

# **2021-2025 Jordan Nucleic Acid Testing (NAT) Market Opportunities-Competitive Shares and Growth Strategies, Volume and Sales Segment Forecasts for 100 Infectious, Genetic, Cancer, Forensic and Paternity Tests-Latest Technologies and Instrumentation Pipeline, Market Barriers and Risks**

<https://marketpublishers.com/r/23EE64928E53EN.html>

Date: September 2021

Pages: 1120

Price: US\$ 2,450.00 (Single User License)

ID: 23EE64928E53EN

## **Abstracts**

This new report from LeadingMarketResearch.com is designed to help current suppliers and potential market entrants identify and evaluate emerging opportunities in the molecular diagnostics market during the next five years.

### Highlights

Five-year test volume and sales forecasts

Feature comparison of major analyzers

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

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.

### 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.

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

Companies, universities and research centers developing new molecular diagnostic technologies and products.

### Competitive Assessments

Strategic profiles of major suppliers and emerging market entrants, including their sales,

product portfolios, marketing tactics, collaborative arrangements and new technologies/products in R&D.

### Opportunities and Strategic Recommendations

New product development opportunities with potentially significant market appeal

Alternative market penetration strategies.

Potential market entry barriers and risks.

Business planning issues and concerns.

Contains 1,120 pages and 48 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
  2. Non-Isotopic Methods
- D. Instrumentation Review of latest analyzers from Abbott, Beckm an Coulter/Danaher, Becton Dickinson, bioMerieux, Bio-Rad, Cepheid, Hologic, Qiagen, Roche, Siemens Healthineers, and others.
- 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 (Rubeo la)  
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  
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

The report provides review of both current and emerging oncogenes, including:

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

Hemochromatosis

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. MOLECULAR DIAGNOSTICS MARKET

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Test Volume and Sales Forecasts, Major Supplier Sales and Market Shares

## **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 PRODUCTS**

## I would like to order

Product name: 2021-2025 Jordan Nucleic Acid Testing (NAT) Market Opportunities-Competitive Shares and Growth Strategies, Volume and Sales Segment Forecasts for 100 Infectious, Genetic, Cancer, Forensic and Paternity Tests-Latest Technologies and Instrumentation Pipeline, Market Barriers and Risks

Product link: <https://marketpublishers.com/r/23EE64928E53EN.html>

Price: US\$ 2,450.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/23EE64928E53EN.html>

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**

Customer signature \_\_\_\_\_

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

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