

CLINICAL TRIALS

FACT SHEET

March 2019

This fact sheet was produced by Breast Cancer Network Australia

What are clinical trials?

For me, the request to participate in a clinical trial came at a time when there were so many other important decisions to make. And what was a clinical trial anyway?

Clinical trials are scientific research studies that involve patients. They help find better treatments.

When we think of treatments for breast cancer, we often think that only means drugs. However, there are clinical trials for other treatments too, including radiotherapy, surgery, supportive care programs, complementary therapies and even exercise.

Clinical trials are conducted under supervision by researchers so that the effects of the treatments or interventions being studied are properly monitored.

Why do we need clinical trials?

We need clinical trials because they help us to know whether treatment options are safe and effective. For example, a drug can look promising in the laboratory and may even have been used in laboratory mice with positive results. However, researchers need to study how the treatment works for people before it can be made widely available.

Some trials compare new treatments with current treatments, while others look at different ways of using treatments, such as combining two or more existing treatments to see if this leads to better outcomes. Some trials study whether less treatment can be given and still achieve good outcomes. Common drugs that we take for granted (e.g. aspirin and antibiotics) all went through clinical trials before becoming the everyday treatments they are now.

Most of the improvements in breast cancer treatment have happened because they were first shown to work through a clinical trial. For example, clinical trials showed that breast conservation surgery is a safe alternative to mastectomy and that sentinel node biopsy can be used instead of removing all the underarm lymph nodes (axillary dissection).



Clinical trials also found that Herceptin is an effective treatment for HER2-positive early breast cancer. These trials were conducted after Herceptin had good results in metastatic HER2-positive breast cancer. As a result, 12 months of Herceptin is now standard treatment for people with HER2-positive early breast cancer.

Who runs clinical trials?

Clinical trials are run by teams of researchers at places like universities and hospitals. In Australia, many breast cancer clinical trials happen through Breast Cancer Trials. The Breast Cancer Trials program involves more than 700 researchers in Australia and New Zealand. More than 14,000 women have participated in its trials. For more information visit breastcancertrials.org.au.

What are the different phases of clinical trials?

New treatments go through many trial phases to ensure they are safe and effective for people.

Phase I and II trials involve small numbers of patients. They often focus on people whose current treatments are no longer helping them (usually patients with metastatic breast cancer).



These trials provide information and knowledge about the benefits, risks and side effects of the treatments.

In Australia, the most common trials that people participate in are Phase III trials. Phase III trials are large-scale trials, often involving thousands of patients, where new treatment options are compared with current standard treatments. New treatments do not typically become part of standard care until their value is proven in Phase III trials.

There are also Phase IV trials, which continue to collect information about treatments that have already become part of standard care.

Cancer Council Victoria has more information on the [phases in clinical trials](#). Visit cancervic.org.au.

Does this mean people are 'guinea pigs'?

Women should expect to have all their questions answered and to be kept up to date with what is happening with any trial they participate in. They should also understand that ethically they would never be knowingly disadvantaged by participating in a trial.

Sometimes people think that participants in clinical trials are 'guinea pigs'. This is not true. There are ethical and legal safeguards that ensure that patients are protected and are treated with care in clinical trials.

Participants involved in clinical trials usually receive more follow-up than other patients, because their progress is closely monitored by the research team.

The people who design and run clinical trials are usually at the cutting edge of their professions. People who take part in trials are also helping others by improving standards of treatment and care.

How are clinical trial participants protected?

Participants are protected by ethical standards that govern clinical trials. All researchers must abide by these ethical standards and ensure that clinical trials:

- meet the best scientific standards
- do not cause more harm than good
- keep all stakeholders informed of developments and results from the study

- meet international and national agreed standards about the right way to conduct research involving people.

Researchers undergo a lengthy process to develop 'protocols' or guidelines about how they are going to conduct their trials. Protocols must be approved by a Human Research Ethics Committee before a trial can begin. Ethics committees will not approve trials with protocols that do not meet scientific, medical and ethical standards.

Ethics committees are regulated by the National Health and Medical Research Council (NHMRC), a federal government body. They are independent, meaning they are made up of scientists, doctors, lawyers, ministers of religion and members of the general community, and not members of the research team.

Many clinical trials, and all trials run by Breast Cancer Trials, engage consumer representatives at every step of the research process – from the design of trials and developing protocols to monitoring and reporting results. Consumer representation at all levels of the process means that trials are more likely to truly reflect participants' interests and needs.

What is informed consent?

It is crucial that anyone agreeing to participate in a trial fully understands what they are agreeing to. This is called 'informed consent'. This means that before you make a decision about taking part in a trial, you must be given written information that helps you to fully understand:

- the treatment being studied
- the potential benefits and risks of taking part (including any side effects of the treatment)
- full details of what is required of participants, e.g. attendances for treatments and tests
- your rights as a participant – including the right to opt out of the trial at any time for whatever reason, without your future medical care being affected.

You will be given written information to read. Once you have had enough time to read, talk about and absorb the information, if you agree to participate, you will be asked to give your informed consent by signing a form.



By signing the consent form, you are saying that you have understood the information given to you and that you are consenting freely to participating in the trial.

It is important that if you are thinking about taking part in a trial, you are given as much time as you need to understand the information given to you. You can ask as many questions of your doctors as you need, talk to family and friends, and even seek a second opinion from another doctor, before signing anything. You can, of course, decide not to go ahead with a trial after weighing up the pros and cons.

If you decide not to proceed, your doctors will offer you the current standard treatment.

Where are results of clinical trials published?

Researchers publish the results of clinical trials at international meetings and in 'peer-reviewed' medical journals. Peer-reviewed means that the articles are reviewed by several experts in the field before they can be published. This makes sure the article is good quality and accurate.

Doctors read these journals and use this information to keep themselves up to date with the latest in breast cancer treatment and to inform their consultations with their patients. If published results are from large Phase III trials, the information is used by health policy makers in government to help them make decisions about funding new treatments through schemes such as the Pharmaceutical Benefits Scheme (PBS) and Medicare.

Why have I never been approached about a clinical trial?

I was not able to participate in the Herceptin trial because my breast cancer was HER2-negative.

One reason you may not have been told about a clinical trial is because there wasn't a trial at the time of your treatment that suited your particular type of breast cancer.

Clinical trials seek to answer specific questions about new treatments for breast cancer. For example, a trial may be started because there is a promising new therapy that targets a particular type of breast cancer, e.g. a new hormone therapy for hormone receptor positive breast cancer. In this trial, only women with hormone receptor positive breast cancer would be eligible.

Another reason is safety. Like all treatments, new treatments under clinical trials come with potential side effects e.g. loss of bone mineral density or heart complications. If you have, or are at risk of, certain health conditions, or you are taking other medications that could interfere with new treatments, this may mean you are not eligible to participate in a particular clinical trial. You can discuss this with your treating team.

One further reason is distance. In Australia, clinical trials tend to take place in metropolitan or regional centres. People in rural and remote areas may not be offered participation in a clinical trial because they are not being run locally. Even in cities, however, not all trials are offered at all hospitals.

If a trial for which you are suitable is available at another treatment centre, you may be able to change doctors and treatment centres so you can participate. Speak to your doctor about the best options for you.

What can I do if I'm interested in getting involved in a clinical trial?

As part of your treatment discussions, your doctor may suggest a clinical trial that includes a new treatment that would be relevant for you. If your doctor doesn't discuss clinical trials with you, you can ask them whether they know of any trials that maybe appropriate for you. You can also find out about clinical trials yourself by visiting some of the websites listed in this fact sheet.

The Australian Cancer Trials website, australiancancertrials.gov.au, developed and managed by Cancer Australia, lists all clinical trials in cancer care, including trials that are currently recruiting new participants. The website is written in a way that is easy to understand and is intended for anyone affected by cancer. The website has a search function, which allows you to easily find current breast cancer trials.

If you are eligible for a trial, your doctor will give you written information to help you make your decision.

What sorts of questions can I ask my doctor?

You can ask your doctor as many questions as you need. You may like to bring someone to the consultations for support or to help ask questions and remember or write down answers.



It may be helpful to record the conversation (with your doctor's permission). What's most important is that you get the information you need to help with your decision.

If you receive written information about the trial from somewhere other than your doctor, you may like to take it along to your doctor to review and answer any questions you may have about it.

Questions to ask your doctor include:

- What is the treatment being studied?
- Why is this trial being done?
- Who is involved in running the trial?
- Who will be managing my care during the trial?
- Where will I have to go for treatment?
- What will I need to do if I participate in the trial e.g. how often will I have to go to the treatment centre, how long does the trial run, how often will I be tested and what tests will be used?
- What is known about the possible risks, side effects and benefits of the new treatment being studied?
- How do the risks/benefits of the new treatment compare with standard treatment?
- Will the treatment I receive affect the current medications I'm on?
- Will I know if I am receiving the new treatment or a 'placebo'?
- Are there costs involved with the trial or will these be covered?
- What is required of me when the trial finishes and how long will I have to attend follow up appointments?
- How will I find out the results of the trial?
- Who do I contact if I have concerns or questions during the trial?
- Can I talk to other people participating in the trial?
- Why do you think this trial is suitable for me?
- What treatment will I receive if I do not participate in the trial?

It feels like a big decision. What have others thought?

I liked the idea of contributing to research and possibly gaining an advantage in my treatment. Being involved in the trial also meant slightly closer monitoring over the five years of treatment.

The decision to participate in a clinical trial can be difficult. People are often asked to make their decision at a time when they are only just beginning to understand their diagnosis and what it means for them. There is already much to think about. The choice of whether or not to participate in a clinical trial is a very personal one, which is why it's important to be fully informed.

Many people decide to join a clinical trial because:

- they may have an opportunity to try a new treatment they would not otherwise be able to have
- even if they don't get the new treatment being studied, they will still get the current standard treatment for their breast cancer
- current treatments are no longer working for them and a clinical trial offers access to a new treatment that is not otherwise widely available
- their health will be carefully monitored by the doctors running the trial
- they want to help find better ways to treat breast cancer
- they can access free medication
- the trial may result in improved survival.

Many decide not to join a clinical trial because:

- they want to have control over their treatment choice rather than being part of a trial where treatment may be randomly allocated to them
- they feel there is still not enough known about the risks and side effects of the new treatment being studied
- their doctor is not involved in running a trial and they don't want to change doctors
- there is already enough to think about without having to consider a trial
- they are required to travel a long distance to participate in the trial
- the trial would result in an out-of-pocket cost that they cannot afford or don't want to pay
- they do not want to have to continue to visit the hospital for long-term follow up.

Remember, your decision not to participate in a trial will not affect your relationship with your treating team.



What can I expect if I decide to participate in a clinical trial?

I was told that should my health be compromised in any way during the trial I could withdraw and continue with the standard treatment.

If you decide to participate in a clinical trial, your doctor will ask you to sign a consent form that outlines your rights and shows that you've understood the written information given to you about the trial.

If there are parts of the form that you do not understand, you can ask your doctor to explain these to you. When you sign the form, you're also agreeing to take part in the trial. You can decide at any time to withdraw from the trial, even after you have started on the trial (see 'What happens if I decide to stop participating in a clinical trial?').

You will be given a copy of the signed form to keep. Your doctor then registers you for the trial. Any information about you will be kept confidential, as will your medical records.

You will receive treatment under the trial. If it's a Phase III trial, this will either be a new treatment that has already shown promise in treating breast cancer or the current standard treatment. It is likely that your treatment will be randomly assigned.

The trial is considered a 'double-blind study' if neither you nor your doctor knows which of the treatments you are receiving. Information on this will be included in your consent form and participant information document.

Throughout your treatment you will be carefully monitored by your doctors. If the treatment is not working – or if something unforeseen happens as a result of the treatment – then it will be stopped. Your doctor will discuss with you the best treatment options available for you.

Your treatment will not be neglected and your health will continue to be monitored after the treatment finishes. Depending on the trial, follow-up can involve days, weeks, months or years. In breast cancer trials, it is common for follow-up to continue for years to determine whether the treatment helped you live longer and also to study the quality of your life after your treatment and any late (and rare) side effects.

Many trials in Australia are part of large, international studies that collect data over many years. This is why some trials take such a long time to complete. As a patient involved in a clinical trial, you can expect to be kept informed about the progress of your trial as well as its results.

Why do some trials ask for tissue, blood or tumour samples?

The effects of new treatments can be influenced by a range of things including the tumour type (e.g. hormone receptor status), genetics and metabolism. Researchers link treatment results to blood or tumour samples of participants so they can find opportunities for new studies. This is why you may be asked to sign a separate consent form for the use of your specimens in future research.

Allowing your samples to be available to researchers is very useful and contributes to new research into the future.

You can consent to the use of your samples in future studies, and expect your confidentiality will be protected and that approval from an ethics committee will be obtained before your samples are used. You should ask whether you and your doctor will be told when future studies use your samples (including their results) and where your specimens will be stored.

Another option is to agree to your samples being used for future research, but only after you have been informed about this research and have been asked to consent at the time. It's still a good idea to find out whether you and your doctor will be told of results and where your specimens will be kept.

Of course, you have the right at all times to refuse consent to the use of your tissue and blood samples for purposes other than the trial you have agreed to participate in.

What happens if I decide to stop participating in a clinical trial?

You can stop participating in a trial at any time and for any reason. Your relationship with your treating team will not be affected. Should you decide not to continue with a trial, your doctor will recommend the best standard treatment that is available for you.



Common terms that are used in clinical trials

Randomised controlled trial (RCT)

This means treatments are assigned randomly (without the researchers choosing who gets which treatment) to patients in the trial. Patients do not get to choose which of the treatments they get. This is because it is the best way to compare new treatments against current standard treatments.

Control group

This is the group that doesn't get the new treatment that is being studied. This group gets the current standard treatment instead. A control group is needed to compare the current standard treatment against the new treatment being studied.

Protocol

A protocol sets out what the study will do, how and why. It explains how many patients are being recruited for the trial, for how long, the treatments being used, the tests being used and how the results will be looked at. Protocols are reviewed by Human Research Ethics Committees.

Eligibility criteria

These are the requirements that make sure patients who sign up for clinical trials are appropriate for the trial and share similar things in common. For example, similar general health, age, stage of breast cancer, and types of treatment they have had in the past.

When patients share some basic things in common, it helps researchers to be confident that the results of the study are related to the treatment(s) they are studying and not due to other things like the stage of someone's breast cancer.

Single-blind study

This is a trial where only the doctors know whether their patients are receiving the current standard treatment or the new treatment that is being studied.

Double-blind study

This is a trial where neither the patients nor their doctors know which treatments they are getting – either the new treatment or the current standard treatment. The treatment can be 'un-blinded' if there are any concerns about the safety of the treatment once the study starts.

Informed consent

The process where a patient learns about a clinical trial – including benefits, risks and side effects – before they decide whether or not to be involved.

Phase I, II, III and IV

Trials are carried out in phases. Phases I and II involve small numbers of patients, often those for whom current treatments are no longer helping (usually patients with metastatic breast cancer). Phase III trials are large-scale trials involving thousands of patients where new treatment options are compared with current treatments.

New treatments become part of standard care when their value is proven in Phase III trials. Phase IV trials continue to collect information about treatments that have become part of standard care after they have passed through Phase III.

Placebo

A placebo is used only if the trial is seeking to find out whether a new treatment is better than doing nothing (the placebo). Some trials include a current standard treatment combined with either an additional new treatment or a placebo. For example, the PALOMA trials compared results for patients receiving the new treatment (a combination of the new drug palbociclib and letrozole) against treatment with letrozole and a placebo.

Adapted from: the [Coalition of Cancer Cooperative Groups \(US\) Resources Glossary](https://www.cancertrials.org)
[cancertrials.org](https://www.cancertrials.org)

Useful websites

- Australian Cancer Trials
australiancancertrials.gov.au
- Australian New Zealand Clinical Trials Registry
anzctr.org.au
- BCNA
bcna.org.au
- Breast Cancer Trials
breastcancertrials.org.au
- Cancer Council Victoria
cancervic.org.au



Here to help

Breast Cancer Network Australia (BCNA) works to support, inform, represent and connect Australians affected by breast cancer.

We have a wide range of free information available including booklets, fact sheets, videos and podcasts. This information can be viewed or ordered at bcna.org.au or by calling our Helpline on 1800 500 258.

Feeling overwhelmed or have further questions?

My Journey online tool

Our new My Journey online tool is available to provide quality, evidence-based information and support tailored to your individual needs and circumstances at all stages of your breast cancer journey. My Journey can be found at bcna.org.au/myjourney

Online Network

BCNA's online network exists to connect you with others going through a similar situation at any time during the night and day. The online network can be found at onlinenetwork.bcna.org.au

BCNA Helpline

Our Helpline cancer nurses are available to help you with any questions you may have. Call 1800 500 258.