

# 2021 Lebanon Genetic Diseases, Cancer, Forensic, Paternity Molecular Diagnostics Market Assessment-Competitive Shares and Strategies, Volume and Sales Segment Forecasts, Latest Technologies and Instrumentation Pipeline, Opportunities for Suppliers

https://marketpublishers.com/r/2EEB1D5F53C5EN.html

Date: January 2021 Pages: 0 Price: US\$ 1,850.00 (Single User License) ID: 2EEB1D5F53C5EN

## Abstracts

The report is available by section, market segment, and can be customized to your specific information needs and budget.

This new report is designed to help current suppliers and potential market entrants identify and evaluate emerging opportunities for molecular diagnostic technologies and products for diagnosing genetic diseases, cancer, as well as forensic and paternity/HLA testing during the next five years.

**Report Presents** 

Market shares of leading suppliers

Business and technological trends in major markets

Five-year test volume and sales forecasts

Feature comparison of major analyzers

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

Specific product and business opportunities for instrument and consumable



suppliers.

**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.

Market Segmentation Analysis

Five-year test volume and sales forecasts for major applications, including:

**Forensic Testing** 

Cancer

Paternity Testing/HLA Typing

Genetic Diseases

Others

Product/Technology Review

Comparison of major molecular diagnostic analyzers.

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

2021 Lebanon Genetic Diseases, Cancer, Forensic, Paternity Molecular Diagnostics Market Assessment-Competitive..



Worldwide listings of companies 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.

#### Rationale

Genetic Diseases, Cancer, Forensic and Paternity testing markets are among the most rapidly growing segments 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 these markets, 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.



# 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
- 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
  - 2. Non-Isotopic Methods
- D. Instrumentation

Review of latest analyzers from Abbott, Beckman Coulter/Danaher, Becton Dickinson, bioMerieux, Bio-Rad, Cepheid, Hologic, Qiagen, Roche, Siemens Healthineers, and other suppliers.

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

Liquid Transportation and Mixing

Separation

Reaction

Detection

- F. Pharmacogenomics
- G. Major Applications
  - 1. 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

- 2. 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
- 3. 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
- 4. Paternity Testing/HLA Typing
- 5. 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 Technologies
  - 1. Monoclonal Antibodies/Immunoassays
  - 2. RNA Probes



- 3. Two-Dimensional Electrophoresis
- 4. Flow Cytometry

## VII. MARKET ANALYSES: MOLECULAR DIAGNOSTIC ANALYZERS AND REAGENT MARKET SHARES AND FORECASTS FOR 100 TESTS--VOLUME AND SALES FORECASTS

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

The report provides strategic assessments of over 40 leading molecular diagnostics market players and start-up companies with innovative technologies and products, including:

Abbott, Agilent Technologies, Beckman Coulter/Danaher, Becton Dickinson, bioMerieux, Bio-Rad, Cepheid, DiaSorin, Eiken Chemical, Enzo, Fujirebio, Grifols, Hologic, Illumina, LabCorp/Sequenom, Leica Biosystems, Myriad Genetics, Ortho-Clinical Diagnostics, Qiagen, Quest Diagnostics, Quidel, Roche, Shimadzu, Siemens Healthineers, Sierra Molecular, Takara Bio, Tecan Group, Thermo Fisher, Wako and others.

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



#### I would like to order

Product name: 2021 Lebanon Genetic Diseases, Cancer, Forensic, Paternity Molecular Diagnostics Market Assessment-Competitive Shares and Strategies, Volume and Sales Segment Forecasts, Latest Technologies and Instrumentation Pipeline, Opportunities for Suppliers

Product link: https://marketpublishers.com/r/2EEB1D5F53C5EN.html

Price: US\$ 1,850.00 (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/2EEB1D5F53C5EN.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