

# Cancer Profiling and Pathways: Technologies and Global Markets

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# **Abstracts**

#### **REPORT SCOPE:**

Cancer biomarkers have gained significant importance in the drug-development process, and the market is an emerging segment. To gain an understanding of the market dynamics, market size and competitive landscape, a detailed analysis of cancer biomarker market and cancer profiling technologies and new developments is needed. Microarray technologies provide analysis of tens of thousands of molecules for a variety of assays, including drug binding, molecular interactions, enzyme activity and pathway identification. These microarrays, which include DNA microarrays, protein microarrays, tissue microarrays, low complexity microarrays and carbohydrate microarrays, are excellent tools for gene expression profiling, biomarker profiling and diagnostics.?

Pharmaceutical and biotechnology researchers use microarrays to streamline drug target identification, selection, validation and predictive testing. Rapid growth in the clinical research and diagnostic devices markets holds great potential for applications of microarray technology, including basic research, clinical trials and diagnostic devices. This report examines various microarray platforms and the technologies that are utilized to detect DNA and proteins for the purpose of drug discovery, disease diagnosis and disease monitoring. This report also examines companies that are actively developing and marketing microarray instrumentation or microarray biochips.

The report categorizes the biomarkers and profiling market and provides market data, market drivers, trends and opportunities, top-selling products, key players and competitive outlook. This report will also provide market tables and also provides company profiles.



This report analyzes the cancer profiling and pathways market: technologies market, tools market, and application market (diagnosis, drug development and discovery). This report also examines recent studies, microRNA detection and profiling, clinically oriented microRNA profiling in several human cancers. The report covers epigenetic, methylation and miRNA products in development, products in clinical trials, currently marketed and clinical-stage development products. Relationship between miRNAs and epigenetics is also examined. This report categorizes the market for epigenetics, forecasting the market value in revenue by analyzing the current and future trends in research, diagnostics and therapeutics industries. This report also looks at SNPs analysis instruments, reagents, software and services, providing information critical to understanding the business behind this new technology.

The following technologies and segments are excluded from this report: detailed instruments, pharmacogenomics, combinatorial chemistry, biochip, bioinformatics and high-throughput screening (HTS). Uses of emerging technologies in drug discovery such as lab-on-a-chip (LOAC), nanotechnology, and RNA interference (RNAi) also are not discussed here.

#### **REPORT INCLUDES:**

91 tables

An overview of the global market for cancer profiling and pathways

Analyses of global market trends, with data from 2017 and 2018, and projections of compound annual growth rates (CAGRs) through 2023

Discussion of products in this market, newly emerging tools, diagnostics and therapeutics, and their impacts on the market

Examination of evolving methods, such as microarray analysis, multiplex PCR, and quantitative real-time PCR, which are integral to deciphering molecular mechanisms involved in gene function, biological development, and disease progression, and are important tools in the discovery and development of new drug targets and diagnostic biomarkers

Identification of important cancer profiling techniques, market shares by types of products on the market, and market shares by company, as well as types of cancers and biomarkers



Coverage of epigenetic, methylation, and miRNA products in development, products in clinical trials and currently marketed, and clinical-stage development products

Company profiles of key players in the market



# **Contents**

#### **CHAPTER 1 INTRODUCTION**

Study Goals and Objectives
Reasons for Doing the Study
Scope of Report
Intended Audience
Methodology
Information Sources
Analyst's Credentials
BCC Custom Research

Related BCC Research Reports

#### **CHAPTER 2 SUMMARY AND HIGHLIGHTS**

Cancer Profiling and Pathways

#### **CHAPTER 3 OVERVIEW**

Introduction

**Biomarkers** 

Guidelines

**Screening Tests** 

Early Detection and Diagnosis of Cancer

Pathway Profiling

Linking Cancer Disease through Pathway Profiling

Molecular Profiling

**Historical Facts** 

Molecular Profiles

Cancer Profiling

Challenges

Clinical Utility of Molecular Profiling

Pathological Classification

Molecular Profiling Approaches

Cancer Profiling: Future Goals

#### **CHAPTER 4 CURRENT PROFILING TECHNIQUES**



Genomics

Genomic Profiling

Microarrays

Comparative Genomic Hybridization (CGH)

**Key Companies** 

**Key Players** 

Microarrays to Clinical Problems

Single Nucleotide Polymorphism (SNP)

Multi-color FISH

Companies

**DNA Sequencing** 

**Emerging DNA Sequencing Technologies** 

High-throughput Sequencing

Other Sequencing Technologies

**Cancer Applications** 

Next-Gen Sequencing

**Next-Generation Companies** 

ABI/SOLID

Other Methods

Patents and Sequencing

Summary

**Next-Generation Sequencing Technologies** 

Next-Generation Sequencing: Future

Genomics and Cancer—Some Examples

Mutations Predicting Resistance to Targeted Therapies

Sequencing and the Clinic

Transcriptomic Profiling

Microarray-based Gene Expression Profiling

Tiling Arrays

qRT-PCR

**Cancer Applications** 

**Emerging Microarray Technologies** 

**Future** 

#### **CHAPTER 5 EPIGENOMIC PROFILING**

Overview and Introduction to the Epigenetics Landscape

Cancer Applications
DNA Methylation

Cancer Profiling and Pathways: Technologies and Global Markets



microRNA

**Epigenetic Changes and Cancer Stem Cells** 

**Epigenetic Therapy for Cancer** 

Leading Epigenetic Companies

Epigenetics and MicroRNA Profiling—Finding Pathways to Treatment

MicroRNAs and Therapeutic Applications in Cancer

MicroRNAs as Prognostic and Therapeutic Biomarkers

Anti-Cancer Drugs and microRNA Targets

Case Study: Epigenetic Silencing of the Intronic microRNA Mir-342 in Colorectal Cancer

Diagnostic and Therapeutic microRNA Strategies in Cancer

Therapeutic Potential

Therapeutic Strategies

MicroRNAs in Disease Diagnostics

Circulating microRNAs

MicroRNA Profiling Methods

Clinical microRNA Diagnostics

MicroRNAs in Therapeutics

MicroRNA Patents and Outlook

**Future** 

Methylation Markers

DNA Methylation, an Epigenetic Process

**Current Methods and Products** 

Clinical Implications

**Future Directions** 

**Epigenetic Diagnostic Development** 

**Epigenetic Drugs** 

**HDAC Inhibitors** 

**Epigenetic Therapeutic Development** 

**Key Players** 

#### **CHAPTER 6 PROTEOMICS**

Proteomics and Protein Profiling

Proteomics Protein Profiling Approaches

**Techniques** 

Applications of Proteomic Techniques in Cancer Research

Technologies and Limitations

Proteomics and Initiatives

**Cancer Applications** 



Proteomics in the Treatment of Cancer

Clinical Applications of Proteomics

Proteomic Approaches in Therapeutic Targets

**Key Players** 

Proteomics-Based Diagnostic Products

Proteomic Research Centers

Clinical Trial Using Proteomics Technologies for Personalized Medicine

Proteomics and Medicine

**Proteomics Market** 

#### **CHAPTER 7 GLYCOMICS**

What is Glycomics?

**Techniques** 

Analytical High-Throughput Technologies

Emergence of Glycoarrays

Glycoinformatics

**Biomedical Applications** 

Glycomics's Relationship with Other "Omics" Technologies

Glycomics for Biomarker Discovery

Cancer and Glycomics

Glycomics-Biomarkers for Ovarian Cancer

U.S. Patents on Glycomics

#### **CHAPTER 8 METABOLOMICS**

What is Metabolomics?

Metabolome

**Techniques** 

**Detection Methods** 

Metabolomics and Drug Discovery

Biomarker Identification

# **CHAPTER 9 BIOINFORMATICS, DATABASES AND PATHWAY ANALYSIS**

# **CHAPTER 10 CANCER PROFILING AND CLINICAL DEVELOPMENT**

Biomarkers



### Cancer and Biomarkers

#### **CHAPTER 11 MARKET**

Global DNA Diagnostics Market

The Cancer Diagnostics Market

Cancer Diagnostic Tests

The Cancer/Tumor Profiling Market

Personalized Medicine

Cancer Biomarker Testing Market

**Genomics Market** 

SNP Genotyping and Analysis Market

Microarray/Biochips Market

Diagnostic Microarrays

**DNA Sequencing Market** 

**PCR Market** 

**Epigenetics and Market** 

miRNA Market

Epigenetics and Cancer Market and Future Growth

Proteomics in the Pharma Industry

Protein Microarrays and Trends

The Metabolomics Market

**Future** 

Conclusion



# **List Of Tables**

# **LIST OF TABLES**

Summary Table: Global Cancer Profiling Technologies Market, by Type, Through 2023

Table 1: Technical Approaches for Tumor Molecular Profiling

Table 2: Different Tools for Molecular Profiling of Cancer

Table 3: Genomics: Technologies

Table 4: Applications Market

Table 5: Segment Types

Table 6: List of Techniques/Tools for Genomic Profiling

Table 7: Global Genomics Market for Cancer Profiling Technologies, Through 2023

Table 8: Commonly Used DNA Microarrays

Table 9: Genomic Tests

Table 10: Selected Companies with Microarray Technologies

Table 11: Key Companies

Table 12: Companies with Sequencing Technologies Next-Generation Sequencers

Table 13: Sequencing Patents Awarded

Table 14: Mutations Identified in Cancer

Table 15: Consortium Listed Responsibilities

Table 16: Transcriptomic Techniques

Table 17: miRNA and siRNA-a Comparison

Table 18: Epigenetic Drugs Approved by the U.S. FDA

Table 19: HDAC Inhibitors

Table 20: Selected Epigenetic Companies

Table 21: Currently Used microRNA Techniques

Table 22: MicroRNA Expression in Cancer

Table 23: Epi-miRNAs Regulating Effectors of the Epigenetic Machinery

Table 24: List of Predicted Targets That are Known Genes Affected in Colon Cancer

Table 25: List of Predicted Targets That are Known Genes Affected in Pancreatic

Cancer

Table 26: miRNAs Differentially Expressed Between CRC and Normal Colorectal Tissue

Table 27: miRNAs Differentially Expressed Between Normal Colon and Early-Stage

Colorectal Cancer (Stages I and II)

Table 28: miRNAs Differentially Expressed in Early- (I and II) Vs Late-Stage (III and IV)

Disease

Table 29: Pathways Targeted by CRC miRNAs

Table 30: MicroRNAs as Prognostic Indicators and Therapeutic Targets: Potential Effect

on Breast Cancer Management



Table 31: MicroRNAs (miRs) with Altered Expression in Ovarian Carcinoma

Table 32: MicroRNA-based Therapeutics: Development Status

Table 33: Selected microRNAs in Development and Cancer

Table 34: microRNA Patents

Table 35: Global microRNA Market for Cancer Profiling Technologies, Through 2023

Table 36: Selected Companies for miRNA-Specific Tools and Reagents

Table 37: Intrinsic Classification of Breast Cancer, by Gene Expression Profiles and Cell

Surface Hormonal Expression

Table 38: Select Epigenetic-based Diagnostic Companies

Table 39: Selected Methylation Tests for Cancer

Table 40: Global Epigenetics Market for Cancer Profiling Technologies, Through 2023

Table 41: Epigenetic Drugs for Cancer-Approved/Late-Stage Clinical Trials

Table 42: Methylation Markers in Development

Table 43: Selected Companies with Methylation Products

Table 44: Methylation Markers/Tests-Patents

Table 45: Biomarker Identified Using Two-Dimensional Electrophoresis (2-DE)

Table 46: Biomarker Identified using Mass Spectroscopy (MS)

Table 47: Antibody Array Vendors

Table 48: Global Proteomics Market for Cancer Profiling Technologies, Through 2023

Table 49: The Seven Tumor Glycome Laboratories

Table 50: Clinical Trials and Glycomics

Table 51: U.S. Patents on Glycomics

Table 52: Key Predictive Biomarkers for Trastuzumab Therapy

Table 53: Predictive Biomarkers for EGFR TKI Therapies in Lung Cancer

Table 54: Global DNA Diagnostics Market, Through 2023

Table 55: Cancer Profiling Market: Segment Types

Table 56: Global Cancer Profiling Technologies Market, Through 2023

Table 57: Cancer Profiling Market: Applications

Table 58: Cancer Profiling Market: Technologies

Table 59: Global Biomarkers Market, Through 2023

Table 60: Selected Players

Table 61: U.S. Biomarker Cancer Testing Market, Through 2023

Table 62: Global Genomics Market for Cancer Profiling Technologies, Through 2023

Table 63: Global SNP Genotyping Market, Through 2023

Table 64: Global Biochips Market, Through 2023

Table 65: Microarray Markets

Table 66: Some Major BioChip Companies

Table 67: Microarrays: Modalities

Table 68: Global Diagnostic Microarray Market for Cancer Profiling Technologies,



Through 2023

Table 69: Some Commercially Available Cancer Diagnostic Devices Based on

Microarray Technology

Table 70: Microarray Technologies: Key Companies and Products

Table 71: Global DNA Microarray Market, Through 2023

Table 72: MicroArray Products

Table 73: Global Next-Generation Sequencing Market, Through 2023

Table 74: The Next-Generation Sequencing (NGS) Market: Platforms

Table 75: Next-Generation Sequencing-Based Target Enrichment Industry Company

Platform Method

Table 76: Noninvasive Prenatal Diagnostics Potential Future Competitors

Table 77: Global Polymerase Chain Reaction Market, Through 2023

Table 78: Key PCR Companies

Table 79: Real-Time (QRTPCR) PCR Selected Companies

Table 80: Global Digital (d)PCR and gPCR Market, Through 2023

Table 81: Global Epigenetics Market, Through 2023

Table 82: Epigenetics Arrays and Selected Cancer Profiling Companies

Table 83: Epigenetic Drugs: Approved by the FDA and Commercially Available

Table 84: Epigenetics and Selected Companies

Table 85: Epigenetic Diagnostic Tests

Table 86: Global miRNA Market for Cancer Profiling Technologies, Through 2023

Table 87: miRNA Market Segments

Table 88: Selected Companies with Methylation Products

Table 89: Global Proteomics Market for Cancer Profiling Technologies, Through 2023

Table 90: Selected Companies Offering, Developing or Partnering to Develop

**Companion Diagnostics** 



# **List Of Figures**

#### LIST OF FIGURES

Summary Figure: Global Cancer Profiling Technologies Market, by Type, 2017-2023

Figure 1: Global Genomics Market for Cancer Profiling Technologies, 2017-2023

Figure 2: Global microRNA Market for Cancer Profiling Technologies, 2017-2023

Figure 3: Global Epigenetics Market for Cancer Profiling Technologies, 2017-2023

Figure 4: Global Proteomics Market for Cancer Profiling Technologies, 2017-2023

Figure 5: Global DNA Diagnostics Market, 2017-2023

Figure 6: Global Biomarkers Market, 2017-2023

Figure 7: U.S. Biomarker Cancer Testing Market, 2017-2023

Figure 8: Global Genomics Market for Cancer Profiling Technologies, 2017-2023

Figure 9: Global SNP Genotyping Market, 2017-2023

Figure 10: Global Biochips Market, 2017-2023

Figure 11: Global Diagnostic Microarray Market for Cancer Profiling Technologies, 2017-2023

Figure 12: Global DNA Microarray Market, 2017-2023

Figure 13: Global Next-Generation Sequencing Market, 2017-2023

Figure 14: Global Polymerase Chain Reaction Market, 2017-2023

Figure 15: Global Digital (d)PCR and qPCR Market, 2017-2023

Figure 16: Global Epigenetics Market, 2017-2023

Figure 17: Global miRNA Market for Cancer Profiling Technologies, 2017-2023

Figure 18: Global Proteomics Market for Cancer Profiling Technologies, 2017-2023



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