditional Practices
3. Technological Challenges
4. Automation: Impact on the Microbiology Laboratory and the Patient

B. Major Specimen Types

1. Urine
2. Sterile Fluids: Blood, Serum, and CSF
3. Throat Swabs and Respiratory Secretions
4. Genital Secretions
5. Stool
6. Abscess/Wound
7. Sputum
8. Saliva

C. Test Applications

1. Microbial Identification
2. Antibiotic Susceptibility
3. Urine Screening
 - a. Photometry
 - b. Bioluminescence
 - c. Colorimetric Filtration
 - d. Enzymatic Detection
 - e. Optical Detection
4. Blood Cultures

D. Major Microbiology Automated and Semiautomated Systems

1. Multiple Purpose Microbiology Systems
2. Specialized Microbiology Systems
3. Molecular Diagnostic Systems
4. Immunodiagnostic Systems

Table of Contents (continued)

E. Emerging Diagnostic Technologies

1. Molecular Diagnostics

a. DNA Sequencing

- Introduction
- Sequencing Methods
- Autoradiography
- The Human Genome Project
- Sequencing Automation
- Image Scanners
- Fluorescent Detection
- Gene Profiling
- Gene Expression
- Polymorphism Screening
- Protein Interaction Networks

b. DNA And RNA Probe Technology

- Basic Principles
- Probe Preparation
- The DNA Probe Test
 - Sample Preparation
 - Hybridization
 - Separation
 - Detection/Measurement

- Test Formats
 - Filter Hybridization
 - Southern Blot
 - Northern Blot
 - In Situ Hybridization
 - Others

- Labeling Techniques

- Amplification Methods

- o Polymerase Chain Reaction
 - Temperature Cyclers
 - PCR Variations
 - * Immuno-PCR
 - * QC-PCR
 - * DAP-PCR
- o Strand Displacement Activation
- o TMA
- o Ligase Chain Reaction

Table of Contents (continued)

- 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
 - RAMP
 - Repair Chain Reaction
 - Rolling Circles
 - Sequence Independent Gene Amplification
 - Sequence Initiation Reaction
 - SISPA
 - Solid Phase Amplification
- c. Detection Technologies
 - Radioactive Methods
 - Overview
 - Major Isotopes
 - P-32
 - S-35
 - H-3
 - I-125
 - Non-Isotopic Methods
 - Enzymatic Labels
 - Chemical Labeling
 - Indirect Chemical Labeling
 - Direct Chemical Labeling
 - Fluorescence
 - Chemiluminescence
 - Electrical Conductivity

Table of Contents (continued)

- d. Biochips: Genosensors, Microarrays,
and Labs-on-the-Chip
 - Liquid Transportation and Mixing
 - Separation
 - Reaction
 - Detection

- 2. Monoclonal Antibodies
- 3. Immunoassays
- 4. Differential Light Scattering
- 5. Information Technology
- 6. Artificial Intelligence
- 7. Liposomes
- 8. Flow Cytometry
- 9. Chromatography
- 10. Diagnostic Imaging
- 11. Gel Microdroplets
- 12. Other

II. UK

- A. Business Environment
- B. Market Structure
- C. Market Size, Growth and Major Supplier Sales and Market Shares

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
 - 1. Marketing Approaches
 - 2. Product Complexity
 - 3. Customer Preference

Table of Contents (continued)

4. Established Suppliers
5. Emerging Suppliers
6. Major Types of Distributors
7. Market Segmentation

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. Competitive Assessments

- Abbott
- Affymetrix
- Agilent Technologies
- Applied Gene Technologies
- Arca/Nuvelo
- Beckman Coulter/Danaher
- Becton Dickinson
- Biotek
- bioMérieux
- Bio-Rad
- Biotest
- Caliper
- Cepheid
- Decode
- Diadexus
- Diamedix
- DiaSorin
- Eiken Chemical
- Enzo Biochem
- Exact Sciences
- Fujirebio/Innogenetics
- Hologic/Gen-Probe
- Illumina
- ID Biomedical/GSK

Table of Contents (continued)

- Kreatech
- Li-Cor Biosciences
- Life Technology
- Lonza
- Monogram Biosciences
- Myriad Genetics
- Nanogen/Elitech
- Novartis Diagnostics/Grifols
- Orchid CellMark
- Ortho-Clinical Diagnostics
- Proteome Sciences
- Qiagen
- Roche
- Scienion
- Sequenom
- SeraCare
- Siemens
- Sierra Molecular
- Shimadzu
- Takara Bio
- Tecan
- Thermo Fisher
- Wallac/PE
- Wako

List of Tables

Major Companies Developing or Marketing AIDS Tests

Major Companies Developing or Marketing Adenovirus Tests

Major Companies Developing or Marketing Bartonella Tests

Major Companies Developing or Marketing Campylobacter Tests

Major Companies Developing or Marketing Candida Tests

Major Companies Developing or Marketing Chlamydia Tests

Major Companies Developing or Marketing Clostridium Tests

Major Companies Developing or Marketing Coronavirus Tests

Major Companies Developing or Marketing Cryptosporidium Tests

Major Companies Developing or Marketing CMV Tests

Major Companies Developing or Marketing Echovirus Tests

Major Companies Developing or Marketing Enterovirus Tests

Major Companies Developing or Marketing EBV Tests

Major Companies Developing or Marketing Giardia Tests

Major Companies Developing or Marketing Gonorrhea Tests

Major Companies Developing or Marketing Hantavirus Tests

Major Companies Developing or Marketing Helicobacter Pylori Tests

Major Companies Developing or Marketing Hepatitis Tests

Major Companies Developing or Marketing Herpes Tests

Major Companies Developing or Marketing Influenza Tests

List of Tables (continued)

Major Companies Developing or Marketing Legionella Tests

Major Companies Developing or Marketing Lyme Disease Tests

Major Companies Developing or Marketing Lymphogranuloma Tests

Major Companies Developing or Marketing Malaria Tests

Major Companies Developing or Marketing Measles Tests

Major Companies Developing or Marketing Meningitis Tests

Major Companies Developing or Marketing Microsporidium Tests

Major Companies Developing or Marketing Mononucleosis Tests

Major Companies Developing or Marketing Mumps Tests

Major Companies Developing or Marketing Mycoplasma Tests

Major Companies Developing or Marketing Papilloma Virus Tests

Major Companies Developing or Marketing Parvovirus Tests

Major Companies Developing or Marketing Pneumonia Tests

Major Companies Developing or Marketing RSV Tests

Major Companies Developing or Marketing Rotavirus Tests

Major Companies Developing or Marketing Rubella Tests

Major Companies Developing or Marketing Salmonella Tests

Major Companies Developing or Marketing Septicemia Tests

Major Companies Developing or Marketing Shigella Tests

Major Companies Developing or Marketing Staphylococci Tests

List of Tables (continued)

Major Companies Developing or Marketing Streptococci Tests

Major Companies Developing or Marketing Syphilis Tests

Major Companies Developing or Marketing Toxoplasmosis Tests

Major Companies Developing or Marketing Trichomonas Tests

Major Companies Developing or Marketing Tuberculosis Tests

Major Companies Developing or Marketing West Nile Tests

Major Companies Developing or Marketing Yersinia Tests

U.K.

Laboratories Performing Microbiology Tests by Market Segment

U.K.

Hospital Laboratories Performing Microbiology Tests by Bed Size

U.K.

Commercial/Private Laboratories Performing Microbiology Tests
by Annual Test Volume

U.K.

All Market Segments Microbiology Specimen Volume

U.K.

Hospital Laboratories Microbiology Specimen Volume

U.K.

Public Health Laboratories Microbiology Specimen Volume

U.K.

Commercial/Private Laboratories Microbiology Specimen Volume

U.K.

Microbiology Test Volume by Market Segment

U.K.

Microbiology Test Volume by Application

List of Tables (continued)

U.K.

Microbial Identification Test Volume by Market Segment

U.K.

Urine Screening Test Volume by Market Segment

U.K.

Antibiotic Susceptibility Test Volume by Market Segment

U.K.

Blood Culture Test Volume by Market Segment

U.K.

Microbiology Consumables Market by Application

U.K.

Microbiology Consumables Market by Market Segment

U.K.

Microbial Identification Consumables Sales by Market Segment

U.K.

Antibiotic Susceptibility Consumables Sales by Market Segment

U.K.

Blood Culture Consumables Sales by Market Segment

U.K.

Urine Screening Consumables Sales by Market Segment

U.K.

All Market Segments Infectious Disease Test Volume Forecast by Assay

U.K.

All Market Segments Infectious Disease Diagnostics Market Forecast by Test

U.K.

Infectious Disease Blood Screening NAT Volume Forecast by Assay

U.K.

Infectious Disease Blood Screening NAT Reagent Market Forecast by Assay

List of Tables (continued)

U.K.
HIV/AIDS Testing Market Diagnostics Sales by Major Supplier

U.K.
HIV/Hepatitis Blood Screening NAT Market Diagnostics Sales
by Major Supplier

U.K.
Campylobacter Testing Market Diagnostics Sales by Major Supplier

U.K.
Candida Testing Market Diagnostics Sales by Major Supplier

U.K.
Gonorrhea Testing Market Diagnostics Sales by Major Supplier

U.K.
Hepatitis Testing Market Diagnostics Sales by Major Supplier

U.K.
Hepatitis C Testing Market Diagnostics Sales by Major Supplier

U.K.
Influenza Testing Market Diagnostics Sales by Major Supplier

U.K.
Mycoplasma Testing Market Diagnostics Sales by Major Supplier

U.K.
Pneumonia Testing Market Diagnostics Sales by Major Supplier

U.K.
RSV Testing Market Diagnostics Sales by Major Supplier

U.K.
Rubella Testing Market Diagnostics Sales by Major Supplier

U.K.
Septicemia Testing Market Diagnostics Sales by Major Supplier

List of Tables (continued)

U.K.

Shigella Testing Market Diagnostics Sales by Major Supplier

U.K.

Streptococci Testing Market Diagnostics Sales by Major Supplier

U.K.

Syphilis Testing Market Diagnostics Sales by Major Supplier

U.K.

Tuberculosis Testing Market Diagnostics Sales by Major Supplier

U.K.

Molecular Diagnostics Market Sales and Shares of Major Suppliers