

How can I help?

As more patients enrol in genomic research studies, the more information on different kinds of cancer genomes we can learn from. By taking part in a genomic research study, you are helping us answer questions such as:

- How do we improve early detection and ideally prevent cancer?
- Does a cancer change with time and treatment?
- Can we use current treatments better?



Why is data sharing important?

Working in isolation slows down the research process. Our guiding principle is to share data and information collected in order to speed up scientific findings. This brings cost savings, quicker patient benefit and better treatments.

All personal identifying information is replaced with a code. Coded information is then only shared with safeguards in place to protect your privacy. The more information we share, the faster we learn, and the faster treatments can be tailored and made available to patients.



For more information about ICGC-ARGO and how you can get involved visit our website - <https://www.icgc-argo.org>.



Genomics: Getting the right treatment to the right patient

What is genomics?

Genomics is the study of the genome. Your genome (also called your DNA) is the operating manual containing all the instructions that helped you develop from a single cell into the person you are today. Your genome guides your growth, helps your organs to do their jobs, and repairs itself when it becomes damaged. It's unique to you.

Why study the genome?

Many diseases such as cancer occur when the structure of DNA within a cell is damaged or altered. Studying these alterations in the genome could allow researchers to find new treatments for cancer.

What are the benefits?

In the past medical treatments were designed for the average patient. Doctors would give cancer patients treatments, such as chemotherapy, not knowing if they would work for that person or not. We didn't know much about our genome then. As we have learnt more about the genome we have been able to start delivering medicine more precisely, to suit each individual. This is known as precision medicine.



Precision medicine aims to match each patient with the treatment that will work best for them and their genome.

Advances in genome technology are leading to a new understanding of cancer and new ways for diagnosing and treating many types of cancer.





Advances in genome technology mean that analysing a patient's cancer mutations is more affordable and available.

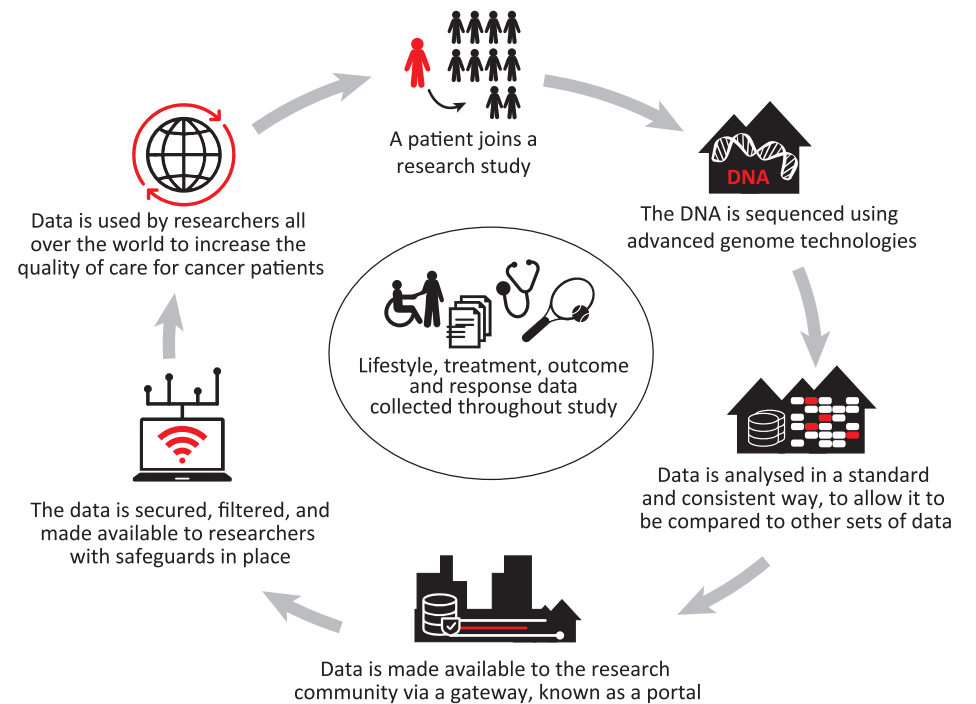
What does this mean for cancer patients?

Research tells us that each patient's cancer is different, yet we have treated them much the same. If we know more about the specific alterations in the genome that led to someone's cancer, then we can look for more specific and effective treatments for their cancer.

We are moving toward treating cancers not by where they are found in the body, but by how their genomes have changed. The more we know about a patient's genome, the more we will understand their cancer and be able to offer them treatments that are more likely to work and improve their survival and quality of life.

A Precision Medicine approach means that drugs traditionally used in one cancer may be evaluated for effectiveness in another cancer if they share similar genomic changes.

What is the process?



What is ICGC-ARGO?

ICGC-ARGO is the International Cancer Genome Consortium - Accelerating Research in Genomic Oncology.



The ICGC was originally established in 2007 to coordinate a large number of international genomic research projects. Since then it has enabled over 25,000 patients' genomes data sets to be made available to the research community resulting in significant advances in our understanding of cancer and how to treat it.

ICGC-ARGO is the new phase of the ICGC, and it builds on the previous project by including more clinical information about a patients' cancer. Researchers and patients from 13 countries are already participating.

By bringing experts together we hope to accelerate research into cancer genomes, so that patients can realise the benefits of research much faster.



We plan to use this shared knowledge to improve outcomes for people affected by cancer.