A Guide to Clinical Trials
For young people with cancer and their parents

www.childhoodcancerint.org   www.siope.eu   www.encca.eu
Many children and young people with cancer are treated on clinical trials. We hope this leaflet, designed for young people with cancer and their parents, will help you understand more about clinical trials and answer some of the many questions you may have. Always discuss any questions or specific queries relating to treatment or participation in a trial with your doctor or other members of the team.

What is a clinical trial?
A clinical trial is a medical research study involving people. It is a final step in a long process that begins with research in a lab. Most standard treatments we use today are based on the results of past clinical trials. Clinical trials are key to developing new methods to prevent, detect, and treat cancer.

There are different types of clinical trial. For example, a trial may compare one treatment against another, or be based on questionnaires to answer questions about quality of life. Clinical trials usually involve patients, but sometimes involve healthy volunteers.

Why are clinical trials important?
Because we don’t yet know the best way to treat every type of cancer, clinical trials help us to find better ways of treating the different kinds of cancer. Clinical trials allow us to test new treatments and ways of controlling symptoms, or to investigate new ways of preventing or diagnosing cancer. It is largely because of clinical trials that progress has been made in the treatment of children’s cancer over the last few decades.
Are there different kinds of trials?

Yes. There are three different kinds of trials (known as phases). Each phase aims to find out something different about the new treatment or procedure.

**Phase I trials** give possible new treatments to people for the first time. They help find the best doses of new drugs and possible side effects. These trials are offered to a small number of people whose cancer has no known effective treatment. Usually a new drug has been tested in adults before it is offered to children.

**Phase II trials** test whether a treatment is effective at the dose(s) chosen during phase I. They aim to show how well the new treatment works for particular types of cancer and measure any unwanted side effects. They will again involve a relatively small number of patients.

**Phase III** trials aim to confirm the benefit of a new treatment or a new schedule of existing treatments ("treatment optimisation") compared with the current standard of care. These trials involve much larger numbers of people in everyday clinical care settings and usually run for much longer than phase I and II trials.

All these different kinds of trials may run across different countries at the same time.
Can anybody enter a trial?

Each clinical trial is aiming to improve treatment for patients with a specific type of cancer. Therefore for each trial there will be precise guidance on which patients are eligible for the trial. The inclusion and exclusion criteria (rules for being included) are clearly set out in the trial protocol (treatment plan). It is important that the patient is an exact match to these criteria, and that the patient or parents agree to take part. For example, the inclusion criteria may not allow all patients with a particular type of cancer to enter the trial, but just a smaller group of these patients, perhaps based on age or stage of the disease.

How much will we be told about the trial and what does it mean to take part?

The doctor or a research nurse will explain all necessary information about the trial and they will provide detailed information sheets for parents and patients. Additionally you will have the opportunity to discuss the trial with them. The information sheets will give you details about the treatment and any possible side effects as well as explaining what will happen to the data collected during the trial.

Does everyone in a trial get the same treatment?

Not necessarily. Some trials are known as randomised trials. In a randomised trial patients are randomly assigned to different treatments (known as treatment arms). By doing a randomised trial, doctors can find out if a new treatment is better or safer than the current standard treatment. The treatment assignment is usually done by computer, and each arm is a different treatment. This method means that neither the parents/patient, nor the doctor will be able to influence which treatment arm is allocated, and helps to ensure that the results are not biased in any way. Equal numbers of patients are treated in each arm; and at the end of the trial the results are compared. Sometimes a trial may contain more than one randomisation. A randomised trial will be stopped early if one arm shows much better responses. Your doctor will explain in more detail how randomisation works, and precisely what it means in a particular trial.
What happens if we decide to take part?

Once you have read the information sheets and had a chance to ask questions, you will be given some time to think about whether or not you wish to go ahead. The length of time will vary according to the trial, but will usually be at least 24 hours. In order to take part in the trial, it will be necessary to sign a consent form to confirm that you understand what happens in the trial and that you agree to take part. This will be signed by either the parents or the patients themselves (depending on their age).

How can we be sure the treatment is safe?

The safety of patients in clinical trials is of utmost importance. All trial protocols have to be reviewed and approved by ethics and regulatory committees. All the possible risks and benefits of taking part will be explained to you. Once the trial has started, it is then reviewed on an ongoing basis. If there are any concerns about the safety or how well the treatment is working, the trial may be stopped and treatment will be continued using standard best care.

How many patients are needed?

The trial protocol contains details of how many patients are needed in order to effectively answer the question(s) posed within the trial. The numbers will vary depending on the type of trial. Since cancer in childhood is rare, patients for clinical trials will be recruited from treatment centres in various countries within the EU as well as overseas. This helps to ensure that recruitment is completed as quickly as possible.
What if we say yes, and then change our minds?

Patients and parents can change their minds at any time. You do not have to give a reason if you do not wish to participate. Your doctor will respect your decision and you (or your child) will then receive the treatment, which is the currently best known and proven treatment.

What are the advantages and disadvantages of taking part in a clinical trial?

Your doctor will discuss with you any possible advantages and disadvantages. According to the design of the particular trial protocol taking part may mean:

- You may receive a new treatment that is only available in a clinical trial
- Your treatment will be according to the same standard as all the patients who are participating in the trial
- National, or often international, experts in the particular tumour type will have worked together to develop the trial protocol
- There is considerable emphasis on patient safety and you will be monitored closely
- Sometimes there may be no benefit for you or your child but the results of the trial may help doctors to improve cancer treatments for future patients.
- You may have to make more hospital visits
- You may have more tests carried out
- The new treatment, although expected to be better, may not actually be better than the standard treatment
- You may not be able to have the drug treatment made up specially as a syrup, but will have to swallow tablets/capsules just like all other patients on the trial.
- You may experience side effects that you or your doctor are not expecting, but you will be closely monitored for these.
What happens if we don’t want to take part?

The doctor treating you or your child will respect your choice and you/your child will receive the currently best known and proven treatment. Even if you agree to take part in a trial you can withdraw at any stage and you/your child will continue to be treated with the best possible treatment.

How long do trials last?

This depends on the type of trial and the number of patients needed to answer the trial question. Phase I and II trials usually last 1-2 years. Phase III trials may last a total of 5 years, or even longer. Often there is then a long period of follow up. The length of time that individual patients are on treatment within a trial will vary, but will be clearly explained in the trial protocol.

Who is responsible for running the clinical trials?

Clinical trials in childhood cancer are run from universities or hospitals with specialist units and expertise in running clinical trials. Nowadays they also involve collaboration with other international groups. The information sheets for a particular trial will give more details about who is running that trial. Occasionally trials may be run by a pharmaceutical company.

Developing a new drug for clinical use

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Where does the trial treatment take place?
The trial treatment is in hospitals with specialist doctors in cancer in children and young people. For most clinical trials, this would be the same hospital where patients are treated with the standard best known treatment. However for some trials your doctor may refer you to another specialist hospital where the trial is being done. Many childhood cancer trials involve international collaboration and therefore patients in several countries take part in the same trial.

What sort of information is collected?
The information (or data) collected on patients taking part in a trial includes details of diagnosis, treatment received, results of specific tests (for example scans and blood tests), and also issues relating to any possible side effects. It may also be information about long-term follow up and quality of life.

What happens to the information?
Information on patients who enter into a clinical trial will be collected in the treatment centre and is sent to the trials unit responsible for coordinating the trial. The information will either be recorded on paper or sent electronically. It will be stored in a secure database and then analysed by statisticians to provide information about the interim results of the trial.

How is patient confidentiality maintained?
All information about patients on trials is protected by the national or European regulations on data protection. This means that all staff who have access to this information are legally required to keep the information secure. This is very strictly governed and there are clear guidelines about disclosure of this information. Usually, only patient initials or a patient code number will be used.
How long is trial data kept?

Because it may be necessary to go back and look at the information many years after the end of the trial, trial data may be kept indefinitely, either in paper form or electronically.

Who monitors the way clinical trials are run?

Clinical trials are very closely monitored by a number of different individuals and organisations. This will be the Chief Investigator, the Trial Management Group that has developed the trial, and relevant staff within the clinical trials unit. An Independent Data Monitoring Committee may also be established to oversee the conduct of the trial. At a national level, there will be an ethics committee and the national independent regulatory body. If there are any concerns about the conduct of the trial or the interim results, a trial may be stopped early.

When are trial results available?

Some trials run for a considerable time. It is not possible to carry out the final analysis of the results of the trial until sometime after the last patient has finished treatment and has been followed up for a certain period. After that the results will be published. Trial results may therefore not be published until a few years after the last patient has finished treatment.

How can I find out the results?

The trial results are published in medical and scientific journals. These are written for doctors and often use quite complicated terminology. No individual patients are identified in these publications. It is not usual for trial results to be fed back to individual patients, but a summary should be available once the final publication is in print.
Glossary of terms:

**Data:** This is individual patient information collected throughout the course of the trial. The data is analysed to find out how well the treatment is working.

**Chief Investigator** is the lead clinician for a clinical trial across a number of sites or countries.

**Ethics Committee:** The Committee that reviews the treatment protocol to ensure that what is being proposed is ethical, safe and in the best interests of the patient. This Committee will also review the information to be provided to the patient or parent to make sure they can fully understand what they are asked to consent to.

**Inclusion and exclusion criteria:** These are requirements that must be met before a patient is entered into a trial (for example: patient age, type and stage of cancer etc.).

**Informed consent:** In order to take part in the trial, it will be necessary to sign a consent form to confirm that you understand what happens in the trial and that you agree to take part. This will be signed by either the parents/guardians or the patients themselves, depending on their age.

**Principal Investigator:** The lead clinician at a particular site or treatment centre.

**Protocol:** It is a document for medical staff that contains details of the purpose, design and conduct of the trial, and all the information on how doctors diagnose and treat the patient. The protocol is usually not given to parents or patients. Patient information sheets are available explaining the clinical trial in a lay language.

**Randomisation:** This means the random assignment of patients to different treatment arms within a clinical trial.

**Regulatory body:** This is the body which approves the science of the trial and use of the drugs within the trial, and monitor the safety of the investigational medicines.
Find more information on clinical trials in your language

**English:**
www.siope.eu
www.childhoodcancerint.org
www.cancerresearchuk.org/cancer-help/trials/
www.nhs.uk
www.itcc-consortium.org

**French:** National Cancer Institut:
Booklet „Mon enfant et la recherche en cancérologie”
(order via www.sparadrap.org; Ref. D28)

**German:**
www.kinderkrebsinfo.de

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© 2014/1st edition

*This publication has received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under the project ENCCA, grant agreement no HEALTH-F2-2011-261474.*