

***P19: Is antidepressant use associated with breast cancer development? A meta-analysis.***

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**Introduction:** Breast cancer is the most prevalent cancer in women worldwide and there is considerable research proving that depression is an aetiological factor in the development of cancer and a risk factor concerning mortality of breast cancer. Studies in rats also demonstrated a possible development of breast cancer due to antidepressant use. Moreover, even though studies in humans are trifling, the few studies examining the relationship between antidepressant use and breast cancer risk have produced conflicting results.

**Objectives:** The goal of the present study was to analyze associations between use of antidepressant medication and risk of breast cancer. A second goal was to test whether these associations would vary depending on study characteristics.

**Materials and Methods:** We review evidence for the study goal based upon prospective longitudinal studies. We searched in MEDLINE, EMBASE and Cochrane trials registers from December 2014 and January 2015 for studies studying association of antidepressants and breast cancer. Bibliographies of elected articles were examined for further references. Research took into account a predetermined list of Medical Subject Headings (MeSH) and free text terms where appropriate. We combined the terms “antidepressive agents”, “depression”, “antidepressant use” and “breast cancer risk”.

**Results and Discussion:** Meta-analysis was used for integrating the results of 12 eligible trials of antidepressive treatments. There is some evidence that there exist association between antidepressant use and breast cancer. Further confirmatory trials and research are required before the body of scientific evidence can be conclusive.

**Conclusion:** Antidepressant use is not associated with breast cancer development.