TUMOR MARKERS: US, EUROPE, JAPAN Emerging Opportunities And Business Expansion Strategies

Table of Contents

<u>Introduction</u>

Worldwide Market and Technology Overview

- A. Cancer Statistics and Etiology
 - 1. Bladder
 - 2. Breast
 - 3. Cervical
 - 4. Colon and Rectum
 - 5. Endometrial
 - 6. Esophagus
 - 7. Head and Neck
 - 8. Leukemia
 - 9. Lung
 - 10. Lymphoma
 - 11. Oral
 - 12. Ovarian
 - 13. Prostate
 - 14. Renal Cell Carcinoma
 - 15. Skin
 - 16. Stomach
 - 17. Uterine
- B. Major Current And Emerging Tumor Marker
 - 1. Introduction
 - 2. Tumor Marker Classification
 - 3. ACTH
 - 4. Alpha-Fetoprotein (AFP)
 - 5. Beta-2 Microglobulin
 - 6. CA 15-3/27.29
 - 7. CA 19-9
 - 8. CA-125
 - 9. Calcitonin
 - 10. Carcinoembrionic Antigen (CEA)
 - 11. Estrogen and Progesterone Receptors
 - 12. Ferritin
 - 13. Gastrin
 - 14. Human Chorionic Gonadotropin (HCG)
 - 15. Insulin
 - 16. Lymphocytes CD4/CD8

- 17. NSE
- 18. Occult Blood
- 19. PAP Smear/HPV
- 20. Prostatic Acid Phosphatase (PAP)
- 21. Prostate-Specific Antigen (PSA)
- 22. Squamous Cell Carcinoma Antigen (SCC)
- 23. TdT
- 24. Thyroglobulin
- 25. Tissue Polypeptide Antigen (TPA)
- 26. Biochemical Tumor Markers
 - ADA
 - B-Protein
 - PNP
 - 5'-Nucleotidase

27. Oncogenes

- Abl/abl-bcr
- AIB1
- APC
- BTA 26
- BCL-2
- BCR-ABL
- B-raf
- BRCA
- CD44
- CDK
- C-abl
- C-fos
- C-myb
- C-myc
- CYCD1
- CYP-17
- DPC
- E-myc
- Erb-B
- HER-2/neu
- HPC1
- HSTF
- L-myc
- MET
- MSH
- NEU
- N-myc

Table of Contents (continued)

- N-telopeptide
- PCA3
- PIK3CA
- PTI-1
- P10
- P40
- P51
- P53
- ? Ras
- ? Req
- ? RET
- ? sFas
- ? Sis
- Src
- 28. Polypeptide Growth Factors
 - Basic Fibroblast Growth Factor
 - ? Beta-TGF
 - Cachectin (TNT)
 - Calmodulin
 - ECFR
 - ? Nerve Growth Factor (NGF)
 - Epidermal Growth Factor (EGF)
 - Ornithine Decarboxylase
 - Transferrin
 - Transforming Growth Factor-Alpha
- 29. Ectopic Hormones
- 30. Colony Stimulating Factors
- 31. Lymphokines
 - Alpha-Interferon
 - B Cell Growth Factors
 - B Cell Growth Factor (BCGF)
 - Gamma-Interferon
 - Interleukin-1 (IL-1)
 - Macrophage Activating Factor
- 32. Immunohistochemical Stains
- 33. Emerging Tumor Markers
 - N-Acetylglucosamine
 - Actin
 - Alpha-Actin
 - Angiogenin
 - Angiostatin
 - Antineuronal Antibodies

```
7B2
?
   B72.3
   B-Protein
?
   Bax
   BCD-F9
?
   BLCA-4
   Blood Group Antigens A,B,H
?
   BTA
   CA 50
?
   CA 72-4/TAG-72
   CA 195
?
   CA-242
   CA-549
   Cadherin
   CAM 26
?
   CAR-3
   CD105
   Cathepsin-D
   Chromogranin A and B
?
   Cluster 1 Antigen
   Cluster-5/5A Antigen
?
   COX Antigen
   CTA
?
   CU18
   Cyclin
?
   DR-70
   DU-PAN-2
   Endometrial Bleeding Associated Factor
   Endostatin
?
   Epithelial Membrane Antigen
   FDP
?
   Feulgen Hydrolysis
   Fibronectin
?
   FSH
   (1->3)-L-fucosyltransferase
?
   Gastrin-Releasing Peptide (GRP)
   GDCFP-15
   Glucagon
   Glycoamines
?
   H23
```

HAAH

hk3

7

Table of Contents (continued)

- HPA
- ? HSP27
- Human Carcinoma Antigen
- ? ICAM
- Intermediate Filaments
 - Cytokeratins/CK18/Cyfra 21-1
 - Desmin
 - Gliofibrillary Acid Protein
 - Neurofilaments
 - Vimentin
- ? KA 93
- Kallikrein
- Kinases
- ? KP16D3
- LAI
- ? Leukocyte Common Antigen
- Lewis Antigens
- ? Lysophosphatidic Acid (LPA)
- Ma 695/Ma 552
- ? MABDF3
- MAG
- ? ME1
- Minactivin
- ? MN/CA9
- MSA
- ? Mucin Cancer Antigen (MCA)
- Multiple Tumor Suppressor 1
- ? Myosin
- NEA-130
- ? NMP22
- Nucleolar
- OA-519
- ? Opiod Peptides
- P-glycoprotein
- ? Pancreatic Oncofetal Antigen (POA)
- Parathyrcoid Hormone
- ? Placental Lactogen
- PR92
- ? Proliferative Index, Ki-67
- Px
- ? RB Inactivation/Deletion

- Ret
- ? S-100 Protein
- SCCL 175
- ? Selectin
- Serotonin
- ? Sialic Acid
- Sialyl SSEA-1/SLX
- ? SN10
- Somatostatin
- ? TA-90
- TABA
- ? Tachykinin
- TAG 12
- ? TPS
- Troponin
- ? Tubulin
- VCAM
- ? VEGF
- Villen
- White Blood Cell Markers

C. Instrumentation Review And

Market Needs

- 1. Abbott AxSYM
- 2. Abbott IMx
- 3. Anagen AN2000/AuraFlex
- 4. Beckman Coulter Access
- 5. BioChem Pharma SR1
- 6. bioMerieux Vidas Series
- 7. Biotrol Systems 7000
- 8. J&J Diagnostics/Amersham Amerlite
- 9. J&J Diagnostics Vitros ECI
- 10. Olympus PK Series
- 11. Roche Cobas Core
- 12. Roche Elecsys
- 13. Roche ES 22
- 14. Roche ES 33
- 15. Roche ES 300/300 AL
- 16. Siemens ACS: 180
- 17. Siemens ACS: Centaur
- 18. Siemens ELISA Processor II/III
- 19. Siemens Immuno 1
- 20. Siemens/Opus/Plus/Magnum

- 21. Siemens Stratus
- 22. Tosoh AIA Series
- 23. Wallac/Pharmacia Delfia
- D. Current and Emerging Technologies
 - 1. Monoclonal and Polyclonal Antibodies
 - 2. Immunoassays
 - a. Technological Principle
 - b. Radioimmunoassay (RIA)
 - c. Enzyme Immunoassays (EIA)
 - Overview
 - ELISA
 - Immunofiltration
 - Particle-Membrane Capture Immunoassay
 - Enzyme Amplification
 - d. Fluorescent Immunoassays
 - e. Luminescence
 - Chemiluminescence
 - Bioluminescence
 - 3. Molecular Diagnostics
 - a. Technology Overview
 - b. Amplification Methods
 - PCR
 - DAP-PCR
 - Immuno-PCR
 - QC-PCR
 - CAR
 - DNA
 - HPA
 - LCR
 - NASBA
 - QBR
 - SDA
 - 3 SR, and others
 - 4. Biochips/Microarrays
 - 5. Chromosome Analysis
 - a. Chronic Myelogenous Leukemia (CML)
 - b. Acute Myeloid Leukemia (AML)
 - c. Acute Lymphoblastic Leukemia (ALL)
 - d. Malignant Lymphomas
 Lymphoid Malignancies
 - e. Chronic Lymphocytic Leukemia (CLL)
 - f. Solid Cancers
 - g. Chromosomal Translocation and Oncogenes

Table of Contents (continued)

- 6. Microcomputers and Automation
- 7. Artificial Intelligence
- 8. Flow Cytometry
- 9. Biosensors
- E. Competing/Complementing Technologies
 - 1. CT
 - 2. MRI
 - 3. NMR
 - 4. PET
 - 5. Photonics Spectroscopy
- F. Business Environment
 - 1. Worldwide Market Structure
 - 2. Worldwide Market Size and Growth
- G. Personal Testing

France

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Suppliers

Germany

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Suppliers

<u>Italy</u>

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Suppliers

<u>Japan</u>

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Suppliers

Table of Contents (continued)

<u>Spain</u>

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Suppliers

U.K.

- A. Executive Summary
- B. Business Environment
- C. Market Structure
- D. Market Size, Growth and Major Suppliers

U.S.A.

- A. Executive Summary
- B. Business Environment
 - 1. Health Care Expenditures
 - 2. Cost Consciousness
 - 3. Reimbursement
 - 4. Industry Consolidation
 - 5. Managed Care
 - a. HMO
 - b. PPO
 - 6. Hospitals
 - 7. Admissions
 - 8. Length of Stay
 - 9. Industry Diversification
 - 10. Physician Demographics
 - 11. Population Aging
 - a. Chronic Illness
 - b. Disease Incidence
 - c. Susceptibility to Iatrogenesis
 - d. Multiple Illness Cases
 - 12. Laboratory Regulations
 - 13. FDA Reform
- C. Market Structure
 - 1. Centralized Testing
 - a. Hospitals
 - b. Commercial/Private Laboratories
 - 2. POT/Decentralized Testing
 - a. Physician Offices/Group Practices

- b. Cancer Clinics
- c. Other Decentralized Testing Locations
- D. Market Size, Growth and Major Suppliers Sales, Instrument Placements and Market Shares

Major Product Development Opportunities

- A. Reagent Kits and Test Systems/Panels
- B. Instrumentation
- C. Computers, Software and Automation
- D. Auxiliary Products

Design Criteria for Decentralized Testing Products

Alternative Market Penetration Strategies

- A. Internal Development
- B. Collaborative Arrangements
- C. University Contracts
- D. Distribution Strategies
 - 1. Marketing Approaches
 - 2. Product Complexity
 - 3. Customer Preference
 - 4. Established Suppliers
 - 5. Emerging Suppliers
 - 6. Major Types of Distributors
 - 7. Market Segmentation Factor

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

Competitive Profiles

- Abbott
- AdnaGen
- Ambrilia Biopharma
- AMDL
- Beckman Coulter
- Becton Dickinson
- Biomedical Diagnostics
- bioMerieux
- Bio-Rad
- CanAG Diagnostics
- CeMines
- Cepheid
- Correlogic Systems
- Dako
- Decode
- Diadexus
- Diagnocure
- Diasorin
- Eiken Chemical
- Enterix
- Enzo Biochem
- Epigenomics
- Exact Sciences
- Fujirebio
- Gen-Probe
- Guided Therapeutics
- Hologic
- Ipsogen
- J&J Diagnostics
- Kreatech
- Kyowa Medex
- Mackay Life Sciences
- Matritech
- Myriad Genetics
- OncoLab
- Panacea Pharmaceuticals
- Polartechnics
- Polymedco
- PreMD
- Qiagen

- Radient Pharmaceuticals
- Roche
- Scienion
- Sequenom
- Siemens Healthcare
- Takara Bio
- Targeted Diagnostics & Therapeutics
- Tosoh
- Veridex
- Wako Pure Chemicals
- Wallac
- Zila

<u>Appendixes</u>

Appendix I: Major Companies Developing or

Marketing Tumor Marker Reagents

and Instruments

Appendix II: Major Universities and Research

Centers Developing Tumor Marker

Detection

Technologies and Applications

Appendix III: Assumed Currency Exchange Rates

List of Tables

Tumor Marker Classification

Major Companies Developing or Marketing ACTH Tests

Major Companies Developing or Marketing AFP Tests

Major Companies Developing or Marketing Beta-2 Microglobulin Tests

Major Companies Developing or Marketing CA 15-3/27.29 Tests

Major Companies Developing or Marketing CA 19-9 Tests

Major Companies Developing or Marketing CA 125 Tests

Major Companies Developing or Marketing Calcitonin Tests

Major Companies Developing or Marketing CEA Tests

Major Companies Developing or Marketing Estrogen Receptor Tests

Major Companies Developing or Marketing Progesterone Receptor Tests

Major Companies Developing or Marketing Ferritin Tests

Major Companies Developing or Marketing Gastrin Tests

Major Companies Developing or Marketing HCG Tests

Major Companies Developing or Marketing Insulin Tests

Major Companies Developing or Marketing NSE Tests

Major Companies Developing or Marketing Occult Blood Tests

Major Companies Developing or Marketing PAP Smear/HPV Tests

Major Companies Developing or Marketing PAP Tests

Major Companies Developing or Marketing PSA Tests

Major Companies Developing or Marketing Lymphocyte Subclassification Tests

Biochemical Markers Potential Applications In Cancer Diagnosis

Oncogenes Potential Applications In Cancer Diagnosis

Major Companies Developing or Marketing Oncogene Tests

Growth Factors Potential Applications
In Cancer Diagnosis

Colony Stimulating Factors Potential Applications in Cancer Diagnosis

Lymphokines Potential Applications In Cancer Diagnosis

Immunohistochemical Stains Potential Applications in Cancer Diagnosis

Executive Summary Table: France, Total Tumor Marker Test Volume and Sales Forecast by Market Segment

France, Estimated Cancer Death Rates Per 100,000 Population

France, Laboratories Performing Tumor Marker Tests by Market Segment

France, Hospital Laboratories Performing Tumor Marker Tests by Bed Size

France, Commercial/Private Laboratories
Performing Tumor Markers by Annual
Test Volume

France, Total Tumor Marker Volume Forecast by Market Segment

France, All Market Segments Major Tumor Marker Test Volume Forecast

France, Hospital Laboratories Major Tumor Marker Test Volume Forecast by Test

France, Commercial/Private Laboratories Major Tumor Marker Test Volume Forecast

France, Total Tumor Marker Sales Forecast By Market Segment

France, All Market Segments Major Tumor Marker Sales Forecast by Test

France, Hospital Laboratories Major Tumor Marker Sales Forecast by Test

France, Commercial/Private Laboratories Tumor Marker Market Forecast by Test

France, ACTH Test Volume and Diagnostics Sales Forecast by Market Segment

France, AFP Test Volume and Diagnostics Sales Forecast by Market Segment

France, Beta-2 Microglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

France, CA 15-3/27.29 Test Volume and Diagnostics Sales Forecast by Market Segment

France, CA 19-9 Test Volume and Diagnostics Sales Forecast by Market

France, CA-125 Test Volume and Diagnostics Sales Forecast by Market Segment

France, Calcitonin Test Volume and Diagnostics Sales Forecast by Market Segment

France, Cathepsin Test Volume and Diagnostics Sales Forecast by Market Segment

France, CEA Test Volume and Diagnostics Sales Forecast by Market Segment

France, Colon-Specific Antigen Test Volume And Diagnostics Sales Forecast by Market Segment

France, Cytokeratins Test Volume and Diagnostics Sales Forecast by Market Segment

France, Estrogen Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

France, Ferritin Test Volume and Diagnostics Sales Forecast by Market Segment

France, Gastrin Test Volume and Diagnostics Sales Forecast by Market Segment

France, HCG Test Volume and Diagnostics Sales Forecast by Market Segment

France, Insulin Test Volume and Diagnostics Sales Forecast by Market Segment

France, Interferons Test Volume and Diagnostics Sales Forecast by Market Segment

France, Interleukins Test Volume and Diagnostics Sales Forecast by Market Segment

France, Lymphocyte Subtyping Test Volume And Diagnostics Sales Forecast by Market Segment

France, NSE Test Volume and Diagnostics Sales Forecast by Market Segment

France, Nucleolar Test Volume and Diagnostics Sales Forecast by Market Segment

France, Occult Blood Test Volume and Diagnostics Sales Forecast by Market Segment

France, Oncogenes Test Volume and Diagnostics Sales Forecast by Market Segment

France, Pancreatic Oncofetal Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

France, PAP Smear Test Volume and Diagnostics Sales Forecast by Market Segment

France, Parathyroid Hormone Test Volume and Diagnostics Sales Forecast by Market Segment

France, Progesterone Receptor Test Volume And Diagnostics Sales Forecast by Market Segment

France, PAP Test Volume and Diagnostics Sales Forecast by Market Segment

France, PSA Test Volume and Diagnostics Sales Forecast by Market Segment

France, S-100 Protein Test Volume and Sales Diagnostics Sales Forecast by Market Segment

France, Serotonin Test Volume and Diagnostics Sales Forecast by Market Segment

France, Sialic Acid Test Volume and Diagnostics Sales Forecast by Market Segment

France, Squamous Cell Carcinoma Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

France, TDT Test Volume and Diagnostics Sales Forecast by Market Segment

France, Thymidine Kinase Test Volume And Diagnostics Sales Forecast by Market Segment

France, Thyroglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

France, TPA Test Volume and Diagnostics Sales Forecast by Market Segment

France, Total Tumor Marker Sales By Major Suppliers

France, AFP Testing Market Diagnostics Sales by Major Supplier

France, CA 15-3 Testing Market Diagnostics Sales by Major Supplier

France, CA 19-9 Testing Market Diagnostics Sales by Major Supplier

France, CA 125 Testing Market Diagnostics Sales by Major Supplier

France, CEA Testing Market Diagnostics Sales by Major Supplier

France, NSE Testing Market Diagnostics Sales by Major Supplier

France, PAP Testing Market Diagnostics Sales by Major Supplier

France, PSA Testing Market Diagnostics Sales by Major Supplier

France, Tumor Marker Testing
Instrumentation Major Systems
Estimated Placements and Installed
Base by Supplier and Model

Executive Summary Table: Germany, Total Tumor Marker Test Volume and Sales Forecast By Market Segment

Germany, Estimated Cancer Death Rates Per 100,000 Population

Germany, Laboratories Performing Tumor Marker Tests by Market Segment

Germany, Hospital Laboratories Performing Tumor Marker Tests by Bed Size

Germany, Commercial/Private Laboratories
Performing Tumor Marker Tests by Annual
Volume

Germany, Total Tumor Marker Test Volume Forecast by Market Segment

Germany, All Market Segments, Major Tumor Marker Test Volume Forecast

Germany, Hospital Laboratories, Major Tumor Marker Test Volume Forecast by Assay

Germany, Commercial/Private Laboratories
Major Tumor Marker Test Volume
Forecast

Germany, Physician Offices/Group Practices Major Tumor Marker Test Volume Forecast

Germany, Total Tumor Marker Sales Forecast by Market Segment

Germany, All Market Segments Major Tumor Marker Sales Forecast by Assay

Germany, Hospital Laboratories, Major Tumor Marker Sales Forecast by Test

Germany, Commercial/Private Laboratories
Major Tumor Marker Sales Forecast by Test

Germany, Physician Offices/Group Practices Major Tumor Marker Sales Forecast by Test

Germany, ACTH Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, AFP Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Beta-2 Microglobulin Test Volume And Diagnostics Sales Forecast by Market Segment

Germany, CA-15-3/27.29 Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, CA-19 Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, CA 125 Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Calcitonin Test Volume and Diagnostic Sales Forecast by Market Segment

Germany, Cathepsin Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, CEA Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Colon-Specific Antigen Test Volume And Diagnostics Sales Forecast by Market Segment

Germany, Cytokeratins Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Estrogen Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Ferritin Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Gastrin Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, HCG, Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Insulin Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Interferons Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Interleukins Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Lymphocyte Subtyping Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, NSE Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Nucleolar Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Occult Blood Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Oncogenes Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Pancreatic Oncofetal Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Pap Smear Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Parathyroid Hormone Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Progesterone Receptor Test Volume And Diagnostics Sales Forecast by Market Segment

Germany, PAP Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, PSA Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, S-100 Protein Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Serotonin Test Volume and Diagnostics Sales Forecast by Mar Segment

Germany, Sialic Acid Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Squamous Cell Carcinoma Antigen Test Volume and Diagnostics Sales Forecast By Market Segment

Germany, TDT Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Thymidine Kinase Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Thyroglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, TPA Test Volume and Diagnostics Sales Forecast by Market Segment

Germany, Total Tumor Marker Sales By Major Supplier

Germany, AFP Testing Market Diagnostics Sales by Major Supplier

Germany CA 15-3/27.29 Testing Market Diagnostics Sales by Major Supplier

Germany CA 19-9 Testing Market Diagnostics Sales by Major Supplier

Germany, CA 125 Testing Market Diagnostics Sales by Major Supplier

Germany, CEA Testing Market Diagnostics Sales by Major Supplier

Germany, PSA Testing Market Diagnostics Sales by Major Supplier

Germany, Tumor Marker Testing Instrumentation Major Systems

Estimated Placements and Installed Base By Supplier and Model

Executive Summary Table: Italy, Total Tumor Marker Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Estimated Cancer Death Rates Per 100,000 Population

Italy, Laboratories Performing Tumor Marker Tests by Market Segment

Italy, Hospital Laboratories Performing Tumor Marker Tests by Bed Size

Italy, Commercial/Private Laboratories
Performing Tumor Markers by Annual
Test Volume

Italy, Total Tumor Marker Test Volume Forecast by Market Segment

Italy, All Market Segments Major Tumor Marker Test Volume Forecast

Italy, Hospital Laboratories Major Tumor Marker Test Volume Forecast

Italy, Commercial/Private Laboratories Major Tumor Marker Test Volume Forecast

Italy, Total Tumor Marker Market Forecast by Market Segment

Italy, All Market Segments Major Tumor Marker Sales Forecast by Test

Italy, Hospital Laboratories Major Tumor Marker Forecast by Test

Italy, Commercial/Private Laboratories Major Tumor Marker Sales Forecast by Test

Italy, ACTH Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, AFP Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Beta-2 Microglobulin Test Volume And Diagnostics Sales Forecast by Market Segment

Italy, CA 15-3/27.29 Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, CA-19-9 Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, CA 125 Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Calcitonin Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, CEA Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Colon Specific Antigen Test Volume And Diagnostics Sales Forecast by Market Segment

Italy, Cytokeratins Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Estrogen Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Ferritin Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Gastrin Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, HCG Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Insulin Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Lymphocyte Subtyping Test Volume And Diagnostics Sales Forecast by Market Segment

Italy, NSE Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Occult Blood Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Oncogenes Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Pancreatic Oncofetal Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, PAP Smear Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Parathyroid Hormone Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Progesterone Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, PAP Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, PSA Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, S-100 Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Serotonin Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Sialic Acid Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Squamous Cell Carcinoma Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, TDT Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Thymidine Kinase Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Thyroglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, TPA Test Volume and Diagnostics Sales Forecast by Market Segment

Italy, Total Tumor Markers Sales by Major Supplier

Italy, AFP Testing Market Diagnostics Sales by Major Supplier

Italy, CEA Testing Market Diagnostics Sales by Major Supplier

Italy, PSA Testing Market Diagnostics Sales by Major Supplier

Italy, Tumor Marker Testing Instrumentation Major Non-Isotopic Systems Estimated Installed Base by Supplier and Model

Executive Summary Table: Japan, Total Tumor Marker Test Volume and Sales Forecast by Market Segment

Japan, Estimated Cancer Death Rates Per 100,000 Population

Japan, Laboratories Performing Tumor Marker Tests by Market Segment

Japan, Hospital Laboratories Performing Tumor Marker Tests by Bed Size

Commercial/Private Laboratories Performing Tumor Marker Tests By Annual Volume

Japan, Total Tumor Marker Test Volume Forecast by Market Segment

Japan, All Market Segments Major Tumor Marker Test Volume Forecast

Japan, Hospital Laboratories Major Tumor Marker Test Volume Forecast by Assay

Japan, Commercial/Private Laboratories Major Tumor Marker Test Volume Forecast

Japan, Total Tumor Marker Sales Forecast by Market Segment

Japan, All Market Segments Major Tumor Marker Sales Forecast by Test

Japan, Hospital Laboratories Major Tumor Marker Sales Forecast by Test

Japan, Commercial/Private Laboratories Major Tumor Marker Sales Forecast by Test

Japan, ACTH Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, AFP Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Beta-2 Microglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, CA 15-3/27.29 Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, CA 19-9 Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, CA-125 Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Calcitonin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Cathepsin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, CEA Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Chromogranin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Colon-Specific Antigen Test Volume And Diagnostics Sales Forecast by Market Segment

Japan, Cytokeratins Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Estrogen Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Ferritin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Gastrin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, HCG Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Insulin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Interferons Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Interleukins Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Lymphocyte Subtyping Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, NSE Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Nucleolar Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Occult Blood Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Oncogenes Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Pancreatic Oncofetal Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, PAP Smear Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Parathyroid Hormone Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Progesterone Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, PAP Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, PSA Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, S-100 Protein Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Serotonin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Sialic Acid Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Squamous Cell Carcinoma Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, TDT Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Thymidine Kinase Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Thyroglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, TPA, Test Volume and Diagnostics Sales Forecast by Market Segment

Japan, Total Tumor Marker Sales by Major Supplier

Japan, AFP Testing Market Diagnostics Sales by Major Supplier

Japan, CA 15-3/27.29 Testing Market Diagnostics Sales by Major Supplier

Japan, CA 19-9 Testing Market Diagnostics Sales by Major Supplier

Japan, CA 125 Testing Market Diagnostics Sales by Major Supplier

Japan, Calcitonin Testing Market Diagnostics Sales by Major Supplier

Japan, CEA Testing Market Diagnostics Sales by Major Supplier

Japan, NSE Testing Market Diagnostics Sales by Major Supplier

Japan, PAP Testing Market Diagnostics Sales by Major Supplier

Japan, PSA Testing Market Diagnostics Sales by Major Supplier

Japan, Tumor Marker Testing
Instrumentation, Major System
Estimated Placements and Installed Base
By Supplier and Model

Executive Summary Table: Spain, Total Tumor Marker Test Volume and Sales Forecast by Market Segment

Spain, Estimated Cancer Death Rates Per 100,000 Population

Spain, Laboratories Performing Tumor Marker Tests by Market Segment

Spain, Hospital Laboratories Performing Tumor Marker Tests by Bed Size

Spain, Commercial/Private Laboratories
Performing Tumor Markers by
Annual Test Volume

Spain, Total Tumor Marker Test Volume Forecast by Market Segment

Spain, All Market Segment Major Cancer Diagnostic Test Volume Forecast

Spain, Hospital Laboratories Major Cancer Diagnostic Test Volume Forecast by Test

Spain, Commercial/Private Laboratories Major Tumor Marker Test Volume Forecast

Spain, Total Tumor Marker Sales Forecast by Market Segment

Spain, All Market Segments Major Tumor Marker Sales Forecast by Test

Spain, Hospital Laboratories Major Tumor Marker Sales Forecast by Test

Spain, Commercial/Private Laboratories Major Tumor Marker Sales Forecast by Test

Spain, AFP Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Beta-2 Microglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, CA 15-3 Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, CA 19-9 Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, CA-125 Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Calcitonin Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, CEA Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Colon-Specific Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Estrogen Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Ferritin Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Gastrin Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, HCG Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Insulin Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Lymphocyte Subtyping Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, NSE Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Occult Blood Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Oncogenes Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Pancreatic Oncofetal Antigen Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, PAP Smear Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Parathyroid Hormone Test Volume And Diagnostics Sales Forecast by Market Segment

Spain, Progesterone Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, PAP Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, PSA Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, S-100 Protein Test Volume And Diagnostics Sales Forecast by Market Segment

Spain, Serotonin Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Sialic Acid Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Squamous Cell Carcinoma Antigen
Test Volume and Diagnostics Sales Forecast
by Market Segment

Spain, TDT Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Thymidine Kinase Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Thyroglobulin Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, TPA Test Volume and Diagnostics Sales Forecast by Market Segment

Spain, Total Tumor Marker Sales by Major Supplier

Spain, AFP Testing Market Diagnostics Sales by Major Supplier

Spain, CA 15-3/27.29 Testing Market Diagnostics Sales by Major Supplier

Spain, 19-9 Testing Market Diagnostics Sales by Major Supplier

Spain, CA 125 Testing Market Diagnostics Sales by Major Supplier

Spain, CEA Testing Market Diagnostics Sales by Major Supplier

Spain, PSA Testing Market Diagnostics Sales by Major Supplier

Spain, Tumor Marker Testing Instrumentation Major Systems Estimated Placements and Installed Base by Supplier and Model

Executive Summary Table: U.K., Total Tumor Marker Test Volume and Sales Forecast by Market Segment

- U.K., Estimated Cancer Death Rates Per 100,000 Population
- U.K., Laboratories Performing Tumor Marker Tests by Market Segment
- U.K., Hospital Laboratories Performing Tumor Marker Tests by Bed Size
- U.K., Commercial/Private Laboratories
 Performing Tumor Marker Tests by
 Annual Test Volume
- U.K., Total Tumor Marker Testing Volume Forecast by Market Segment
- U.K., All Market Segments Major Tumor Marker Test Volume Forecast
- U.K., Hospital Laboratories Major Tumor Marker Test Volume Forecast by Assay
- U.K., Commercial/Private Laboratories Major Tumor Marker Test Volume Forecast
- U.K., Total Tumor Marker Sales Forecast by Market Segment
- U.K., All Market Segments Major Tumor Marker Sales Forecast by Test
- U.K., Hospital Laboratories Major Tumor Marker Sales Forecast by Test
- U.K., Commercial/Private Laboratories Major Tumor Marker Sales Forecast by Test

- U.K., ACTH Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., AFP Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Beta-2 Microglobulin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., CA 15-3/27.29 Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., CA 19-9 Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., CA-125 Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Calcitonin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., CEA Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Colon-Specific Antigen Test Volume And Diagnostics Sales by Market Segment
- U.K., Cytokeratins Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Estrogen Receptor Test Volume and Diagnostics Sales Forecast by Market Segment

List of Tables (continued)

- U.K., Ferritin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Gastrin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., HCG Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Insulin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Lymphocyte Subtyping Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., NSE Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Occult Blood Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Oncogenes Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Pancreatic Oncofetal Antigen Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., PAP Smear Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Parathyroid Hormone Test Volume and Diagnostics Sales Forecast by Market Segment

- U.K., Progesterone Receptor Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., PAP Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., PSA Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., S-100 Protein Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Serotonin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Sialic Acid Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Squamous Cell Carcinoma Antigen Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., TDT Test Volume and Diagnostics Sales Forecast by Market Segment
- U.K., Thymidine Kinase
 Test Volume and Diagnostics
 Sales Forecast by Market Segment
- U.K., Thyroglobulin
 Test Volume and Diagnostics
 Sales Forecast by Market Segment
- U.K., TPA Test Volume and Diagnostics Sales Forecast by Market Segment

- U.K., Total Tumor Marker Sales and Market Shares Forecast
- U.K., CEA Testing Market Diagnostics Sales by Major Supplier
- U.K., PSA Testing Market Diagnostics Sales by Major Supplier
- U.K., Tumor Marker Testing
 Instrumentation Major Systems
 Estimated Placements and Installed Base
 By Supplier and Model

Executive Summary Table: U.S., Total Tumor Marker Test Volume and Sales Forecast by Market Segment

- U.S., Estimated New Cancer Cases and Deaths
- U.S., Estimated Cancer Death Rates Per 100,000 Population
- U.S., Laboratories Performing Tumor Marker Tests by Market Segment
- U.S., Hospital Laboratories Performing Tumor Marker Tests by Bed Size
- U.S., Commercial/Private Laboratories
 Performing Tumor Marker Tests by
 Annual Test Volume
- U.S., Physician Office Laboratories Performing Tumor Marker Tests by Practice Size
- U.S., Total Tumor Marker Test Volume Forecast by Market Segment

- U.S., All Market Segments Major Tumor Marker Test Volume Forecast
- U.S., Hospital Laboratories Major Tumor Marker Test Volume Forecast by Test
- U.S., Commercial/Private Laboratories Major Tumor Marker Test Volume Forecast
- U.S., Physician Offices/Group Practices
 Major Tumor Marker Test Volume
 Forecast
- U.S., Cancer Clinics Major Tumor Marker Test Volume Forecast by Assay
- U.S., Total Tumor Marker Sales Forecast by Market Segment
- U.S., All Market Segment Major Tumor Marker Sales Forecast by Test
- U.S., Hospital Laboratories Major Tumor Marker Sales Forecast by Test
- U.S., Commercial/Private Laboratories
 Major Tumor Marker Sales Forecast by Test
- U.S., Physician Offices/Group Practices Major Tumor Marker Sales Forecast by Test
- U.S., Cancer Clinics Major Tumor Marker Sales Forecast by Test
- U.S., ACTH Test Volume and Diagnostics Sales Forecast by Market Segment

- U.S., AFP Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Beta-2 Microglobulin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., CA 15-3/27.29 Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., CA 19-9 Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., CA-125 Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Calcitonin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Cathepsin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., CEA Test Volume and Diagnostics Sales by Market Segment
- U.S., Chromogranin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Colon-specific Antigen Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Cytokeratins Test Volume and Diagnostics Sales Forecast by Market Segment

- U.S., Estrogen Receptor Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Ferritin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Gastrin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., HCG Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Insulin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Interferons Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Interleukins Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Lymphocyte Subtyping Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., NSE Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Nucleolar Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Occult Blood Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Oncogenes Test Volume and Diagnostics Sales Forecast by Market Segment

- U.S., Pancreatic Oncofetal Antigen Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., PAP Smear Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Parathyroid Hormone Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Progesterone Receptor Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., PAP Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., PSA Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., S-100 Protein Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Serotonin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Sialic Acid Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Squamous Cell Carcinoma Antigen Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., TDT Test Volume and Diagnostics Sales Forecast by Market Segment

- U.S., Thymidine Kinase
 Test Volume and Diagnostics
 Sales Forecast by Market Segment
- U.S., Thyroglobulin Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., TPA Test Volume and Diagnostics Sales Forecast by Market Segment
- U.S., Total Tumor Marker Sales By Major Supplier
- U.S., AFP Testing Market Diagnostics Sales by Major Supplier
- U.S., CA 125 Testing Market Diagnostics Sales by Major Supplier
- U.S., CA 15-3/27.29 Testing Market Diagnostics Sales by Major Supplier
- U.S., CEA Testing Market Diagnostics Sales by Major Supplier
- U.S., Ferritin Testing Market Diagnostics Sales by Major Supplier
- U.S., HCG Testing Market
 Diagnostics Sales by Major Supplier
- U.S., Insulin Testing Market Diagnostics Sales by Major Supplier
- U.S., PAP Testing Market Diagnostics Sales by Major Supplier

- U.S., PSA Testing Market Diagnostics Sales by Major Supplier
- U.S., Tumor Marker Testing Instrumentation Major Systems Estimated Placements and Installed Base by Supplier and Model