

1 A case-control study to determine if there is an association between the use of aromatase inhibitors and  
2 prevention of endometrial cancer

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8 Abstract

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10 Objectives:

11 Type 1 endometrial cancers are estrogen dependent. Interest exists in using aromatase inhibitors to  
12 prevent or treat early stage endometrial cancers, particularly in women who have a contraindication to  
13 progestins or women who want fertility-sparing treatment options. This study sought to determine if  
14 there is a protective effect of aromatase inhibitors with regards to prevention of endometrial cancer.

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16 Materials and Methods:

17 This was a case-control study to determine whether aromatase inhibitors were associated with a  
18 decrease in endometrial cancer. Cases were patients with breast cancer or DCIS who also had either a  
19 history or active diagnosis of endometrial cancer seen in University of Florida OB/GYN clinics over the  
20 past 10 years. Controls were selected from breast cancer or DCIS patients seen at the same clinics  
21 during the same time period who did not have endometrial cancer and were matched 4:1 on the basis of  
22 age and BMI.

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24 Results:

25 Among endometrial cancer patients, 2 had been exposed to aromatase inhibitors and 7 had not. Among  
26 controls, 22 had been exposed to aromatase inhibitors and 14 had not. The odds ratio was **0.1818** with  
27 95% confidence interval of **0.0329 to 1.0037**.

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29 Conclusion:

30 Although the association was not statistically significant a strong trend toward a protective association  
31 between aromatase inhibitor use and prevention of endometrial cancer was identified.