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About clinical trials

This information is about clinical trials for lymphoma: what they are, why they are done, how they are carried out and what they involve for those who take part. We have a dedicated page that lists **questions you might like to ask** if you are thinking about taking part in a clinical trial.

There is a lot of information on this page. You might want to read it in chunks. You can use the links under 'On this page' to help you navigate to the parts that are most relevant to you.

On this page

We have separate information about the topics in **bold font**. Please get in touch if you'd like to request copies or if you would like further information about any aspect of lymphoma. Phone 0808 808 5555 or email **information@lymphoma-action.org.uk**.

What are clinical trials?

Clinical trials are medical research studies that aim to find better ways to diagnose, prevent and treat different diseases. This page focuses on treatment-related clinical trials for lymphoma.

Trials often test potential new treatments, or new ways of giving treatments, and compare them to the current treatments available. Every new treatment for lymphoma needs to be tested in clinical trials before it can be **approved**. Clinical trials are the fastest and safest way to find new treatments for lymphoma.

Clinical trials testing treatments

Clinical trials testing new treatments aim to find out:

- if the new treatment is safe
- if it works the same as or better than current treatments
- if it has **side effects**.

All new treatments have to be thoroughly tested.

Not all clinical trials will result in a new and better treatment. Sometimes the results from a trial do not indicate that the new treatment is more effective or has more manageable side effects than current standard treatments.

Treatment trials can test:

- **a new treatment** to see if it works, if it is safe, whether it is better than the current standard treatment, if it can work in combination with other treatments, how it works and how your body processes it
- **existing treatments** to compare one treatment with another, comparing different ways of using existing treatments (for example, a different dose or a different way of giving it), or testing if treatments used for other diseases could help people with lymphoma.

Other types of clinical trial

Trials that don't involve treatment might be used to study:

- what causes lymphoma
- the best ways to detect or diagnose lymphoma
- how genetic changes (mutations) in lymphoma cells might be used to design or choose treatments
- the best ways to monitor response to treatment and follow-up after treatment
- how lymphoma affects your quality of life.

If you are considering entering a trial that does not involve treatment, talk to your medical team about exactly what is involved.

How are clinical trials designed?

Trials are organised to answer questions in a scientific way. They are also designed to be fair and safe for the people who take part.

Four parts of trial design are:

- phases of trials
- randomisation
- blinding
- placebos.

Dr William Townsend talks about the difference between early phase trials for lymphoma (phase 1 trials) and those in later phases (phase 2 and 3).

https://www.youtube.com/watch?v=4FIU-JUdetw

Phases of trials

Clinical trials of new treatments are planned based on the results of laboratory and animal studies to make sure the trial is as safe as possible for the people taking part. Treatment trials in humans are normally organised in phases. More is learnt about a treatment as it goes through the different phases. If a treatment is not successful in one phase, it can't go on to the next. Trials that do not involve treatment are not done in phases because they do not involve taking medication.

- **Phase 1** trials test the safety and side effects of a new treatment in a small number of people. One of the aims of a phase 1 trial is often to find out what the right dose might be to use in later studies. These are called a 'dose escalation study'. They start with small doses and increase the dose if the people taking part respond well. Many phase 1 trials have a dose escalation followed by a dose expansion. Phase 1 trials might be the first time a treatment has been tested in people (known as 'first-in-human' trials). They are usually only carried out in people who have no other treatment options.
- **Phase 2** trials aim to find out more about the safety and effectiveness of the new treatment in a larger group of people. This is to get a better understanding of its side effects in the short term.
- **Phase 3** trials compare the safety and effectiveness of the new treatment (or new way of using an existing treatment) to current treatment in a larger group of people.
- **Phase 4** trials are done after the new treatment has been shown to work and it has been **licensed** (a doctor can prescribe it), to monitor how well it works and any side effects that occur with widespread use.

Phase 1 and 2 trials are sometimes called 'early phase' trials. Phase 3 and 4 trials are sometimes called 'late phase' trials.

Randomisation

When trials compare one treatment against another, they are often randomised. Randomised trials are the best way of collecting reliable evidence about a new treatment. Trials are randomised to ensure that any results of the treatment are likely to occur because of the treatment, rather than other factors (for example, age, sex and stage of lymphoma). Randomisation does this by making sure people in all the treatment groups have similar characteristics at the start of the trial.

Instead of a doctor choosing which treatment you have, you are randomly assigned to different treatment groups. These are sometimes called 'treatment arms'. If you are in a randomised trial, you can't choose which treatment you have and neither can your doctor. The treatment you are given is down to chance.

Read **Michael's personal experience** of a randomised trial.

Blinding

In some trials, you do not know which treatment you are having. This is called a 'blind' trial. If your doctor doesn't know either, the trial is called 'double-blind'. Blinding is used to remove any expectations you or your doctor might have about the treatment. Expectations could affect the results of the trial because people can't help being influenced by knowing what the treatment is. The trial organisers keep a record of who is having which treatment so they can tell your doctor if any problems occur.

Placebos

A placebo is a dummy treatment – it doesn't have any active medication in it. It is used to make sure that the results of a trial aren't affected by whether or not participants know they are having active treatment.

Many lymphoma trials do not use placebos. If they do, placebos are used in addition to standard treatment. You don't have placebo treatment on its own. For example, participants in a placebo-controlled trial might be treated with either:

- standard treatment plus the new treatment
- standard treatment plus a placebo that looks the same as the new treatment.

If you take part in a trial that uses placebos, your trial team will tell you. However, you won't know whether you are having the placebo or active treatment.

Planning clinical trials

Setting up any trial takes a long time. Clinical trials in the UK are governed by strict laws. These laws protect the people taking part and help to ensure that trials are as safe as possible.

Organising a trial usually involves the following process:

- **Making a proposal:** Clinical trials are set up by individuals or organisations who design a trial to answer a question. A trial might be organised by a university or a pharmaceutical (drug) company.

- **Getting funding:** Trials are very expensive. Funding has to cover costs for research staff, administration, drugs and tests, hospital stays, analysis of the results and the costs of following-up participants, sometimes long after treatment has finished. Cancer trials in the UK are usually funded by a pharmaceutical company, a national charity (for example **Cancer Research UK** or **Blood Cancer UK**) or a government organisation. Funding often comes from a combination of sources.

- **Developing a protocol:** Every trial needs a document that describes the study in detail. This is called the trial 'protocol'. The doctors and nurses treating you have to follow the procedures described in the protocol to make sure everyone who participates in the trial is treated in the same way. The protocol includes information on: why the research is needed; who is able to take part; how many people are needed for the trial; the treatments, tests and methods involved; how participants will be monitored and for how long; and when the trial will end.

- **Getting approval:** All clinical trials must be approved by an independent ethics committee and by the **Medicines and Healthcare products Regulatory Agency (MHRA)**, a government organisation that regulates the use of medicines in the UK. These agencies look at the protocol carefully to make sure the researchers are working in the participants' best interests.

Once the protocol has been approved and funding has been secured, investigators can begin to find people to take part in the trial. This is called 'recruitment'. If your doctor thinks you could be suitable for a trial they might suggest you take part. You can choose not to get involved. Your decision won't affect the care or treatment you receive outside the trial.

If you do consider taking part in a trial, you might want to read some of the **advantages and disadvantages** of taking part. Take time to think about all the information you get. **Ask your doctor questions** to make sure you understand what is involved. You can show the information to someone else, such as a family member or your GP.

What happens during a clinical trial?

Most treatment trials follow a similar process:

- **Informed consent given:** Your doctor explains the trial and you are given a 'patient information sheet' to read. Although it is called an information sheet it may be several pages long. This gives you details about the trial so you can make an informed decision about whether or not you want to take part. You can **ask as many questions as you want**. You can show the information to someone you trust like a family member or your GP if you want to. If you decide to take part, you are asked to sign a consent form to show that you understand the information you have been given and agree to take part. If you are aged under 16 and would like to take part in a trial that involves a medicine, your parent or guardian will be asked to provide consent on your behalf.
- **Eligibility assessed:** Once you agree to take part, you have tests to check if you are suitable for the study. You can only take part if you meet strict criteria called '**eligibility criteria**'. If you do not meet the requirements for the study, you will not be able to take part in the trial. Your doctor will discuss other options with you.
- **Treatment:** You will be assigned to one of the treatment groups. During the treatment period, you visit the hospital regularly for treatment and tests. You might be given some treatment to take at home. Details about tests and treatments are provided in the information sheet. This tells you how the treatment is given, how often you have it and how long you are treated for.
- **Follow-up:** When treatment is finished, you go to the hospital regularly for check-ups to see how you are doing.

Trials are monitored closely throughout to make sure any problems are picked up and dealt with quickly. The protocol can be changed if necessary during the course of the trial. For example, the trial might be expanded to recruit more people, or the closing date might be changed if recruitment is slower than expected.

A trial might be stopped early if there are concerns about safety or if it is not likely to come up with a meaningful result. This can happen if the organisers have difficulty recruiting enough people to take part. If it becomes obvious that one group is doing much better than the other groups, the trial might close early and everyone might switch to the better treatment if possible.

> Part of my reason for taking part in the trial was that I understand how important it is to get people involved in trials in order to have data to analyse. But I also realised that I would still get good treatment and a lot of care and follow-up.
>
> **Stephen, who took part in a clinical trial for mantle cell lymphoma**

Who can take part in a clinical trial?

In order to take part in a clinical trial, you must meet a strict set of criteria. These 'eligibility' criteria help to make sure that everyone taking part in the trial are like each other in terms of characteristics such as age, type and stage of lymphoma, general health, and previous treatment.

- **Inclusion criteria** set out who **can** take part in the trial. For example, the type of your lymphoma, the stage of your lymphoma and whether you have already had treatment or not. The criteria also usually give an age range for participants.
- **Exclusion criteria** set out who **can't** take part in the trial. For example, certain previous treatments might interact with the study drugs so you can't join the trial if you've had them. Other criteria relate to safety, so if you have other medical conditions you might not be able to take part. Pregnant and breastfeeding women are normally excluded from clinical trials to prevent harm to the baby.

How can I find out about clinical trials that might be suitable for me?

Your doctor might ask you if you are interested in taking part in a clinical trial, or you can ask your doctor if there is a clinical trial suitable for you. You might be able to be referred to another hospital if there isn't a suitable trial running at your hospital. Your medical team won't be offended if you ask about a trial at another hospital.

There are several places you can find information about trials that might be suitable for you:

- Our clinical trials information service, **Lymphoma TrialsLink**, has a **database of lymphoma clinical trials** that are taking place in the UK. You can use it to search for a trial that might be suitable for you.
- The **Lymphoma Coalition** has a **database of clinical trials and treatments** that you can search by country.
- **Blood Cancer UK** has a **Clinical Trials Support Service**, where registered nurses offer personalised support around understanding which clinical trials are available and support you to decide if a clinical trial might be right for you.
- The **National Institute for Health and Care Research (NIHR)** is a government organisation that aims to improve the health and wealth of the nation through research. It has a searchable database of clinical trials at **Be Part of Research**.
- **Cancer Research UK** is a charity that funds research and provides information on all types of cancer. They maintain a **database of clinical trials** taking place in the UK.
- **ClinicalTrials.gov** is a US database of clinical studies that are being conducted around the world, including the UK. You can search for trials by country.
- The **World Health Organization** runs an **international clinical trials registry** that you can search by country.

If you find out about a trial that you might be eligible for, discuss it with your doctor. You can print the information you find and show it to them. They can check the eligibility criteria and find out whether you may be suitable.

You might not find a trial that is suitable for you. There are relatively few trials running at any one time and they are only open to new participants for a limited period of time. However, new trials are opening all the time. If there is not a trial that is suitable for you at the moment, you may find one at a later date. In the meantime, you will be treated with the best treatment available for you.

Advantages and disadvantages of clinical trials

Before you join a clinical trial, you are given a patient information sheet that describes the possible risks and benefits of taking part. However, there is no way of knowing exactly how a treatment will affect you.

The trial team is not allowed to try to persuade you to take part in a clinical trial. They have to give you all the information they have and tell you all the possible risks of taking part in the trial. It might feel as though they are trying to talk you out of participating, but it's important you know what the trial could mean for you.

It was clearly explained to me that the drug was being trialled and that it was impossible to know at that stage if it was the best course of treatment, although the clinical team seemed to think it would be. But they stressed it had to be my decision.
Sue, who took part in a clinical trial for follicular lymphoma

Read more of **Sue's personal experience**, where she describes some of the advantages and disadvantages of taking part in a clinical trial.

Potential advantages of taking part in a clinical trial

Most of the advantages of taking part in a clinical trial are linked to receiving good medical care. This includes access to expert staff, good quality information and careful follow-up. Clinical trials can also provide you with:

- **Access to expert support and advice about the trial procedures and treatments:** Doctors and nurses following the trial protocol act on the most up-to-date information about someone in your situation. You also have access to an experienced research nurse or a clinical nurse specialist with an interest in research. They can explain the trial to you and help you discuss any worries with your medical team.
- **Close monitoring:** Clinical trials pay particular attention to **side effects** (unwanted effects of a medical treatment) and your response to treatment. You may have more tests than usual to see how you are responding to the treatment.
- **Longer follow-up:** You might be followed up for longer than usual because the trial team wants to know what happens with your health in the long term.

- **Access to the latest treatments:** Many clinical trials provide you with an opportunity to have a treatment that is not available outside the trial. They can also offer access to another treatment when all standard options have been tried.
- **Access to information:** For a trial to be approved, participants have to be given good quality information about the treatment involved and the possible risks and benefits of the trial. You are likely to receive more written information than you would with standard treatment. The trial team are available to answer your questions.
- **Helping others:** Taking part in a clinical trial may help people with lymphoma in the future, even if the trial doesn't benefit you directly.

Read **Carol's personal experience** of several clinical trials of new treatments.

Potential disadvantages of taking part in a clinical trial

There are possible risks involved in taking part in a clinical trial. Your doctor or research nurse can discuss any concerns you have to help you decide whether a clinical trial is right for you.

Some things you should consider include:

- **Uncertainty about the outcome:** Clinical trials are set up to answer questions. No one knows for sure what will happen. It's possible you might be in a treatment group that doesn't do as well as expected, or you might get unexpected side effects. There is more uncertainty in early phase trials, where less is known about the treatment's effects than in later stage trials. Phase 1 trials are usually only open to people with no other treatment options.
- **No choice of treatment:** You and your doctor might not get a choice in what treatment you have. If the trial is blinded, you won't know what treatment you are having. Sometimes your doctor won't know either (double-blinded trial). There are some things to remember though:
    - You might be disappointed if you are in the control group (the group that the new treatment is being compared to). However, the control group is given the best standard treatment available and it might be just as good as or even better than the new treatment.

    - If it becomes obvious one group is doing much better than the other, the trial might close early and everyone might switch to the better treatment if possible.

- **Extra hospital visits and tests:** Some people find these reassuring but you might find them inconvenient. Discuss the risks of any extra tests with your medical team (for example, extra scans can increase your exposure to radiation). These risks are assessed when the trial is designed, but it is important that you are comfortable with them.
- **Worrying about information you are given:** Taking part in a trial means dealing with a lot of information. Talk to your medical team if anything is troubling you or you find the information difficult to understand.

What happens if I decide to take part?

Consider the information you are given and ask all the **questions** you want to. You do not have to take part in a clinical trial if you don't want to. It is your decision. Turning down an offer to take part in a clinical trial does not influence the standard of care you receive.

If you decide to take part after you have considered everything, you need to sign a consent form. Signing the form gives your informed consent. This means that you understand what is involved in the trial and agree to take part.

You can change your mind at any time during the trial and withdraw from the trial without giving a reason. Signing the consent form doesn't mean you have to continue to take part if you don't want to.

If you decide to withdraw from the trial, you might not be able to continue to have the trial treatment. You'll usually be given the standard treatment for someone in your situation instead. Sometimes, the treatment you have in the trial influences what treatment you can have next. For example, it might not be possible to switch from one **chemotherapy regimen** (combination of drugs) to another. Before you agree to take part in a clinical trial, ask your trial team what might happen if you change your mind and want to withdraw from the trial.

What happens after treatment?

After you finish treatment as part of a trial, there is usually a long period of follow-up, often several years. The trial team is interested in long-term as well as short-term effects of a treatment. As part of follow-up, you attend the hospital regularly for tests and a check-up. Details of what is involved are included on your information sheet.

It can take several years before the results of a clinical trial are available. This is because it takes time to recruit enough people, treat them according to the trial protocol, and follow them up afterwards. Researchers also need to analyse the results to work out what the outcome of the study is. Results are usually reported at major medical conferences and in medical or scientific journals. For some clinical trials, people who took part are sent a results information sheet.

References

The full list of references for this page is available on our website. Alternatively, email **publications@lymphoma-action.org.uk** or call 01296 619409 if you would like a copy.

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✓	Evidence-based
✓	Approved by experts
✓	Reviewed by users

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