

Next Generation Sequencing Kits Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028F Segmented by Workflow (Library Preparation, Cluster Generation, Sequencing Reagents Kits), By Sequencing Type (WES and WGS, Targeted Sequencing, Long Read Sequencing, Other Sequencing), By Usage Area (Clinical, Research), By Application (Oncology, Rare Diseases, Genetic Disorders, Reproductive Health, Others), By End User (Academic and Research Institutions, Pharmaceutical and Biotechnology Companies, Clinical and Diagnostic Laboratories, Others), By Region and Competition

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## **Abstracts**

Next Generation Sequencing Kits market is anticipated to witness impressive growth during the forecast period. This can be ascribed to the rising advancements NGS platform such as using the iSeq 100 system and Ion Gene Studio S5 in the technology for better testing across the globe. Similarly, the growing improvement of regulatory and reimbursement scenarios for NGS-based diagnostics tests will further drive the growth of the market over the years. Additionally, the growing prevalence of cancer and increasing applications of next-generation sequencing in cancer and other infectious diseases research is expected to create significant growth during the forecasted period. Moreover, the growing development of portable sequencing technologies along with growing partnerships & collaborations for technological advancements in NGS with



major key players and research institutes is expected to drive the growth of the market during the forecast period.

#### Growing Advancements in NGS

Growing demand for DNA testing for the diagnosis of some rare genetic diseases such as cystic fibrosis and sickle cell diseases has significantly increased over the years. Additionally, the growing demand for advanced technology which can provide faster results at less cost is expected to drive the growth of global next generation sequencing kits market during the forecast period.

For instance, in January 2022, a new ultra-rapid genome sequencing approach developed by Stanford Medicine scientists and their collaborators used to diagnose rare genetic diseases in an average of eight hours. Genome sequencing helps scientists to find a patient's complete DNA makeup which contains information about everything from eye color to inherited diseases and it is vital for diagnosing patients with diseases rooted in their DNA. Also, the growing genome mapping program linked to different types of diseases and understanding inherited disorders and their treatment will further drive the growth of the market during the forecast period. Public, private, and non-profit interests have also invested largely in the technology to treat novel diseases and improve diagnostics and healthcare. Increased availability of funding supported by the next-generation sequencing market will further enhance the demand for the NGS kits market during the forecast period.

#### Growing Demand for Early Detection of Chronic Diseases

For the successful treatment of cancer and other infectious diseases in the early stage, NGS technology is required. So, the growing prevalence of cancer and other infectious diseases such as tuberculosis, meningococcal diseases, etc is one of the major factors expected to drive the growth of the NGS kits market during the forecast period. For instance, according to the data provided by World Health Organization (WHO) in February 2022, cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020. So, the usage of molecular diagnostics methods in clinical microbiology has increased rapidly in recent years. Molecular diagnostic technologies such as next-generation sequencing (NGS) can detect the presence of nucleic acids and this technology are quick and doesn't require specimen growth in culture. The researchers can use next-generation sequencing texts to detect different diseases concurrently and directly from a sample. Additionally, replacing the traditional technologies such as microarrays by NGS technology for fast detection will further



enhance the demand for NGS kits over the years. For instance, in January 2022, Illumina Inc. and Nashville Biosciences LLC, a wholly-owned subsidiary of Vanderbilt University Medical Center (VUMC), entered a multi-year agreement to accelerate medicines development through large-scale genomics and the establishment of a preeminent clinical-genomic resource using Illumina's next-generation sequencing (NGS) platforms.

#### Market Segmentation

Global Next Generation Sequencing Kits market can be segmented on the basis of workflow, sequencing type, usage area, application, end users and by region. Based on the workflow, the market is further segmented into library preparation, cluster generation, and sequencing reagents kits. Based on sequencing type, the market can be segmented into WES and WGS, targeted sequencing, long read sequencing, and other sequencing. Based on the usage area, the market can be bifurcated into clinical and research. Based on application, the market can be further grouped into oncology, rare diseases, genetic disorders, reproductive health, and others. Based on end users, the market can be grouped into academic and research institutions, pharmaceutical and biotechnology companies, clinical, diagnostic laboratories, and others. Regionally, in terms of region North America dominated the market among Asia Pacific, Europe, Middle East & Africa, and South America. On the basis of country, the United States dominated the global next generation sequencing kits market on account of the increasing demand for early detection of infectious diseases in the country.

#### **Recent Development**

In January 2021, BGI group received the CE mark approval for the Thalassemia Gene Detection Kit which will be used for the genetic diagnosis of thalassemia and other hemoglobinopathy or for general population carrier screening.

In September 2020, Themo Fisher Scientific received the US FDA premarket approval for the Oncomine Dx Target Test as and NGS based companion diagnostic test to identify RET fusion positive, metastatic non-small cell lung cancer patients receiving GAVRETO which is a targeted therapy developed by Blueprint Medicines.

#### **Market Players**



Agilent Technologies, Inc., Bio-Rad Laboratories, Inc., BGI Group., Creative Biogene., Danaher., F. Hoffmann-La Roche Ltd., Hologic, Inc., Illumina, Inc., Oxford Nanopore Technologies plc., Pacific Biosciences of California, Inc., PerkinElmer Inc. are some of the leading players operating in the Global Next Generation Sequencing Kits Market.

Report Scope:

In this report, global Next Generation Sequencing Kits market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Next Generation Sequencing Kits Market, By Workflow:

Library Preparation

**Cluster Generation** 

Sequencing Reagents Kits

Next Generation Sequencing Kits Market, By Sequencing Type:

WES and WGS

**Targeted Sequencing** 

Long Read Sequencing

Other Sequencing

Next Generation Sequencing Kits Market, By Usage Area:

Clinical

Research

Next Generation Sequencing Kits, By Application:

Oncology



**Rare Diseases** 

**Genetic Disorders** 

**Reproductive Health** 

Others

Next Generation Sequencing Kits, By End User:

Academic and Research Institutions

Pharmaceutical and Biotechnology Companies

**Clinical and Diagnostic Laboratories** 

Others

Next Generation Sequencing Kits Market, By Region:

North America

**United States** 

Canada

Mexico

Europe

France

Germany

United Kingdom

Italy

Spain



China

India

Japan

South Korea

Australia

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Next Generation Sequencing Kits Market.

Available Customizations:

With the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the

Next Generation Sequencing Kits Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-...



report:

**Company Information** 

Detailed analysis and profiling of additional market players (up to five).



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