What this study is about
A study to develop a new non-surgical treatment technique for adults with breast cancer.

The full title of this study is: A phase II trial exploring the success of cryoablation therapy in the treatment of invasive breast carcinoma

Why the study was done
It is important to develop simpler and less disfiguring methods to treat small cancers in the breast. One possibility is to use a method that freezes tumor tissue, using a small instrument that is inserted into the tumor through the skin. This procedure is known as cryoablation, and is now sometimes used to treat non-cancerous or non-malignant breast tumors. It is not known if cryoablation is effective for treatment of cancerous or malignant breast tumors.

This study was done to see if freezing tumors using cryoablation would destroy enough of the tumor that no living tumor cells could be found when the tissue was examined microscopically. An MRI scan was also done for each patient before and after the cryoablation so that researchers could see if MRI scans could be used to tell if all tumor was destroyed by the cryoablation.

Study results
These results are for people with small breast cancers, less than an inch across, that could also be seen on an MRI scan.

There were 87 patients in this study, and each one had a cryoablation of a breast tumor, then had surgery to remove the tumor using the same surgery as would be done if cryoablation had happened first. The study found that people treated with cryoablation still had tumor left 24% of the time. Also, for patients who still had tumor after cryoablation, MRI was not able to predict this result about 19% of the time.

What the results mean
Because it is so important to be sure that all tumor cells are removed, the results of this study mean that the procedure of cryoablation and examination by MRI must be further improved before it can be considered safe for further study. This method of treating tumors in the breast is not currently recommended.

How the study worked
Here’s a picture that explains how patients were placed into this study.
When did the study start and end? The study started in March 2009. All patients were enrolled by June 2013.

How many patients joined? 87 patients agreed to be in this study.

Talk to your doctor if you want more information about this study.

Scientific publications about this study

This summary includes information in the following article:


To learn about this trial, visit the ClinicalTrials.gov website at https://clinicaltrials.gov/ct2/show/NCT00723294

This study was sponsored by the Alliance for Clinical Trials in Oncology – a national clinical trial network group that runs large cancer clinical trials. The Alliance is supported by the National Cancer Institute (NCI) and brings researchers together to develop better treatments for cancers. More information about the Alliance is at http://www.allianceforclinicaltrialsinoncology.org.

This summary lists what is known about this research study as of August 2016. New Information may be available.

We thank the people who joined this study and made it possible.
We do research to try to learn the best ways to help patients.
The people who joined this study helped us to do that.

Thank you for your interest in learning more about cancer research advances.