Clot Risk Genes (1 in 20 people)

Factor V Leiden and Factor II Prothrombin gene changes have a 4-to 7-fold increased risk of deep vein thrombosis and pulmonary embolism.

Prevent clots by simple blood thinning tablets for long-distance flights or high-risk scenarios.

Haemochromatosis (1 in 150 people)

Genetic recessive disorder causing iron overload, leading to cirrhosis, liver cancer & affecting the heart. With early diagnosis & regular blood removal- the condition will not affect your life expectancy. **Only 1 in 20 people with haemochromatosis know they have it.**

Familial Hypercholesterolemia FH (1 in 250 people)

FH results in very high levels of LDL - bad cholesterol, causing early heart attacks and strokes. Finding out means you can take highly effective medicines. **9/10 people are unaware that they carry these gene changes.**

Reassurances

Protection by the ABI Code of Insurance:
Insurance companies will **not** ask for your genetic test results, other than if you have a pre-existing condition with an associated gene in the UK.
We only test for genes which are "actionable" meaning you can do something positive. **We have five multi-skilled consultant geneticists.**
You can use a pseudonym - be anonymous.

Genetic Reproductive Options

Pre-Implantation Genetic Testing (PGT):
If the genetic condition is serious enough, you can stop it going through to the next generation by IVF & selecting embryos without the condition.

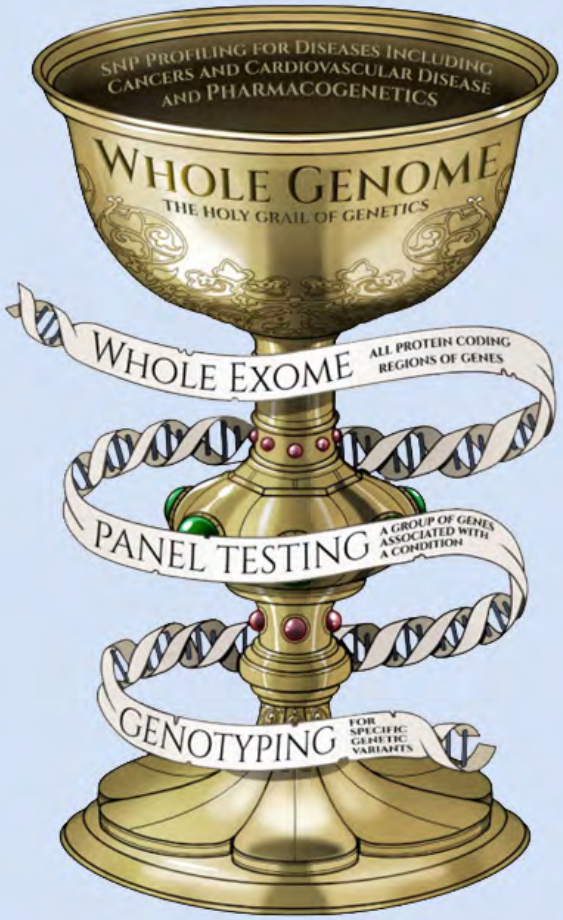
1 in 350 babies have a recessive disorder

Conditions can vary from Tay Sachs disease, typically fatal by ages 4-5 with progressive neurodegeneration, to now treatable cystic fibrosis (1 in 25 of us carry a change in this gene).
Genes come in pairs and for a recessive disorder to develop both parents must be carriers of the same recessive gene. If you have a carrier match we can then advise you about reproductive options.
There are over 2,000 recessive disorders.

CARRIER TESTING is available to all couples.

HOW TO BOOK A CONSULTATION

The London Genetics Centre
90 Sloane Street, London, SW1X 9PQ
0207 2355850
enquiries@tlgc.uk
www.thelondongeneticscentre.com



MEN'S HEALTH

THE LONDON GENETICS CENTRE

Our aim is to stop suffering and save lives

WHAT DO YOU GAIN BY GENETIC TESTING?

Genetic testing aims to drop overall cancer mortality by 1/5th - 1/7th
We find those at increased risk through two techniques: **Single Risk Genes and Polygenic Risk Scores**

Prostate Cancer (1 in 6 men)

7% of cases localised in the prostate and 13% of metastatic cases are due to inherited gene changes, eg. *BRCA1, BRCA2 (1 in 277 to 1 in 381 carrier frequency; 1 in 40 for those with Ashkenazi Jewish ancestry)* or 11 other risk genes.

Starting Earlier & more frequent prostate screening if you have a genetic risk / family history saves the majority of lives.

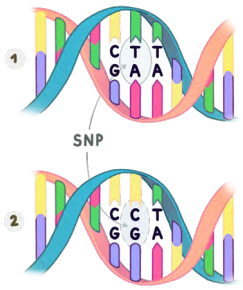
Polygenic Risk Scores (PRS) form the largest component of genetic prostate cancer risk. If you have a *BRCA2* gene change, the risk of prostate cancer will be influenced by your PRS (the ranging from 20-85% depending on your PRS if high or low).

Bowel Cancer (1 in 14 men)

10% is due to inherited genetic changes, such as Lynch syndrome.

- **Colonoscopies** reduce the risk of bowel cancer mortality by 70% for 10 years after.
- **Medications -** Aspirin reduces the risk of bowel cancer in **Lynch syndrome** carriers by up to 50%.

Knowing you have Lynch syndrome improves mortality by 25%, and can help your relatives to take action to reduce risk.



WHAT IS A POLYGENIC RISK SCORE - PRS

Polygenic risk scores (PRS) are a major separate way of predicting risk. We hope to save more lives using PRS risk stratification in addition to single risk gene testing.
A **SNP** is when the 4 organic bases **- C,T,G,A - swap,** as per the diagram. Scientists add up the known positions of these SNPs and their associated weight of increased risk to form a PRS. PRS are available for prostate, breast, bowel and ovarian cancer, as well as non cancer hypertension, coronary artery disease risk, etc.

Single Risk Genes includes but is not limited to	Polygenic Risk Scores (Effect of higher PRS)	The PRS includes 9 conditions in men, importantly prostate cancer.
CARDIAC DISEASE (81 genes) Cardiomyopathy, QT genes, familial hypercholesterolemia (FH). Knowing you have these saves lives.	**3-fold risk** Coronary Artery Disease. LDL Cholesterol, and Hypertension PRS	**If you know you have a high coronary disease PRS, take action and avoid having bypass surgery in your 50's.**
BOWEL CANCER (20 genes) **Lynch Syndrome,** can give up to a 60% lifetime risk of bowel cancer in men.Polyposis syndromes FAP and MAP.	**3.8-fold risk**	**FINDS who need earlier and more frequent bowel screening.**
PROSTATE CANCER (11 genes) Risk genes include *BRCA1, BRCA2,* and Lynch syndrome genes etc.	**11-fold risk**	**A high PRS has a stronger effect than even high-risk genes in prostate cancer. They also interact with genes**
PHARMACOGENOMICS (120+ drugs) Pharmacogenes INFORMING YOU of how you will metabolise Clopidogrel, Codeine, Metoprolol, antidepressants and **hundreds of other medicines. Personalised adjusted genetic drug prescription is now the ideal.**		

Learn more about genetic testing pathways.

Learn more about our story here.