

# **Global NGS-based RNA-sequencing Market Size study, By Product & Service (Sample Preparation Products, Sequencing Platforms & Consumables, Sequencing Services, Data Analysis, Storage, & Management), By Technology (Sequencing by Synthesis, Ion Semiconductor Sequencing, Single-molecule Real-time Sequencing, Nanopore Sequencing), By Application (Expression Profiling Analysis, Small RNA Sequencing, De Novo Transcriptome Assembly, Variant Calling & Transcriptome Epigenetics), By End User (Research & Academia, Hospitals & Clinics, Pharmaceutical & Biotechnology Companies, Other End Users), and Regional Forecasts 2022-2028**

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## **Abstracts**

Global NGS-based RNA-sequencing Market is valued approximately USD 2.45 billion in 2021 and is anticipated to grow with a healthy growth rate of more than 20.0% over the forecast period 2022-2028.

RNA sequencing (RNA-Seq) is a high throughput next-generation sequencing method that is used to identify and quantify the RNA present in a biological sample in the present time. The NGS presents a wide range and compassion for improved detection of varyingly expressed genes with quantifiable data. This method is highly used in both

non-conventional and conventional applications for obtaining advanced and inclusive insights at a genomic level. The rising number of RNA-Seq grants, the high characteristics of RNA-Seq over conventional technologies, coupled with the growing demand for precision medicine are the primary factors that may accelerate the market growth across the globe. In addition, increasing research and development activities including RNA-seq, coupled with the rising number of strategic actions such as mergers, acquisitions, strengthening product portfolio, etc. by the leading market players are the further factors that may propel the market demand in the near future. For instance, in November 2018, Illumina acquired Pacific Biosciences- a leading provider of sequencing systems with the aim of expanding the company's sequencing product portfolio. Also, in May 2019, GenomiQa and BGI Group entered into the services agreement for overall-genome sequencing on BGI's DNBseq™ sequencing technology platform for using BGI's ISO15189 accredited laboratory sequencing facilities by the genomiQa. However, the lack of skilled professionals and standardization concerns of RNA-seq in diagnostic testing impedes the growth of the market over the forecast period of 2022-2028. Also, increasing applications of RNA-Seq in research and rising investment in R&D are anticipated to act as a catalyzing factor for the market demand during the forecast period.

The key regions considered for the global NGS-based RNA-sequencing market study include Asia Pacific, North America, Europe, Latin America, and the Rest of the World. North America is the leading region across the world in terms of market share owing to technological developments in RNA-Seq products and the huge presence of major market players such as Thermo Fisher, Illumina, and Agilent Technologies. Whereas, Asia-Pacific is anticipated to exhibit the highest CAGR over the forecast period 2022-2028. Factors such as increasing incidences of target diseases, as well as government support by providing funds for genomics research, would create lucrative growth prospects for the NGS-based RNA-sequencing market across the Asia-Pacific region.

Major market players included in this report are:

Thermo Fisher Scientific Inc.

Illumina Inc.

Pacific Biosciences of California, Inc.

F. Hoffman-La Roche Ltd

Agilent Technologies Inc.

BGI Group

Oxford Nanopore Technologies Ltd.

Eurofins Scientific Company

Qiagen Company

Perkinelmer Inc.

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming eight years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within each of the regions and countries involved in the study. Furthermore, the report also caters the detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, the report shall also incorporate available opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Product & Service:

Sample Preparation Products

Sequencing Platforms & Consumables

Sequencing Services

Data Analysis, Storage, & Management

By Technology:

Sequencing by Synthesis

Ion Semiconductor Sequencing

Single-molecule Real-time Sequencing

Nanopore Sequencing

By Application:

Expression Profiling Analysis

Small RNA Sequencing

De Novo Transcriptome Assembly

Variant Calling & Transcriptome Epigenetics

By End User:

Research & Academia

Hospitals & Clinics

Pharmaceutical & Biotechnology Companies

Other End Users

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain  
Italy  
ROE

Asia Pacific  
China  
India  
Japan  
Australia  
South Korea  
RoAPAC  
Latin America  
Brazil  
Mexico  
Rest of the World

Furthermore, years considered for the study are as follows:

Historical year – 2018, 2019, 2020  
Base year – 2021  
Forecast period – 2022 to 2028

Target Audience of the Global NGS-based RNA-sequencing Market in Market Study:

Key Consulting Companies & Advisors  
Large, medium-sized, and small enterprises  
Venture capitalists  
Value-Added Resellers (VARs)  
Third-party knowledge providers  
Investment bankers  
Investors

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