New treatments based on your response to chemotherapy.

Sponsored by Mayo Clinic Center for Individualized Medicine
Breast Cancer Genome Guided Therapy Study 2, known as “BEAUTY-2,” is an exciting group of studies designed to test new drugs for women with chemotherapy resistant breast cancer. The first drug is abemaciclib - a CDK 4/6 inhibitor.

What is the purpose of this research study?

Neoadjuvant chemotherapy is the standard treatment for women with certain types of breast cancer.

For patients with no cancer after standard chemotherapy the prognosis is excellent. However, for patients with residual cancer after standard chemotherapy additional therapy to eradicate disease may reduce the risk for future breast cancer events.

At this time, there are limited options for women with residual cancer after neoadjuvant chemotherapy.

The goal of this study is to accelerate drug development for patients with chemotherapy resistant breast cancer.

Why abemaciclib?

Abemaciclib is a CDK 4/6 inhibitor that is FDA approved for the treatment of metastatic breast cancer that is resistant to estrogen targeted therapies. Based on scientific findings from the first BEAUTY study, BEAUTY-2 is testing the effects of abemaciclib in patients who have tumors that are estrogen receptor negative and have residual disease after neoadjuvant chemotherapy.

Why are you asking me to be in this study?

You are being invited to participate in this study because you have been treated with neoadjuvant chemotherapy for triple negative breast cancer, TNBC. For women with

Women with triple negative breast cancer treated with neoadjuvant chemotherapy

Residual disease

No residual disease

Blood sample
Imaging
Tumor biopsy

The ultimate goal is to individualize cancer treatment, enable...
The ultimate goal is to individualize cancer treatment, enabling physicians to provide the best care to each patient.

Can I join this study?

**After neoadjuvant chemotherapy has been given**
All women with triple negative (ER-, PR-, HER2-) invasive breast cancer treated with anthracycline and taxane based chemotherapy are eligible to participate in this trial who:
- Have completed chemotherapy and not yet had surgery
- Are not pregnant or breastfeeding

What happens if I join this study?

Your doctor will discuss the trial with you. You will be given a consent form that outlines the study procedures and tests, shown in the diagram below.

After completion of standard chemotherapy patients will be assessed by breast imaging as well as a breast biopsy to see how well the tumor has responded to the chemotherapy treatment. Patients with disease remaining will be treated with abemaciclib, which has shown promise for treating TNBC that is resistant to chemotherapy. Patients who have no or minimal residual disease by imaging and biopsy will proceed to surgery.

If I chose to join, how long will I be in this study?

The biopsies, imaging and abemaciclib treatment will be completed by the time of surgery.

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**Abemaciclib**

**Surgery to remove any remaining cancer**

**Blood sample**

Enabling physicians to provide the best care to each patient.
Who can I contact for more information?

Visit the website for more information

https://www.mayo.edu/research/clinical-trials/cls-20462810

http://mayoresearch.mayo.edu/mayo/research/center-for-individualized-medicine/