



THE
SISTER STUDY
BREAST CANCER RESEARCH

JULY 2023

Our Recent Findings!

In a recent [Sister Study publication](#), we examined whether gynecological surgery was related to women's risk of developing breast cancer. Since many women who undergo a hysterectomy (removal of the uterus) or bilateral oophorectomy (removal of both ovaries) often take hormone therapy, we also considered the combined effects of surgery and hormone therapy. We found that having had a bilateral oophorectomy was associated with a lower incidence of breast cancer, both overall and when accompanied by unopposed estrogen hormone therapy. In contrast, hysterectomy without bilateral oophorectomy was associated with higher incidence of breast cancer, particularly for women who also took estrogen plus progestin hormone therapy. This work was led by a summer intern, Sharonda Lovett, who is currently completing her PhD in Epidemiology.



Have you completed your Annual Update?

Thank you if you have already completed your 2022-2023 Annual Health Update! In October 2022 we began contacting all Sisters about completing your Annual Health Update. We have now received a response from 81.6% of our participants! If you'd like to complete the questionnaire online, click the link below:

<https://sisterstudy.niehs.nih.gov/English/index1.htm>

We are deeply grateful for your continued participation! If you have not received your AHU or have any questions or issues, please contact our Help Desk toll-free at 877-4SISTER (877-474-7837) or email us at

update@sisterstudy.org.

We will gladly help you!

Pregnancy Complications and Premenopausal Breast Cancer

The pregnancy complications preeclampsia and preterm birth may affect future breast cancer risk in different ways, even though women with preeclampsia are more likely to have a preterm birth. A very large study was needed to disentangle these relationships. In a [recently published paper](#), Sister Study investigators led an analysis of data from 6 different cohort studies, including the Sister Study, to try to understand how preeclampsia and preterm birth may be linked to breast cancer occurring prior to menopause. They found that women who experienced preeclampsia were less likely to develop premenopausal breast cancer. While preterm birth was not associated with premenopausal breast cancer among all women, it was associated with higher rates of premenopausal breast cancer among those who experienced preeclampsia or gestational hypertension (high blood pressure during pregnancy). This study helps to clarify the complicated relationships between certain pregnancy complications and premenopausal breast cancer risk and may help to identify high risk women.

<https://tinyurl.com/CancerHypPreg>