





#### **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

- Leverage 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)

Access comprehensive gene panels across multiple variant types, including TMB, MSI, and GIS to assess HRD



# Liquid biopsy

Detect and analyze cancer variants with high analytical sensitivity and specificity using low levels of ctDNA



# Hematological cancer

Streamline insight generation for myeloic leukemia, lymphoma, and other hematologic malignancies

# 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 auto-ingestion of variant data and autolaunch of Connected Insights

#### Automated oncogenicity classification

Facilitate standardization within and across laboratories with automated, guideline-based oncogenicity classification, incorporating Al predictors such as PrimateAl-3D and SpliceAl 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, 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

## **GenomeWeb Variant Interpretation article**

Learn how Illumina and Genomenon are partnering to improve oncology variant interpretation with Al-driven predictors, knowledge bases, and literature mining integrated within Connected Insights



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

Indels insertion/deletion

API application programming interface
CNV copy number variant
ctDNA circulating tumor DNA
GIS genomic instability score
HRD homologous recombination deficiency

LIMS laboratory information management system
MSI microsatellite instability
NGS next-generation sequencing
SNV single nucleotide variant

key opinion leader

KOL

SOP standard operating procedure
SV structural variant
TMB tumor mutational burden
WES whole-exome sequencing
WGS whole-genome sequencing