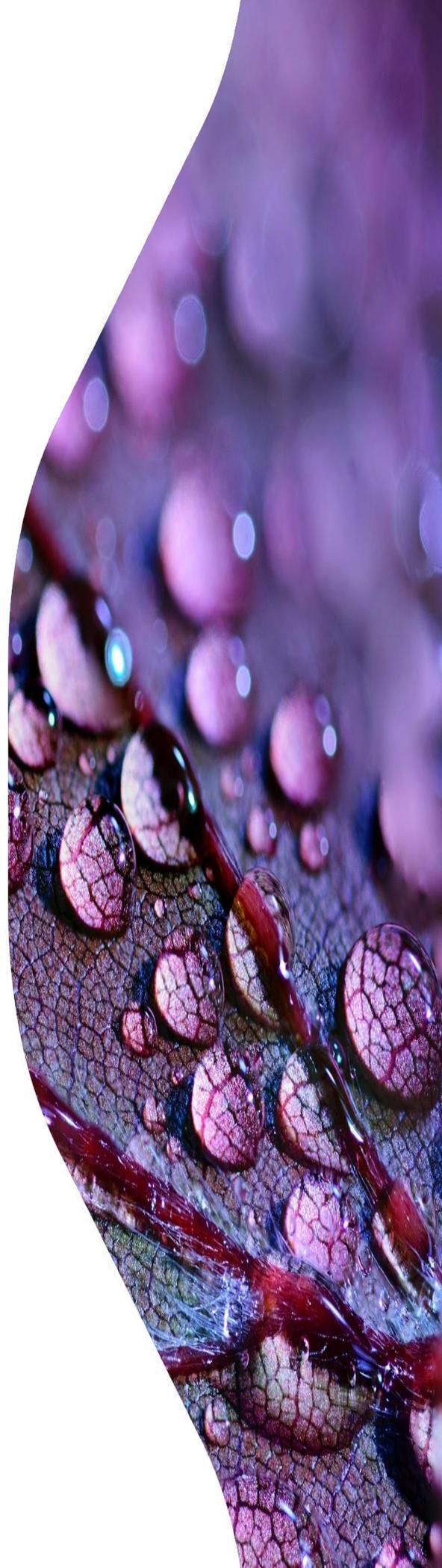


allelica

Enabling the next generation
of clinical genomics



THE POLYGENIC RISK SCORE COMPANY



Allelica Office in Rome, Italy

Founded in 2017 by a team of researchers from the Wellcome Trust Center for Human Genetics in Oxford, UK and University of Rome La Sapienza, Italy, Allelica was established with the goal of advancing genomic medicine to reduce the onset and burden of chronic disease. In 2021, Allelica moved its headquarters to New York, USA to better serve its stakeholders in North America, Allelica's largest market.

Today Allelica is working with leading health systems and genetics laboratories in the United States and across Europe to advance chronic disease prevention through widened application of the Polygenic Risk Score (PRS) in healthcare.

IMPROVING HEALTH SYSTEM RANKING BY REDUCING THE IMPACT OF CHRONIC DISEASE

PRS identify how a patient's genes contribute to their risk of developing disease. Allelica has created a secure and trusted platform for PRS analysis and reporting which equips health systems with cutting-edge computational tools to reduce the onset of chronic diseases through precision medicine. Our top-ranking PRS for coronary artery disease, breast cancer, prostate cancer, and a range of other diseases are deployed in a platform that is fast and scalable. Results are delivered seamlessly as reports and integrated within electronic health records, allowing clinicians to accurately identify patients at elevated disease risk who are currently undetected by traditional risk assessments.

SOFTWARE AS A SERVICE FOR PRS

Allelica's Software as a Service (SaaS) is a fully compliant platform for comprehensive PRS analysis and risk stratification through advanced analytics. The platform enables clinical laboratories to calculate individual PRS and produce automated reports, according to the "Polygenic Risk Score Reporting Standards" developed by the NHGRI Clinical Genome Resource (ClinGen), Complex Disease Working Group and the Polygenic Score Catalog (PGS).

PLATFORM FEATURES

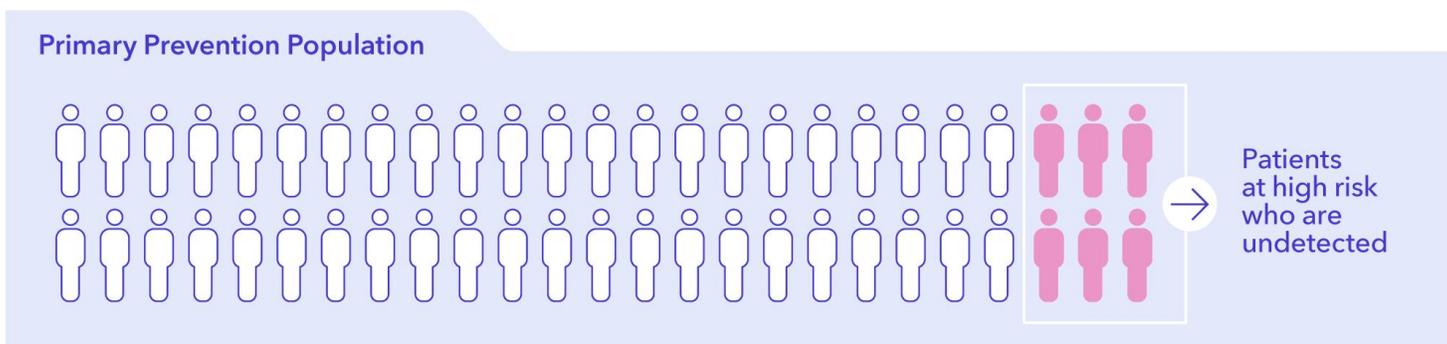
- HIPAA & GDPR Compliant
- CE-marked medical device
- Available on the cloud or on-premises
- API integration for direct report uploading
- Compatible with raw microarray or Low coverage WGS data

ADVANCING DISEASE PREVENTION THROUGH PRECISION RISK ASSESSMENT

Current risk prediction for chronic disease focuses on clinical risk factors, such as smoking and high cholesterol for heart disease, and mutations in single genes like *BRCA* for breast cancer. But many patients at high risk still go undetected and suffer the effects of these diseases. By integrating Polygenic Risk Scores (PRS) into risk prediction, health systems can identify significantly more patients at high risk and inform decisions for more effective primary prevention strategies.

UNCOVER PATIENTS WITH HIDDEN RISK

Risk prediction models which fail to account for PRS have devastating consequences: many patients at high risk of diseases like breast cancer and Type 2 Diabetes are invisible to existing assessments and are incorrectly classified as having average or even low risk. As a result, these patients are not prescribed with appropriate preventative strategies. This hidden risk is estimated to be present in more than 10% of the population for some diseases.*



ENABLE DATA-DRIVEN PRIMARY PREVENTION STRATEGIES

Advances in precision risk prediction improve patient outcomes and minimize the impact of chronic diseases by more effectively classifying risk. In the case of coronary artery disease, PRS can identify patients at high risk despite having average cholesterol levels and no additional risk factors. These patients can then be appropriately prescribed therapeutic or lifestyle interventions, significantly reducing the onset of heart attack.

IMPROVING HEALTH SYSTEMS RANKING

Given the proven benefits of early detection of chronic diseases, health systems across the country are now taking steps to adopt PRS in their healthcare setting. PRS adoption is helping address the massive economic burden of treatment costs for chronic conditions by empowering physicians to improve patient outcomes and satisfaction through early risk detection and data-driven prevention plans.

*Bollig, A., et al. "Polygenic Risk Score Modifies Risk of Coronary Artery Disease Conferred by Low-Density Lipoprotein Cholesterol." *Circulation* (2021).

THE PREDICT MODULE: Calculate and report PRS for chronic disease

The PREDICT module is a resource for clinical laboratories and healthcare providers to build personalized PRS reports for a range of complex diseases. Our end-to-end solution starts with a simple file upload of patient genotype data and delivers a patient's customized genetic risk by leveraging the UK Biobank data with our own analytics. Our technology accounts for a patient's ancestry by utilizing the genetically diverse 1000 Genomes Project resource.



Generate automated, highly personalized PRS reports with clinical grade risk prediction.

- + Ancestry-specific risk prediction
- + Top-performing PRS
- + Lifetime genetic risk and absolute risk models
- + Customizable and white label report

