

Streamline somatic variant interpretation

Identify insights faster while scaling NGS operations for somatic oncology research applications





Move precision medicine forward

Streamlined

Accelerate time to research report by harnessing the power of automation, powerful visualization, and > 55 knowledge sources

Integrated

Remove unnecessary touchpoints and manual data movement by connecting data analysis with upstream sequencing to simplify and secure the comprehensive workflow

Powered for growth

Scale the volume and throughput of your NGS workflows without increasing headcount to keep pace with evolving science, technology, and demand

Connected Insights harnesses > 55 knowledge sources to bring insights to diverse applications

Comprehensive knowledge in one place

- Connect LIMS, storage, pipelines, and third-party knowledge bases through APIs
- Integrate variant classifications, relevant drug labels, and pertinent clinical trials within a single view

Evidence-based integrated knowledge content from trusted sources

- Apply comprehensive solid and hematological cancer content, somatic gene variant annotations, and related content from multiple integrated knowledge bases:
 - OncoKB, a precision medicine knowledge base that includes FDA-recognized content from Memorial Sloan Kettering
 - The Clinical Knowledgebase (CKB) from Genomenon, a trusted knowledge base with over 100,000 users worldwide

Flexible regionality

- Incorporate relevant lab- and region-specific practices within the user-defined workflow
- Support customized variant interpretation and reporting based on regional-tiering guidelines

Regular updates

- Access up-to-date, relevant variant annotations and insights, guidelines, and more with regular, automated content updates (as frequently as monthly for some knowledge sources)

Unlock meaning for a wide range of applications



Solid tumor testing (tissue)



Liquid biopsy



Hematological cancer



DNA methylation



Gene expression



MRD and monitoring

Powerful features to streamline integration and adoption of a single-vendor workflow

Enterprise-level security and privacy standards

Protect the privacy of your genomic data with industry-leading global and local security standards

User-defined SOPs and advanced filters

Implement SOPs by creating sets of predefined custom filters or using the advanced filtering system

Streamlined workflow and collaboration

Facilitate teamwork, save time and remove manual data movement steps with autoingestion of variant data and autolaunch of Connected Insights

Automated oncogenicity classification

Facilitate standardization within and across laboratories with automated, guideline-based oncogenicity classification, incorporating AI predictors such as PrimateAI-3D and SpliceAI and generating a transparent evidence map

Broad portfolio of tests and variant types

Analyze comprehensive panels, exomes, genomes, or transcriptomes across a range of DNA and RNA variant and biomarker types, including TMB, MSI, and GIS to assess HRD

Lab-specific curation

Grow, update, and maintain a private knowledge base of your organization's curated data, including information about past variant interpretations and reporting

Automated custom research reporting

Customize, edit, and automatically populate draft research reports with minimal manual interaction

Powerful visualizations

Generate gene- and exon-level visualizations for DNA and RNA, variant QC, genome plots for structural variants, Circos plots, ideogram/karyogram plots, mutational signatures, CNVs, B-allele ratio, fusion plots, and more

Integrate and streamline your workflows from library prep, sequencing, and data analysis

Learn more about Connected Insights at
illumina.com/connected-insights

Video



[Connected Insights video](#)

Watch this video to understand how Connected Insights enables data interpretation operations for critical insights



Article



[The Jackson Laboratory advances precision medicine with end-to-end workflow](#)

Learn how The Jackson Laboratory has adopted an end-to-end Illumina informatics workflow to provide molecular profiling for tumor-based neurological cancer research



Data sheet



[Connected Insights data sheet](#)

Read how Connected Insights streamlines, integrates, and powers laboratories for scale and growth



Security brief



[Connected Insights security and compliance brief](#)

Understand how extensive privacy, security, and compliance features make Connected Insights a secure environment for sensitive data



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Abbreviations

API application programming interface

CNV copy number variant

ctDNA circulating tumor DNA

GIS genomic instability score

HRD homologous recombination deficiency

Indels insertion/deletion

KOL key opinion leader

LIMS laboratory information management system

MSI microsatellite instability

MRD Measurable residual disease

NGS next-generation sequencing

SNV single nucleotide variant

SOP standard operating procedure

SV structural variant

TMB tumor mutational burden

WES whole-exome sequencing

WGS whole-genome sequencing