

STRATEGIES TO REDUCE IMPLICIT BIAS IN CANCER SURVIVORSHIP CARE

SPECIAL FOCUS ON FERTILITY AND YOUNG WOMEN
A PROVIDER'S PERSPECTIVE

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Implicit Bias

Unconscious social Bias

Emotional, Age, race, prior parity, marital status, gender, socioeconomic status, Insurance

Sub-Type of breast cancer

Urgency of need for treatment

Strategies to Reduce Implicit Bias

It takes layers of recognition and capture

- Self assessment
- Chemo teach
- Supportive care
- Staff education
- <https://www.projectimplicit.net/>
- <https://implicit.harvard.edu/implicit/takeatest.html>

Limitations to Fertility preservation



Time



Financial



Social
support



Resources



Safety



Emotional



Insurance



US state
mandates

Texas Insurance Code Requirements

- Tex. Insurance Code Ann. § 1366.001 et seq. (1987, 2003) requires that all health insurers offer and make available coverage for services and benefits for expenses incurred or prepaid for outpatient expenses that may arise from in vitro fertilization procedures. In order to qualify for in vitro fertilization services, the couple must have a history of infertility for at least five years or have specified medical conditions resulting in infertility. The law includes exemptions for religious employers.
- BCBS: Important to note is that while Blue Cross/Blue Shield of Texas is required to let employers know of this availability, "the law does not require those insurers to provide the coverage; nor does it force employers to include it in their health plans"

NCCN recommendations

The [National Comprehensive Cancer Network](#) (NCCN) has guidelines for oncologists treating young adult women with cancer:

- Discuss fertility implications before and after treatment.
- Discuss contraception after treatment.
- Discuss specific methods for fertility preservation such as freezing embryos, eggs, or ovarian tissue.
- Some research has looked at whether medications to suppress menstruation may protect the ovaries during treatment with chemotherapy: Ovarian suppression

POSITIVE TRIAL : Purpose

- Delay in childbearing for a variety of reasons including cultural, educational, and professional.
- Breast cancer in young women often occurs before the completion of reproductive plans.
- Infertility has a significant impact on quality of life, resulting in substantial distress in younger women with breast cancer
- Possible Infertility Influences treatment decisions
- The best available evidence suggests that pregnancy after breast cancer does not increase a woman's risk of developing a recurrence.

POSITIVE TRIAL: Unknowns to Women

- For women desiring pregnancy after a breast cancer, 5-10 years of endocrine therapy may substantially reduce the chance of conception
- A shorter duration of endocrine therapy in this population has not been studied in a prospective manner.
- Birth outcome after breast cancer has not been shown to be different from that of the normal population,
- Increased risks of delivery complications, cesarean section, preterm birth and low birth weight have been reported.
- Endocrine agents are potentially teratogenic: taking into account their median half-life, waiting 3 months after their interruption before attempting conception is considered safe.
- The limited evidence available on breastfeeding after breast cancer reports successful lactation from the treated breast in approximately 30% of women without detrimental effect on survival. No prospective definitive data are available.

Study Design

- Intervention Study
- A Study Evaluating the **P**regnancy **O**utcomes and **S**afety of **I**nterrupting Endocrine **T**herapy for Young Women With Endocrine Respons**I**VE Breast Cancer Who Desire Pregnancy
- 500 women ages 18-42 Premenopausal
- December 2014- December 2022
- 10 year Follow up
- Final Results : December 2028.
- Endocrine therapy interruption after having completed between ≥ 18 months and ≤ 30 months.

STUDY DESIGN

- 3 months wash-out between treatment interruption and pregnancy attempt. Up to 2 years interruption to allow pregnancy, delivery, breastfeeding or failure to conceive.
- Endocrine therapy resumption. Completion of full duration of endocrine therapy according to individual risk, institutional policy or patient's preference.

Secondary outcome measures

- Information on mensuration recovery and pattern
- Pregnancy rate determined by pregnancy test next time talking to outcome including labor and delivery information, full-term pregnancy, cesarean section, abortion, miscarriage, ectopic, still birth rates
- Offspring outcome
- Breast-feeding pattern
- Use of assistive reflective technology
- Distant recurrence free interval: time from enrollment and study to first breast cancer recurrence in a distant site assessed up to 14 years.

POSITIVE TRIAL UPDATES: SABCS 2018

- Ann Partridge. "*Breast Cancer in Young Women: Understanding Differences to Improve Outcomes.*" San Antonio Breast Cancer Symposium, AACR Outstanding Investigator Award in Breast Cancer Research lecture. Dec 7 2018.
- Abstract OT1-01-06: POSITIVE: A study evaluating Pregnancy, disease outcome and safety of interrupting endocrine therapy for premenopausal women with endocrine responsive breast cancer who desire pregnancy (IBCSG 48-14/BIG 8-13): Actual enrollment: 262 (30 June 2018).
- By end of December 2018, **339 women** with ER+ early breast cancer had been recruited to POSITIVE in 20 countries, and **57 healthy babies** had been born. Women will be followed up for 10 years after enrolment and initial results are expected in the next few years.

Pregnancy After Breast Cancer: A Systematic Review and Meta-Analysis: PROSPERO number CRD42020158324: SABCS 2020

What is this study about?

- This study is about the safety of mothers and their infants among women who become pregnant after breast cancer treatment.

Importance of Study

- What are the chances of becoming pregnant?
- What are the risks of pregnancy complications and the impact on infant safety?
- How does pregnancy affect cancer recurrence and survival?

OUTCOMES

- **Among women who had breast cancer treatment compared to healthy women of similar age:**
- 60% fewer pregnancies occurred.
 - It is unknown whether this decreased number of pregnancies reflects difficulties in becoming pregnant or decreased choice to attempt pregnancy after breast cancer treatment.
- No differences were found in the rates of pregnancy-related complications, completed pregnancies or spontaneous abortions (miscarriages).
- The rate of C-sections increased modestly (14%).
- No increase in infant birth defects (congenital abnormalities) was found.
- Infants of mothers who had breast cancer treatment were more likely to have lower birthweight, premature births, low birth weight.
 - Despite the increased risk of these events in women with pregnancies after breast cancer treatment, the absolute number of these types of births was low.
 - Low birth weight and small size for gestational age occurred mostly in infants of women who had been treated with chemotherapy.

STRENGTHS

- Of 6,462 identified records, 39 were included involving 8,093,401 women from the general population and 112,840 patients with BC of whom 7,505 had a pregnancy after diagnosis.
- Sufficient patients had different nodal, hormone receptor or mutation status so that researchers could look at pregnancy in these subgroups.

LIMITATIONS

- Race and ethnic information about study participants were not known. It is unclear whether the aspects of pregnancy in this research differ between women of different races or ethnic backgrounds.
- The studies did not look at women with breast cancer who had inherited mutations in genes other than BRCA1 and BRCA2.
- There maybe other factors that impact birth rates among women after breast cancer treatment that were not accounted for such as underlying fertility issues.
- Also the use or lack of fertility treatments was not looked at.

PROSPERO RESULTS

Q: How does pregnancy affect cancer recurrence and survival?

A: Pregnancy is safe for women after breast cancer treatment

- Compared to women who did not become pregnant after breast cancer treatment, women who became pregnant after breast cancer treatment:
- Had a similar rate of cancer recurrence—pregnancy did not elevate the risk of cancer returning and disease-free survival (DFS) was similar. Pregnancy after breast cancer was linked to a decreased rate of recurrence (21% less among women who became pregnant compared to those who did not).
- Had a better overall survival rate.
- The overall survival of women with BRCA mutations was better among women who had a pregnancy after their breast cancer treatment.
- These results were true regardless of a woman's node status or hormone receptor status.

What does it mean for you?

- Dr. Blondeaux concluded ***"These results provide reassuring evidence on the feasibility and safety of conceiving in women with prior history of breast cancer."***
- Patients' pregnancy desire should be considered a crucial component of their survivorship care plan.

References

- <https://www.facingourrisk.org/XRAY/outcomes-young-women-breast-cancer-childbearing>
- <https://ascopubs.org/doi/abs/10.1200/JCO.21.00535>
- <https://www.bigagainstbreastcancer.org/news/positive-trial-answering-important-question-young-women>