A study by Karin Michels et al., published in the April 2007 *Archives of Internal Medicine*, was reported in the *New York Times* and other news outlets as showing "Breast Cancer Not Linked to Abortion." Particularly egregious was the deletion of an important adjustment for spontaneous abortions from the overall result. This flaw alone reduced the reported risk increase from an almost significant 10% to a non-significant 1%.

What May Cause the Denial of the ABC Link?

First, while we may idealize scientists as being above all personal biases and influences, the reality is that they, too, are human and can be influenced by many things other than the facts. Those influences may include cultural prejudices, sources of funding for research, and even sheer resistance to new or unwelcome ideas.

In a 2005 study "Scientists Behaving Badly," the scientific journal *Nature* revealed that, in an anonymous questionnaire, 15.5% of scientists who received grants from the National Institutes of Health admitted to changing study design, results and methodologies "in response to pressure from a funding source."

Ideology of "Safe" Abortion

This tendency to ignore or deny inconvenient information is especially strong when the subject is abortion. Documentation and public awareness of the negative effects of abortion poses a danger to Big Abortion, in the same way studies linking cigarettes to cancer posed a danger to Big Tobacco. The first study linking cigarettes to lung cancer was published in 1928, and the first Surgeon General's warning, without the support of the AMA, was announced in 1964. The Bradford-Hill epidemiologic criteria developed to evaluate causality, ultimately used to show the tobaccolung cancer link in the 1960s, are the same criteria that support the ABC link.

The Abortion Breast Cancer Link is not likely to be disproved, because this finding rests on the biological facts about our created bodies. Prochoice columnist Ellen Goodman in 2004 railed that research linking breast cancer to abortion "keeps reappearing no matter how many scientists drive a stake through its heart." But the link is based on how we are made, and this reality won't ever go away.

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The full-length version of this article is posted at http://www.usccb.org/prolife/programs/rlp/lanfranchi.pdf



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Abortion and Breast Cancer: The Link that Won't Go Away

Angela Lanfranchi, M.D., FACS



There are many well established and wellknown causes of breast cancer, such as inheriting a BRCA gene (a defective gene associated with increased breast cancer risk) and being exposed to oral contraceptives and hormone replacement therapy. There are lesser known risks of breast cancer such as cigarette smoking before a full term pregnancy and induced abortion. But just as only 15% of people who smoke will get lung cancer and only about 5 - 10% of women with breast cancer develop this cancer because they had an abortion, we should still advise the public of these avoidable risks, however small. Women need this information to make informed choices and to understand when to get screened for cancer if they are at increased risk, beginning approximately 8 to 10 years after the risk was taken.

Over fifty years ago, in April 1957, the first study reporting a link between abortion and an increased risk of breast cancer was published in a major medical journal. By 1995, after abortion was widely legalized in the West, 17 studies worldwide showed a statistically significant abortion-breast cancer link (or "ABC link"). Yet few medical professionals or members of the public knew of these important studies.

Over the last thirty years, 48 million abortions have been done on American women and breast cancer incidence has risen 40%. Actuary Patrick Carroll, looking at data from several countries, concluded that abortion is the greatest predictor of a country's breast cancer rate.

Over ten years ago, in 1996, Dr. Joel Brind and colleagues from Pennsylvania State University published a meta-analysis of all the known published studies to date on breast cancer that distinguished between induced and spontaneous abortions (miscarriages). That rigorous quantitative analysis demonstrated a 30% increased risk of breast cancer in women who had an induced abortion.

The Biology of Pregnancy Outcomes and Breast Cancer Risk

Years of published research have shed light on the breast maturation process that accounts for the protective effect of a full term pregnancy. During pregnancy breasts enlarge, doubling in volume. Due to the stimulating hormones estrogen and progesterone, the number of lobules (units of breast tissue comprised of a duct and several milk glands) increases in preparation for breast feeding. Under the influence of the pheromones hCG and hPL, made by the baby in the mother's womb, the mother's breast also matures so that cancer-vulnerable Type 1 and 2 lobules become cancer-resistant Type 3 and 4 lobules.

Most of the breast maturation needed for resistance to breast cancer does not occur, however, until after 32 weeks of pregnancy, gaining maximum protection at 40 weeks (full term). This is why a premature delivery before 32 weeks more than doubles the risk of breast cancer.

About 23% of all pregnancies end in spontaneous abortions (i.e., miscarriages) in the first 11 weeks (in the first trimester). Abnormally low levels of pregnancy hormones do not stimulate the breasts to grow a significant number of Type 1 and 2 lobules (the places where cancer starts). Early miscarriage therefore does not increase the risk of breast cancer as does induced abortion when terminating a normal pregnancy. A woman who is pregnant can legally choose an abortion or carry her baby to full term. By carrying her baby to full term, she matures about 85% of her breast tissue to cancer resistant Type 3 and Type 4 lobules, thereby lowering her long-term breast cancer risk, just by that fact alone.

The "independent risk," i.e., leaving her breasts with more places for cancer to start, is contested by some epidemiologic studies, but is consistent with all known facts of breast development in texts and literature. If pregnancy is interrupted, her breasts are left with more cancer-susceptible lobules than when her pregnancy began.

If abortion is so clearly linked to breast cancer, why do so few physicians and women know about it?

Ideology, Breast Cancer and Abortion

Studies in the last ten years showing little or no association between breast cancer and abortion have so many flaws that they prompted Dr. Edward Furton, staff ethicist at the National Catholic Bioethics Center, to write "The Corruption of Science by Ideology" in 2004. Dr. Furton decried the "unwillingness of scientists to speak out against the shoddy research that is being advanced by those who deny the abortionbreast cancer link."

For example, in 2004 the British journal *Lancet* published a meta-analysis by Valerie Beral et al. of 52 abortion-breast cancer studies. Inexplicably, data from more than half the studies selected by Beral (28 of 52) had not even been published in peer-reviewed journals. She also excluded 15 peer-reviewed studies – whose findings supported the ABC link – for invalid, non-scientific reasons.