

Accelerate innovation in Healthcare and Life Sciences with HPC on AWS

With Amazon Web Services, researchers can access purpose-built HPC tools and services along with scientific and technical expertise to accelerate the pace of discovery.

AWS delivers virtually unlimited compute capacity to Relay Therapeutics to accelerate molecular compound analysis for faster drug development. Read the full case study.

Simplify and accelerate drug design cost-effectively

Simplified analysis and orchestration Optimized drug discovery process

Benefits

- Scalable compute resources

Avoid upfront investments or lengthy procurement cycles.

Reduced molecular compound analysis

Impact

- time from months to days

Reduced compute costs by 50%

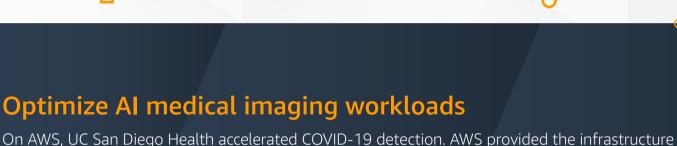
The AWS pay-as-you-go pricing allows you to pay only for the capacity you use, and Amazon Elastic Cloud Compute (EC2) Spot Instances can help you save up to 90% on compute costs.

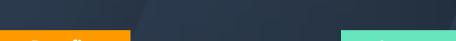


\$41 in profit or cost savings¹

Every dollar spent on HPC in HCLS generated







Benefits **Impact** HIPAA-secure environment Infrastructure for AI-enabled image

to facilitate machine learning-based algorithm to analyze chest X-rays for COVID-19

AWS support and speed to deploy

cloud infrastructure

Cost-effective and highly scalable

characteristic signs. Read the full case study.

9 weeks

analysis deployed in 10 days

Almost 13,000 X-rays analyzed in



services to meet the most demanding imaging workloads.

Take advantage of HPC focused

compute, scalable storage

solutions, advanced machine

learning and data integration

Accelerate time to insight in modeling and simulation

93%

of healthcare leaders confirm AI is absolutely essential, very important or important to their strategy²

Running simulations 98% faster Reducing cost while extending capabilities Time to discovery reduced by

Impact

almost a year

AWS enables Bristol-Myers Squibb, to build a secure, self-provisioning portal for hosting

research to run clinical trial simulations on-demand. Read the full case study.

and compliance Reduced sample size

at the atomic, cellular, and biological level.

Benefits

at scale

value chain.

Benefits

AWS infrastructure security

Leverage on-demand HPC

initiatives that analyze and

predict future medical states

resources to facilitate emerging

and analytics. Read the full case study.

Rapid genomics data processing

Saved time with easily accessible and customizable infrastructure

analyze, store and share genomic

data through HPC solutions that

support each step of the genomics





Impact

Over 51 billion statistical tests

two million genomes by 2026

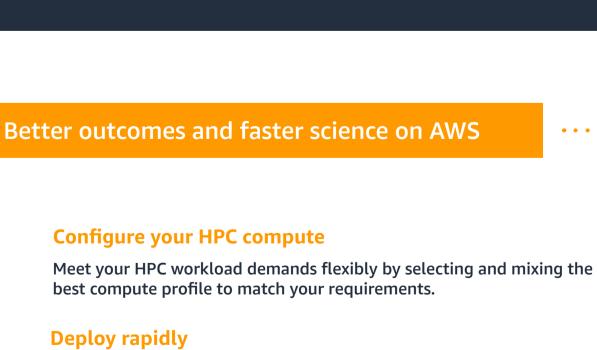
Genomic insights delivered to over

40 drug discovery projects in 2020 Moving closer to the goal of analyzing

processed in 24 hours



Use AWS services to securely



Deploy rapidly Quickly respond to new business demands by launching an HPC cluster

in minutes.

Pay-as-you-go

decommission them in minutes.



Choose from a wide variety of instance types and services to match your unique scientific requirements. Accelerate time to insight

Leverage purpose-built tools and services

Only pay for HPC resources you use and after completion,

Exchange (ADX). Innovate without infrastructure constraints

Secure the HPC resources required to fuel healthcare and life sciences

Expedite your research with HPC services, scalable storage solutions

and access to secure collaboration platforms such as AWS Data

Learn how HPC on AWS can accelerate your research https://aws.amazon.com/hpc/hcls

workloads and advance the pace of innovation.

1 https://www.businessweekly.co.uk/news/biomedtech/hpc-revolutionising-speed-life-science-research

2 https://www.aiin.healthcare/sponsored/9667/topics/ai-healthcare-2020-leadership-survey-report/ai-healthcare-2020-leadership-1