

Saudi Arabia Minimally Invasive Biopsy Techniques
Market Assessment, By Product Offered [Tests, Kits &
Consumables, Instruments], By Technique [Liquid
Biopsy, Optical Biopsy, Brush Biopsy, Pigmented
Lesion Assays, Others], By Circulating Biomarker
[Circulating Tumor Cells, Cell Free DNA, Circulating
Tumor DNA, Extracellular Vesicles, Others], By
Application [Clinical, Therapeutic], By End-user
[Hospitals & Clinics, Academic & Research
Institutions, Ambulatory Care Centers], By Region,
Opportunities and Forecast, 2016-2030F

https://marketpublishers.com/r/S2E921DB816BEN.html

Date: March 2025

Pages: 111

Price: US\$ 3,300.00 (Single User License)

ID: S2E921DB816BEN

Abstracts

Saudi Arabia minimally invasive biopsy techniques market size was valued at USD 191.23 million in 2022, which is expected to reach USD 333.51 million in 2030, with a CAGR of 7.2% for the forecast period between 2023 and 2030F. Saudi Arabia minimally invasive biopsy techniques market has witnessed significant growth driven by a convergence of factors, including technological advancements, and increasing demand for more patient-friendly diagnostic procedures. Minimally invasive biopsy techniques have emerged as a revolutionary alternative to traditional invasive procedures, offering reduced patient discomfort, quicker recovery times, and minimal scarring. The shift in approach is largely underpinned by the growing awareness among healthcare professionals and patients about the benefits of these techniques, spurring the adoption rate.

The market's growth is propelled by drivers such as the rising prevalence of various



cancers necessitates accurate and timely diagnoses, fueling the demand for less invasive yet precise biopsy methods. Also, advancements in imaging technologies such as ultrasound, MRI, and CT scans have synergized with biopsy procedures, enabling more targeted and efficient sample collection. Healthcare providers are increasingly emphasizing early disease detection, propelling the integration of innovative techniques that offer superior diagnostic accuracy. Innovations in Saudi Arabia minimally invasive biopsy techniques market is evident through the development of innovative tools and equipment. Robotic-assisted biopsy systems are gaining traction for their enhanced precision and maneuverability, while real-time imaging guidance systems are revolutionizing the accuracy of needle placements during biopsies. For example, Dr. Karla Williams is leading a significant development in the field of cancer diagnostics, utilizing extracellular vesicles as a groundbreaking approach for 'liquid biopsy'. This innovative method is gaining traction due to its potential to revolutionize early cancer detection and monitoring. By analyzing these vesicles found in bodily fluids, such as blood, it allows for a non-invasive means of gathering crucial genetic and molecular information about tumors. The approach is poised to enhance our ability to track cancer progression, tailor treatments, and improve patient outcomes, making it a pivotal advancement in the battle against cancer.

For example, in 2022, Agilent's Resolution ctDx FIRST obtained FDA approval, designating it as a liquid biopsy companion diagnostic test for advanced non-small cell lung cancer. This endorsement signifies a significant milestone in precision medicine, showcasing the test's effectiveness in guiding treatment decisions for specific cancer type.

Increasing Incidence of Cancer

Saudi Arabia minimally invasive biopsy techniques market is experiencing a surge in demand due to the escalating incidence of cancer. The country has witnessed a notable increase in cancer cases, necessitating accurate and timely diagnoses for effective treatment. Minimally invasive biopsy techniques have emerged as a pivotal solution, extending patients with lesser discomfort, faster recovery, and reduced risks compared to traditional invasive methods. As the incidence of various cancers continues to rise, the adoption of these advanced techniques has become crucial in enabling early disease detection and precise tissue sampling, thereby playing a pivotal role in improving patient outcomes and enhancing the overall management of cancer in the region.

Technological Advancements



Saudi Arabia minimally invasive biopsy techniques market is benefiting from remarkable technological advancements that are revolutionize diagnostic procedures. Innovative imaging technologies such as high-resolution ultrasound, advanced MRI, and real-time 3D imaging for more precise and targeted tissue sampling. Robotic-assisted biopsy systems, driven by Al-controlled precision, are enhancing the accuracy of needle placements and minimizing human errors during the procedure. Furthermore, the integration of telemedicine and digital health platforms facilitates remote consultation and real-time collaboration between specialists, ensuring timely and expert guidance in challenging cases. Additionally, the emergence of sophisticated molecular and genetic analysis techniques allows for a comprehensive understanding of tissue samples at a cellular level, aiding in the early detection of cancer and other diseases, and tailoring personalized treatment plans for improved patient outcomes. These technological strides are shaping the Saudi Arabia minimally invasive biopsy techniques market, making it a dynamic and progressive domain within the healthcare sector.

For example, in the year 2022, Thermo Fisher Scientific unveiled a comprehensive range of more than 50 innovative Absolute Q Liquid Biopsy Assays designed to operate on the Applied Biosystems QuantStudio Absolute Q dPCR System. This fully integrated digital PCR (dPCR) system is engineered for exceptional accuracy and consistent results in just 90 minutes, with minimal hands-on involvement. These assays are preconfigured to identify genetic mutations swiftly and dependably, even the complex cancer hotspot mutations, aiming to streamline liquid biopsy workflows, as highlighted by the company.

Patient-Centric Care

Patient-centric care is a pivotal driver in the growth of the minimally invasive biopsy techniques market in Saudi Arabia. As healthcare evolves, the focus is shifting towards enhancing patient experiences, comfort, and outcomes. Minimally invasive biopsy techniques align perfectly with the approach. They offer reduced pain, shorter recovery times, and minimum scarring compared to traditional invasive methods. Patients appreciate these benefits, leading to increased acceptance and demand for these advanced procedures. Moreover, the minimally invasive approach enables faster return to daily activities, reducing disruptions to patients' lives. This patient-centered approach improve the diagnostic process and contribute to the overall healthcare satisfaction, encouraging healthcare providers in Saudi Arabia to adopt these techniques and invest in advanced medical technologies that prioritize the well-being and convenience of their patients.



Impact of COVID-19

The COVID-19 pandemic had a significant impact on the Saudi Arabia minimally invasive biopsy techniques market. The market experienced a slowdown in growth due to the temporary suspension of non-essential medical procedures and surgeries in the initial stages of the pandemic. It led to a decline in demand for minimally invasive biopsy procedures in the country. Additionally, disruptions in the global supply chain resulted in delays in the delivery of medical devices and equipment, further hindering the market growth. However, as the situation stabilized and medical procedures resumed, the market is expected to recover and continue its growth trajectory. The pandemic has accelerated the adoption of telemedicine and remote patient monitoring, which may drive the demand for minimally invasive biopsy techniques in the future.

Key Player Landscape and Outlook

Saudi Arabia minimally invasive biopsy techniques market is highly competitive, with several major players operating in the space. Companies are engaged in extensive research and development activities to bring innovative products to the market and gain a competitive edge. They focus on expanding their market presence through strategic partnerships, collaborations, and mergers and acquisitions. Additionally, several local players in the market cater to the specific needs of Saudi Arabia healthcare system. Overall, the market is characterized by intense competition, with players focusing on product innovation, cost-effectiveness, and quality to gain a larger market share. For instance, in 2022, Bioplatforms are at the forefront of liquid biopsy advancements, driving progress in isolation, characterization, and clinical application techniques. These platforms enable the non-invasive analysis of biological samples, like blood, for crucial genetic and molecular information. The evolving methods promise early cancer detection, personalized treatment approaches, and real-time monitoring. The transformative shift in diagnostics holds immense potential for improving patient care and outcomes in the realm of cancer management.

For example, in 2022, Imagia Canexia Health joined forces with Anwa Medical Co. Together, they have established a significant partnership, formalized through Memorandum of Understanding (MOU), aimed at introducing Imagia Canexia Health's advanced distributed liquid biopsy testing products in Saudi Arabia and across the broader of Middle East and North Africa (MENA). This collaboration aims to accelerate the accessibility of precision care by leveraging the synergy of AI expertise and innovative molecular biopsy solutions.



Contents

- 1. RESEARCH METHODOLOGY
- 2. PROJECT SCOPE & DEFINITIONS
- 3. IMPACT OF COVID-19 ON SAUDI ARABIA MINIMALLY INVASIVE BIOPSY TECHNIQUES MARKET
- 4. EXECUTIVE SUMMARY
- 5. SAUDI ARABIA MINIMALLY INVASIVE BIOPSY TECHNIQUES MARKET OUTLOOK, 2016-2030F
- 5.1. Market Size & Forecast
 - 5.1.1. By Value
- 5.1.2. By Volume
- 5.2. By Product Offered
 - 5.2.1. Tests
 - 5.2.2. Kits & Consumables
 - 5.2.3. Instruments
- 5.3. By Technique
 - 5.3.1. Liquid Biopsy
 - 5.3.2. Optical Biopsy
 - 5.3.3. Brush Biopsy
 - 5.3.4. Pigmented Lesion Assays
 - 5.3.5. Others (Breath Biopsy)
- 5.4. By Circulating Biomarker
 - 5.4.1. Circulating Tumor Cells (CTCs)
 - 5.4.2. Cell Free DNA (cfDNA)
 - 5.4.3. Circulating Tumor DNA (ctDNA)
 - 5.4.4. Extracellular Vesicles
 - 5.4.5. Others (miRNA, CTECs, circRNA)
- 5.5. By Application
 - 5.5.1. Clinical
 - 5.5.1.1. Treatment Monitoring
 - 5.5.1.2. Prognosis & Recurrence Monitoring
 - 5.5.1.3. Treatment Selection
 - 5.5.1.4. Others (Diagnosis & Screening)



- 5.5.2. Therapeutic
 - 5.5.2.1. Lung Cancer
 - 5.5.2.2. Breast Cancer
 - 5.5.2.3. Prostate Cancer
 - 5.5.2.4. Colorectal Cancer
- 5.5.2.5. Others (Blood Cancer, Thyroid Cancer)
- 5.6. By End-user
 - 5.6.1. Hospitals & Clinics
 - 5.6.2. Academic & Research Institutions
 - 5.6.3. Ambulatory Care Centers
- 5.7. By Region
 - 5.7.1. Central
 - 5.7.2. Western
 - 5.7.3. Northern
 - 5.7.4. Eastern
 - 5.7.5. Southern
- 5.8. By Company Market Share (%), 2022

6. MARKET MAPPING, 2022

- 1.1. By Product Offered
- 1.2. By Technique
- 1.3. By Circulating Biomarker
- 1.4. By Application
- 1.5. By End-user
- 1.6. By Region

7. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

- 7.1. Supply Demand Analysis
- 7.2. Import Export Analysis
- 7.3. Value Chain Analysis
- 7.4. PESTEL Analysis
 - 7.4.1. Political Factors
 - 7.4.2. Economic System
 - 7.4.3. Social Implications
 - 7.4.4. Technological Advancements
 - 7.4.5. Environmental Impacts
 - 7.4.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)



- 7.5. Porter's Five Forces Analysis
 - 7.5.1. Supplier Power
 - 7.5.2. Buyer Power
 - 7.5.3. Substitution Threat
 - 7.5.4. Threat from New Entrant
 - 7.5.5. Competitive Rivalry

8. MARKET DYNAMICS

- 8.1. Growth Drivers
- 8.2. Growth Inhibitors (Challenges and Restraints)

9. KEY PLAYERS LANDSCAPE

- 9.1. Competition Matrix of Top Five Market Leaders
- 9.2. Market Revenue Analysis of Top Five Market Leaders (in %, 2022)
- 9.3. Mergers and Acquisitions/Joint Ventures (If Applicable)
- 9.4. SWOT Analysis (For Five Market Players)
- 9.5. Patent Analysis (If Applicable)

10. PRICING ANALYSIS

11. CASE STUDIES

12. KEY PLAYERS OUTLOOK

- 12.1. Medtronic plc
 - 12.1.1. Company Details
 - 12.1.2. Key Management Personnel
 - 12.1.3. Products & Services
 - 12.1.4. Key Market Focus & Geographical Presence
 - 12.1.5. Financials (As Reported)
 - 12.1.6. Recent Developments
- 12.2. Becton, Dickinson, and Company
- 12.3. Boston Scientific Corporation
- 12.4. Roche Molecular Systems, Inc.
- 12.5. Bio-Rad Laboratories, Inc.
- 12.6. Beckman Coulter, Inc.
- 12.7. QIAGEN N.V.



- 12.8. Thermo Fisher Scientific Inc.
- 12.9. Illumina, Inc.
- 12.10. Agilent Technologies, Inc.
- 12.11. Olympus Corporation
- *Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work

13. STRATEGIC RECOMMENDATIONS

14. ABOUT US & DISCLAIMER



I would like to order

Product name: Saudi Arabia Minimally Invasive Biopsy Techniques Market Assessment, By Product

Offered [Tests, Kits & Consumables, Instruments], By Technique [Liquid Biopsy, Optical Biopsy, Brush Biopsy, Pigmented Lesion Assays, Others], By Circulating Biomarker [Circulating Tumor Cells, Cell Free DNA, Circulating Tumor DNA, Extracellular Vesicles, Others], By Application [Clinical, Therapeutic], By End-user [Hospitals & Clinics, Academic & Research Institutions, Ambulatory Care Centers], By Region, Opportunities and Forecast, 2016-2030F

Product link: https://marketpublishers.com/r/S2E921DB816BEN.html

Price: US\$ 3,300.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/S2E921DB816BEN.html