

# 2015-2019 New Frontiers in the Spanish Automated Microbiology Market: Business Challenges, Emerging Technologies, Competitive Landscape

https://marketpublishers.com/r/2512C273D6CEN.html

Date: August 2015

Pages: 421

Price: US\$ 5,560.00 (Single User License)

ID: 2512C273D6CEN

## **Abstracts**

Complete report \$8,850. DataPack (test volumes, sales forecasts, supplier shares) \$5,700.

2015-2019 New Frontiers in the Japanese Automated Microbiology Market: Business Challenges, Emerging Technologies, Competitive Land scape is VPGMarketResearch's new analysis of the major business opportunities emerging in the automated microbiology market during the next five years. The report examines key trends in the Japanese automated microbiology market; 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 expand ing microbiology market, in evaluating emerging opportunities and developing effective business strategies.

Supplier Shares, Sales and Volume Forecasts

Sales and market shares of major suppliers of microbiology products, by individual test.

Five-year test volume and sales forecasts for over 100 microbiology assays.

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

#### Japan Market Overview

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

Estimated universe of laboratories performing microbiology testing.

Specimen, test volume and sales forecasts.

Business 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.		
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 features analyzers manufactured by Abbott, Alifax, Anagen, BD, Beckman Coulter/Danaher, Biochem, Biolog, bioMerieux, Bio-Rad, Biotrol, Cepheid, Curetis, GenMark, Hologic/Gen-Probe, HTG, Iris, J&J, Labsystems, Life Technologies, MiDI, Olympus, Qiagen, Roche, Siemens, Sy-Lab, Sysmex, Tecan, Thermo Fisher, Tosoh.

#### Infectious Diseases Analyzed in the Report

AIDS/HIV, Adenovirus, Aeromonads, Bartonella, Blastocystis Hominis, Campylobacter, Cand ida, 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 and others.

# **Technology Assessment**

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 Strategies**

Strategic assessments of major suppliers and start-up firms developing innovative technologies and products, including their sales, product portfolios, marketing tactics, collaborative arrangements, and new products in R&D.



The companies analyzed in the report include: Abbott Affymetrix **Agilent Technologies** Applied Gene Technologies Arca Biopharma Beckman Coulter/Danaher **Becton Dickinson Biokit** bioMerieux Bio-Rad **Biotest** Cepheid CellMark Forensics/LabCorp **Decode Genetics** Diadexus Diamedix 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

Contains 421 pages and 79 tables



## **Contents**

#### I. Introduction

#### II. Worldwide Market an

- d 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 (Amplification Methods, Sequencing, Microarrays/Biochips)
  - 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 Polys

Dendritic Polymer Technology

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

# III. Spain A. Business Environment

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

## **IV. Major Product Development Opportunities**

#### V. Design Criteria for Decentralized Testing Products

## **VI. 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/Nuvelo

Beckman Coulter/Danaher

**Becton Dickinson** 

**Biokit** 

bioMerieux

Bio-Rad

**Biotest** 

Caliper

Cepheid

Decode

Diadexus

Diamedix

DiaSorin

Eiken Chemical

Enzo Biochem

**Exact Sciences** 

Fujirebio/Innogenetics

Hologic/Gen-Probe

Illumina

ID Biomedical/GSK

Kreatech

Li-Cor Biosciences

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/Life Technologies

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

Spain Laboratories Performing Microbiology Tests by Market Segment

Spain Hospital Laboratories Performing Microbiology Tests by Bed Size

Spain Commercial/Private Laboratories Performing Microbiology Tests by Annual Test Volume

Spain All Market Segments Microbiology Specimen Volume

Spain Hospital Laboratories Microbiology Specimen Volume

Spain Commercial/Private Laboratories Microbiology Specimen Volume

Spain Microbiology Test Volume by Market Segment

Spain Microbiology Test Volume by Application

Spain Microbial Identification Test Volume by Market Segment

Spain Urine Screening Test Volume by Market Segment

Spain Blood Culture Test Volume by Market Segment

Spain Antibiotic Susceptibility Test Volume by Market Segment

Spain Microbiology Consumables Market by Application

Spain Microbiology Consumables Market by Market Segment

Spain Microbial Identification Consumables Sales by Market Segment

Spain Blood Culture Consumables Sales by Market Segment

Spain Antibiotic Susceptibility Consumables Sales by Market Segment

Spain Urine Screening Consumables Sales by Market Segment

Spain All Market Segments Infectious Disease Test Volume Forecast by Assay

Spain All Market Segments Infectious Disease Diagnostics Market Forecast by Test

Spain Infectious Disease Blood Screening NAT Volume Forecast by Assay

Spain Infectious Disease Blood Screening NAT Reagent Market Forecast by Assay

Spain HIV/AIDS Testing Market Diagnostics Sales by Major Supplier

Spain HIV/Hepatitis Blood Screening NAT Market Diagnostics Sales by Major Supplier

Spain Chlamydia Testing Market Diagnostics Sales by Major Supplier

Spain CMV Testing Market Diagnostics Sales by Major Supplier



Spain Hepatitis Testing Market Diagnostics Sales by Major Supplier Spain Hepatitis C Testing Market Diagnostics Sales by Major Supplier Spain Herpes Testing Market Diagnostics Sales by Major Supplier Spain Influenza Testing Market Diagnostics Sales by Major Supplier Spain Lyme Disease Testing Market Diagnostics Sales by Major Supplier Spain Meningitis Testing Market Diagnostics Sales by Major Supplier Spain Mononucleosis Testing Market Diagnostics Sales by Major Supplier Spain Mycoplasma Testing Market Diagnostics Sales by Major Supplier Spain RSV Testing Market Diagnostics Sales by Major Supplier Spain Rotavirus Testing Market Diagnostics Sales by Major Supplier Spain Rubella Testing Market Diagnostics Sales by Major Supplier Spain Septicemia Testing Market Diagnostics Sales by Major Supplier Spain Streptococci Testing Market Diagnostics Sales by Major Supplier Spain Syphilis Testing Market Diagnostics Sales by Major Supplier Spain Toxoplasmosis Testing Market Diagnostics Sales by Major Supplier Spain Trichomonas Testing Market Diagnostics Sales by Major Supplier Spain Tuberculosis Testing Market Diagnostics Sales by Major Supplier Spain Molecular Diagnostics Market Sales and Shares of Major Suppliers



#### I would like to order

Product name: 2015-2019 New Frontiers in the Spanish Automated Microbiology Market: Business

Challenges, Emerging Technologies, Competitive Landscape

Product link: https://marketpublishers.com/r/2512C273D6CEN.html

Price: US\$ 5,560.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

# **Payment**

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/2512C273D6CEN.html">https://marketpublishers.com/r/2512C273D6CEN.html</a>

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

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 <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

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



