

US Automated Microbiology Market, 2019-2023: Supplier Shares and Segmentation Forecasts--Molecular Dx, Identification, Susceptibility, Blood Culture, Urine Screening, Immunodiagnostics--Competitive Landscape, Innovative Technologies, Latest Instrumentation, Emerging Opportunities

https://marketpublishers.com/r/UE38F150A7DEN.html

Date: July 2019 Pages: 436 Price: US\$ 6,500.00 (Single User License) ID: UE38F150A7DEN

Abstracts

LeadingMarketResearch.com's new report is an analysis of major business opportunities emerging in the U.S. automated microbiology market during the next five years. The report examines key trends, reviews current and emerging assays; analyzes potential applications of innovative diagnostic technologies; forecasts volume and sales for molecular diagnostic, microbial identification, antibiotic susceptibility, blood culture, urine screening and immunodiagnostic procedures, as well as over 100 infectious disease tests by assay, application, market segment; profiles leading players and potential market entrants; and suggests alternative business expansion strategies for suppliers.

Rationale

The level of automation in the microbiology laboratory has been lagging behind that of other major clinical laboratory segments, such as chemistry and hematology. The slow acceptance of the technology is in part due to the complexity of developing automation suitable for microbiology tests.

The introduction of automated microbiology instrumentation has been delayed by a number of intrinsic and technical problems. The diffusion of automated microbiology



systems, once the technology was developed, has not matched that of other automated laboratory technologies. The acquisition of automation in microbiology has been slowed by forces less easily identifiable than the effects of various reimbursement plans. Some laboratorians still believe that current instrumentation is not the ultimate technology and expect better automation on the horizon.

The driving force behind the need for rapid reporting of microbiological test results is the clinical relevance in a time of financial austerity, a time when cost and health care effectiveness to the patient and diagnostician looms ever larger, and where after-the-fact results at high expense are coming under severe scrutiny worldwide.

This comprehensive report will assist diagnostics industry executives, as well as companies planning to diversify into the dynamic and rapidly expanding U.S. microbiology market, in evaluating emerging opportunities and developing effective business strategies.

Market Segmentation Analysis

Sales and market shares for major suppliers by individual test.

Volume and sales forecasts for over 100 infectious disease assays by individual test:

Test volume estimates by method (molecular, serology/immunodiagnostics, culture/microscopy).

Review of the market dynamics, trends, structure, size, growth and major suppliers.

Specimen Types

Urine

Sterile Fluids: Blood, Serum, CSF

Throat Swabs, Respiratory Secretions

Genital Secretions



Stool

Abscess/Wound

Sputum

Saliva

Applications

Microbial Identification

Antibiotic Susceptibility

Urine Screening

Blood Cultures

Review of Major Automated Systems

Review of major automated molecular diagnostic, multipurpose, specialized, microbial identification, antibiotic susceptibility, blood culture, urine screening, and immunodiagnostic analyzers.

The report profiles analyzers manufactured by 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.

Infectious Diseases Analyzed in the Report

AIDS/HIV, Adenovirus, Aeromonads, Bartonella, Blastocystis Hominis, Campylobacter, Candida, Chancroid, Chlamydia, Clostridium, Coronavirus, Coxsackievirus, Cryptosporidium, Cyclospora, CMV, E. Coli, Echovirus, Encephalitis, Enterovirus, EBV,



Giardia, Gonorrhea, Granuloma Inguinale, Hantavirus, H. Pylori, Hepatitis, Herpes Influenza, Legionella, Lyme disease, Lymphogranuloma, Malaria, Measles, Meningitis, Microsporidium, Mononucleosis, Mumps, Mycoplasma, HPV, Parvovirus, Pneumonia, Polyomaviruses, Pseudomonas, Rabies, RSV, Rhinovirus, Rotavirus, Rubella, Salmonella, Septicemia, Shigella, Staphylococci, Streptococci, Syphilis, Toxoplasmosis, Trichomonas, TB, Vibrio, West Nile, Yersinia.

Technology Review

Assessment of molecular diagnostic, monoclonal antibody, immunoassay, and other technologies and their potential applications for the microbiology market.

Global listings of companies developing or marketing microbiology products by individual test.

Competitive Assessments

Strategic assessments of major suppliers and emerging market entrants, including their sales, product portfolios, marketing tactics, collaborative arrangements and new products in R&D.

The companies analyzed in the report include 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.

Opportunities and Strategic Recommendations

Emerging opportunities for new analyzers, reagents kits, IT and other products with significant market appeal during the next five years.

Design criteria for decentralized testing products.

Alternative market penetration strategies.

Potential market entry barriers and risks.



Contains 436 pages and 94 tables



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
- 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

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 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** 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. U.S.A.

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

VII. 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

VIII. COMPETITIVE ASSESSMENTS

Abbott Affymetrix **Agilent Technologies** Applied Gene Technologies Arca Biopharma Beckman Coulter/Danaher **Becton Dickinson Biokit** bioMerieux **Bio-Rad** Biotest Cepheid CellMark Forensics/Lab Corp **Decode Genetics** Diadexus Diamedix/Erba DiaSorin **Eiken Chemical** Elitech Group Enzo Biochem **Exact Sciences** Fujirebio Grifols Hologic/Gen-Probe Illumina **ID Biomedical/GSK** Kreatech/Leica Li-Cor Biosciences Lonza **Monogram Biosciences** Myriad Genetics **Ortho-Clinical Diagnostics** Perkin Elmer/Caliper **Proteome Sciences**



Qiagen

Roche

Scienion

Sequenom

SeraCare Siemens

Sierra Molecular

Shimadzu

Takara Bio

Tecan

Thermo Fisher

Wallac/PE

Wako



List Of Tables

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 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 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.S.A. Laboratories Performing Microbiology Tests by Market Segment U.S.A. Hospital Laboratories Performing Microbiology Tests by Bed Size U.S.A. Commercial/Private Laboratories Performing Microbiology Tests by Annual Test Volume U.S.A. All Market Segments Microbiology Specimen Volume U.S.A. Hospital Laboratories Microbiology Specimen Volume U.S.A. Physician Offices/Group Practices Microbiology Specimen Volume U.S.A. Public Health Laboratories Microbiology Specimen Volume U.S.A. Commercial/Private Laboratories Microbiology Specimen Volume U.S.A. Microbiology Test Volume by Market Segment U.S.A. Microbiology Test Volume by Application U.S.A. Microbial Identification Test Volume by Market Segment U.S.A. Urine Screening Test Volume by Market Segment U.S.A. Blood Culture Test Volume by Market Segment U.S.A. Antibiotic Susceptibility Test Volume by Market Segment U.S.A.



Microbiology Consumables Market by Application U.S.A. Microbiology Consumables Market by Market Segment U.S.A. Microbial Identification Consumables Sales by Market Segment U.S.A. Antibiotic Susceptibility Consumables Sales by Market Segment U.S.A. Blood Culture Consumables Sales by Market Segment U.S.A. Urine Screening Consumables Sales by Market Segment U.S.A. All Market Segments Infectious Disease Test Volume Forecast by Assay U.S.A. All Market Segments Infectious Disease Diagnostics Market Forecast by Test U.S.A. Infectious Disease Blood Screening NAT Volume Forecast by Assay U.S.A. Infectious Disease Blood Screening NAT Reagent Market Forecast by Assay U.S.A. HIV/AIDS Testing Market Diagnostics Sales by Major Supplier U.S.A. HIV/Hepatitis Blood Screening NAT Market Diagnostics Sales by Major Supplier U.S.A. Adenovirus Testing Market Diagnostics Sales by Major Supplier U.S.A. Campylobacter Testing Market Diagnostics Sales by Major Supplier U.S.A. Candida Testing Market Diagnostics Sales by Major Supplier U.S.A. Chancroid Testing Market Diagnostics Sales by Major Supplier U.S.A. Chlamydia Testing Market Diagnostics Sales by Major Supplier U.S.A. CMV Testing Market Diagnostics Sales by Major Supplier U.S.A. Cryptosporidium Testing Market Diagnostics Sales by Major Supplier U.S.A. Echovirus Testing Market Diagnostics Sales by Major Supplier



U.S.A. Enterovirus Testing Market Diagnostics Sales by Major Supplier U.S.A. EBV Testing Market Diagnostics Sales by Major Supplier U.S.A. Giardia Testing Market Diagnostics Sales by Major Supplier U.S.A. Gonorrhea Testing Market Diagnostics Sales by Major Supplier U.S.A. Helicobacter Pylori Testing Market Diagnostics Sales by Major Supplier U.S.A. Hepatitis Testing Market Diagnostics Sales by Major Supplier U.S.A. Hepatitis C Testing Market Diagnostics Sales by Major Supplier U.S.A. Herpes Testing Market Diagnostics Sales by Major Supplier U.S.A. Influenza Testing Market Diagnostics Sales by Major Supplier U.S.A. Legionella Testing Market Diagnostics Sales by Major Supplier U.S.A. Lyme Disease Testing Market Diagnostics Sales by Major Supplier U.S.A. Measles Testing Market Diagnostics Sales by Major Supplier U.S.A. Meningitis Testing Market Diagnostics Sales by Major Supplier U.S.A. Mononucleosis Testing Market Diagnostics Sales by Major Supplier U.S.A. Mumps Testing Market Diagnostics Sales by Major Supplier U.S.A. Mycoplasma Testing Market Diagnostics Sales by Major Supplier U.S.A. Pneumonia Testing Market Diagnostics Sales by Major Supplier U.S.A. Rabies Testing Market Diagnostics Sales by Major Supplier U.S.A. RSV Testing Market Diagnostics Sales by Major Supplier U.S.A.



Rotavirus Testing Market Diagnostics Sales by Major Supplier U.S.A.

Rubella Testing Market Diagnostics Sales by Major Supplier U.S.A.

Salmonella Testing Market Diagnostics Sales by Major Supplier U.S.A.

Septicemia Testing Market Diagnostics Sales by Major Supplier U.S.A.

Shigella Testing Market Diagnostics Sales by Major Supplier U.S.A.

Streptococci Testing Market Diagnostics Sales by Major Supplier U.S.A.

Syphilis Testing Market Diagnostics Sales by Major Supplier U.S.A.

Toxoplasmosis Testing Market Diagnostics Sales by Major Supplier U.S.A.

Tuberculosis Testing Market Diagnostics Sales by Major Supplier U.S.A.

Molecular Diagnostics Market Sales and Shares of Major Suppliers



I would like to order

- Product name: US Automated Microbiology Market, 2019-2023: Supplier Shares and Segmentation Forecasts--Molecular Dx, Identification, Susceptibility, Blood Culture, Urine Screening, Immunodiagnostics--Competitive Landscape, Innovative Technologies, Latest Instrumentation, Emerging Opportunities
 - Product link: https://marketpublishers.com/r/UE38F150A7DEN.html
 - Price: US\$ 6,500.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/UE38F150A7DEN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

**All fields are required

Custumer signature ____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970