



MEDICAL DEVICES



PHARMACEUTICALS



CHEMICALS



FOOD & BEVERAGE



ELECTRONICS

Table of Contents and List of Tables

Copyright VENTURE PLANNING GROUP
This material is confidential for use by our clients only
and may not be reprinted or reproduced.

VPG Publications, Consulting, Clients ***www.VPGcorp.com***

VPG Market Research Reports ***www.VPGMarketResearch.com***

Partner Reports ***www.LeadingMarketResearch.com***

VENTURE PLANNING GROUP 1271 Avenue of the Americas, Suite 4300 New York, NY 10020
Phone + 1 212 564 2838 Fax + 1 212 564 8133 ***reports@vpgcorp.com***



MEDICAL DEVICES



PHARMACEUTICALS



CHEMICALS



FOOD & BEVERAGE



ELECTRONICS

2014 Italy Molecular Blood Typing, Grouping and Infectious Disease NAT Market Emerging Technologies, Sales Forecasts, Supplier Shares, Competitive Strategies

Table of Contents

Copyright 2014 VENTURE PLANNING GROUP
This material is confidential for use by our clients only
and may not be reprinted or reproduced.

VPG Publications, Consulting, Clients www.VPGcorp.com

VPG Market Research Reports www.VPGMarketResearch.com

Partner Reports www.LeadingMarketResearch.com

VENTURE PLANNING GROUP 1271 Avenue of the Americas, Suite 4300 New York, NY 10020
Phone + 1 212 564 2838 Fax + 1 212 564 8133 clientcenter@vpgcorp.com

Table of 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

Table of Contents (continued)

- 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

Table of Contents (continued)

- 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

Table of Contents (continued)

- 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

Table of Contents (continued)

- 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

Table of Contents (continued)

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. Italy

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

Table of Contents (continued)

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
- Grifols
- Hologic/Gen-Probes
- Immucor
- Ortho-Clinical Diagnostics
- Proteome Sciences
- Quest Diagnostics
- Quidel
- Roche
- Siemens
- Tecan
- Thermo Fisher

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: Italy, Total Blood Bank
Test Volume and Reagent Sales Forecast
by Test Category

Italy, Facilities Performing Blood
Bank Tests by Market Segment

Italy, Hospital Laboratories Performing
Blood Bank Tests by Bed Size

Italy, Commercial/Private Laboratories
Performing Blood Bank Tests
by Annual Test Volume

Italy, All Market Segments Blood Typing
And Grouping Test Volume by Market Segment

Italy, All Market Segments Blood Typing
And Grouping Test Volume Forecast

List of Tables (continued)

Italy, Hospital Laboratories Blood
Typing and Grouping Test Volume Forecast

Italy, Blood Banks Blood Typing
And Grouping Test Volume Forecast

Italy, Commercial/Private Laboratories
Blood Typing and Grouping Test Volume Forecast

Italy, All Market Segments Infectious
Disease Screening Test Volume Forecast by Market
Segment

Italy, All Market Segments Infectious
Disease Screening Test Volume Forecast

Italy, Blood Banks Infectious Disease
Screening Test Volume Forecast

Italy, Commercial/Private Laboratories
Infectious Disease Screening Test Volume Forecast

Italy, Hospital Laboratories Infectious
Disease Screening Test Volume Forecast

Italy, All Market Segments Blood Typing
and Grouping Reagent Market Forecast
by Market Segment

Italy, All Market Segments Blood Typing
And Grouping Reagent Market Forecast
by Major Test

Italy, Hospital Laboratories Blood
Typing and Grouping Reagent Market Forecast
By Major Test

Italy, Blood Banks Blood Typing and
Grouping Reagent Market Forecast by Major Test

List of Tables (continued)

Italy, Commercial/Private Laboratories
Blood Typing and Grouping Reagent Market Forecast
By Major Test

Italy, All Market Segments Infectious
Disease Screening Reagent Market Forecast by Market
Segment

Italy, All Market Segments Infectious
Disease Screening Reagent Market Forecast by Test

Italy, Blood Banks Infectious Disease
Screening Reagent Market Forecast by Test

Italy, Commercial/Private Laboratories Infectious
Disease Screening Reagent Market Forecast by Test

Italy, Hospital Laboratories
Infectious Disease Screening Reagent Market Forecast
By Test

Italy, Major Suppliers of Blood Typing
And Grouping Reagents Estimated Sales
And Market Shares

Italy, AIDS/Hepatitis Blood Screening Market,
Reagent Sales by Major Supplier

Italy, HIV/Hepatitis NAT Market,
Reagent Sales by Major Supplier

Italy, CMV Blood Screening Market,
Reagent Sales By Major Supplier