

Unlock genomic insights

Streamline variant interpretation for sequencing and microarray research applications with Emedgene™ explainable AI (XAI) software and automation

Trusted by leading institutions

BAYLOR
GENETICS

SickKids



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Confidently scale tertiary analysis clinical research workflows

Streamlined

Save valuable time through the application of XAI and customizable automation by as much as 75% per subject¹

Integrated

Connect with DRAGEN™ secondary analysis, LIMS, and other health IT systems to simplify and secure the complete assay workflow

Powered for growth

Keep pace with evolving science, technology, and demand, while being supported by a team of genomics experts

Powerful core XAI technology to power diverse use cases

Launch assays

Implement a streamlined genome (WGS), exome (WES), virtual panel, targeted panel, or microarray workflow that is integrated into your lab's digital ecosystem

Scale volume

Increase throughput without increasing headcount using accurate,² comprehensive XAI variant prioritization and automated workflows

Expand menu

Broaden your analysis to WGS or WES or standardize panels on a backbone assay; analyze across a comprehensive range of variant types—SNVs, indels, CNVs, mtDNA, SVs, STR variants, and others—with seamless DRAGEN secondary analysis integration

Share curated knowledge

Leverage the power of collaboration to share knowledge across a private network, one lab or many, that you control

The role of AI in genomics is to reduce noise and highlight data with the most evidence



Efficiency³

Support scale and efficiency gains



Time per subject¹

Reduce turnaround time and costs



Accuracy¹

Prioritize variants across applications confidently

All the enterprise features needed for smooth adoption, integration, and operation

Automated ACMG classification

Save as much as 90% of time with automated classification for SNVs, indels, and CNVs³

Broad portfolio of tests and variant types

Support your interpretation of SNVs, indels, CNVs, SVs, STRs, and mtDNA from WGS, WES, targeted panels, or virtual panels

SOP and advanced filters

Implement your SOP by creating sets of predefined custom filters or use our advanced filtering system

Knowledge management

Maintain a knowledge base of your organization's curated and tagged genomic data; see all evidence mapping for prioritized variants with XAI

Streamlined workflow and collaboration

Adopt a customized workflow for your lab and facilitate team communications

Automated custom reporting

Customize, edit, and automatically populate reports; no HTML required and minimal manual work

Powerful API interoperability

Automate workflows with API integrations to leading LIMS, storage, pipelines, and more

Share curated knowledge

Share curated variants securely across a private network of labs and facilitate team communications

Integrate and streamline your germline analysis research workflows from wet lab to dry lab

Publication



[Evaluating an automated variant interpretation model](#)

The Baylor Genetics laboratory evaluates Emedgene XAI for accuracy in a cohort of research subjects



Publication



[Children's rare disease cohort studies](#)

Boston Children's Hospital incorporates Emedgene software in their clinical research genomics initiative



Article



[Australia's path to improving generational health](#)

A milestone research study in Melbourne hopes to pave the way to sequencing every child at birth



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[Emedgene software](#)

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Abbreviations

ACMG, American College of Medical Geneticists; AI, artificial intelligence; API, application programming interface; CNV, copy number variant; EHR, electronic health record; GDPR, General Data Protection Regulation; HIPAA, Health Insurance Portability and Accountability Act; LIMS, laboratory information management system; mtDNA, mitochondrial DNA; NLP, natural language processing; SNV, single nucleotide variant; SOC, service organization control; SOP, standard operating procedure; STR, short tandem repeat; SV, structural variant; TAT, turnaround time; WES, whole-exome sequencing; WGS, whole-genome sequencing; XAI, explainable artificial intelligence

References

1. Greenwood Genetic Center. GGC Reduces Turn Around Time on Genomic Analysis by 75% With Emedgene's AI Platform. <https://ggc.org/in-the-news-app/ggc-reduces-turn-around-time-on-genomic-analysis-by-75-with-emedgenes-ai-platform>. Published September 12, 2019. Accessed July 17, 2024.
2. Meng L, Attali R, Talmy T, et al. Evaluation of an automated genome interpretation model for rare disease routinely used in a clinical genetic laboratory. *Genet Med*. 2023;25(6):100830. doi:10.1016/j.gim.2023.100830
3. Data on file. Illumina, Inc. 2024.