

Catalyze research using clinicogenomics in cardiology and metabolic conditions

Unlock the potential of genomic data

The information within the human genome can help us diagnose rare diseases, identify individuals at risk for developing certain conditions and create effective treatment regimens. But today's genomic data sets come with limitations for researchers. They're noisy, not representative and, if not linked to the longitudinal clinical data that details patients' journeys, their value is limited.

Research-ready, de-identified clinicogenomics data sets link genomic data with the longitudinal health record. This allows for:

- · Genotypic and phenotypic research across all stages of a therapy's development and use in the real world
- Improved understanding of medical conditions and the criteria used to diagnose them
- The creation of cohorts that reflect the real-world populations a researcher wants to study

The benefits of clinicogenomics extend far beyond rare disease

This rich information can unlock insights into more common conditions with much larger patient populations.

Case in point: Several widespread cardiology and metabolic conditions have room for improvement when it comes to treatment side effects, patient quality of life and total cost of care. Others lack adequate treatment options altogether. The populations who suffer from these conditions are generally under-represented in existing genomic data sets. Now with clinicogenomics data from Optum, you can explore the clinical and genomic data of populations living with these conditions in the real world.

Clinicogenomic data sets for cardiology and metabolic conditions

Optum can focus a customized cohort on individuals who are diverse with unique combinations of comorbid profiles.

	NASH	Hypertension	Chronic kidney	Type 2 diabetes	Heart failure	Cardiomyopathy
Demographics	30% non- Caucasian in a 1,000-person cohort	100% non- Caucasian in a 1,000-patient cohort	30% non- Caucasian in 1,000-patient cohort	100% non- Caucasian in a 1,000-patient cohort	~50% Black in a 1,000 patient cohort	30% non- Caucasian in a 1,000 patient cohort
Population with highest prevalence in real world	Hispanic adults	Black adults	Black adults	Hispanic and Black adults	Black adults	Black adults

Research-ready, on-demand data sets

- Ignite discovery using consistently high-quality and whole genome sequence (WGS) data
- Access a highly characterized, relevant cohort without time and cost of recruitment. Data sets are often ready for timely delivery
- Explore robust, longitudinal phenotypic data that's linked to genomic data and designed to help you answer specific research questions about populations that matter

Screenshot of user view, data license delivered in genomics platform

Two solutions to help you find the answers you need

Life sciences leaders trust our robust real-world data and experienced consultants to connect the dots in ways that answer tough questions, illuminate new possibilities and improve patients' lives.

The Optum clinicogenomics portfolio offers solutions that scale to help you find answers to the questions you have today — and the questions you didn't even know you could ask.

Custom research projects give you the flexibility to work with us on more complex initiatives that help answer unique questions. These projects can range from light-touch analytics on demand to end-to-end research work or a deep dive into a specific area.

On-demand data sets are easy to access, research-ready and syndicated for large market opportunities.

Fuel your next discovery

Optum clinicogenomics expands our capacity to deliver data-driven insights in ways that streamline the process of drug research and development. Partner with Optum clinicogenomics to:

- Discover high-value biomarkers for drug development
- · Require fewer internal resources for data storage
- · Waste less time on unproductive research and development
- Accelerate speed to market for innovative, targeted therapies

optum.com/clinicogenomics



optum.com

Optum is a registered trademark of Optum, Inc. in the U.S. and other jurisdictions. All other brand or product names are the property of their respective owners. Because we are continuously improving our products and services, Optum reserves the right to change specifications without prior notice. Optum is an equal opportunity employer.