

# **US Molecular Blood Typing, Grouping and Infectious Disease NAT Market, 2019-2023: Supplier Shares, Sales Forecasts by Test and Market Segment, Competitive Strategies, Technology Trends, Instrumentation Review**

<https://marketpublishers.com/r/U16EE6B69F4EN.html>

Date: July 2019

Pages: 465

Price: US\$ 4,500.00 (Single User License)

ID: U16EE6B69F4EN

## **Abstracts**

This comprehensive report is designed to help current suppliers and potential market entrants identify and evaluate emerging opportunities in the US molecular blood banking market during the next five years, and assist industry executives in developing effective business, new product development and marketing strategies.

The report explores future marketing and technological trends in US; provides test volume and sales forecasts by market segment/test location; compares features of major automated and semi-automated analyzers; profiles leading and emerging competitors; and identifies specific product and market opportunities facing suppliers during the next five years.

Blood Group Genotyping

PCR, PCR-RFLP, AS-PCR or PCR-SSP, Multiplex PCR, Real Time PCR, Sanger DNA Sequencing, Pyrosequencing

Microarrays

BeadChip Array, BloodChip, Genome Lab SNP Stream, Fluidic Microarray Systems, TaqMan OpenArray, MALDI-TOF-MS, Mini-Sequencing

Blood Typing and Grouping Tests

ABO, Antibody Panels, Antibody Screening/Indirect Antiglobulin, Antigen Typing (C, c, Duffy, E, e, I, i, Kell, Kidd, Le a, b, MN, P, S, s), Antiglobulin (Direct, C3 + IgG, IgG, C3), Crossmatching (Immediate Spin, Full Crossmatch), Rh (D, Du).

### Infectious Disease Screening Tests

AIDS (HIV NAT, HIV-1/2), Cytomegalovirus, Hepatitis (HAV NAT, HBV NAT, HBs Ag, Anti-HBc, HCV NAT, HCV, ALT/SGPT), HTLV-I/II, Parvovirus B19 NAT, Syphilis, West Nile Virus NAT

### Sales and Market Share Analysis

Sales and market share estimates for leading suppliers of blood banking products by individual product.

### Competitive Assessments

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

### Market Segmentation Analysis

Comprehensive market segmentation analysis, including review of the market dynamics, trends, structure, size, growth, and key suppliers.

Test volume and sales forecasts for over 40 blood typing, grouping and infectious disease screening tests, including NAT, by market segment:

Blood Centers

Plasma Fractionation Facilities

Hospitals

Commercial/Private Laboratories

Military Blood Banks

## Current and Emerging Products

Analysis of current and emerging blood typing, grouping and infectious disease screening tests.

Review of automated and semi-automated analyzers.

## Technology Review

Assessment of current and emerging technologies, and their potential applications for the blood banking market.

Comprehensive lists of companies developing or marketing new technologies and products, by test.

## Strategic Recommendations

New product development opportunities with significant market appeal.

Alternative market penetration strategies.

Potential market entry barriers and risks.

Contains 465 pages and 48 tables

## Contents

### I. INTRODUCTION

### II. WORLDWIDE TECHNOLOGY AND MARKET OVERVIEW

#### A. Major Blood Typing, Grouping and Infectious Disease Screening Tests

##### 1. Blood Typing and Grouping Tests

- a. ABO
- b. Antibody Panels
- c. Antibody Screening
- d. Antigen Typing
- e. Antiglobulin Test
- f. Crossmatch
- g. HLA Typing
- h. Rh
- i. Other Blood Groups

##### 2. Blood Group Genotyping

- a. PCR
- b. PCR-RFLP
- c. AS-PCR or PCR-SSP
- d. Multiplex PCR
- e. Real Time PCR
- f. Sanger DNA Sequencing
- g. Pyrosequencing
- b. Microarrays
  - BeadChip Array
  - BloodChip
  - Genome Lab SNP Stream
  - Fluidic Microarray Systems
  - TaqMan OpenArray
- MALDI-TOF-MS
- Mini-Sequencing

##### 3. Infectious Disease Screening Tests

- a. AIDS
  - Structure and Composition
  - Classification
  - Origin of AIDS
  - Animal Lentivirus Systems

Virus Receptors  
HIV Infections in Humans  
    Pathogenesis & Pathology  
    Overview of Course of HIV Infection  
CD4T Lymphocytes and Memory Cells  
Monocytes and Macrophages  
Lymphoid Organs  
Neural Cells  
Viral Coinfections  
    Clinical Findings  
Plasma Viral Load  
Pediatric AIDS  
    Neurologic Disease  
    Opportunistic Infections  
    Protozoa  
    Fungi  
    Bacteria  
Viruses  
Cancer  
Immunity  
Laboratory Diagnosis  
    Virus Isolation  
    Serology  
    Detection of Viral Nucleic Acid or Antigens  
Epidemiology  
    Worldwide Spread of AIDS  
    United States  
    Routes of Transmission  
Prevention, Treatment, And Control  
    Antiviral Drugs  
    Vaccines Against HIV  
Transmission of HIV in Blood Products  
HIV Transmission in Transplant and Artificial Insemination Recipients  
Diagnostic Tests  
    Enzyme Immunoassay Interpretation  
    Specificity, Sensitivity, and Predictive  
Value of Enzyme Immunoassay  
    Competition Assays  
    Western Blot Technique

Immuno-Fluorescence Assay (IFA)  
Radioimmunoprecipitation  
HIV-1/HIV-2 Combination Testing  
Methods of HIV-Antigen Detection  
Antigen Assays and Blood Screening  
Urine Tests  
DNA Probes  
Overview  
Quantitative Polymerase Chain Reaction  
In Situ PCR  
Needed Improvements  
Viral Load/Drug Resistance Testing  
Genotype and Phenotype Testing  
Blood Banking Considerations  
b. Hepatitis  
Hepatitis A  
Hepatitis B  
    Structure and Composition  
    Replication of Hepatitis B Virus  
Hepatitis C  
Hepatitis D (Delta Hepatitis)  
Hepatitis E  
Hepatitis G  
Hepatitis Virus Infections In Humans  
    Pathology  
Clinical Findings  
Laboratory Features  
    Hepatitis A  
    Hepatitis B  
    Hepatitis C  
    Hepatitis D  
    Hepatitis E  
Virus-Host Immune Reactions  
Epidemiology  
    Hepatitis A  
    Hepatitis B  
    Hepatitis C  
    Hepatitis D (Delta Agent)  
Vaccines and Drugs

## c. Cytomegalovirus

Background

Chorioretinitis

Gastrointestinal

Central Nervous System Disease

Diagnostic Tests

Vaccines and Drugs

## d. Syphilis

Background

Diagnostic Tests

Vaccines and Drugs

## e. West Nile Virus

Background

Clinical Syndromes

Diagnostic Tests

Vaccines and Drugs

## f. Parvovirus B19

Microbiology

Epidemiology

Clinical Syndromes

Erythema Infectiosum Slapped (cheek)

Adult Polyarthropathy

Transient Aplastic Crisis

Transient Pancytopenia

Red Cell Aplasia in the Immunocompromised

Perinatal Infections

Diagnosis

Treatment

## g. Creutzfeldt-Jakob's Disease

Background

Transmission

Diagnostic Tests

Major Commercial and Academic Players

## Bayer

Disease Sciences/BioTec Global

Imperial College School of Medicine

Ortho-Clinical Diagnostics

Pall

ProMetic Life Sciences

Proteome Sciences/Idexx  
Q-One Biotech  
Serono  
U.S. Agricultural Research Service

Drugs  
Vaccines

h. Malaria

i. Chagas Disease

j. Babesiosis

4. Pathogen Reduction

5. Leukocyte Reduction

Background

Methods

B. Instrumentation Review: Operating Characteristics, Features and Selling Prices of Leading Automated and Semiautomated Analyzers Manufactured by:

Abbott

Beckman Coulter/Danaher

Becton Dickinson

Bio-Rad

BioMerieux

Cepheid

Curtis Unyvero

Gen-Probe/Hologic

GenMark

Grifols

HTG

Immucor

Life Technologies

Nanosphere

Ortho-Clinical Diagnostics

Qiagen

Roche

Sarstedt

Siemens

Tecan

C. Major in Vitro Diagnostic Technologies And Their Potential Applications

1. Molecular Diagnostics

a. Overview

b. NAT



2. Monoclonal and Polyclonal Antibodies
3. Immunoassays
  - a. Technological Principle
  - b. Chemiluminescence
  - c. Enzyme Immunoassays (EIA)
    - Overview
    - ELISA
    - EMIT
    - Electrochemical
  - d. Radioimmunoassays (RIA)
  - e. Immunoprecipitation
  - f. Affinity Chromatography
4. Microtitration Plates
5. IT and Automation
6. Lasers
7. Robotics
8. Synthetic Red Cell Substitutes
9. Genetically Engineered Blood Components
  - a. Albumin
  - b. Factor VIII
  - c. Alpha-2 Antiplasmin
  - d. Antithrombin III
  - e. Factor IX
  - f. Von Willebrand's Factor
  - g. Fibrinogen
  - h. t-PA
10. Blood Preservation
11. Autologous Blood Transfusion/Freezing

### **III. U.S.**

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Supplier Sales and Market Shares for Blood Typing, Grouping and Infectious Disease Screening Tests

### **IV. MAJOR PRODUCT DEVELOPMENT OPPORTUNITIES**

- A. Molecular Blood Typing and Grouping
- B. Infectious Disease Screening
- C. Auxiliary

## **V. ALTERNATIVE MARKET PENETRATION STRATEGIES**

- A. Internal Development
- B. Collaborative Arrangements
- C. University Contracts

## **VI. POTENTIAL MARKET ENTRY BARRIERS AND RISKS**

- A. Market Maturity
- B. Cost Containment
- C. Competition
- D. Technological Edge and Limitations
- E. Patent Protection

## **VII. COMPETITIVE ASSESSMENTS**

Abbott  
Beckman Coulter/Danaher  
Becton Dickinson  
Biokit  
BioMerieux  
Bio-Rad  
CellMark Forensics/LabCorp  
Diagast  
DiaSorin  
Fujirebio  
Hologic/Gen-Probe  
Grifols  
Immucor  
Ortho-Clinical Diagnostics  
Proteome Sciences  
Quest Diagnostics  
Quidel  
Roche  
Siemens

Tecan  
Thermo Fisher

## List Of Tables

### LIST OF TABLES

Major Companies Developing or Marketing Blood Typing and Grouping Tests  
Major Companies Developing or Marketing HLA Typing Tests  
Major Companies Developing or Marketing AIDS Tests  
Major Companies Developing or Marketing Hepatitis Tests  
Major Companies Developing or Marketing CMV Tests  
Major Companies Developing or Marketing Syphilis Tests  
Major Companies Developing or Marketing Blood Bank Analyzers  
Executive Summary Table: U.S.A., Total Blood Bank Test Volume and Reagent Sales Forecast by Test Category  
U.S.A., Estimated Number of Inpatient and Ambulatory Surgeries  
U.S.A., Facilities Performing Blood Bank Tests by Market Segment  
U.S.A., Hospital Laboratories Performing Blood Bank Tests by Bed Size  
U.S.A., Commercial/Private Laboratories Performing Blood Bank Tests by Annual Test Volume Forecast  
U.S.A., Facilities Collecting Whole Blood And Plasma by Market Forecast Segment  
U.S.A., Whole Blood and Plasma Collections By Market Forecast Segment  
U.S.A., All Market Segments Blood Typing and Grouping Test Volume by Market Forecast Segment  
U.S.A., All Market Segments Blood Typing And Grouping Test Volume Forecast  
U.S.A., Hospital Laboratories Blood Typing and Grouping Test Volume Forecast  
U.S.A., Community and Regional Blood Centers Blood Typing and Grouping Test Volume Forecast  
U.S.A., Commercial/Private Laboratories Blood Typing and Grouping Test Volume Forecast  
U.S.A., Plasma Fractionation Centers Blood Typing and Grouping Test Volume Forecast  
U.S.A., Military Blood Banks Blood Typing and Grouping Test Volume Forecast  
U.S.A., All Market Segments Infectious Disease Screening Test Volume Forecast By Market Segment  
U.S.A., All Market Segments Infectious Disease Screening Test Volume Forecast  
U.S.A., Community and Regional Centers Infectious Disease Screening Test Volume Forecast  
U.S.A., Plasma Fractionation Centers Infectious Disease Screening Test Volume Forecast  
U.S.A., Hospital Blood Banks Infectious Disease Screening Test Volume Forecast

U.S.A., Military Blood Banks Infectious Disease Screening Test Volume Forecast

U.S.A., All Market Segments Blood Typing And Grouping Reagent Market Forecast by Market Segment

U.S.A., All Market Segments Blood Typing And Grouping Reagent Market Forecast by Market Segment

U.S.A., Hospital Blood Banks Blood Typing And Grouping Reagent Market Forecast by Major Test

U.S.A., Community and Regional Blood Centers Blood Typing and Grouping Reagent Market Forecast By Major Test

U.S.A., Commercial/Private Laboratories Blood Typing and Grouping Reagent Market Forecast By Major Test

U.S.A., Plasma Fractionation Centers Blood Typing and Grouping Reagent Market Forecast By Major Test

U.S.A., Military Blood Banks Blood Typing And Grouping Reagent Market Forecast by Major Test

U.S.A., All Market Segments Infectious Disease Screening Reagent Market by Market Forecast Segment

U.S.A., All Market Segments Infectious Disease Screening Reagent Market by Market Forecast Segment

U.S.A., Community and Regional Centers Infectious Disease Screening Reagent Market Forecast By Test

U.S.A., Plasma Fractionation Centers Infectious Disease Screening Reagent Market Forecast By Test

U.S.A., Hospital Blood Banks Infectious Disease Screening Reagent Market Forecast By Test

U.S.A., Military Blood Banks Infectious Disease Screening Reagent Market Forecast By Test

U.S.A., Major Suppliers of Blood Typing And Grouping Reagents Estimated Sales And Market Shares

U.S.A., HIV/HTLV Blood Screening Market, Reagent Sales by Major Supplier

U.S.A., Hepatitis Blood Screening Market, Reagents Sales by Major Supplier

U.S.A., Hepatitis C Blood Screening Market, Reagent Sales By Major Supplier

U.S.A., HIV/Hepatitis C NAT Market, Reagent Sales By Major Supplier

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

U.S.A., CMV Blood Screening Market, Reagent Sales by Major Supplier

U.S.A., Syphilis Blood Screening Market, Reagent Sales by Major Supplier

## I would like to order

Product name: US Molecular Blood Typing, Grouping and Infectious Disease NAT Market, 2019-2023: Supplier Shares, Sales Forecasts by Test and Market Segment, Competitive Strategies, Technology Trends, Instrumentation Review

Product link: <https://marketpublishers.com/r/U16EE6B69F4EN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](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/U16EE6B69F4EN.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