



# Clinical Trials

Your first steps on the path to understanding clinical trials start here

Participating makes  
new treatments possible



### Why Do We Need Clinical Trials?

- To study what can cause a disease
- To study ways to better diagnose a disease
- To study ways to treat a disease or control its symptoms
- To study how comfort and quality of life can be improved
- To study changes in a disease over time

### Why Participate in a Clinical Trial?

- To better understand your disease
- To help develop new treatments or better understand current treatments
- To make a difference in the care that people receive in the future

**It's important! Clinical trials need participants that represent all individuals that are affected by a disease**



# How an Investigational Treatment is Studied Before it Can be Used as a Treatment Option

Clinical trials are usually done in phases that build on one another

## 1 Phase 1 trials

- Include a small number of participants, sometimes people with no disease
- Find the dose or doses that are safe and can be studied more
- Study how the investigational treatment moves through the body (pharmacokinetics)
- Study the effects of the investigational treatment and how it acts on the body (pharmacodynamics)
- May be **controlled** and/or **randomized**



## 2 Phase 2 trials

- Include a larger number of participants
- Continue to study the safety of the investigational treatment
- Keep studying the effects of the investigational treatment and whether it acts as intended
- May be **controlled** and/or **randomized**



## 3 Phase 3 trials

- Include an even larger number of participants
- Compare the safety and effects of the investigational treatment to a **placebo**, another treatment, or no treatment
- Are **controlled** and **randomized**



**! Two phase 3 trials are usually required for an investigational treatment to be approved as a treatment option**

- For diseases with no currently approved treatment or that need more effective treatments the approval process may be shortened, or “fast tracked,” to make the treatment available sooner

## 4 Phase 4 trials

- Take place after the investigational treatment is approved as a treatment option
- Continue studying the treatment as it is used by people with the disease to gather information on long-term benefits and potential safety concerns



### Definitions

**Controlled:** a clinical trial that includes a comparison (control) group. Participants in the control group may receive a placebo, another treatment, or no treatment

**Placebo:** a control treatment that is designed to have no effect on the participant, but looks the same and is delivered the same way as the investigational treatment (for example, a “sugar pill”)

**Randomized:** when participants are placed in a trial group based on chance (for example, a coin flip)



## Common Questions Answered

Things You May Consider

### Who Can Participate?

- Every clinical trial has rules for who can or can't participate. These are called the inclusion (can) and exclusion (can't) criteria
- These rules increase the likelihood of getting higher-quality data and decrease the likelihood of harm to participants

### What Are the Possible Risks of Participating?

- The investigational treatment may not work as intended
- The way the treatment is given may have possible risks (for example, a surgical procedure)
- There may be side effects, or side effects that are worse than expected
- In a **controlled** trial, you may not receive the investigational treatment



### What May I Be Asked to Do?

- You may be asked to travel to a different clinic or hospital than where you usually see your doctor
- Clinical trial visits may be more frequent than your usual doctor visits
- You may have more tests than you normally do
- The trial may require some uncomfortable tests (for example, taking blood)

### Who Conducts Clinical Trials?

- A clinical trial is usually led by a principal investigator (PI), often a medical doctor, and a team that can include other doctors, nurses, and staff
- Trials are funded by one or more sponsors. Sponsors may include:
  - Federal agencies such as the National Institutes of Health (NIH)
  - Companies making new treatments
  - Academic medical centers
  - Patient advocacy groups





## What's Involved? On the Path Toward a Better Understanding of Clinical Trials

- After you have done your research and spoken with your health care provider and others you trust, you may decide that you want to participate in a clinical trial
- It's important to learn about how clinical trials work: who you might interact with along the way, which questions you may want to ask before consenting to participate in a trial, and what you may need to do during a trial

## 1 Getting Started: The People Who Work Together on a Clinical Trial Team

- Clinical trial team members you may meet include doctors, nurses, and trial coordinators
- Someone from the clinical trial team, usually the trial coordinator, will speak with you to discuss your interest in joining the trial
- The trial coordinator will also keep up-to-date contact information for you and will schedule check-ins and visits to the trial site
- The clinical trial team will be available during the entire study to answer your questions and discuss your issues or concerns

## 2 Informed Consent

- An “informed consent form” explains the details of the trial, including its purpose, length, the tests involved, and potential risks and benefits
  - A person who chooses to participate in a trial, or the person who makes medical decisions for them, must sign the informed consent form before participation in a clinical trial can begin
  - The consent form is not a contract – you can stop participating in a trial at any time after signing it, for any reason
  - Signing the informed consent form does not guarantee that you will be part of the trial
- In addition to the informed consent form there may be separate consent forms for specific trial procedures, such as a surgery

**Make sure all your questions are answered  
before signing the informed consent form**





## Questions You May Want to Ask About Clinical Trials

### General Questions About the Clinical Trial:

- What are the goals of the trial?
- How many participants will be in the trial?
- Is this the first clinical trial for this investigational treatment or has it been studied before?
- Who decides if I can or can't participate in the trial?
- How long will I be in the trial?
- What if I have unexpected reactions during the trial?
- Can I participate if English is not my first language?

### Questions About Treatments and Tests During the Trial:

- Will every participant receive the investigational treatment? If not, how are different treatments assigned?
- Will I be told that I have received the investigational treatment? Will members of the clinical trial team know? What about my other doctors?
- What are the possible benefits and risks of the investigational treatment?
- Will I have to stop my current treatment? If not, will the investigational treatment change how my current treatment works?
- What tests will I have before I receive treatment? After I receive treatment?
- Will all the tests happen in a medical center, or will some happen at home?



- Do I take this treatment myself or is it given to me? How many times do I receive treatment? How often?
  - If the treatment is given to me, how is it done? How long will it take?
  - If the treatment requires a procedure, such as surgery, how long will it take me to recover?
- How long after starting treatment will follow-up visits begin? How many visits will there be?
- Will I have to travel to a different medical center for any of my visits?
- Who will oversee my medical care while I am participating in the trial?
- What if I feel as though the treatment I'm receiving isn't working?

### Questions About Cost:

- How much will it cost me to participate in the clinical trial?
- Can I participate if I don't have health insurance?
- Will my health insurance cover some or all treatment costs during the trial?
- Will I be reimbursed if there are out-of-pocket expenses?

### Questions About the End of the Trial:

- Will the treatment be available to me after I finish the trial?
- Will I receive the results of the trial when it is finished?



### 3 What to Expect After Signing the Informed Consent Form

#### Screening

- Screening is when the clinical trial team determines whether or not you have all of the inclusion and none of the exclusion criteria
- The information collected can include things like demographics (such as age and race), medical history, and current medications
- Some tests may be required and may include a physical exam, a neurological exam, urine and/or a blood samples, a chest X-ray, an electrocardiogram, and questionnaires
- The information may be gathered over one or several visits, depending on the clinical trial

### 4 Baseline

- The baseline visit is your starting point as an official clinical trial participant and gives a snapshot of your health before treatment starts
- Some of the information you provide at screening may be updated at the baseline visit, certain tests may be repeated, or there may be additional tests



### 5 Treatment and Follow-up Visits

- Treatment will begin after the baseline tests are completed
- During or after the baseline visit is when your treatment group will be determined
- After starting your assigned treatment, follow-up visits track your progress in the trial
- Tests may be performed during follow-up visits to check the safety and measure any effects of the treatment
  - The number of follow-up visits depends on what kind of data the clinical trial team wants to collect from participants and how long the trial lasts

### 6 End-of-Study Visit

- The last trial visit often includes tests conducted throughout the trial, as well as during screening or baseline visits
- Your last trial visit doesn't mean that the clinical trial is finished; there may be other participants who have not completed all of their follow-up visits
- This is a good time to ask, "When will the results of the trial will be available?"
- At the end-of-study visit you may be asked if you want to participate in another trial, often called an "extension" trial, which studies the longer-term safety and effects of the investigational treatment



## Participants are the most valuable part of any clinical trial!

Your safety and well-being are critical to a successful trial

### Protecting the Rights of Clinical Trial Participants

- Institutional Review Board (IRB):
  - Doctors, researchers, and community members who ensure that a clinical trial is well designed, ethical, and that participant rights, safety, and welfare are protected
  - Approves the clinical trial design and informed consent form at each trial site
  - Makes sure that the risk to participants in the clinical trial is minimized and reasonable compared to the potential benefits of the investigational treatment
  - Monitors the trial and makes sure that any side effects or unexpected events are immediately reported to ensure participant safety
- Data and Safety Monitoring Board (DSMB)
  - Also known as Data Monitoring Committee (DMC) or Data and Safety Monitoring Committee (DSMC)
  - Along with the IRB, many clinical trials are closely supervised by a DSMB
  - Made up of experts who are not involved with the clinical trial
  - The DSMB looks at the data as the trial is in progress – they can recommend that a trial be stopped or placed on hold if the treatment is not working, or if there are unexpected risks
  - If trial results are very good, the DSMB can recommend an early stop to reduce testing and stop any control treatments

- Personal and Medical Information

- It is strictly required that personal and medical information of trial participants be kept confidential during and after the trial
- Clinical trial data are “de-identified,” so personal information (like your name) cannot be revealed in any reports or publications that present results from the trial







## How Do I Find Out More?

Talk to your healthcare provider to learn more about participating in a clinical trial

Reach out to patient advocacy organizations or foundations dedicated to advancing clinical research

Search [www.clinicaltrials.gov](http://www.clinicaltrials.gov) to learn more about clinical trials that are currently looking for participants

Together, we can  
discover new treatments



### Additional Resources:

Learn About Clinical Studies. ClinicalTrials.gov website. <https://www.clinicaltrials.gov/ct2/about-studies/learn#ClinicalTrials>

NIH Clinical Research Trials and You. National Institutes of Health website. <https://www.nih.gov/health-information/nih-clinical-research-trials-you/basics>

Step 3: Clinical Research. US Food & Drug Administration website. <https://www.fda.gov/patients/drug-development-process/step-3-clinical-research>

Why Should I Participate in a Clinical Trial? National Institutes of Health website. <https://www.nih.gov/health-information/nih-clinical-research-trials-you/why-should-i-participate-clinical-trial>