

Impactomics

AI-powered, Cloud-enabled NGS Analysis & Reporting Platform

Empowering clinical genomics with intelligence, speed & precision

Impactomics is an AI-driven genetic variant analysis, interpretation, and reporting platform designed to simplify the entire NGS workflow. Spanning from FASTQ to the final diagnostic report, it is purpose-built for rare disease and oncology. It combines automation, AI, and cloud scalability to deliver faster, accurate, and actionable insights.

Simplify Complexity + Accelerate Discovery : Improved Outcomes

Comprehensive NGS Workflows



Rare Disease Diagnostics

- End-to-end workflow: FASTQ/VCF to clinical report
- HPO-based variant ranking with OMIM, ClinGen, Orphanet
- AI-powered pathogenicity prediction (VarTk ML model)
- Trio & family analysis, automated ACMG classification
- Clinician-friendly reports with evidence summary

Identify disease-causing variants faster and confidently.



Oncology Diagnostics

- Somatic variant calling (SNVs, CNVs, INDELS, Fusions)
- Actionability assessment linked to therapeutic biomarkers
- Integrated oncology databases & clinical trial mapping
- Automated tier classification (AMP/ASCO/CAP)
- TMB, MSI, HRD, LOH & fusion driver detection

Accelerate precision oncology, from mutation to treatment.



Scalable. Secure. Seamless.

- Cloud or hybrid deployment (AWS/Azure/on-premise)
- Fully automated workflows – analysis to reporting
- User-friendly dashboards for clinicians & analysts
- Compliant & secure: HIPAA, GDPR, CAP/CLIA-ready
- Multi-tenant architecture for labs of all sizes



AI & Genomic Intelligence Engine

- VarTk ML model: Predicts variant pathogenicity
- Automated ACMG classifier: Evidence-based interpretation
- Knowledge Graph: Links gene–disease–drug networks
- Continuous improvement: Learns from lab feedback



Key Features & Benefits

- Germline, somatic, CNV, and fusion workflows
- Phenotype-aware, ACMG/AMP-compliant interpretation
- Customizable, branded clinical reports
- QC metrics, full audit trails
- Multi-omics ready (RNA, proteomics future-ready)
- LIMS/EMR integration (FHIR/HL7 APIs)

Why Impactomics

- End-to-end automation – from raw data to report
- AI-driven accuracy & speed
- Clinical-grade compliance
- Cloud scalability for any lab size
- Intuitive UI for non-bioinformaticians

From variant to verified insight — powered by AI.

Designed For



Clinical Geneticists



Laboratory Managers



Genome Analysts



Clinicians & Pathologists

Transform Clinical Genomics

Deliver accurate, audit-ready, and clinically validated results — faster than ever.

Talk to the Experts:

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