Google Cloud

Google Cloud for Life Sciences

Life Science problems, are data problems.

While Life Sciences companies are traditionally thought of as bench science and sales and marketing businesses, success in both R&D and commercialization today is dependent on data analytics on a massive scale.

From mounting pressure to accelerate R&D lifecycles and focus on specialty products, to complex country-specific supply chain requirements, to consumer demand for digital convenience and value – life sciences organizations worldwide are scrambling to successfully leverage new data and technology opportunities. To compound this, data security has never been more crucial.

Cloud-based technology will play a pivotal role in transforming life sciences systems and processes, harnessing data to increase competitiveness while empowering workers with modern, collaborative and secure tools.

The shift to precision medicine has **decreased productivity by 20-30%,** since companies must store and compute more data to produce more specialized products
– Forbes

49% of healthcare organizations **can't deploy the AI they want because their data isn't ready**
– Infosys

The adoption of **digital tools in clinical trials will increase from** 60-97% by 2022
– Validic

Google Cloud's health-specific products and solutions enable life science organizations to bring treatments to patients faster & operate more efficiently

Deploy Google Cloud in your organization

Google Cloud has a team of healthcare focused engineers and product managers building products around five core areas to meet the needs of healthcare organizations.

Store, de-identify and aggregate your organization's data to make it useful from drug discovery to commercialization.

Harness the power of your data from drug development to commercialization using analytics tools and platforms.

Leverage AI/ML to **provide insights** that improve the drug development and commercialization process.

Empower cross-functional **collaboration** across your organization and drugs life-cycle.

Build new tools and services to provide additional value for your patients, customers and organization.

All with **best-in-class security** built-in including HITRUST CSF certification, third party audits and HIPAA compliance.

Faster insights and secure scalability for Broad Institute

Broad Institute replaced its in-house genome sequence analysis system with Google Cloud Platform, which delivers greater **speed**, **scalability**, and data **security**.

Broad Institute generates roughly 12 terabytes of data every day, which is now supported by the Google Cloud Platform.

- 400% faster analysis of human genomes.
- Scalable to meet spikes in demand for data processing and storage.
- High-level security helps protect sensitive genomic data.
- Achieve greater understanding of links between genetics and human disease biomedical advances.

"
We can do important research faster than ever.

Geraldine Van der Auwera, *Associate Director of Outreach and Communications, Broad Institute*

To learn more about Google Cloud and how it is already transforming the life sciences industry, visit **cloud.google.com/solutions/healthcare-life-sciences/**

1. Google Research https://www.blog.google/products/google-cloud/our-genes-how-google-cloud-helps-broad-institute-slash-cost-research/
2. Google Research https://cloud.google.com/customers/broad-institute/ | https://cloud.google.com/customers/colorado-center-for-personalized-medicine/