AI Technologies and Solutions

Driving innovation in genomics and shaping the future of medicine

FUJITSU

Fujitsu leverages various business-specific AI technologies, including generative AI, action recognition AI, and demand forecasting, to support the creation of new services and businesses that improve daily convenience and enhance people's abilities and knowledge.

This solution represents a significant breakthrough in the field of genomics by accelerating research, improving diagnostics and improving patient care. It enables researchers and healthcare professionals to unlock the potential of genomic data and advance the understanding of genetic factors in health and disease.

To improve efficiency and accuracy in genetic processes and reduce response times in the field of health

Clinical genomics demands advances in quality, efficiency and applicability. Strategies such as data centralization, interoperability between systems, and a rigorous approach to quality management are essential to overcome today's challenges holistically.

Workflow Complexity

Underutilization of Research Datatime Prolongated from Analysis

Sample Management Errors

Lack of Interoperability Between Systems

Difficulties in Annotation and Interpretation

Underutilization of Research Data

A modular platform to meet the needs of processing, analysis and interpretation of data for personalized & precision medicine, this solution aims to become a fundamental tool in routine genetic diagnostic care.

PRIMARY ANALYSIS
Unify Sequencer Runs

Run Explorer | Quality Assesment

SECONDARY ANALYSIS
Platform to launch bioinformatics pipelines
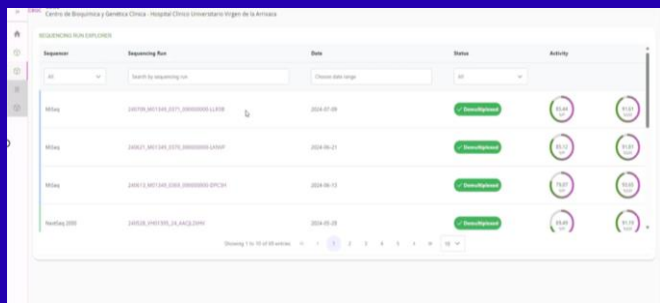
Easy integration of customer pipelines

TERTIARY ANALYSIS
Mutation Analysis Interface
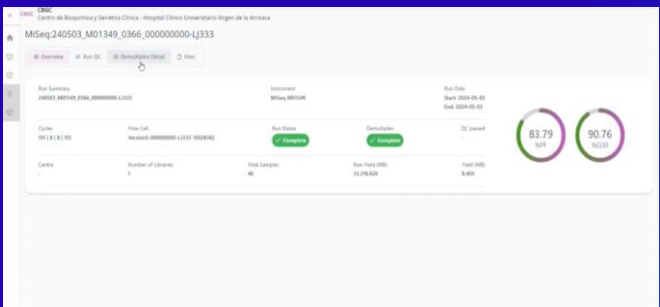
Filtering and prioritizing genetic variants

Features

This solution covers everything from sample management to genetic reporting.
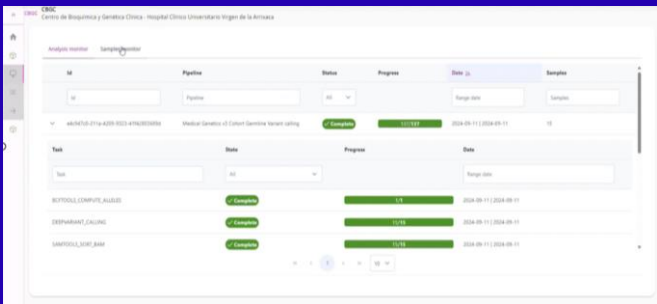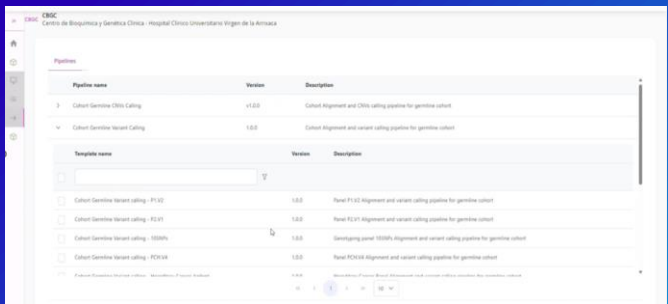
Run Explorer

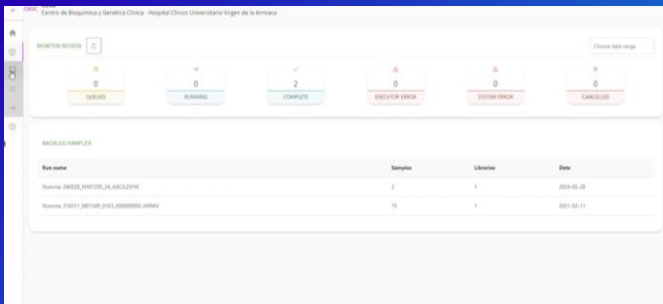## Quality Control of a Run

Monitor pipeline analysis

Launching the pipelines

KPIs of the pipelines

Key Benefits

This solution seeks to improve the efficiency, accuracy and accessibility of genetic processes, delivering substantial benefits in terms of response times, error prevention and research support.

Facilitate the diagnostic process for geneticists

Streamline genetic analysis, reducing waiting times

Identify common errors in the handling of biological samples

Centralization and interoperability

Complete digitization of the genomic process and improve decision-making

Research facilitation

© 2025 Fujitsu Limited

Usecase

Centralized storage for genomic data

Challenge

- *Needed a centralized storage solution for the genomic data generated in the company health system*
- *This solution had to be a complete genomic data analysis, from secondary analysis (alignment and variant calling) to the annotation and implementation of a prioritization and reporting tool.*

Solution

- *Fujitsu provided a centralized, automated, and secure storage solution for genomic data with secure access and backup.*
- *This solution led to an improvement in the automation of genomic analysis processes by integrating with laboratory management systems, avoiding manual processes and speeding up diagnosis.*
- *It also allowed for greater control of genomic data, avoiding duplicate testing and maintaining a traceability record of the entire bioinformatics process and associated data.*

Results

- *It provides a unified and scalable storage of available genomic data.*
- *Improve automation of genomic analysis processes*
- *It makes it possible to quantify and predict analysis times, allowing costs to be reduced.*
- *The platform can be customized or customized, providing new functionalities and pipelines for genomic analysis and including new relevant use cases in clinical genetics.*

Contact

Fujitsu Limited
Contact Fujitsu
Contact Form