

## North America Molecular Diagnostic Analyzers and Reagents Market 2021: USA, Canada, Mexico--Supplier Shares by Test, Competitive Strategies, Test Volume and Sales Segment Forecasts, Technology and Instrumentation Review

https://marketpublishers.com/r/N1365FD6F8BEN.html

Date: June 2017 Pages: 1170

Price: US\$ 9,540.00 (Single User License)

ID: N1365FD6F8BEN

## **Abstracts**

This new 3- country report from VPGMarketResearch.com is available by country, market segment, section, or individual test.

The report is designed to help current suppliers and potential market entrants identify and evaluate major business opportunities emerging in the molecular diagnostics market during the next five years.

## Highlights

Supplier sales and market shares in major countries

Five- year test volume and sales forecasts

Strategic profiles of market players and start- up firms developing innovative technologies and products

Emerging technologies

Review of molecular diagnostic analyzers

Specific product and business opportunities for instrument and consumable suppliers



#### Rationale

The molecular diagnostics market is unquestionably the most rapidly growing segment of the in vitro diagnostics industry. The next five years will witness significant developments in reagent systems and automation, as well as introduction of a wide range of new products that will require innovative marketing approaches. The rate of market penetration into routine clinical laboratories, however, will depend on the introduction of cost- effective and automated systems with amplification methods.

In order to successfully capitalize on the opportunities presented by the molecular diagnostics market, many companies are already exploiting new molecular technologies as corporate strategic assets, managed in support of business and marketing strategies. Integrating new technology planning with business and corporate strategies will be one of the most challenging tasks for diagnostic companies during the next five years.

### **Country Analyses**

Canada, Mexico, USA

Market Segmentation Analysis

Sales and market shares of key suppliers of molecular diagnostic reagent kits and components in major markets.

Five- year test volume and sales forecasts for major applications, including:- Infectious Diseases - Forensic Testing- Cancer - Paternity Testing/HLA Typing- Genetic Diseases - Others- Five- year test volume and sales projections for over 30 NAT assays.- A comprehensive analysis of the sequencing market, by country and laboratory segment, including:- Industrial - Academic- Government - Commercial

Market segmentation analysis, including review of the market dynamics, trends, structure, size, growth and suppliers in major countries.

## **Product/Technology Review**

Comparison of leading molecular diagnostic analyzers marketed by Abbott, Beckman Coulter, BD, Bio- Rad, Hologic, Roche, Tecan and other suppliers.



Extensive review of molecular diagnostic technologies, test formats, detection methodologies, trends in testing automation and over 30 target/signal amplification methods, including:

PCR - bDNA

SDA - NASBA

TMA - SSSR, and others

LCR

Universities and research centers developing new molecular diagnostic technologies and products.

## **Competitive Assessments**

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

Companies developing and marketing molecular diagnostics products, by test and application.

## **Opportunities and Strategic Recommendations**

Specific new product development opportunities with potentially significant market appeal during the next five years.

Design criteria for new products.

Alternative market penetration strategies.

Potential market entry barriers and risks.

Business planning issues and concerns.



Contains 1,170 pages and 75 tables



## **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. MARKET AND TECHNOLOGY REVIEW**

- A. DNA Sequencing
  - 1. INTRODUCTION
  - 2. SEQUENCING METHODS
  - 3. AUTORADIOGRAPHY
  - 4. THE HUMAN GENOME PROJECT
  - 5. SEQUENCING AUTOMATION
  - 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
  - 2. NON-ISOTOPIC METHODS
    - a. Enzymatic Labels
    - b. 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
  - 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 QIASYMPHONY RGQ



- 17. ROCHE COBAS AMPLICOR
- 18. ROCHE COBAS TAQMAN
- 19. ROCHE COBAS TAQMAN
- 20. ROCHE COBAS TAQMAN AMPLIPREP
- 21. ROCHE LIGHCYCLER
- 22. ROCHE COBAS 4800
- 23. ROCHE COBAS S
- 24. SIEMENS VERSANT
- 25. TECAN LS SERIES
- E. Biochips: Genosensors, Microarrays, Labs-on-the-Chip

Liquid Transportation and Mixing

Separation

Reaction

Detection

- F. Pharmacogenomics
- G. Major Applications
  - 1. MICROBIOLOGY/INFECTIOUS DISEASES
    - a. Overview
    - b. Major Infectious Diseases

AIDS/HIV

Adenovirus

Aeromonads

Anthrax/Bacillus Anthracis

Arboviruses

**Babesiosis** 

Bacillary Epithelioid Angiomatosis (BEA), 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

Herpes Simplex Virus

Human Herpes Virus-6 (HHV-6)

Influenza Viruses

Legionella

Lyme Disease

Lymphogranuloma Venereum (LGV)

Malaria

Measles (Rubeola)

Meningitis

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

## 2. CANCER TESTING

- a. Overview
- b. Major Cancer Types

Prostate

Lung

Colon and Rectum

**Breast** 

Skin

Uterine

Leukemia

Oral

c. Oncogenes

Abl/abl-bcr

AIB1

BCL-2

BRCA1

**CD44** 

C-fos

C-myb

C-myc

CYP17

Erb-B

HPC1

N-myc

P40

P51

P53

PIK3CA

PTI-1

Ras



Reg

Sis

Src

## 3. GENETIC DISEASES

- a. Overview
- b. Nucleic Acid Amplification
- c. Chromosome Imaging
- d. Genomics Technologies
- e. Proteomics Technologies
- f. Current Pharmacogenomic Tests
- g. Future Pharmacogenomic Testing
- h. Major Diseases

Achondroplasia

Autosomal Dominant Polycystic Kidney Disease

Cancer

Cosmetogenomics

Cystic Fibrosis

Down's Syndrome

Duchenne and Becker Muscular Dystrophy

Factor V (Leiden)

Factor IX Deficiency

Fragile X Syndrome

**Heart Disease** 

Hemochomatosis

Hemophilia

**Huntington's Disease** 

Maternal-Fetal Incompatibility

Multiple Endocrine Neoplasia

Phenylketonuria (PKU)

Polycystic Kidney Disease (PKD)

**Prenatal Screening** 

Retinitis Pigmentosa

Retinoblastoma

Sickle Cell Anemia

Spinal Muscular Atrophy

Vitamin B12 Metabolism

- i. Social Issues and Concerns
- 4. FORENSIC TESTING
  - a. Overview



- b. Multilocus and Single Locus Probes
- c. DNA Profile Data Banks
- d. Judicial Implementation
- e. Major Crime Categories
- f. Factors Contributing to the DNA Probe Market Expansion Technology Availability

Use of Hair as Evidence

- g. Wildlife Forensics
- 5. PATERNITY TESTING/HLA TYPING
- 6. OTHER APPLICATIONS
  - a. Disease Susceptibility Testing
  - b. Cardiovascular Diseases
  - c. Diabetes
  - d. Alzheimer's Disease
  - e. Periodontal Disease
  - f. Plasma Purification
  - g. Organ Transplantation
  - h. Water Contamination
  - i. Other
- H. Competing/complementing
  - 1. MONOCLONAL ANTIBODIES/IMMUNOASSAYS
  - 2. RNA PROBES
  - 3. TWO-DIMENSIONAL ELECTROPHORESIS
  - 4. FLOW CYTOMETRY

# VII. COUNTRY ANALYSES: VOLUME AND SALES FORECASTS--INFECTIOUS DISEASES, GENETIC DISEASES, CANCER, FORENSIC AND PATERNITY TESTING

Canada

Mexico

**USA** 

#### **VIII. COMPETITIVE ASSESSMENTS**

**Abbott** 

Affymetrix/Thermo Fisher

Agilent Technologies

Applied Gene Technologies

Arca Biopharma



Beckman Coulter/Danaher Becton Dickinson **Biokit** bioMerieux Bio-Rad **Biotest** CellMark Forensics/LabCorp Cepheid **Decode Genetics** Diadexus Eiken Elitech Group Enzo **Exact Sciences Fujirebio** Grifols Hologic/Gen-Probe Illumina Kreatech/Leica Li-Cor Biosciences Monogram Biosciences/LabCorp Myriad Genetics Ortho-Clinical Diagnostics Perkin Elmer/Caliper **Proteome Sciences** Qiagen Roche Scienion Sequenom Shimadzu Siemens Sierra Molecular Takara Bio

Tecan Group

## IX. APPENDIX: MAJOR UNIVERSITIES AND RESEARCH CENTERS DEVELOPING INNOVATIVE MOLECULAR DIAGNOSTIC TECHNOLOGIES AND PRODUCTS



## **List Of Tables**

#### LIST OF TABLES

Canada Molecular Diagnostics Test Volume and Sales Forecasts by Application

Canada Molecular Diagnostics Test Volume Forecasts by Application

Canada Major Infectious Disease Test Volume Forecasts by Assay

Canada Molecular Diagnostics Market Forecasts by Application

Canada Major Infectious Disease Diagnostics Market Forecasts by Assay

Mexico Molecular Diagnostics Test Volume and Sales Forecasts by Application

Mexico Molecular Diagnostics Test Volume Forecasts by Application

Mexico Major Infectious Disease Test Volume Forecasts by Assay

Mexico Molecular Diagnostics Market Forecasts by Application

Mexico Major Infectious Disease Diagnostics Market Forecasts by Assay

U.S.A. Molecular Diagnostics Test Volume and Sales by Major Application

U.S.A. Laboratories Performing DNA Sequencing by Market Segment

U.S.A. Echovirus Testing Market Estimated Sales by Major Supplier

U.S.A. Enterovirus Testing Market Estimated Sales by Major Supplier

U.S.A. EBV Testing Market Estimated Sales by Major Supplier

U.S.A. Gonorrhea Testing Market Estimated Sales by Major Supplier

U.S.A. Hepatitis Testing Market Estimated Sales by Major Supplier

U.S.A. Hepatitis C Testing Market Estimated Sales by Major Supplier

U.S.A. HIV/Hepatitis Blood Screening NAT Market Reagent Sales by Major Supplier

U.S.A. Herpes Testing Market Estimated Sales by Major Supplier

U.S.A. Influenza Testing Market Estimated Sales by Major Supplier

U.S.A. Meningitis Testing Market Estimated Sales by Major Supplier

U.S.A. Mycoplasma Testing Market Estimated Sales by Major Supplier

U.S.A. Pneumonia Testing Market Estimated Sales by Major Supplier

U.S.A. Rabies Testing Market Estimated Sales by Major Supplier

U.S.A. RSV Testing Market Estimated Sales by Major Supplier

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

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

U.S.A. West Nile Virus Nat Market Reagent Sales by Major Supplier

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

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

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

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 Oncogenes Potential Application in Cancer Diagnosis Major Companies Developing or Marketing Cancer Molecular Diagnostic Tests Major Companies Developing or Marketing Molecular Diagnostic Tests for Genetic Diseases



#### I would like to order

Product name: North America Molecular Diagnostic Analyzers and Reagents Market 2021: USA,

Canada, Mexico--Supplier Shares by Test, Competitive Strategies, Test Volume and

Sales Segment Forecasts, Technology and Instrumentation Review

Product link: https://marketpublishers.com/r/N1365FD6F8BEN.html

Price: US\$ 9,540.00 (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 <a href="https://marketpublishers.com/r/N1365FD6F8BEN.html">https://marketpublishers.com/r/N1365FD6F8BEN.html</a>

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 <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