### **illumina**<sup>®</sup> Connected Insights

### Connections bring meaning to cancer testing

Identify insights faster while scaling NGS operations for somatic oncology applications

Biomark

**Clinical trials** 



Guidelines



Illumina Connected Insights



Report

# Move precision medicine forward

#### Streamlined

Accelerate time to report by harnessing the power of automation, user-defined workflow configuration, 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 clinical content**

- 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
  - JAX-CKB powered by The Jackson Laboratory, a trusted knowledge base with over 100,000 users worldwide

#### Flexible regionality

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

#### **Regular updates**

 Access up-to-date, relevant variant annotations, 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 covering multiple variant types, including TMB, MSI, and GIS to assess HRD



biopsy

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



#### Hematological cancer

Streamline insight generation for myeloid 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 on the platform 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 oncogenecity classification, including 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

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

#### Automated custom reporting

Customize, edit, and automatically populate reports, in 18+ different languages, as needed, with minimal manual interaction

#### **Powerful visualizations**

Generate gene- and exon-level visualizations for DNA and RNA, variant QC, genome plots for structural variants, CNVs, B-allele ratio, fusion plots, and more

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

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#### GenomeWeb KOL white paper

Learn the thoughts of key opinion leaders on the current challenges and promise of NGS interpretation and reporting in clinical oncology





#### Connected Insights data sheet

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





#### Connected Insights animated video

Understand how Connected Insights can connect various knowledge sources to streamline operations for powerful insights



### Learn more at illumina.com/connected-insights

### illumina

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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
- NGS next-generation sequencing
- SNV single nucleotide variant

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