

Developing a Breastmilk Tool to Detect Breast Cancer Before It Spreads

Giving birth & breastfeeding **reduces** a woman's **lifetime risk** of developing breast cancer. However, pregnancy is linked to a short-term **increased** risk of developing breast cancer, referred to as Pregnancy-Associated Breast Cancer (PABC).

Breastfeeding is beneficial for both the infant and mother, but makes screening for signs of PABC difficult. **We need new tools for detecting PABC before it spreads.**

Want to know more?

BreastmilkResearch.org



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Breastmilk Research to Detect and Stop Breast Cancer in New Moms

Researchers at the University of Massachusetts are studying the milk of **breastfeeding mothers** who have been **diagnosed with breast cancer** OR who are **undergoing a breast biopsy**. Participants can live anywhere in the continental US.

Why study breastmilk?

We study breastmilk in an effort to reduce the risk that a woman will develop breast cancer. Breastmilk provides a unique opportunity to examine the breast through the cells, proteins, and small molecules present in the milk.

Some of the cells in breastmilk, called epithelial cells, originate from the lining of the gland and contain important information about the health of the breast tissue. Analysis of the DNA in these epithelial cells for mutations and small tags called 'DNA methylation' provides biomarkers of breast cancer risk and potential targets for chemoprevention and treatment.



About this Study

We want to determine if the epithelial cells naturally present in breastmilk can be used both to assess an individual woman's risk of developing breast cancer, and to discover new molecular targets for preventing breast cancer.

This study may also aid in the development of a tool for early detection of breast cancer in lactating women. Detecting signs of breast cancer early is important for all women but especially for those at increased risk due to a family history of breast cancer.

What will you be asked to do?

You will be asked to complete an informed consent document, a questionnaire, and to send us a copy of your breast biopsy results. Then you will need to provide milk and saliva samples. You will receive \$50 in compensation for your time.

How will you donate milk?

We will send you a collection kit with containers for your milk and saliva sample. The kit will include a prepaid return FedEx mailer. You will call FedEx to have your milk picked up and returned by express delivery.

How will your privacy be protected?

All information related to you will be given a code and your name will not be used in any publication. Identifying information about you will not be released to anyone.