

# Research and Clinical Trials



## What is research?



Medical research is the investigation of health issues in order to better understand and treat them. There are many types of research, including clinical trials, which are important for developing diagnostic tools and tests, medical devices, and new treatments.

## What is a clinical trial?



Clinical trials investigate the safety and effectiveness of devices and treatments. They also play a significant role in identifying the benefits, limitations, and long-term side effects of devices or treatments.

## What are the phases of clinical trials?



**Phase 1:** This phase explores whether the treatment is safe. Typically, a small group receives the treatment for the first time. Researchers monitor for negative side effects, decide on safe dosages, and how the body reacts to the treatment.



**Phase 2:** This phase investigates whether the treatment is useful. A larger group of patients receives the treatment. Researchers continue to monitor safety but also look at how well the treatment works at different doses. This phase helps to decide whether the treatment is effective, and the most effective dose of the treatment.



**Phase 3:** This phase is used to find out how the new treatment compares to others. This phase usually involves a much larger group of patients to compare the new treatment with other treatments or a placebo (also called a “sugar pill,” an item with no treatment benefit). Phase 3 trials further show a new treatment’s effectiveness, safety, and correct dose. This phase is the last step before a new treatment is approved.



**Phase 4:** After a treatment’s approval, a phase 4 trial continues to monitor the safety and efficacy of the treatment over time. Researchers may also investigate new uses for the treatment, any long-term side effects, or interactions with other medicines.

*Each phase of a clinical trial builds upon the previous one to determine whether a treatment is safe and effective for patients. Regulatory agencies like the FDA (Food and Drug Administration) in the United States carefully review information from each phase of a clinical trial before deciding whether to approve a treatment for widespread use.*

## How can I learn more about clinical trials that are available to me?



Your health care provider can provide information for you regarding available clinical trials. You can also find information on ongoing clinical trials on [ClinicalTrials.gov](https://www.ClinicalTrials.gov).