



# THE GENOOX INTERPRETATION AND REPORTING ENGINE

Increasing diagnostic yield and  
eliminating the complexity of variant  
interpretation



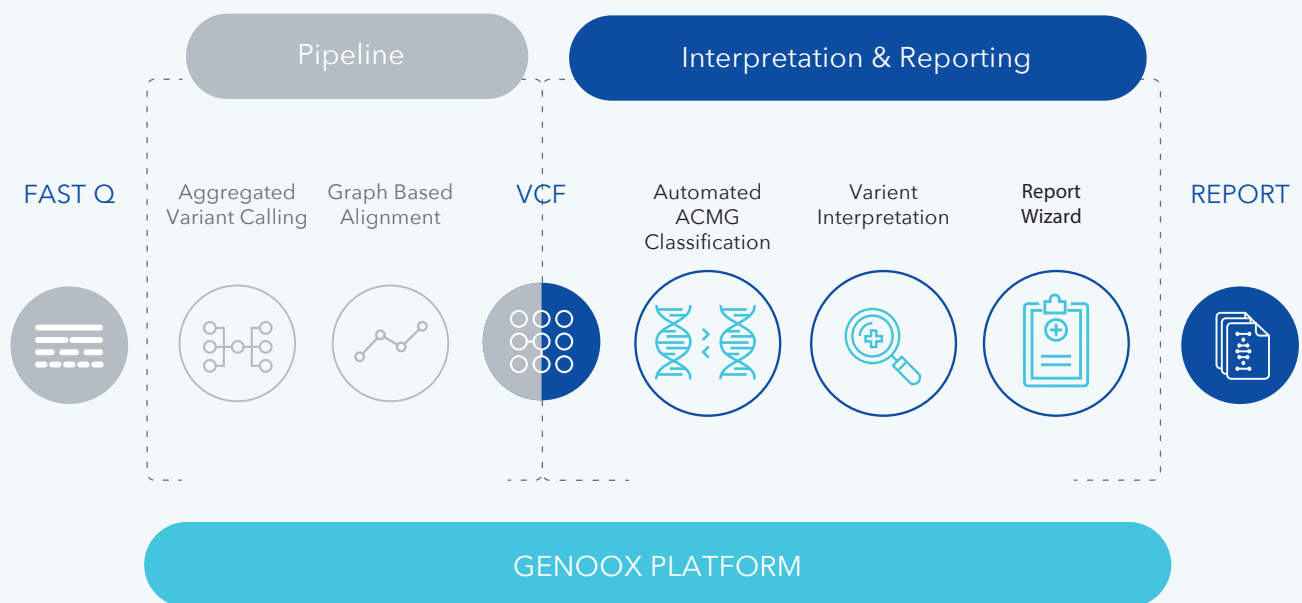
# Increase your diagnostic yield and eliminate the complexity of variant interpretation



## GENOOX INTERPRETATION & REPORTING

# RAPID AND ACCURATE RESULTS POWERED BY ARTIFICIAL INTELLIGENCE

The Genoox Interpretation engine delivers cutting edge tools and algorithms to increase laboratory diagnostic yield and reduce the complexity of determining the pathogenicity of genomic variants and reporting them.



Genoox's proprietary classification engine, based on the American College of Medical Genetics (ACMG) and powered by Artificial Intelligence (AI) technology is designed to automatically identify, classify and prioritize variants fast and accurate combining deep phenotype, genotype data with disease causing information.

**A fully featured, integrated reporting system enables medical professionals to review, finalize, and sign out clinical reports.**

# INCREASING DIAGNOSTIC YIELD AND REDUCING TURNOVER TIME

Turnover time is reduced to several minutes per case combining features facilitating variant visualization, AI based ACMG classification and automated reporting all in one platform.

- Comprehensive filtering with integrated Genotype/Phenotype Correlation Engine
- Automated ACMG classification powered by Artificial Intelligence (AI)
- Integrated lab-branded clinical reporting tool



**CLASSIFICATION ~ 1 Sec\***  
Automating ACMG guidelines



**INTERPRETATION <12 Min\***  
Prioritizing relevant variants



**REPORTING <7 Min\***  
Streamlining clinical reporting

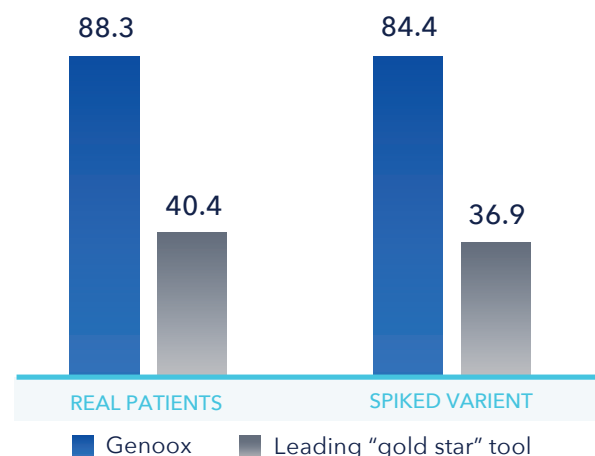
\* Average time according to internal customer survey

## ACHIEVING MORE ACCURATE RESULTS

Cultivating and curating billions of biomedical information to surface the most relevant findings and reduce the amount of Variants of Unknown Significance (VUS) with high level of confidence.

- Frequent database update from public data, curated sources and Pubmed
- ACMG criteria sub-classification and manual rule assignment
- Improved statistical findings optimizing historical data

CLASSIFICATION RESULTS FOR PATHOGENIC VARIANTS



# DELIVERING CLINICAL REPORTS IN MINUTES

Automated, lab-branded clinical reports deliver results supported by clinical evidence and graphical gene-level decision support for physicians and collaborators.

- Fully customizable lab-branded clinical report generator
- Evidence-based genomic results including detailed clinical literature
- Flexible delivery options and third-party downstream integration



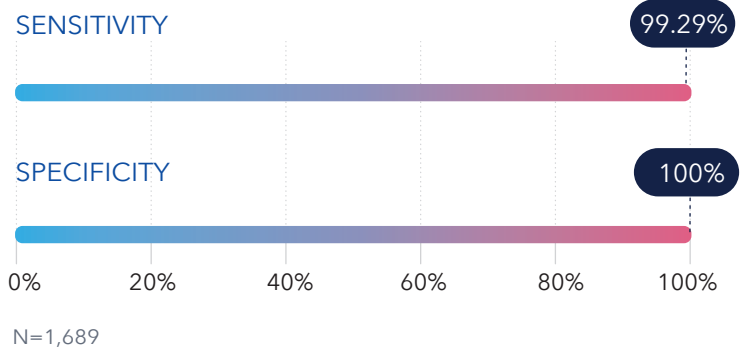
## VALIDATION

The Genoox classification engine was validated and benchmarked against a Clinvar blinded study<sup>1</sup>, Amendola study<sup>2</sup>, and multiple internal studies

In all cases the Genoox Classification demonstrated over 99% Specificity & Sensitivity

1. Einhorn Y, Lev O, Einhorn M, et al. Benchmarking an automated variant classification engine (aVCE) algorithm using ClinVar: results of a time-capsule experiment. As presented at the ACMG 2018 Annual Clinical Genetics Meeting.
2. Amendola, Laura M., et al. "Performance of acmg-amp variant-interpretation guidelines among nine laboratories in the clinical sequencing exploratory research consortium." the american journal of human genetics 98.6 (2016): 1067-1076

### CLINVAR TIME CAPSULE EXPERIMENT





GENOOX is healthcare and technology company that aims to make clinical genetic sequencing more accessible to clinical laboratories. With its cloud-based advanced AI framework that encompasses purpose-built applications, users can easily manage the entire genetic sequencing process and create virtual genetic test modules allowing plug- and-play for the delivery of clinical actionable insights and disease diagnoses.

To see how the Genoox platform can help you expand your laboratory capabilities, or to schedule a demo, contact us at:

[www.genoox.com](http://www.genoox.com) | [info@genoox.com](mailto:info@genoox.com) | +1.877.408.9188