



www.kfl.org

**State Office**  
2501 East Central  
Wichita, KS 67214  
(800) 928-LIFE (5433)  
Fax (316) 687-0303  
kfl@kfl.org

**Legislative Office**  
929-A S. Kansas Ave.  
Topeka, KS 66612  
(785) 234-2998  
Fax (785) 234-2939  
topeka@kfl.org

**K.C. Regional Office**  
7808 Foster  
Overland Park, KS 66204  
(913) 642-LIFE (5433)  
Fax 642-7061  
kansansforlife@aol.com

## Proponent, HB 2253

Senate Health Committee  
Chairwoman Pilcher-Cook and committee,

Mar. 22, 2013

Good afternoon,

I am Kathy Ostrowski, legislative director for Kansans for Life, here today to support HB 2253, the 2013 Pro-Life Protections Act, which passed the House 92-31.

HB 2253 does NOT add any new abortion definitions or restrictions on access. It is not a “stealth” personhood bill. The bill includes:

- A. the ‘no-taxpayer funding for abortion’ sections of HB 2598, last year’s Pro-Life Protections Act;
- B. codification of the KDHE Woman’s Right to Know materials, also part of HB 2598;
- C. technical clean up, importing existing language into relevant statutes, also in HB 2598;
- D. the Life Begins at Fertilization declaration (section 2) filed last year as HB 2579; and
- E. the federal Brownback Kennedy law (section 9) that offers improved support for children diagnosed pre- and post-natally with disabilities.

**A.** Tax-funding for abortion and abortion training are eliminated, including itemization of abortion and abortion “riders” as healthcare deductions. Businesses that provide abortion are also denied tax breaks. Attachment A provides evidence of public support for such actions.

**B.** Since 1997, KDHE has authored the Woman’s Right to Know (WRTK) materials that would pass the legal standard for what a pregnant woman (including a minor) should know before obtaining an abortion. The gestational development section comes from a neutral source—the Endowment for Human Development, whose materials on this topic are distributed by National Geographic.

HB 2253 does not require any physician to “say” anything. (Read more at length about this in Attachment B.)

Nothing in the abortion protocol requires the provider to review or discuss what KDHE publishes online or on paper; the woman seeking abortion merely has to sign a paper that she has “accessed” the WRTK materials 24 hours prior to the abortion. The abortion provider can even post signs in the clinic challenging/denying anything in the materials—one KCK abortion clinic has mocked the materials for many years on its website.



Kansas Affiliate of the National Right to Life Committee

HB 2253 commits KDHE's WRTK materials to statute, and adds the words underlined to the 1997 instruction because KDHE independently has decided the topics of pre-term birth and breast cancer are part of what in legal terminology is 'what a reasonable patient would find relevant'.

*The material shall also contain objective information describing the methods of abortion procedures commonly employed, the medical risks commonly associated with each such procedure, including risk of premature birth in future pregnancies, risk of breast cancer, risks to the woman's reproductive health and the medical risks associated with carrying an unborn child to term.*

This is how the WRTK booklet and online content currently reads:

**Future Childbearing:**

Some complications associated with an abortion, such as infection or a cut or torn cervix, may make it difficult or impossible to become pregnant in the future or carry a pregnancy to term. The 2007 Institute of Medicine report Preterm Birth: Causes, Consequences, and Prevention lists a prior first trimester induced abortion as an immutable medical risk factor associated with preterm birth. A 2009 analysis of international studies concluded prior induced abortions are associated with a significantly increased risk of low birth weight and preterm births, and that the risk increased as the number of previous induced abortions increased. Preterm babies, who have higher risk of death, also have the highest risk for lasting disabilities, such as cerebral palsy, mental retardation, and visual and hearing impairment.

**Breast Cancer:** Your chances of getting breast cancer are affected by your pregnancy history. If you have carried a pregnancy to term as a young woman, you may be less likely to get breast cancer in the future. However, your risk is not reduced if your pregnancy is ended by an abortion. There are also studies that have found an increased risk of breast cancer after induced abortion, but other studies have found no risk. A 2003 National Cancer Institute panel reviewing studies at that time concluded there was no increased risk; however, study and review of the relationship continue. NCI recognizes research that shows pregnancy and breastfeeding both reduce a woman's lifetime cumulative exposure to hormones that otherwise might increase her risk of breast cancer. Pregnancy and breastfeeding also cause breast cells to mature in order to produce milk, and some researchers hypothesize those cells are more resistant to cancer. Women who have a family history of breast cancer or who have clinical findings of breast disease should seek medical advice from their physician.

As medically reliable information develops, KDHE is required to adapt the information it promulgates. If it were to turn out there is no risk, KDHE will say so. But the topic is relevant and must be covered. (For more details on the abortion link to breast cancer, see attachment C.)

Of note, the testimony against HB 2253 from Planned Parenthood in Overland Park included a national PP fact sheet that includes language nearly identical to that which KDHE uses:

**KDHE**

*"Your chances of getting breast cancer are affected by your pregnancy history. If you have carried a pregnancy to term as a young woman, you may be less likely to get breast cancer in the future. However, your risk is not reduced if your pregnancy is ended by an abortion."*

**PP**

*"reproductive factors have been associated with risk for the disease since the seventeenth century...it is known that having a full-term pregnancy early in a woman's childbearing years is protective against breast cancer."*

C. Definitions of medical emergency and bodily harm as limited to “physical” are part of the 2011 Pain-Capable law and should have been imported to the older late-term statute. This is accomplished in HB 2253.

D. The “Life begins at Fertilization” declaration does not challenge Roe, as it is the “Missouri preamble” language approved by the U.S. Supreme Court in the 1989 *Webster* ruling. Although, under *Roe*, abortion is legal, the *Webster* Court said that it “implies no limitation on a State's authority to make a value judgment favoring childbirth over abortion” and enforcing the protectable interests of the unborn child and its parents, particularly in tort law.

E. The shock of certain prenatal diagnoses can too often drive a mother to agree to seek abortion, especially when ObGyns are themselves not well informed about the condition and available services. Providing more information about specialized medical services and community support allows a more fully informed decision to be made by families coping with medically challenging diagnoses. HB 2253 includes additional instruction to KDHE to co-ordinate and promulgate these sources of support and access points.

In conclusion, we ask this committee to pass out favorably HB 2253. Thank you, I stand for questions.

# 20 of 24 Studies Agree: Public-Funding Restrictions Reduce Abortions

By Michael J. New July 16, 2009 12:00 P.M.

<http://www.nationalreview.com/corner/184578/20-24-studies-agree-public-funding-restrictions-reduce-abortions/michael-j-new>

The Guttmacher Institute recently released a literature review about the effects of restrictions on Medicaid funding for abortion. [SEE HIGHLIGHTS BELOW] Overall, the results indicate that there is a **very strong consensus among both public-health researchers and economists that public funding restrictions lower abortion rates**. The Guttmacher literature review contains citations to 20 academic studies documenting this. These studies analyze data from a range of sources including surveys and aggregate data from the federal, state, and local level. Conversely, Guttmacher identifies only about four studies which show that the effects of public-funding restrictions are inconclusive.

The evidence presented about the effectiveness of public funding restrictions is very persuasive. A 1999 study by Cook et al. analyzed North Carolina's provisions for public funding of abortions. North Carolina is unique because instead of funding abortions for low-income women through Medicaid, they did so through a separate state fund which periodically ran out of money. **When funds were unavailable, the authors found a consistent increase in the birth rate and a decrease in the abortion rate**. Furthermore, these trends were more pronounced among blacks. Another Guttmacher study found that the **abortion rate among Medicaid recipients was more than twice as high in those states that publicly funded abortion through Medicaid**.

## Excerpt: June'09 Guttmacher (pro-abortion) report (*discussed above*)

- The Hyde Amendment bans the use of federal Medicaid funds for abortions except in cases of life endangerment, rape or incest. In addition, as of 2008, 32 states and the District of Columbia had prohibited the use of their state Medicaid funds for abortions except in the limited cases allowed under the Amendment.
- A literature search identified 38 studies of the impact of these laws on a range of outcomes.
- Approximately one-fourth of women who would have Medicaid-funded abortions instead give birth when this funding is unavailable.
- Medicaid restrictions lead to a reduction in the proportion of teenage pregnancies that end in abortion, but the long-term effect on the birthrate is less clear.
- Such restrictions appear to delay some women having abortions by 2–3 weeks and Medicaid-eligible women having first-trimester abortions by a few days on average; the net impact on second-trimester procedures is unclear.
- Studies have found little evidence that lack of Medicaid funding has resulted in illegal abortions, although one death was directly related to the restrictions and two were indirectly related.
- Studies of the impact of Medicaid restrictions on other outcomes—sexual behavior, prematurity, low birth weight, fatal injuries to children, late or no prenatal care, suicide and number of abortion providers—suffer from methodological limitations and are inconclusive, although there is some evidence of adverse effects on child health.

**Attachment A**

# Kansans for Life

2013 LEGISLATION

HB 2253: Pro-Life  
Protections Act.

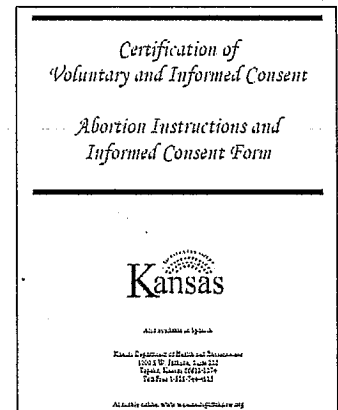
## KFL rebuttals to Planned Parenthood alarmist claims

Planned Parenthood regularly misrepresents pro-life bills. In a national email appeal (after the 2012 version passed the House), Planned Parenthood president Cecile Richards mischaracterized this bill as “outrageous attacks on women’s health [that] will spread to state after state.” She goes on, “*Kansas state lawmakers are set to force doctors to lie to women about abortion...*” In fact, the Pro-Life Protections Act, HB 2253, forces *no* doctor to deceive women.

### 1. Will doctors really be “forced to lie” by this bill?

The Kansas Medical Society takes no position on abortion, but it watches every legislative proposal. Be assured that if *any* of its members were being forced to do *anything*, it would have stood up against it. Yet it has been silent about this bill, despite months of internet agitation by abortion supporters.

The Pro-Life Protections Act codifies existing medical info; it does *not* mandate abortionists “tell” women anything, period.



### 2. What does the bill in fact do, then?

Section 10 of the bill puts into statute the KDHE health informational materials (both print and online at [www.womansrighttoknow.org](http://www.womansrighttoknow.org)) that women must have access to, 24 hours before they obtain a Kansas abortion. Women are not forced to read the materials, but it has been the law since 1997 that they sign a form confirming that they had access to them. This includes (since 2007) access to a website with high quality sonography about the developing child. The bill reproduces the information that is included in these resources.

### 3. What about the doctor-patient relationship?

Planned Parenthood’s email insists: “Even if the woman seeking abortion is a victim of rape or incest, her doctor will lie to her about her risk of breast cancer *on the orders of Kansas lawmakers.*”

In truth, Kansas lawmakers are *not* “invading” the doctor-patient relationship. Abortion-seeking women did not regularly (if ever) receive medical information relevant to their condition prior to laws requiring minimum informed consent. Court rulings about abortion issued since *Roe* always uphold the state’s right to oversight of medical providers.

Women entering abortion facilities do not forfeit their right to state protection from misuse of the medical arts. Abortion is most commonly obtained from a practitioner whom the woman finds in the yellow pages or online. In the huge majority of cases, there is hardly a “trusted relationship” with that practitioner—either before or after the abortion.

Politicians are *not* “intervening” in the abortion consultation, and are *not* telling health agencies how to assess risk. A woman who is *already* pregnant has a legal right to all information that a reasonable patient would find relevant.

**Attachment B**

#### 4. Why is the KDHE information important?

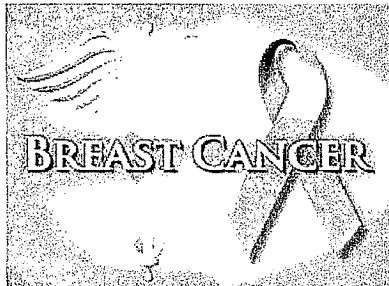
For 16 years, the Kansas state health department (KDHE) has recognized the relationship between reproductive events and breast cancer, and has given a modest “heads up” about a connection in a section that makes up about 2% of the total content in the informational brochure.

The warning in the KDHE materials is *not* “in dispute.” It has been promoted for over 60 years by the World Health Organization.

**An already-pregnant woman must be informed her first full-term delivery statistically affords a lifetime of increased protection from breast cancer risk—protection denied by ending the pregnancy.**

Even without the bill’s specific statutory command to include the topics of breast cancer and future pre-term birth, KDHE researchers knew that they had to admit the biological tie between those outcomes and abortion. If there’s no connection, the agency is free to say so.

Since 1997, when the state informed-consent law was enacted, no woman seeking a Kansas abortion has been required to review the state materials with anyone at the clinic. The abortionist is free to disagree with the materials, even mock them—as the Aid for Women clinic has done on its website for years (see, for example, the KFL blog entry of June 24, 2011).



Despite the dishonesty of USA government health authorities, breast cancer’s link to abortion will eventually be acknowledged-- like smoking’s long-suppressed link to lung cancer. And though most people who smoke don’t get cancer, we are waging a public health campaign against smoking. Most women who get breast cancer did not have abortions and most women who get abortions will not contract breast cancer, but the overall 30 to 50 percent increased statistical risk is real.

Despite abortion sloganeering, the bill does *not* dictate “that abortion causes breast cancer.” What is sending the abortion industry into orbit is that the Pro-Life Protections Act adds 12 words (underlined in the following text) to the *open-ended instruction* on subjects needing objective relevant information:

“The material shall also contain objective information describing the methods of abortion procedures commonly employed, the medical risks commonly associated with each such procedure, including risk of premature birth in future pregnancies, risk of breast cancer, risks to the woman’s reproductive health and the medical risks associated with carrying an unborn child to term.”

Any selections of the KDHE materials that are being codified into statute were devised by the KDHE, which has to muddle through the politically correct federal health bureaucracy.

For example, the National Cancer Institute is schizophrenic on this topic, even after an NCI division head published that abortion raises breast cancer risk: <http://www.lifenews.com/2009/01/01/nat-5850/>. The undisputed biology of women’s health is that a first full-term delivery statistically affords the best protection against breast cancer. The NCI admits that first full-term delivery is protective: <http://www.cancer.gov/cancertopics/factsheet/Risk/reproductive-history>,\* while on the same page it absurdly *denies* that abortion (which prevents delivery) is linked to breast cancer!

*\*this page has been removed from web*

## Surgical Associates of Central New Jersey

Angela Lanfranchi, M.D., F.A.C.S.  
Specializing in Breast Surgery

Feb. 8, 2012

Proponent, HB 2598

Report in support of informed consent provisions of Kansas HB 2598 "Pro-Life Protections Act"  
Submitted by Angela Lanfranchi, MD FACS  
to the House Federal - State Affairs Committee; Rep. Steve Brunk, chair

Medical authorities and textbooks now accept:

- 1) that a full-term pregnancy lowers a woman's risk of breast cancer;
- 2) that each additional pregnancy further lowers her risk by 10%; and
- 3) that for each year a woman delays a full-term pregnancy her risk of premenopausal breast cancer increases by 5% and postmenopausal breast cancer by 3%.<sup>1</sup>

These three facts alone necessarily cause a pregnant woman who chooses to end her pregnancy by abortion to increase her risk of breast cancer. This is because:

- 1) abortion causes her to lose the benefit of a full-term pregnancy;
- 2) she will have fewer or no full-term pregnancies; and
- 3) she necessarily delays a full-term pregnancy.

An abortion does not turn back the clock and make a pregnant woman "unpregnant". As soon as conception occurred and before implantation, the embryo released the hormone hCG (human chorionic gonadotropin) which immediately caused the mother's ovaries to produce higher levels of estrogen and progesterone and change her breasts. That earliest sign of pregnancy, sore and tender breasts, is the result of the multiplication of breast cells to produce more breast tissue in preparation for breast feeding. Abortion cannot remove those newly made cells that will remain cancer vulnerable for her lifetime or until she completes a pregnancy past 32 weeks. If that same pregnant woman chooses to carry her pregnancy to term, she will have the lifelong benefit of a lower breast cancer risk. These are the undisputed biological facts that cause abortion to be a risk for breast cancer.

Another reason why induced abortion causes an increased risk of breast cancer is its secondary effect of increasing the rate of premature birth in the mother's subsequent pregnancies. Any premature delivery before 32 weeks will increase breast cancer risk through the same biological mechanism that causes induced abortion to increase breast cancer risk. With the stimulation by the pregnancy hormones of estrogen and progesterone, the numbers of cells that are immature and cancer vulnerable are markedly increased in number. In other words there are more places (cells) for cancers to start. It is only in the hormonal environment which occurs after the first 32 weeks of pregnancy -- during which time hPL (human placental lactogen) has been very elevated -- that these

cells mature through specific genetic changes which cause them to become cancer resistant. There have been two large meta-analyses confirming that induced abortion increases a woman's risk for premature delivery.<sup>ii, iii</sup>

There is acknowledgement that abortion is a risk for breast cancer made by scientists worldwide in recently published studies concerning all breast cancer risks.

In order for a study concerning breast cancer risk to be accurate, all known risks must be controlled for in the study (or case) group which has the risk to be studied and the control group which is used for comparison. This is the basis for case controlled studies. For instance, if a study was to look at whether candy increased breast cancer risk or not, the study group who ate candy and the control group who did not eat candy would have to be similar in all other known cancer risks. Thus if the case group had more women in it with a family history of breast cancer than the control group, the study would come in for merited criticism if it found that candy increased breast cancer risk. In other words, the study group and control group of women have to be equal in all known risks for the study to be valid.

There have been several recent studies from groups of scientists all over the world that have controlled for induced abortion as a risk factor for breast cancer. For instance, an American study<sup>iv</sup> looking at oral contraceptives as a risk for subtypes of breast cancer also controlled for induced abortion. In the discussion section of the study, it reported that as in "previous studies, induced abortion was found to be a risk for breast cancer." The researchers on this study included Louise Brinton, the chief of the Hormonal and Reproductive Section in the Division of Epidemiology at the National Cancer Institute. A paper from China looking into risk factors associated with sub-types of breast cancer found that induced abortion increased breast cancer risk.<sup>v</sup> Another, separate Chinese study also showed an increased risk of breast cancer with induced abortion.<sup>vi</sup> This study also showed an increase risk with increase in numbers of abortions. A recent Turkish study<sup>vii</sup> has also found induced abortion to be a risk for breast cancer. In the discussion section of this paper the authors reported that their finding was consistent with previous findings in the world's literature concerning induced abortion.

If scientists worldwide did not know and agree that induced abortion was a known risk for breast cancer, they would not refer to it in their studies and analyses. Induced abortion is specifically acknowledged as a known risk factor in the performance of their studies as well as in the methodology and discussion sections of the published papers. This is because induced abortion is now -except in North America, for political reasons - a commonly-accepted risk factor for breast cancer.

There is a known normal breast development during pregnancy which is consistent with all known reproductive risks of breast cancer, including induced abortion.

There are well documented, physiological changes which occur in the mother's breast with a normal pregnancy and result in a lowering of her breast cancer risk if the pregnancy goes past 32 weeks.<sup>viii</sup> This reduction is due to the maturing hormones produced by the fetus and placenta (afterbirth) in preparation for breast feeding.

A lobule is a unit of breast tissue consisting of milk glands and ducts which carry the milk toward the nipple. Prior to a first full-term pregnancy, the breast is about 75% Type 1 and 25% Type 2 lobules where ductal and lobular breast cancers form respectively. By the end of the pregnancy, the breast is about 85% fully matured to cancer-resistant Type 4 lobules and only 15% immature, cancer-vulnerable lobules, thereby reducing the mother's future risk of breast cancer. During a pregnancy the absolute numbers of these lobules also increase as the breast doubles in volume with an increase in number of lobules and a decrease in stroma (the surrounding connective tissue)<sup>ix</sup>.

A premature delivery before 32 weeks for any reason, whether physician-induced or because of an incompetent cervix (which is commonly due to previous abortions) or any other natural cause, doubles breast cancer risk, because the breast has already responded to the hormones estrogen and progesterone, which are produced by the ovaries, fetus or placenta in response to fetal-placental secretion of human chorionic gonadotropin (hCG)<sup>x,xii</sup>. These hormones cause an increase in breast tissue, Type 1 and 2 lobules, where cancers start. Only after 32 weeks' gestation does the fetal-placental hormone human placental lactogen (hPL) enable the breast to fully mature its breast lobules into Type 4 making them cancer-resistant. This cancer resistance is the result of known permanent genetic changes that occur within the breast cells' genome, providing the molecular basis for to protective effect of a full-term pregnancy.<sup>xiii</sup> An induced abortion before 32 weeks has the same physiological effect on the breast, and differs from premature delivery only in that the fetus is delivered dead and not alive.

The above breast physiology explains the independent breast cancer risk that induced abortions cause in addition to losing the protective effect the mother could have gained by carrying her pregnancy to term. The longer the gestation up to 32 weeks before the induced abortion, the higher the mother's breast cancer risk because she has developed more places for cancers to start.<sup>xiii</sup>

Even pregnancies ending after 32 weeks but before 40 weeks gestation do not offer the maximum protection afforded by a full-term pregnancy.<sup>xiv</sup> Women who remain childless (nulliparous) have an increased risk for breast cancer because they have lifelong immature cancer susceptible lobules, Types 1 and 2.

Without the maturing effects of hPL to form cancer-resistant Type 4 lobules, any mutated or clinically dormant cancer cells present in the mother's breasts before her pregnancy may become cancerous or start to grow under the influence of elevated levels of the genotoxic and proliferative effects of estrogen and progesterone. Estrogen levels increase 2000% by the end of the first trimester. This explains why women who have their first child late in life will also have a higher risk of breast cancer. It is because of the additional time that has elapsed for mutations to have formed before pregnancy. This also explains the transient increase in the risk of breast cancer in women who have children late in their reproductive life.

The more menstrual cycles a woman has, (whether owing to an early age at menarche (first period) or to a late menopause), the longer her exposure to estrogen and progesterone during her menstrual cycle and the higher her risk. Irregular periods during the first five years after menarche lower risk as there are fewer cycles and many are anovulatory (no egg produced), thus exposing a woman to less estrogen and progesterone.

Breast feeding lowers a woman's risk for breast cancer because she will often stop menstruating and her cycles can be anovulatory (no release of an egg).

**Spontaneous abortions (miscarriages) do not carry the same risk as induced abortions** because spontaneous abortions are associated with low levels of the pregnancy hormones needed for breast development. This in turn is due to an abnormality in the fetal-placental unit or the mother's ovaries which then results in a spontaneous abortion (miscarriage)<sup>xv</sup>. Women who miscarry often report having "not felt pregnant" owing to these low hormonal levels.

For these and many other reasons, I support telling a woman that an induced abortion will increase her risk of breast cancer.

By Angela Lanfranchi MD FACS  
Assistant Clinical Professor of Surgery, Robert Wood Johnson Medical School, Piscataway, NJ  
Co-director, Janoff-aventis Breast Care Program, Steeplechase Cancer Center, Suite 3400  
30Rehill Ave Somerville, NJ 08876 Phone 908 927 8994 [angelalabcsj@yahoo.com](mailto:angelalabcsj@yahoo.com)

<sup>i</sup> Breast Cancer Epidemiology, Li C, Ed. Chapter 6 Reproductive Factors pg 122 Springer Science 2010

<sup>ii</sup> Swingle H et al. Abortion and the Risk of subsequent preterm birth. J Reprod Med 2009 Feb; 54(2):95-108

<sup>iii</sup> Shah PS et al. Induced termination of pregnancy and low birth weight: a systematic review and meta-analysis BLOOG 2009 116: 1425-1442

<sup>iv</sup> Dollie J et al. Risk Factors for Triple-Negative Breast Cancer in Women under the age of 45 Years. Cancer Epidemiology Biomarkers and Prevention 2009;18(4). April 2009

<sup>v</sup> Xing P et al a case-control study of reproductive factors associated with subtypes of breast cancer in Northeast China. Medical Oncology 23 Sept 2009

<sup>vi</sup> Yan, XU et al. Analysis of Risk Factors of Breast Cancer. J South Med Univ 2010; 30(3)

<sup>vii</sup> Ozmen V, et al. Breast cancer risk factors in Turkish women-a University Hospital based nested case control study. World Journal of Surgical Oncology 2009, 7:37

<sup>viii</sup> Hsieh C, et al. Delivery of premature newborns and maternal breast cancer risk. The Lancet 1999;353:1239

<sup>ix</sup> Russo J, et al. Mammary gland architecture as a determining factor in the susceptibility of the human breast to cancer. The Breast 2001;7:278-91.

<sup>x</sup> Vatten LJ, et al. Pregnancy related protection against breast cancer depends on length of gestation. Br J Cancer 2002;87:289-90

<sup>xi</sup> Melbye M, et al. Preterm delivery and risk of breast cancer. Br J Cancer 1999;80:609-13

<sup>xii</sup> J. Russo et al., "Full-Term Pregnancy Induces a Specific Genomic Signature in the Human Breast," Cancer Epidemiology Biomarkers and Prevention 17 (2008): 51-66.

<sup>xiii</sup> Melbye M, Wohlfahrt J, Olsen JH, Frisch M, Westergaard T, Helweg-Larsen K, Andersen PK. Induced abortion and the risk of breast cancer. N Engl J Med 1997;336:81-5

<sup>xiv</sup> Hsieh C, et al. Delivery of premature newborns and maternal breast cancer risk. Lancet. 1999;353:1239

<sup>xv</sup> Kurz J, Keller PJ. <sup>125</sup>I-HCG, HPL, Oestradiol, Progesterone and AFP in serum in patients with threatened abortion, Br J Obstet Gynaecol 83 (1976), 640-44