CAMBRIDGE PRECISION MEDICINE

We strive to provide the most comprehensive and thorough genetic analysis based on sequencing the whole genome.

This provides you with access to your very own big data, accessing an exclusive and powerful insight into your health from a completely new angle. Your clinician can use this data to help you improve your health and well-being.

You can learn more about your predisposition to certain diseases and make informed decisions about your lifestyle, from what diet could work better for you to which type of exercise you might see the best results with.

After your genes are analysed, you will receive an in-depth report through your healthcare provider that will give you tangible and practical information. This report is founded on best practise analysis, using the latest and best science to inform the results.

Polygenic risk scoring

In 2020, the government published "Genome UK – The Future of Healthcare" and highlighted the power of polygenic risk scores in aiding precision medicine and preventive healthcare. At Cambridge Precision Medicine, we are proud to be at the front of the curve, having developed a method that adheres to best practice and allows us to conduct robust polygenic risk scoring.

Many common disorders (for instance coronary artery disease) have complex causes. Genetics can be a significant risk factor for such diseases, but often no single genetic variation has a direct effect on the development of the condition. For such disorders, we analyse much more deeply, considering as many as 7million markers for each condition.

We are able to deliver this analysis because we screen the whole genome which gives a far more accurate analysis of your genome and genetic predisposition. For example, whereas other genetic testing providers would analyse a handful of markers for the genes of Type 2 Diabetes, we consider the 6.9 million relevant markers for this condition, providing you with a more robust and accurate analysis.

We base our approach on the latest academic research and we continue to expand our library of genetic risk scores. We have polygenic risk scores for the following conditions (in brackets are the number of genetic markers analysed for each condition):

- *Type 2 diabetes* · · · · · · · · · · *(6,917,436)*
- *Inflammatory bowel disease* · · · *(6,907,112)*
- *Atrial fibrillation* · · · · · · · · · · *(6,730,541)*
- *Coronary artery disease* · · · · · *(6,630,150)*
- *Prostate cancer* · · · · · · · · · · *(6,606,785)*
- *Ischaemic stroke* · · · · · · · · · · *(3,225,583)*
- *Body mass index* · · · · · · · · · · *(2,100,302)*
- *Depression, ICD-10 defined* · · · *(21,150)*
- *Breast cancer* · · · · · · · · · · · *(3,820)*

Pathogenicity screening

Some genetic variants can be potentially disease causing and can be identified though a pathogenicity screening.

We use database curated by Johns Hopkins university that has identified over a million variants to perform a thorough screening of the genome. This database is comprehensive, authoritative compendium of human genes and phenotypes that is updated regularly and allows us to look for specific genetic variants that have been specifically documented to be potentially disease causing.

The report investigates over a million genetic variants that could be disease causing mutations, we will only include any findings are positive. Your healthcare provider will be able to interpret these results for you.

Key genes and genetic positions

Our screening process is enhanced by reporting both negative and positive findings of a selection of genes and genetic positions which we deem to be of particular significance. This list includes the 59 genes classified as actionable by the American College of Medical Genetics, as well as those genes recommended for screening by the US CDC.

You report will tell you if you have the genetic variants in genes on this list that have been associated with different disease risks, including:

- *Cardiovascular diseases*
- *Hearth rhythm problems*
- *Cholesterol*
- *More than 8 types of cancer (breast, ovarian, uterine, colorectal, melanoma, pancreatic, stomach and prostate)*

As your results will be delivered to you by your healthcare practitioner, they will be able to advise you on how to can manage any disease risk you may encounter.

Drug gene interaction

We can help you to better understand how you metabolises different drugs. This allows clinicians to prescribe with greater accuracy, reduce trial and error when administering drugs and fine tune the dosage.

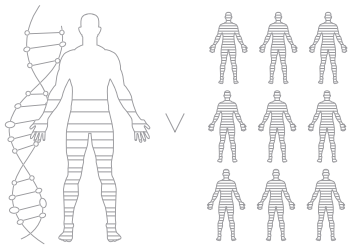
Our report findings can also help avoid drug toxicity and help you become aware of drug intolerances you may have. Common drug types in the analysis include anti-coagulants, antidepressants, pain medication and some cancer treatments.

Fitness and nutrition

Our report covers athletic performance and how your body metabolises food, drink, vitamins and minerals.

General interest

The report also covers the analysis of genes that determine your physical appearance and characteristics such as sense of taste and smell.

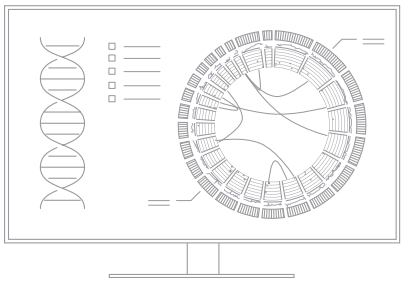


A NEW APPROACH TO HEALTH

Precision Medicine centres on individualised, data-driven healthcare instead of one size fits all. Enabled by whole genome sequencing and interpretation, it's transforming how we treat conditions and manage our well-being.

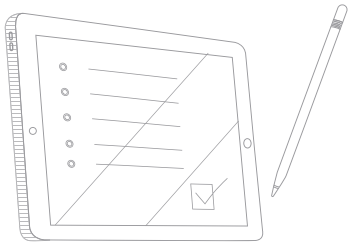
FOCUSING ON PREVENTION AND WELLNESS

Gone are the days of treating based on symptoms alone. Genetic screening supports clinicians to proactively manage their clients' health, prescribe more effectively and offer peace of mind.



WHOLE GENOME SEQUENCING

This rigorous approach to genetic analysis is enabled by sequencing the whole genome. Without the whole genome at our disposal, we simply would not have enough information to perform the depth of research about each patient which is described here.



GENOMICS, EXPLAINED

Working with experts from the Cambridge genomics cluster, we turn huge volumes of data, derived from sequencing the whole genome, into clear, easily understood and actionable findings.

CLINICIANS AT THE CENTRE OF CARE

We believe that clinicians belong at the heart of the process, as genetics becomes part of each in individual's health and wellbeing plan. We can help match you to a clinician who can help, where you would not have access to someone who can fill that role.

PATIENT PRIVACY IS OUR PRIORITY

We believe that each individual's genome is intrinsically personal. We will never sell or share anyone's personal data.

The process

Here to help you.
Our process for genetic analysis is simple, secure and efficient.
We are available to help at each step:

1 INITIAL CONSULTATION:

Clinician and patient meet to discuss the process, understand potential outcomes and go through the informed consent process.

2 SAMPLING:

Saliva is collected by the clinician, using a kit that Cambridge Precision Medicine will provide.

3 WHOLE GENOME SEQUENCING:

DNA is extracted from the saliva, and sequenced, generating a 'print out' or code, in a series of letters, covering the equivalent of about 10 million pages of text.

4 ANALYSIS:

We analyse the data and turned into a clear, actionable report. We use algorithms, cloud computing or big data analysis and our own proprietary bioinformatics processes. We make sure two different experts are involved in the process of deriving and finalising the results.

5 FEEDBACK AND FOLLOW UPS:

The clinician takes the patient through your results and may make recommendations such as lifestyle changes, diet adjustments and follow up screenings.

6 REANALYSIS:

With consent, as and when new information about our genetic makeup comes to light, clinicians can request specific analysis or investigations as the need arises, or even complete re-analysis as and when new information about our genetic make up comes to light.

CAMBRIDGE PRECISION MEDICINE

About us

We believe everyone should have access to high-quality genetic analysis with healthcare professionals applying the analysis. As a research informed company, we provide best in class genetic analysis in accordance to the latest and most complete science.

3 Reasons

to choose Cambridge Precision Medicine to sequence and analyse your genes

1

Privacy is at the heart we do. We won't sell or use your personal data without your informed consent .

2

Our analysis is one of the most comprehensive in the industry. By sequencing and analysing the whole genome, we are able to provide you with more accurate reading of your genes as opposed to many direct to consumer alternatives.

3

We are science led. The field of genetics is growing and evolving and that is why it is so important your genetic analysis is underpinned by strong scientific research. We ensure that all our findings and methods are well-backed up by accurate science and strong methodologies .

Our Team

Our team work in collaboration with experts in their field to perform in-depth analysis of each genome we sequence. We are privileged to benefit from the knowledge and expertise of leading scientists within the Cambridge genomics cluster.

Cambridge Precision Medicine Limited is part of ideaSpace, the University of Cambridge incubator, which shares the university's commitment to excellence and to making a meaningful contribution to society by supporting the development of high impact ventures.

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