Journal of Breast Cancer

J Breast Cancer 2013 March; 16(1): 131 http://dx.doi.org/10.4048/jbc.2013.16.1.131

LETTER TO THE EDITOR

# If Progesterone Is Blamed for Breast Cancer Development, Why Are We Still Using Tamoxifen?

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*To the Editor:*

Breast cancer is the most commonly seen cancer in women and rates increase with advancing age [1]. Tamoxifen was found to be an effective drug in estrogen receptor positive breast cancer and it has been shown to be associated with prolonged survival [2]. In recent long term randomized population studies, breast cancer rates were higher in women under estrogen + progesterone therapy while there was no increase in breast cancer rate in group with estrogen only therapy [3,4]. Another controversy is increase rates of breast cancer in women with long term anovulatory cycles like polycystic ovary syndrome [5]. Additive effect or potentialization may be the mechanism under this controversy. We suggest to analyze effect of progesterone only therapy on breast cancer development. And also the effect of antiprogesterone therapy in breast cancer needs to be analyzed. Although a retrospective data showed no association between previous progesterone exposure and invasive breast cancer [6], we thought that women using subdermal implants for long term contraception are the best candidates to assess role of progesterone in breast cancer development and determine duration and dosage leading to cancer in a prospective manner. Effect of mifepristone on breast cell proliferation was analyzed and study concluded that the ability of mifepristone that block breast epithelial cell proliferation in premenopausal women may be beneficial [7]. Therefore tamoxifen may be combined with a safe drug mifepristone, a progesterone receptor antagonist, as an adjunctive therapy in hysterectomized women to determine efficacy of antiprogesterone therapy in breast cancer.

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**Received:** December 2, 2012 **Accepted:** December 23, 2012

## CONFLICT OF INTEREST

The authors declare that they have no competing interests.

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