

Clinical trials briefsheet

Cancer Research UK plays a unique and pivotal role in cancer clinical trials in the UK. Last year, we spent over £42 million on cancer trials and related studies. And our groundbreaking work in this area has already led to advances in preventing, detecting and treating cancer that have saved many thousands of lives.

What are clinical trials?

Clinical trials are vital for testing new cancer treatments and ways to prevent or detect the disease. Trials find out if the new approach works better than those currently used, and if it has side effects. As well as testing new treatments, trials are needed to refine and improve existing ways of treating people with cancer. Most trials involve patients, but screening and prevention trials may recruit healthy volunteers.

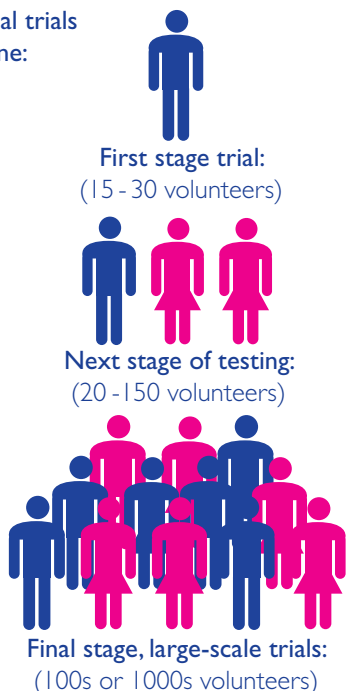
Why are they important?

A new treatment cannot be prescribed for patients unless it has been tested in a clinical trial.

How many trials do we fund?

We currently support around **200** clinical trials. Around 60 are small, early-stage trials that test potential new treatments and involve limited numbers of people. Over half are large-scale trials involving hundreds or thousands of people – this is the final stage of testing for new treatments before they can be rolled out in the clinic.

Clinical trials pipeline:



How many people take part?

Our research would not be possible without the hundreds of thousands of people who help us by volunteering for clinical trials.

In 2008/09, over **33,000** people entered clinical trials supported by Cancer Research UK. This means that, last year, nearly half of all the people joining a cancer trial in the UK were entering one funded by the Charity.

Since 1995, more than **100,000** patients have taken part in our treatment trials and more than **600,000** people have taken part in our screening and prevention trials.

The UK leads the world in the proportion of cancer patients we are recruiting to clinical trials. Around **12 per cent** of cancer patients now take part in trials – that's a greater proportion than in any other European country or the USA.

How long do they take?

There are several stages of clinical trials and they may take a number of years to complete.

Our impact

Many thousands of people have survived cancer as a result of treatments and screening approaches that we have developed or tested. And our trials have led to changes in clinical practice for many different types of cancer including breast, bowel, lung, skin, prostate, and pancreatic cancer. For example:

- Our researchers showed that two X-rays were more effective at detecting breast cancer early than one, and **two-view mammography** is now used by all the national screening centres.
- We funded pivotal clinical trials, which showed that giving **Tamoxifen** to younger as well as older breast cancer patients could save an extra 20,000 lives each year worldwide.
- Through our clinical trials units (see overleaf), we helped to show that **Herceptin** can improve survival in people with a certain type of breast cancer.
- We funded the largest ever trial for people with operable pancreatic cancer. This showed that giving chemotherapy to patients after surgery could extend the lives of people with the disease – this is now standard practice worldwide.

Success in testing new drugs

Since the early 1980s, we have taken over 120 new drugs into early clinical trials, and we have also played a key role in the development of many important cancer treatments used around the world today. These include:

- **temozolomide**, which we discovered and is now used worldwide to treat glioblastoma, a common form of brain cancer;
- **carboplatin**, one of the most successful anti-cancer drugs ever developed and the most widely used drug to treat ovarian cancer;
- **cisplatin**, which has transformed the outlook for people with advanced testicular cancer.

More recently, we helped to develop and test the drug **abiraterone**, which is in clinical trials for treating men with aggressive prostate cancer. And we have carried out early trials of a promising lung cancer drug **DMXAA** that works by blocking the cancer's blood supply. We have also completed the first trials of a new type of drug – known as **PARP inhibitors** – that shows promise for treating certain inherited forms of breast and ovarian cancer.

Currently, around 25 new treatments that our scientists helped to develop are being tested in clinical trials.

Together we will beat cancer

July 2010

Clinical trials – our role

How else are we involved?

As well as funding cancer doctors who lead clinical trials, we provide essential support to keep trials running effectively.

We fund seven **clinical trials units**¹ that coordinate a portfolio of large-scale trials. Staff at the units help design the trials, make sure they are running smoothly, and analyse the large quantities of data produced.

Through a £35 million joint initiative with the UK's Departments of Health, we fund 19 **Experimental Cancer Medicine Centres**. These run the earliest trials of experimental treatments and involve cancer patients for whom other approaches are not working. Volunteers on these trials help researchers to assess the promise of cancer treatments. Our **Drug Development Office** underpins the delivery of many of these smaller, early-stage clinical trials by making the new treatments, testing them for safety, and designing and managing the trials.

We fund around 200 **cancer trials nurses** at hospitals throughout the UK, who help to give treatments and care for people taking part in trials. And we also fund 14 **Senior Research Nurses** at key locations. As well as caring for patients, they help to raise awareness of clinical trials as an option for treatment, and to increase the opportunities for patients to take part in trials.

Working together

Running clinical trials is very costly. Our success in developing new and better treatments and improving survival rates is made possible thanks to close collaboration with our many partners. These include:

- the devolved Departments of Health and the National Health Service, which provide treatment and other costs such as for scans and overnight hospital stays;
- the National Cancer Research Network, which supports the delivery of cancer clinical research within the NHS;
- other charities and funding bodies (for example the Medical Research Council);
- the pharmaceutical industry.

These valuable partnerships make the UK uniquely placed to carry out clinical cancer research – and we are at the heart of this work.

Our trials

Cancer Research UK funds clinical trials in hundreds of towns and cities right across the UK, with some trials recruiting patients in as many as 85 different hospitals. Here are some examples of the trials we fund.

Prevention

We are awaiting the results of a trial investigating whether regularly taking aspirin could help prevent **oesophageal cancer** in people at increased risk. The trial, coordinated in Oxford by Professor Janusz Jankowski, is the first trial of its kind.

Early detection

Professor Stephen Spiro in London is studying whether people at high risk of **lung cancer** would benefit from regular screening for abnormal cells in their phlegm.

Improving treatment

Professor John Neoptolemos in Liverpool and Dr Gary Middleton in Guildford are coordinating a trial for people with advanced **pancreatic cancer**. The trial is testing if a vaccine, which primes the body's immune system to destroy pancreatic cancer cells, can boost survival in patients treated with chemotherapy.

Professor David Dearnaley in Sutton is running a trial to test a new way of giving radiotherapy to men with **prostate cancer**. Through this trial, doctors will find out if giving patients higher doses of radiotherapy less frequently is more effective and has fewer side effects than standard radiotherapy for prostate cancer.

Surgeon Mr Robin Kennedy is coordinating a trial from Oxford to investigate different types of surgery for **bowel cancer**. The trial will show if keyhole surgery is better than conventional surgery at helping people recover quickly and with fewer complications.

Treatment management

In Sutton, Dr Chris Nutting is coordinating a trial that aims to improve radiotherapy for cancer of the parotid glands – a rare type of **head and neck cancer**. This trial is testing whether a technique called IMRT – in which the radiotherapy beams and dose are shaped to match the tumour – can help protect healthy tissue and preserve hearing after treatment.

Children's Cancer trials

Currently, around 60 per cent of children with cancer in the UK are on a clinical trial. Because of this high level of participation, many successful treatments have been developed that are used today.

For over 25 years, we have funded the clinical research work of the Children's Cancer and Leukaemia Group (CCLG). Members of the CCLG have been instrumental in improving the survival rates of children with cancer and they continue to drive research forward in this area.

We now mainly work with members of the CCLG through our Children's Cancer Trials Team (CCTT). The CCTT coordinate groundbreaking clinical trials for children with cancer in 21 centres across the UK and Ireland.

Thanks to a combination of research and clinical trials, more than 7 out of 10 children in the UK with childhood cancer now survive.

CancerHelp UK CANCER RESEARCH UK

CancerHelp UK is our award-winning patient information website. The most popular UK cancer information website, it receives around 1 million visits every month.

The site includes a unique searchable database of UK cancer clinical trials, written specifically for patients and relatives in plain English. If there is a trial you are interested in, you can print off the details and take them to your own doctor. As well as currently recruiting trials, the database also gives information on closed trials and trial results.

For more information visit
www.cancerhelp.org.uk

¹Cardiff, Birmingham (this includes a Children's Cancer Trials Team), Glasgow, Liverpool, London (ICR & UCL), and Southampton

