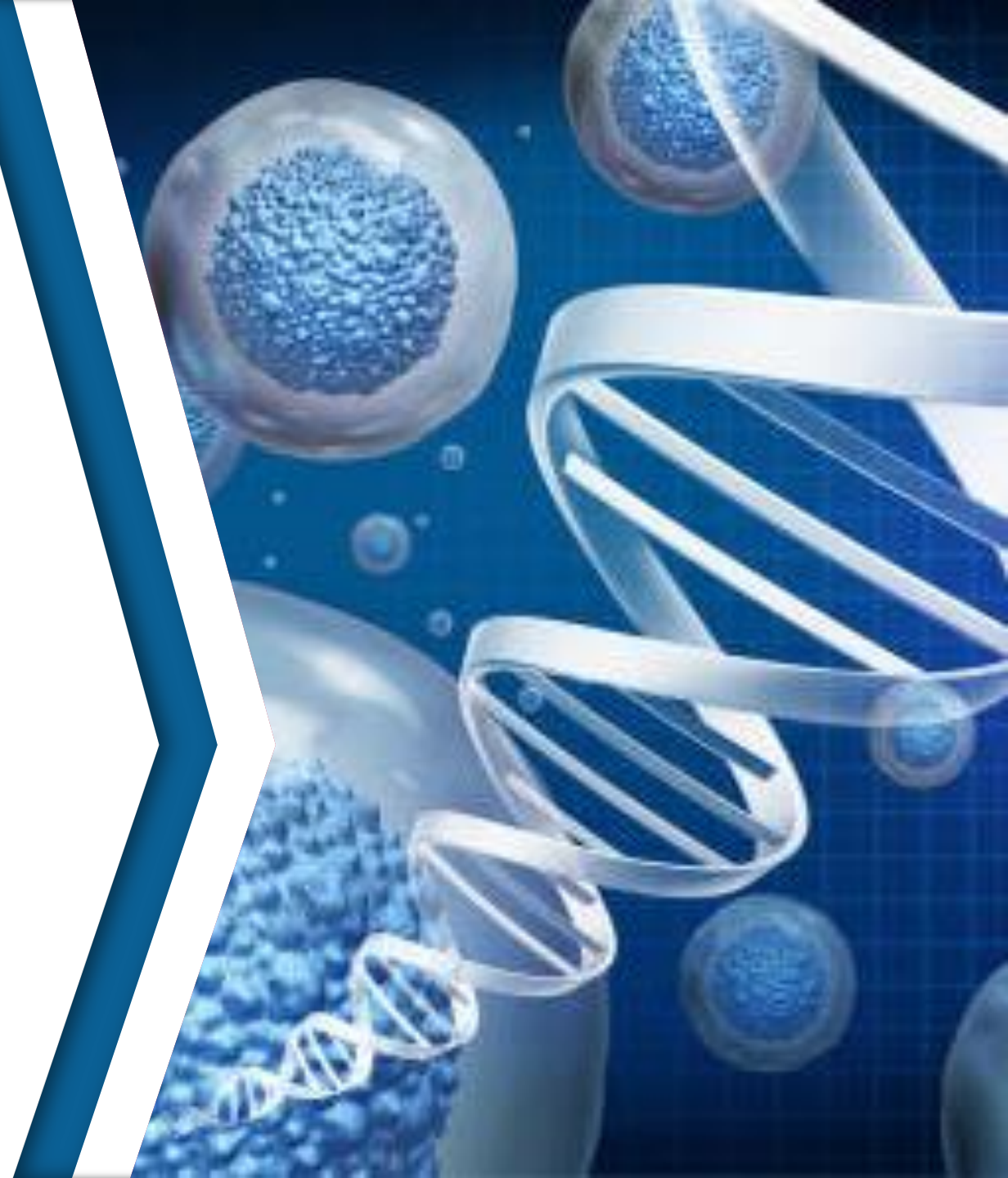
Global Oncology NGS Market: Analysis By Technology, By Workflow, By Application, By End User, By Region Size and Trends with Impact of COVID-19 and Forecast up to 2029

January 2025

Daedal Research



Global Oncology NGS Market: Coverage

- Executive Summary and Scope
- Introduction/Market Overview
- Global Market Analysis
- Regional Market Analysis
- Impact of COVID
- Dynamics
- Competitive Landscape
- Company Profiling

Global Oncology NGS Market: Coverage

Scope of the Report

Attributes	Details
Title	Global Oncology NGS Market: Analysis By Technology, By Workflow, By Application, By End User, By Region Size and Trends with Impact of COVID-19 and Forecast up to 2029
Coverage	Global and Regional
Regional Coverage	North America (The US, Canada and Mexico), Europe (Germany, UK, France, Italy, Spain and Rest of Europe), Asia Pacific (China, Japan, India, South Korea and Rest of Asia Pacific), and Rest of the World
Market Influencing Variables	Growth Drivers, Challenges, Market Trends
Forecast Period of Market	2024-2029
Competition in the Market	Fragmented
Key Players	Thermo Fisher Scientific Inc., Agilent Technologies, Inc., Qiagen, Illumina, Inc., Roche Holdings AG, Revvity, Inc., Pacific Biosciences of California, Inc., Myriad Genetics, Inc., Oxford Nanopore Technologies, BGI Group (Beijing Genomics), Caris Life Sciences

Global Oncology NGS Market: Coverage

Executive Summary

Oncology NGS (Next-Generation Sequencing) refers to the use of advanced sequencing technologies in cancer research, diagnosis, and treatment. NGS allows for the rapid and accurate analysis of genetic material (DNA or RNA), enabling a comprehensive understanding of the genetic mutations and alterations that drive cancer development and progression. The global oncology NGS market value in 2023 stood at US$510.76 million, and is expected to grow at a CAGR of 14.76% over the projected period of 2024-2029.

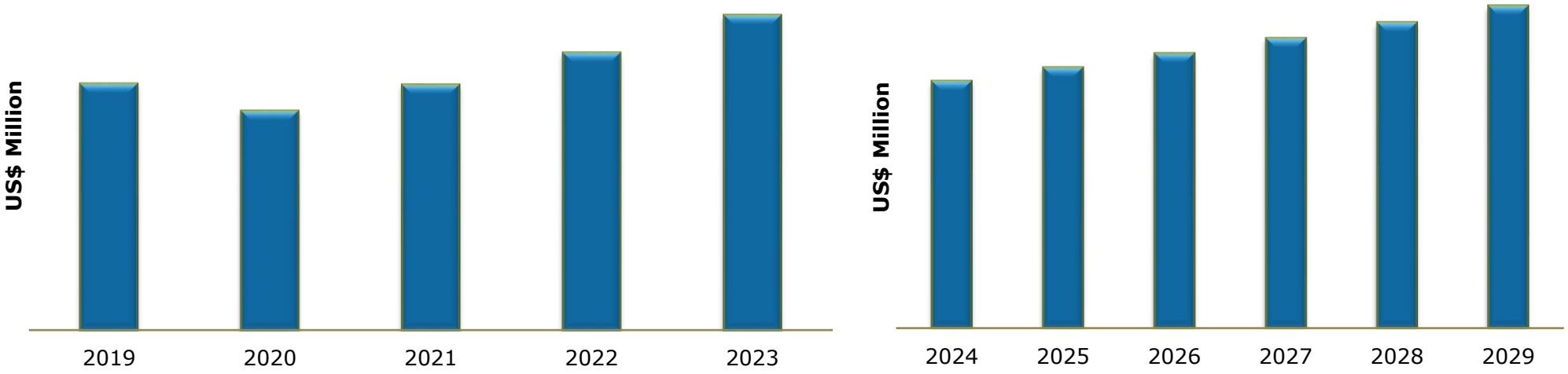
The oncology NGS market can be segmented on the basis of technology (targeted sequencing & resequencing, whole exome sequencing and whole genome sequencing), workflow (NGS sequencing, NGS Pre-sequencing and NGS data analysis), application (screening, companion diagnostics and other diagnostics), and end user (laboratories, hospitals and clinics). On the basis of technology, targeted sequencing & resequencing segment dominated the market in 2023 due to its cost-effectiveness, faster turnaround time, and ability to focus on specific cancer-related genes, making it highly suitable for clinical diagnostics and personalized medicine. Based on workflow, NGS Pre-sequencing is expected to grow fastest due to the increasing demand for efficient and accurate sample preparation techniques, including library preparation and target enrichment, which are critical for ensuring high-quality sequencing results. On the basis of region, North America dominated the global oncology NGS market in 2023.

The COVID-19 pandemic initially disrupted the global oncology NGS market due to delayed cancer diagnoses, reduced hospital visits, and resource reallocation toward managing the pandemic. However, post-COVID-19, the market experienced a rebound driven by increased emphasis on precision medicine, advancements in telehealth, and growing investments in genomic research.

The global oncology NGS market has increased in 2023 and projections are made that the market would rise in the next five years i.e. 2024-2029 tremendously. The growth is driven by rising cancer incidence, growing healthcare expenditure, government initiatives, cost reduction etc. Further, the market is expected to grow, owing to integration with AI and Bioinformatics, liquid biopsies innovations, increased focus on personalized medicine, rise of companion diagnostics, advancements in sequencing technologies, increased R&D investments, decentralization of NGS testing etc., yet the market faces some challenges, such as complex data analysis and ethical and privacy concerns etc.

Oncology NGS Market: Global Analysis

Global Oncology NGS Market by Value



CAGR	
2024-2029	xx%

Global Oncology NGS market valued at US$.... million in 2023, increased as compared to US$... million in 2022. Global Oncology NGS market is anticipated to reach up to US$... million by 2029, at a CAGR of ….%, from US$... million in 2024.

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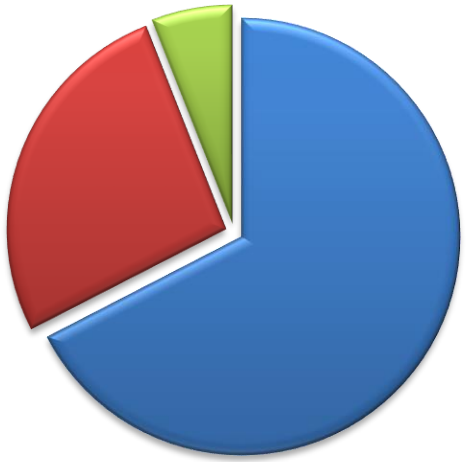
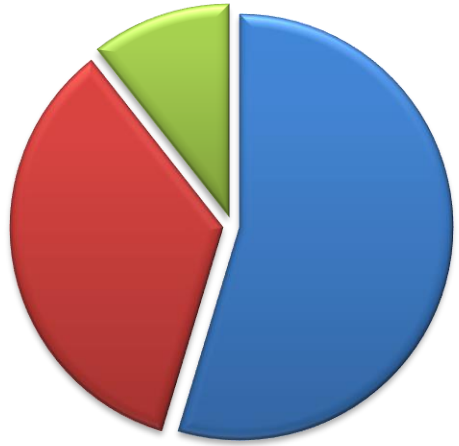
Oncology NGS Market: Global Analysis

Global Oncology NGS Market by Technology; 2023



Technology	Share
	(2023)
Targeted Sequencing & Resequencing	xx%
Whole Exome Sequencing	xx%
Whole Genome Sequencing	xx%

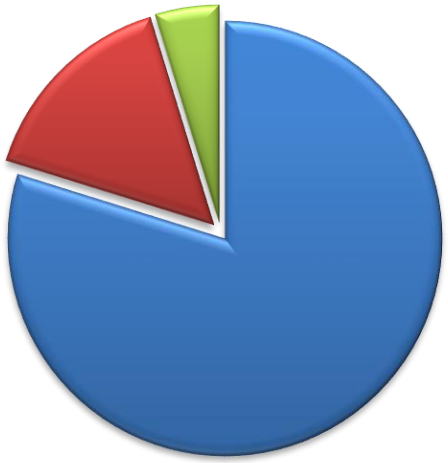
Global Oncology NGS Market by Workflow; 2023



Workflow	Share
	(2023)
NGS Sequencing	xx%
NGS Pre-sequencing	xx%
NGS Data Analysis	xx%

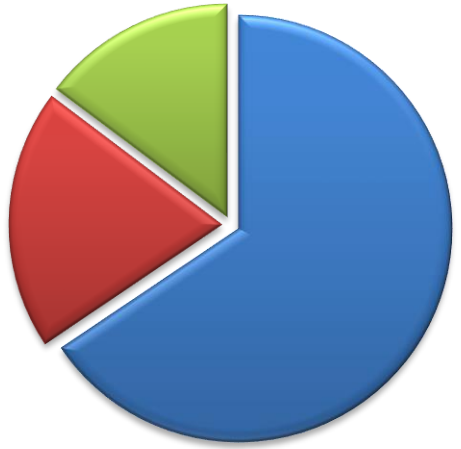
Oncology NGS Market: Global Analysis

Global Oncology NGS Market by Application; 2023



Application	Share
Screening	xx%
Companion Diagnostics	xx%
Other Diagnostics	xx%

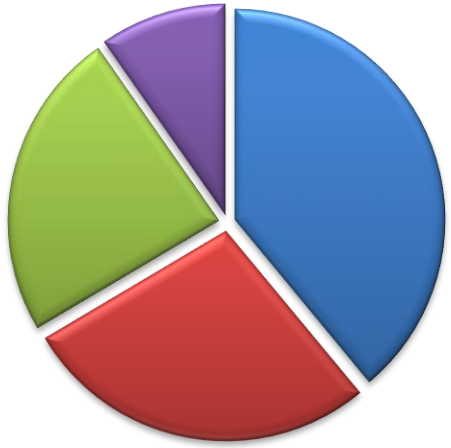
Global Oncology NGS Market by End User; 2023



End User	Share
Laboratories	xx%
Hospitals	xx%
Clinics	xx%

Oncology NGS Market: Global Analysis

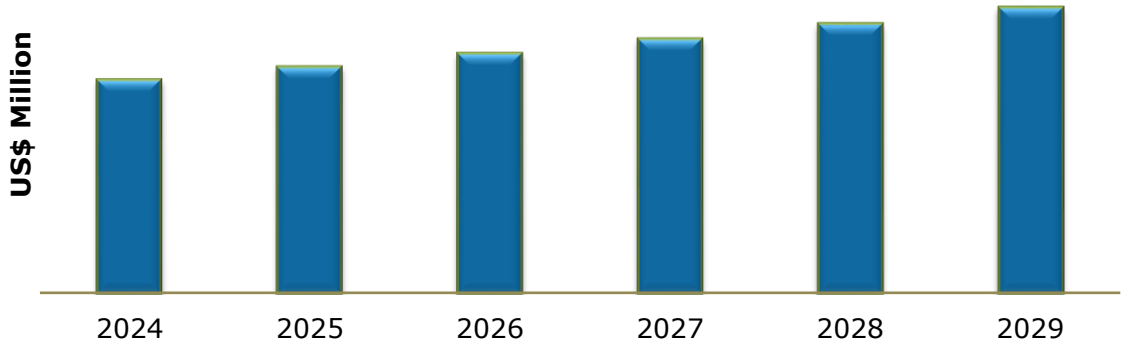
Global Oncology NGS Market by Region; 2023



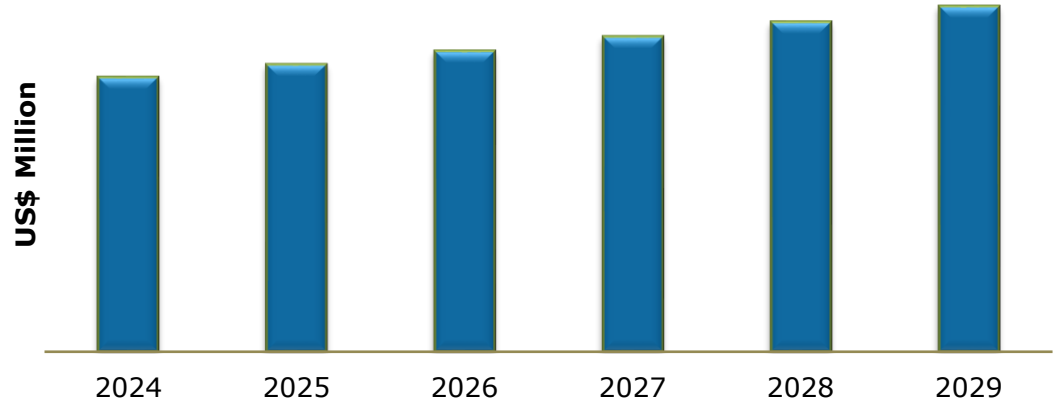
Region	Share
North America	xx%
Europe	xx%
Asia Pacific	xx%
Rest of the World	xx%

Global Oncology NGS Market: Technology Analysis

Global Targeted Sequencing & Resequencing Oncology NGS Market by Value



Global Whole Genome Sequencing Oncology NGS Market by Value



Technology	CAGR
	(2024-29)
Targeted Sequencing & Resequencing	xx%
Whole Exome Sequencing	xx%
Whole Genome Sequencing	xx%

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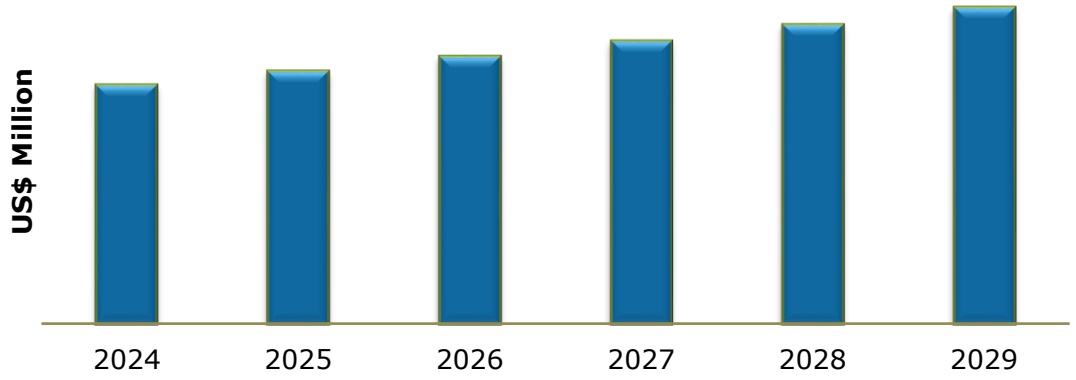
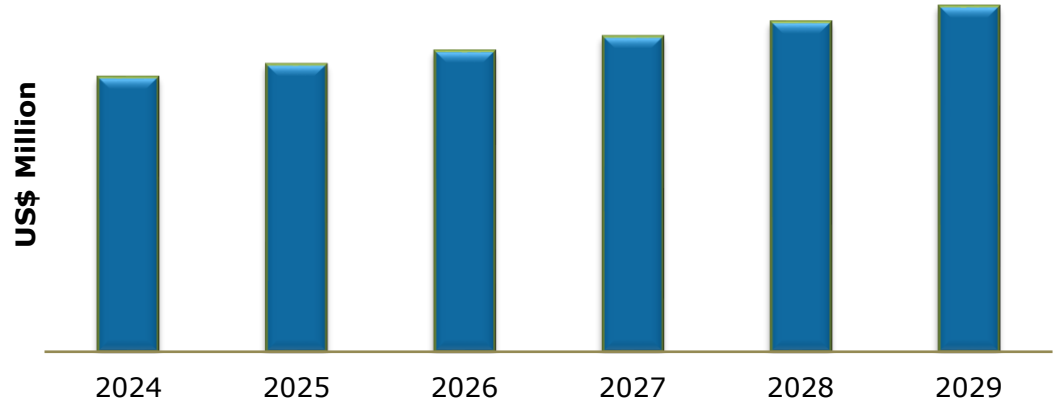
Global Oncology NGS Market: Workflow Analysis

Global Oncology NGS Sequencing Market by Value



Global Oncology NGS Pre-sequencing Market by Value



Workflow	CAGR
	(2024-29)
NGS Sequencing	xx%
NGS Pre-sequencing	xx%
NGS Data Analysis	xx%

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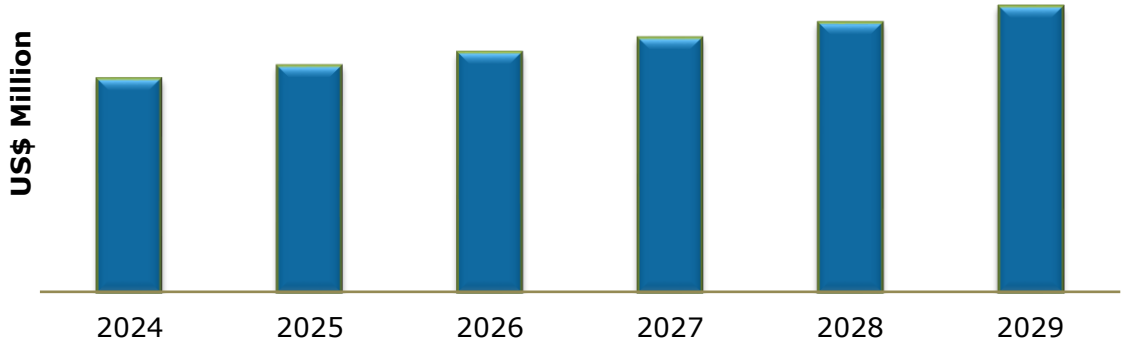
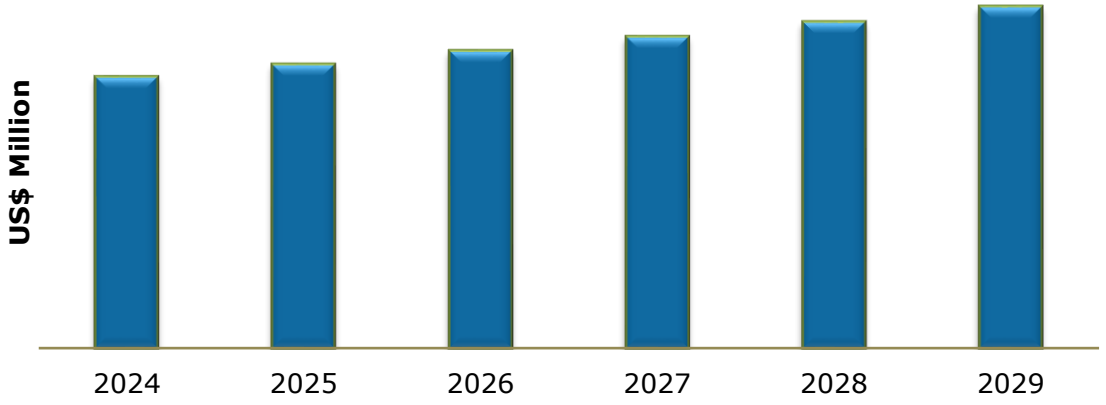
Global Oncology NGS Market: Application Analysis

Global Screening Oncology NGS Market by Value



Global Companion Diagnostics Oncology NGS Market by Value



Application	CAGR
	(2024-29)
Screening	xx%
Companion Diagnostics	xx%
Other Diagnostics	xx%

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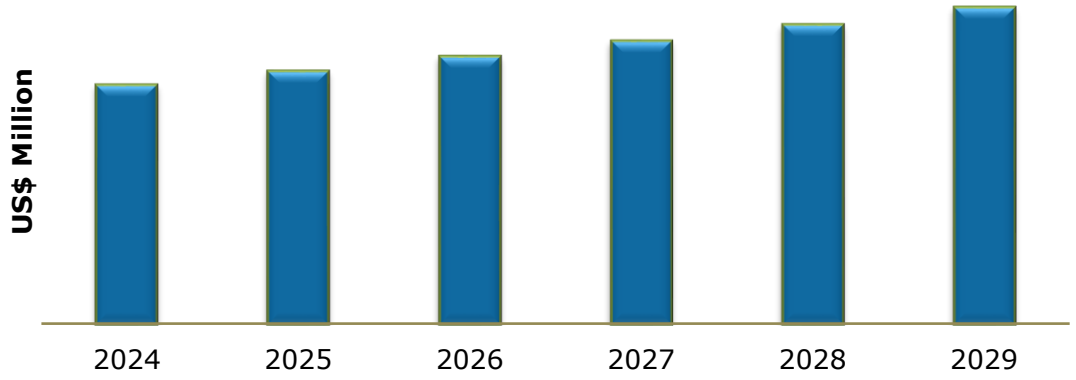
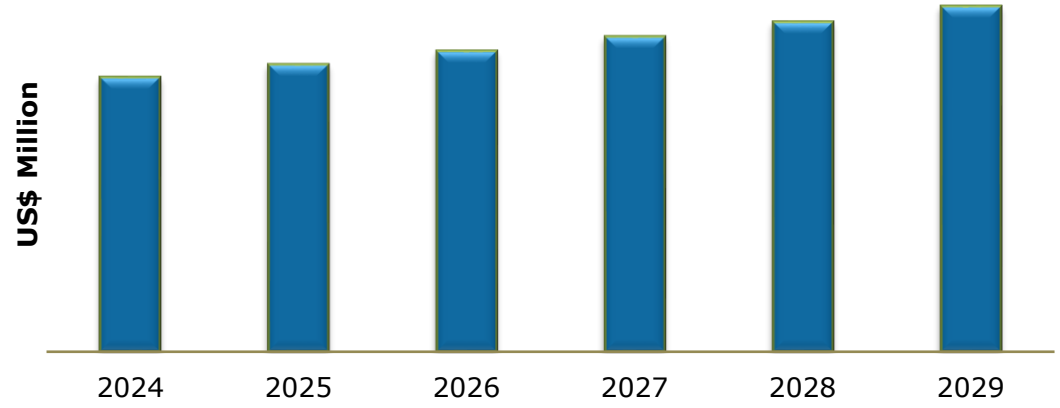
Global Oncology NGS Market: End User Analysis

Global Laboratories Oncology NGS Market by Value



Global Clinics Oncology NGS Market by Value



End User	CAGR
	(2024-29)
Laboratories	xx%
Hospitals	xx%
Clinics	xx%

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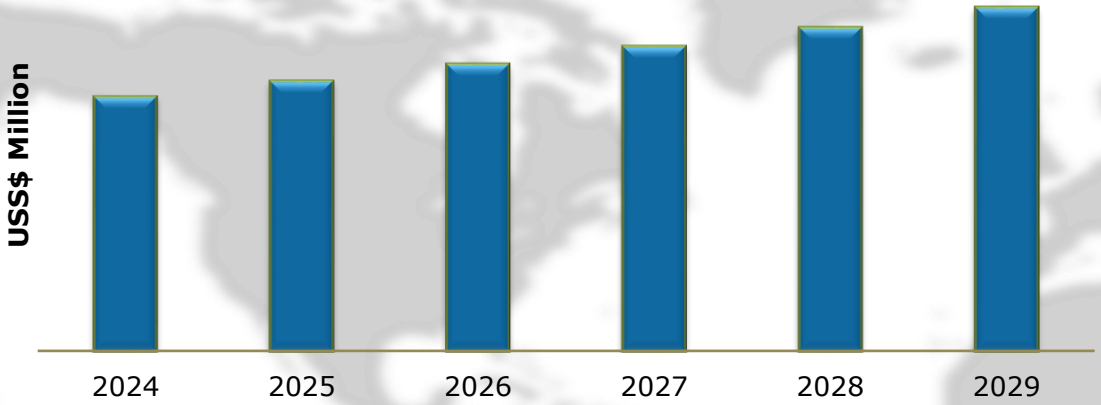
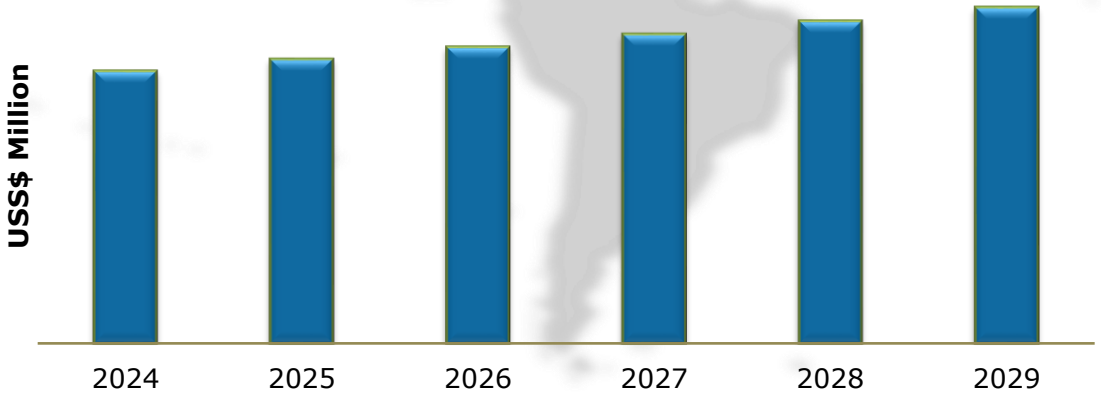
Global Oncology NGS Market: Regional Analysis

North America Oncology NGS Market by Value



Asia Pacific Oncology NGS Market by Value



Region	CAGR
	(2024-29)
North America	xx%
Europe	xx%
Asia Pacific	xx%
Rest of the World	xx%

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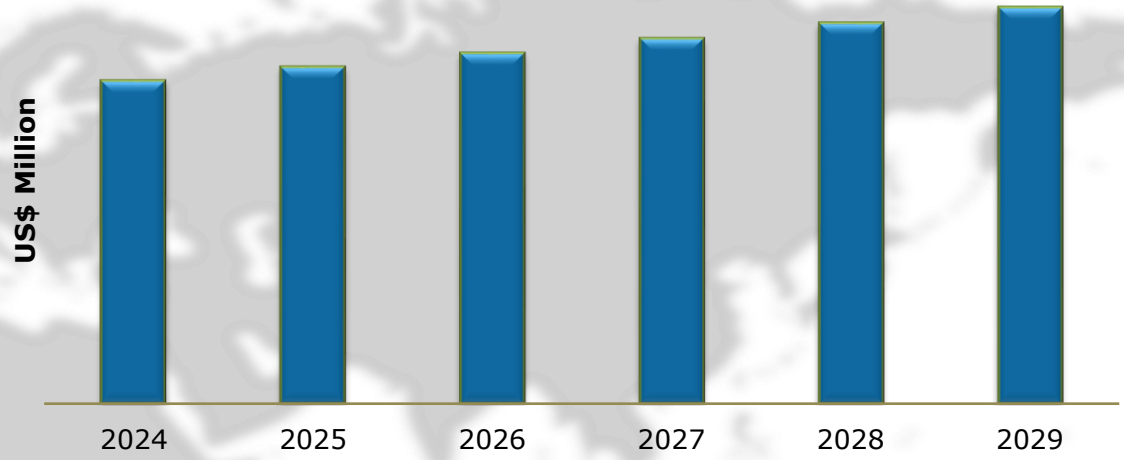
North America Oncology NGS Market: Analysis

North America Oncology NGS Market by Region; 2023

The US Oncology NGS Market by Value



Region	Share	CAGR
		(2024-29)
The US	xx%	xx%
Canada	xx%	xx%
Mexico	xx%	xx%

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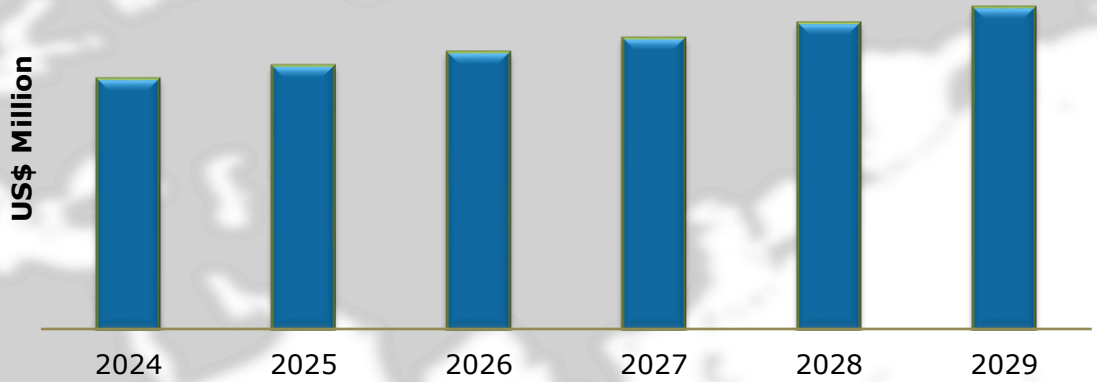
Europe Oncology NGS Market: Analysis

Europe Oncology NGS Market by Region; 2023

Germany Oncology NGS Market by Value



Region	Share	CAGR
		(2024-29)
Germany	xx%	xx%
UK	xx%	xx%
France	xx%	xx%
Italy	xx%	xx%
Spain	xx%	xx%
Rest of Europe	xx%	xx%

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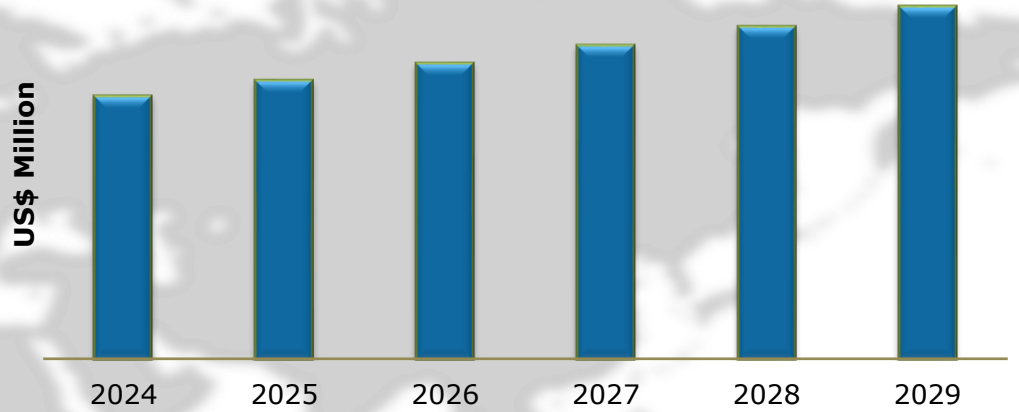
Asia Pacific Oncology NGS Market: Analysis

Asia Pacific Oncology NGS Market by Region; 2023

China Oncology NGS Market by Value



Region	Share	CAGR
		(2024-29)
China	xx%	xx%
India	xx%	xx%
Japan	xx%	xx%
South Korea	xx%	xx%
Rest of Asia Pacific	xx%	xx%

Global Oncology NGS Market: Dynamics

Growth Driver

- Rising Cancer Incidence
- Government Initiatives

Challenges

- Complex Data Analysis and Interpretation
- Ethical and Privacy Concerns

Market Trends

- Integration with AI and Bioinformatics
- Liquid Biopsies Innovations

Global Oncology NGS Market: Competitive Landscape

Players Profiled

- Thermo Fisher Scientific Inc.
- Agilent Technologies, Inc.
- Qiagen
- Illumina, Inc
- Roche Holdings AG
- Revvity, Inc.
- Pacific Biosciences of California, Inc.
- Myriad Genetics, Inc.
- Oxford Nanopore Technologies
- BGI Group (Beijing Genomics)
- Caris Life Sciences