

How is research translated from the bench to the bedside?



Discovery

New techniques or treatments are identified through new insights into a disease, existing treatments that have unanticipated effects and new technologies that may be applicable for a specific disease.



Development

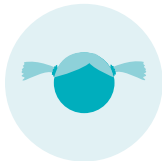
Researchers do experiments to understand how the treatment is done to determine exactly how the treatment or drug works. Some things they look for are:

- How the treatment should be administered
- Any potential side effects there might be
- What the best dosage might be
- How it interacts with other drugs or treatments



Preclinical Research

Before drugs and treatments can be tested in patients, researchers study to make sure the drug won't have the potential to cause serious harm to patients. This is done in a very closely monitored environment that has strict regulations for personnel, facilities, equipment, and procedures.



Clinical Research

Several phases of clinical trials are done to answer specific research questions about the drug or treatment and make sure it is working as expected in a small group of patients.



Food and Drug Administration (FDA) Review and Approval

After the research team has gathered preclinical and clinical data that indicate a drug is safe and effective for its intended use, it is approved by the FDA for use in other patients.

**For more information, visit
[NationwideChildrens.org/Childhood-Cancer-Awareness-Month](https://www.nationwidechildrens.org/Childhood-Cancer-Awareness-Month)
or use the hashtag **#cancerlauNCH****



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