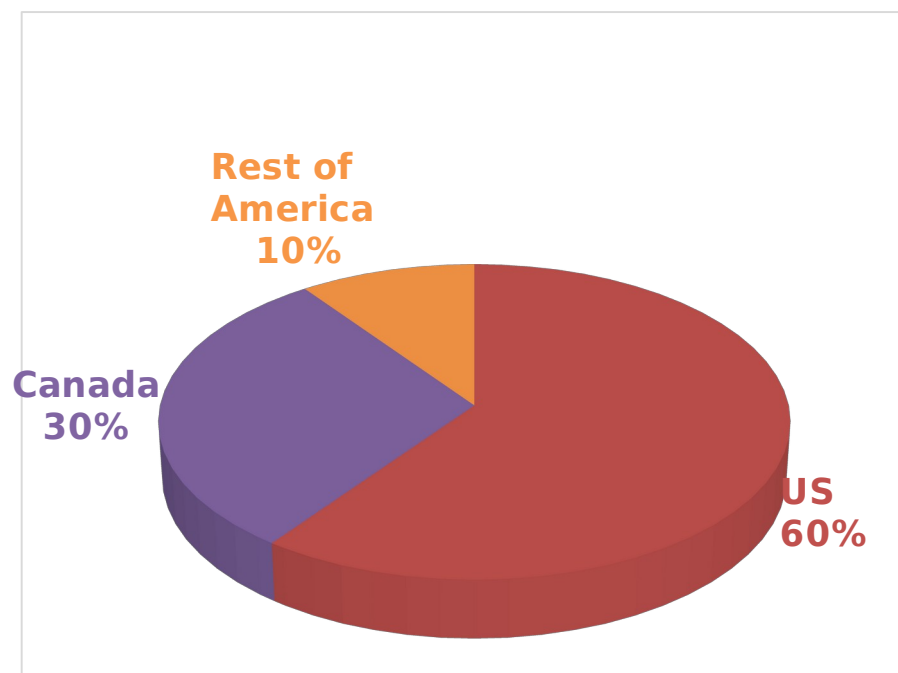


What is the market size, trends, major players for North America Genomics Market?

Scientific evidence supports genomics' potential for illness prevention, management, and treatment. Over the past several years, excellent therapeutic qualities have shifted the healthcare program's focus away from the traditional treatment approach and toward precision medicine. Whole-genome sequencing has proven to be helpful in the detection of serious illnesses like cancer. For instance, According to the National Cancer Institute, by 2040, it is expected that there would be 29.5 million more new instances of cancer and 16.4 million more cancer-related deaths annually. Newer goods and software have come along as a result of the requirement for storing, sequencing, and analyzing vast amounts of DNA data. The aforementioned elements have greatly fueled the market in recent years.

Additionally, a number of businesses and service providers are already developing that offer services such as direct-to-customer sequencing, ancestry, and other services. For instance, Arcencus GmbH announced the beginning of its direct-to-consumer my Life heart service in August 2021. This service is based on whole-genome sequencing. Additionally, the market will expand favourably in the upcoming years due to rising research expenditures and advances in bioinformatics.



- The genomic market in North America is estimated to be approximately USD 6.03 billion in 2022.
- USA contributes 60% of the market followed by Canada and the Rest of America
- Major driver of the genomic market in North America is abundant funds and many companies researching molecular biology.
- The study of genomes and how they interact with diverse stimuli is known as genomics, and in recent years, it has been the subject of intensive research and development efforts. Technology that promises a better understanding of genomes and their interaction with the environment as well as tools that employ research findings to comprehend the role played by genomes in the growth and survival of all species have significantly increased in the field. It is used in a variety of sectors, including biotechnology, anthropology, and other social sciences as well as genomic medicine.

Market Drivers

- Abundant funds rising interest in researching molecular biology by government.
- Increasing demand for Genomes in the pharmaceutical industry to develop a new class of drugs.
- Rising demand for genetically modified plants and animals.
- The market is majorly driven by the advanced technology in the healthcare sector, developed infrastructure and favorable reimbursement policies.
- Increasing investment and funding in research and development will boost the market in near future.
- New products and innovative services to favor Adoption of Genomic Sequencing will also one of the factor which drive the market .

Market Barriers:

- The market growth is constrained by the high cost of the genomic instrument.

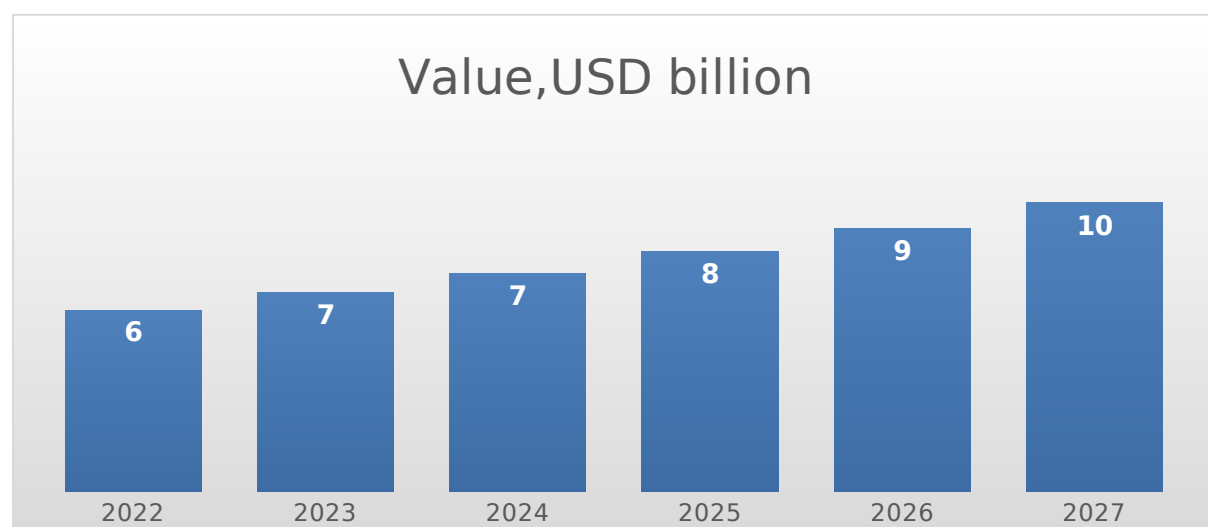
- Lack of trained technicians poses a major hindrance to the market, despite the huge potential, shortage of trained technicians is a significant factor which is restricting the market growth.
- To make sure the safety of the products, the center for diseases control and Prevention, the US food and drug administration and other regulatory bodies have restructured their guideline which overall affect the demand of target market .

Market Trends:

- Due to the enormous potential held by genome sequencing, technological improvement in the field of genomics is a growing trend in the market. Several businesses have started offering sequencing services for a number of applications, including nutrition, ancestry, hereditary illnesses, and other areas.

Forecast:

- The North American genomic market is growing at the rate of 9.7% from 2022to 2027.



IMPACT OF COVID-19 NORTH AMERICAN GENOMIC MARKET

- The Covid -19 pandemic has drastically altered the healthcare business as a whole, and its effects are being felt in all areas of healthcare. To create an effective vaccine or cutting-edge therapy for Covid-19, both the government and commercial pharmaceutical and biotechnology businesses have intensified their research activities and boosted their investment. Monitoring the coronavirus genome sequence can assist determine how the illness spreads and what effects it has on the genome. Using this knowledge, an infectious treatment strategy can subsequently be created. Researchers are tracing the origin of COVID-19 infection and the start of community transmission using the virus genomic data.
- The USA and several other nations are exchanging the whole genome sequencing data isolated from the patients in an effort to better understand the genetic component of coronavirus. Both the North American market and researchers worldwide will benefit from this. A \$40 million funding programme, the Canadian Genomic Network, was officially unveiled by Genome Canada.

PEST Analysis

Political: Government financing for research and development will increase, which will help the market in the foreseeable future. Government funding for molecular biology research is increasing.

Economical: Increased outpatient procedures, as well as economic growth aided by expanded insurance coverage. The highly contagious coronavirus is having an economic impact on a variety of industries, including the genomic market

Social: The increased awareness of genome based treatments in various diseases including Covid-19 are projected to drive market expansion locally in North America

Technological: The healthcare industry's cutting-edge technology, robust infrastructure, and advantageous reimbursement rules are the main market drivers.

Major Players:

- F. Hoffmann-La Roche Ltd
- Illumina Inc
- ThermoFisher Scientific Inc
- Agilent Technologies Inc
- Danaher
- GE Healthcare

Conclusion:

- The global genomic market is anticipated to be dominated by the North American region throughout the predicted period, with a share of 36.7 percent in 2020. A surge in FDA regulatory approvals and shifting reimbursement and usage rules are expected to hasten the adoption of genetic testing in the region. The market is also largely driven by the availability of advanced technology in the healthcare sector, developed infrastructure, and favourable infrastructure policies. Furthermore, the region's genomics market is dominated by the United States and Canada.
- F. Hoffmann-La Roche Ltd., Illumina Inc., Thermo Fisher Scientific Inc., Agilent Technologies Inc., and life technologies are recognised as major players in the North American genomic market.
- The North American genome market is expected to be led by the United States throughout the anticipated period and has seen substantial growth in recent years. Market expansion is anticipated to be fueled by rising government support and investment in genetic research and development. In collaboration with Northshore University Health System, colour genomics inc. completed the implementation of clinical genomics in routine care in its USA programme in January 2020. In addition to Sanford's genetic initiative, the company has helped imaging to improve clinical decision-making.
- It is projected that the Canadian genomic market will increase significantly and contribute to the expansion of the North American regional market.

The rise in startups, the usage of personalised medicine, and partnerships and collaborations will all contribute to the market's expansion.