

# Abortion and Breast Cancer Link

Developmental biology and the results of [epidemiological<sup>1\)</sup>](#) and [ecological epidemiological studies](#) show that induced abortion is a risk factor for breast cancer.

[Studies](#) often cited as demonstrating no link between induced abortion and breast cancer are fatally flawed. As such, these studies are insufficient evidence for the claim that induced abortion has no influence on a woman's risk of breast cancer.

By contrast, many studies—none perfect, but some characterized by better [method](#)—show induced abortion to have an influence on breast cancer risk. This influence is found in many [studies](#) to be positive,<sup>2)</sup> and statistically significant.<sup>3)</sup> The size of the influence varies across study, depending on the population considered and the methods used. However, the findings of these studies demonstrate a need for further research. The existing service network of breast centers (which are FDA-regulated and accredited by the National Accreditation Program of Breast Centers) could be converted into research network, whose resulting database would facilitate the work yet to be done. More statistically rigorous research must be performed in the future to avoid the shortcomings identified in previous work.

## 1. Biology of the Link

(See [Biology of the Abortion-Breast Cancer Link](#))

The developmental biology of changes in the breast that occur during puberty and during a normal pregnancy supports the existence of an independent link between induced abortion and breast cancer.

During the first half of [pregnancy](#), Type 1 and Type 2 lobules<sup>4)</sup> increase in number. During the second half of pregnancy (after week 20), these cancer-vulnerable Type 1 and Type 2 lobules begin to mature into cancer-resistant Type 4 lobules. After 32 weeks of pregnancy, sufficient Type 4 lobules have developed that a mother is protected against breast cancer, and she incrementally gains the breast cancer risk reduction that will maximize at 40 weeks. After birth and after a mother has lactated and [breastfed](#) (or should she choose not to breastfeed), Type 4 lobules regress to Type 3 lobules, which retain the epigenetic changes<sup>5)</sup> that protect against cancer's development.

If a woman has an induced abortion (presumably prior to 32 weeks), her breasts will contain an increased number of Type 1 and Type 2 lobules and will not have developed sufficient cancer-resistant Type 4 lobules. The longer a woman is pregnant before an induced abortion, the more cancer-vulnerable Type 1 and Type 2 lobules she will develop.

## 2. Studies on the Link

(See [Studies on the Abortion-Breast Cancer Link](#))

An assessment of [studies](#) from 1957 through 2013 examining the induced [abortion-breast cancer link](#) reveal a number of [biases](#) and [problems](#) in epidemiological studies of the induced abortion and breast

cancer link. These include:

- Incomplete questionnaire, low user response, unsuitable circumstances for obtaining data
- Health bias or survivor bias
- Incorrect time frame
- Unsophisticated analysis and unsuitable comparisons
- Reporting and abortion law changes
- Omitted variable bias
- Incomplete reporting and distinguishing between spontaneous and induced abortions
- Publication bias
- Insufficient sample randomization
- Very small sample size
- No distinction between first- and second-trimester spontaneous abortions
- Incomplete explanation of model

At least two major epidemiological studies that have minimal flaws, the [1989 Remmenick study](#) and [2007 Carroll study](#), show a strong association between induced abortion and breast cancer.

It is important that to build a research network from existing breast centers that are FDA-regulated and accredited by the National Accreditation Program of Breast Centers to eliminate major gaps in existing literature.

<sup>1)</sup> Epidemiology is “a branch of medical science that deals with the incidence, distribution, and control of disease in a population” ([Merriam Webster Dictionary](#)).

<sup>2)</sup> That is, found to increase risk.

<sup>3)</sup> That is, can be talked about with some degree of certainty. A marginally statistically significant finding can be talked about with slightly less certainty.

<sup>4)</sup> A **lobule** is a unit of breast tissue comprised of a milk duct with surrounding mammary [milk] glands, which are both composed of individual breast cells.

<sup>5)</sup> **Epigenetic changes** include “changes in gene function that do not involve changes in DNA sequence” ([Merriam Webster Dictionary](#)).

This entry draws heavily from [Induced Abortion and Breast Cancer Link](#).

From:

<http://marripedia.org/> - **Marripedia**

Permanent link:

[http://marripedia.org/abortion-breast\\_cancer\\_link](http://marripedia.org/abortion-breast_cancer_link)

Last update: **2017/05/16 07:12**

