

# **2015-2019 New Frontiers in the US Cancer Diagnostics Market: Business Challenges, Emerging Technologies, Competitive Landscape**

<https://marketpublishers.com/r/26581BD8BCCEN.html>

Date: August 2015

Pages: 620

Price: US\$ 7,840.00 (Single User License)

ID: 26581BD8BCCEN

## **Abstracts**

Complete report \$9,800. DataPack (test volumes, sales forecasts, supplier shares) \$6,400.

2015-2019 New Frontiers in the U.S. Cancer Diagnostics Market: Business Challenges, Emerging Technologies, Competitive Landscape is VPGMarketResearch's new study of the major business opportunities emerging in the U.S. cancer diagnostics market during the next five years. The report examines trends in the U.S. cancer diagnostics markets, reviews current and emerging assays; analyzes potential applications of new diagnostic technologies; forecasts sales of major tumor markers by market segment; profiles leading players and potential market entrants; and identifies specific business opportunities for suppliers.

### **Rationale**

The cancer diagnostics market is on the verge of explosion, as the researchers approach major technological breakthroughs in tumor diagnosis and therapy, discover new specific antigens, and unlock the mystery of the genetic basis of the disease. During the next five years, the worldwide cancer diagnostics market is promising to be an exciting, dynamic and rapidly expanding field. Anticipated technological breakthroughs will create numerous opportunities for determining genetic predisposition, detecting specific tumors, and monitoring biological response to cancer therapy. The rise in geriatric population will further compound the growing demand for malignancy assays and the rapid market expansion worldwide.

### **U.S. Market Overview**

Five-year test volume and sales projections.

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

Estimated universe of laboratories performing cancer diagnostic testing.

Cancer statistics, etiology and recent developments.

### Business 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.

### Over 200 Current and Emerging Cancer Diagnostic Test

Biochemical Markers

Oncogenes

Growth Factors

Hormones

Colony Stimulating Factors

Lymphokines

Immunohistochemical Stains, and others.

ACTH, AFP, Beta-2 Microglobulin, CA 15-3/27.29, CA 19-9, CA 125, Calcitonin, Cathepsin, CEA, Chromogranin, Colon-Specific Antigen, Cytokeratins, Estrogen Receptor, Ferritin, Gastrin, HCG, Insulin, Interferons, Interleukins, Lymphocyte Subtyping, Neuron-Specific Enolase, Nucleolar, Occult Blood, Oncogenes, Pancreatic Oncofetal Antigen, Pap Smear, Parathyroid Hormone, Progesterone Receptor, Prostatic Acid Phosphatase, Prostatic Specific Antigen, S-100 Protein, Serotonin, Sialic Acid, Squamous Cell Carcinoma Ag, TDT, Thymidine Kinase, Thyroglobulin, Tissue Polypeptide Antigen, and others.

### Supplier Shares, Sales and Volume Forecasts

Sales and market shares of major cancer diagnostic product suppliers by individual test.

Five-year test volume and sales forecasts for major tumor markers by market segment, including:

Hospitals

Commercial/Private Laboratories

Physician Offices/Group Practices

Cancer Clinics

### Instrumentation Review

Analysis of major molecular diagnostic and immunodiagnostic analyzers used for cancer testing, including their operating characteristics, features and selling prices.

### Technology Assessment

Assessment of latest molecular diagnostic methods, biochips/Microarrays, biosensors, monoclonal antibodies, immunoassays, chromosome analysis, IT, artificial intelligence, flow cytometry, and other technologies and their potential applications for cancer diagnostic testing.

Review of competing/complementing technologies, including CT, MRI, NMR, PET and photonics spectroscopy.

Extensive listings of companies, universities and research centers developing new cancer diagnostic tests and detection technologies.

## Competitive Strategies

Strategic assessments of major suppliers and start-up firms developing innovative technologies and products, including their sales, product portfolios, marketing tactics, collaborative arrangements, and new products in R&D.

The companies analyzed in the report include

Abbott

AdnaGen/Alere

Agilent Technologies

Applied Gene Technologies

Arca Biopharma

Beckman Coulter/Danaher

Becton Dickinson

Biomedical Diagnostics

bioMerieux

Bio-Rad

CellSearch

Cepheid

Correlogic Systems/Vermillion

Decode Genetics

Diadexus

Diagnocure

DiaSorin

Eiken Chemical

Elitech Group

Epigenomics

Enterix

Enzo Biochem

Exact Sciences

Fujirebio

Guided Therapeutics

Hologic/Gen-Probe

Kreatech/Leica

Kyowa Medex

Mackay Life Sciences

Myriad Genetics

OncoLab

Ortho-Clinical Diagnostics

Panacea Pharmaceuticals

Polartechinics

Polymedco

PreMD

Qiagen

Quest Diagnostics

Radiant Pharmaceuticals

Roche

Scienion

Sequenom

Siemens Healthcare

Takara Bio

Targeted Diagnostics & Therapeutics

Thermo Fisher

Tosoh

Veridex

Wako Pure Chemicals

Wallac/PE

Zilla

Contains 620 pages and 103 tables

## Contents

### **I. INTRODUCTION**

### **II. MAJOR PRODUCT DEVELOPMENT OPPORTUNITIES**

- A. Reagent Kits and Test Systems/Panels
- B. Instrumentation
- 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
  - 1. Marketing Approaches
  - 2. Product Complexity
  - 3. Customer Preference
  - 4. Established Suppliers
  - 5. Emerging Suppliers
  - 6. Major Types of Distributors
  - 7. Market Segmentation Factor

### **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 OVERVIEW**



**A. Cancer Statistics and Etiology**

1. Breast Cancer
2. Lung Cancer
3. Colon and Rectum Cancer
4. Prostate Cancer
5. Stomach Cancer
6. Leukemia
7. Lymphoma
8. Oral Cancer
9. Skin Cancer
10. Uterine Cancer
11. Ovarian Cancer
12. Bladder Cancer

**B. Major Current And Emerging Cancer Diagnostic Tests**

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. Carcinoembryonic Antigen (CEA)
11. Estrogen and Progesterone Receptors
12. Ferritin
13. Gastrin
14. Human Chorionic Gonadotropin (HCG)
15. Insulin
16. NSE
17. Occult Blood
18. PAP Smear/HPV
19. Prostatic Acid Phosphatase (PAP)
20. Prostate-Specific Antigen (PSA)
21. Squamous Cell Carcinoma Antigen (SCC)
22. T and B Lymphocytes
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

BCL-2

BRCA1

CD44

C-fos

C-myb

C-myc

CYP-17

Erb-B

HPC1

N-myc

P40

P51

P53

PIK3CA

PTI-1

Ras

Reg

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

Antineuronal Antibodies

7B2

B72.3

Bax

BCD-F9

BLCA-4

Blood Group Antigens A,B,H

CA

CA 72-4/TAG-72

CA

CA-242

CA-549

CAM

CAR-3

Cathepsin-D

Chromogranin A and B

Cluster 1 Antigen

Cluster-5/5A Antigen

CTA

CU18

DR-70

DU-PAN-2

Endometrial Bleeding Associated Factor

Endostatin

Epithelial Membrane Antigen

Feulgen Hydrolysis

Fibronectin  
FSH  
(1->3)-L-fucosyltransferase  
Gastrin-Releasing Peptide (GRP)  
GDCFP-15  
Glucagon  
Glycoamines  
H23  
Her-2  
Human Carcinoma Antigen  
HPA  
HSP27  
Intermediate Filaments  
Cytokeratins/CK18/Cyfra 21-1  
Desmin  
Gliofibrillary Acid Protein  
Neurofilaments  
Vimentin  
KA  
Kinases  
KP16D3  
LAI  
Leukocyte Common Antigen  
Lewis Antigens  
Lysophosphatidic Acid (LPA)  
Ma 695/Ma  
MABDF3  
MAG  
ME1  
Minactivin  
MN/CA9  
MSA  
Mucin Cancer Antigen (MCA)  
Multiple Tumor Suppressor  
Myosin  
NEA-130  
NMP22  
OA-519  
Opioid Peptides

P-glycoprotein  
Pancreatic Oncofetal Antigen (POA)  
Placental Lactogen  
PR92  
Proliferative Index, Ki-67  
Px  
RB Inactivation/Deletion  
Ret  
SCCL  
Selectin  
Sialic Acid  
Sialyl SSEA-1/SLX  
SN10  
Somatostatin  
TA-90  
TABA  
Tachykinin  
TAG  
TPS  
Troponin  
Tubulin  
VCAM  
VEGF  
Villen

#### C. Instrumentation Review And Market Needs

#### D. Current and Emerging Technologies

##### 1. Molecular Diagnostics

- a. Technology Overview
- b. Amplification Methods
- c. Sequencing
- d. Microarrays/Biochips

##### 2. Monoclonal and Polyclonal Antibodies

##### 3. 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
- f. Latex Agglutination
- g. Immunoprecipitation
- h. Affinity Chromatography
- e. Liposome Flow-Injection Immunoassay
- 4. 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
- 5. Artificial Intelligence
- 6. Flow Cytometry
- 7. Two Dimensional Gel Electrophoresis (2-DGE)
- 8. Biosensors
- 9. Competing/Complementing Technologies
  - a. CT
  - b. MRI
  - c. NMR
  - d. PET
  - e. Photonics Spectroscopy
- E. Personal Testing

## **VII. U.S.A.**

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

## **VIII. COMPETITIVE PROFILES**

Abbott  
AdnaGen  
Agilent Technologies  
Applied Gene Technologies  
Arca Pharma  
Beckman Coulter/Danaher  
Becton Dickinson  
Biomedical Diagnostics  
bioMerieux  
Bio-Rad  
CellSearch  
Cepheid  
Correlogic Systems/Vermillion  
Decode Genetics  
Diadexus  
Diagnocure  
Diasorin  
Eiken Chemical  
Elitech Group  
Epigenomics  
Enterix  
Enzo Biochem  
Exact Sciences  
Fujirebio  
Guided Therapeutics  
Hologic/Gen-Probe  
Kreatech/Leica  
Kyowa Medex  
Mackay Life Sciences  
Myriad Genetics  
OncoLab  
Ortho-Clinical Diagnostics  
Panacea Pharmaceuticals  
Polartech  
Polymedco  
PreMD  
Qiagen  
Quest Diagnostics  
Radiant Pharmaceuticals

Roche  
Scienion  
Sequenom  
Siemens Healthcare  
Takara Bio  
Targeted Diagnostics & Therapeutics  
Thermo Fisher  
Tosoh  
Veridex  
Wako Pure Chemicals  
Wallac/PE  
Zila

## **IX. APPENDIX: MAJOR UNIVERSITIES AND RESEARCH CENTERS DEVELOPING CANCER DIAGNOSTIC TECHNOLOGY AND APPLICATIONS**



## List Of Tables

### 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: 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 Test  
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 Forecast 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., ACTH Testing Market Diagnostics Sales by Major Supplier  
U.S., AFP Testing Market Diagnostics Sales by Major Supplier  
U.S., Beta-2 Microglobulin Testing Market Diagnostics Sales by Major Supplier  
U.S., CA 15-3/27.29 Testing Market Diagnostics Sales by Major Supplier  
U.S., CA 19-9 Testing Market Diagnostics Sales by Major Supplier  
U.S., CA 125 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., Parathyroid Hormone Testing Market Diagnostics Sales by Major Supplier  
U.S., PAP Testing Market Diagnostics Sales by Major Supplier  
U.S., Progesterone Receptor Testing Market Diagnostics Sales by Major Supplier  
U.S., PSA Testing Market Diagnostics Sales by Major Supplier

## I would like to order

Product name: 2015-2019 New Frontiers in the US Cancer Diagnostics Market: Business Challenges, Emerging Technologies, Competitive Landscape

Product link: <https://marketpublishers.com/r/26581BD8BCCEN.html>

Price: US\$ 7,840.00 (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/26581BD8BCCEN.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

