

Lapis Global Top 20 Genomic Revolution Index



Genomic Revolution - Big Business with the Building Blocks of Life

Introduction

A **gene** is usually referred to as a segment of **DNA** that holds information for the development of an individual's properties. The DNA contains the entire genetic material of humans and is included in every human cell. Although the human genome was decoded several years ago, most of the function of DNA is still unclear.

Genomics is an interdisciplinary **field of biology** that focuses on the structure, function, evolution, mapping, and editing of **genomes**. It deals with the study of all the **genes** of a human being, including interactions of those genes with each other and with the individuals' environment. **Genetics** analyzes the functioning and composition of the single gene whereas **genomics** addresses all genes and their interrelation to identify their combined influence on the growth and development of the organism.

History

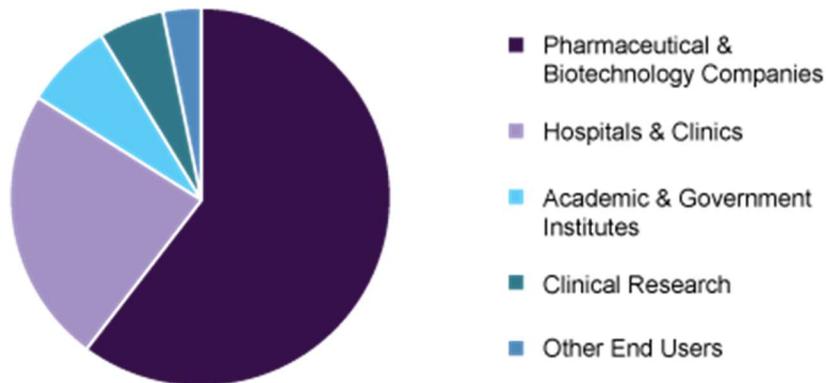
The **Human Genome Project** launched in 1990 and completed in 2003 was an international scientific research project whose goal was the complete mapping and understanding of all the **genes of human beings**. All our genes together are known as our **«genome»**. As part of the project, the researchers found that there are about 20,500 human genes. This research project has given the world a resource of detailed information about the structure, organization, and function of the **complete set of human genes**.

The Human Genome Project was set up to generate a resource that could be used for a broad range of **biomedical studies**. One such use is to look for the genetic variations that increase the **risk of specific diseases**, such as cancer, or to look for the type of **genetic mutations** frequently seen in cancerous cells. More research can then be done to fully understand how the genome functions and to discover the genetic factors underlying health and disease.

Market Overview

The **global genomics market** was worth **USD 15,889 million** in **2018** and is projected to reach **USD 62,615 million** by the end of **2026** - a **CAGR of 18.7%** for the period between 2019 and 2026. Genomics has proven its potential to change the way the prevention, management, and treatment of diseases are handled. The following figure shows the **market share of the genomics market** by the end of **2020**:

Global genomics market share, by end-use, 2020 (%)



Source: www.grandviewresearch.com

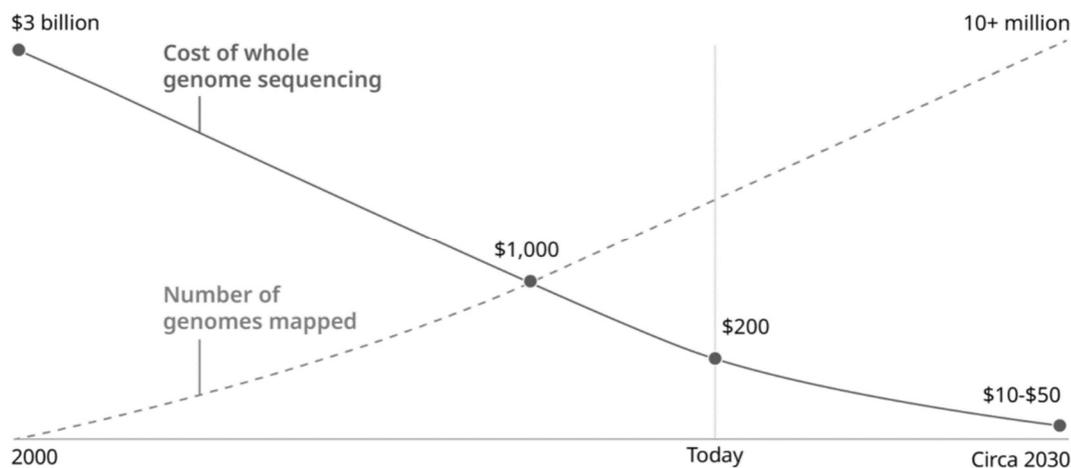
The Genomic Age Has Already Begun

Over the last few years, we have passed key inflection points in our ability to access, manipulate, and understand the **molecular building blocks of the human body**:

- The cost of genome sequencing has significantly fallen.
- DNA editing is becoming an antidote to pervasive, chronic disease.
- For the first time, it seems likely that a single dose of living therapy will be able to cure certain diseases.
- Bioinformatics is linking DNA sequencing data and therapeutic initiatives to patient outcomes, providing scientists, corporations, and clinicians with an unprecedented understanding of how the human genome can break down and how it might be mended.

Declining Costs Lead to Rising Adoption

The **cost of sequencing a human genome** has dropped to USD 200 and further price reductions are expected in the coming years. The formerly high costs of sequencing were an obstacle to mass adoption. Sequencing-driven diagnostic tests are not only becoming cheaper but also more comprehensive than legacy tests. The following figure shows the **relationship** between **costs** and **adoption** (source: OliverWyman, 2020):



Next generation DNA sequencing (NGS) provides the foundation for precision medicine. By sequencing inherited mutations known as **germline mutations**, clinicians can gain an insight into an individual's predisposition to conditions such as coronary artery disease or cancer. NGS can also be used to diagnose **rare inherited disorders in infants**, a process that used to take years.

Potential Impact on Equity Markets

It is expected that the genomic age could create **trillions of dollars in equity market capitalization by 2024**. The genomic revolution could lead to more **effective and efficient health care, longer lives, fewer surgical interventions, and dramatic value creation**. In 2019, publicly listed drug development companies spent USD 100 billion on research and development, nearly double the amount they spent five years earlier. Even marginal changes in the return on that investment could add trillions of dollars to the value of companies involved in drug development.

While the **commercial ramifications** of the genomic revolution are likely to be far-reaching, the impact on **human health will be even more so**.

Lapis Investment Solution

Lapis Asset Management has developed and launched several proprietary equity indices, most of which focus on dividend yields. All equity indices are **rule-based** and use scientifically proven selection criteria. To reduce risk, we apply **quarterly rebalancing** and **optimal diversification**. For this reason, our equity indices show an **attractive risk/return ratio** that is especially beneficial in the **long term**. To give our private and institutional clients unique access to the promising genomic industry, we have developed and calculated the **Lapis Global Top 20 Genomic Revolution Index**.

Lapis Global Top 20 Genomic Revolution Index

The **Lapis Global Top 20 Genomic Revolution Index** is composed of the worldwide best-known and leading 20 companies in **gene therapy, bioinformatics, bio-inspired computing, molecular medicine and pharmaceutical innovation** based on the research approach of an internationally recognized company. All stocks are equally weighted, and the Index is rebalanced on a quarterly basis (end of January, April, July, and October).

We offer our existing and prospective customers access to our unique **Lapis Global Top 20 Genomic Revolution Index** as follows:

- **Mandates** (segregated accounts)
- **Lapis funds** (not yet available) or **white-label financial products**
- **Certificates** or other **index-based financial products**

We would be pleased to explain the advantages of our unique equity indices in a **personal advisory meeting** to determine an **optimal long-term investment strategy** that matches your risk profile and is able to **meet your investment goals**. Further information on the **performance** and relevant **financial ratios** of our equity indices will be provided upon request.

Please visit our website: www.lapis.finance.

Kind regards,

Andreas Wueger
CEO

Disclaimer

This brochure is for general information purposes only and does not constitute, nor is intended to constitute, an offer to buy or an encouragement to sell any financial products or a source of financial, legal or tax advice.