Press Statement

ISSUED ON BEHALF OF THE INTERNATIONAL MENOPAUSE SOCIETY BY
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Hormone therapy and postmenopausal BRCA1 mutation carriers

Eisen and colleagues have published in the *Journal of the National Cancer Institute* this month the results of a case–control study indicating that, among postmenopausal women with a BRCA1 mutation, use of hormone replacement therapy (HRT) was not associated with an increased risk of breast cancer; indeed, in this population, it was associated with a decreased risk.

These results would appear very encouraging to women who have a genetic mutation that exposes them to a higher risk of developing breast cancer during their lifetime. Those women are often recommended to undergo ovariectomy and hysterectomy at a young age to prevent the occurrence of a breast cancer, based on the belief that estrogen would increase their risk; these women would be denied HRT. This study challenges this practice.

However, the study has limitations that are discussed by the authors and in the Editorial. First, observational studies have been questioned as to their ability to bring evidence-based conclusions as valid as those from randomized controlled trials (RCT). However, several observational studies concurred with the results of RCTs with regard to major outcomes related to HRT.

Second, the relatively small sample size of the subgroups, analyzed from a database containing more than 6000 patients, is another limitation. Several exclusion factors were applied to study only those women who had reached menopause and had a good
recall of their past or current use of HRT. The women who would have developed breast cancer at an earlier age and would not have reached menopause are also excluded and this may constitute a bias in the selected population restricted to women who would be less sensitive to the hormonal factors.

Third, because BRCA1-associated breast cancers are commonly negative for estrogen and progesterone receptors, they are potentially less likely to be under hormonal influence and HRT would be of little influence on the evolution of these tumors.

The authors concluded that these data are reassuring in suggesting that HRT is probably not contraindicated in women with a BRCA1 mutation, as they observed a statistically significant reduction in the risk of breast cancer following hormone therapy use. Also, the observed associations were not different for women who used estrogen alone or estrogen plus progesterone. However, the authors recommended that further studies would confirm these findings. Given the limitations of the design and size of the study, caution is still recommended for the use of HRT in women who are carriers of a genetic mutation that exposes them to a higher risk of breast cancer in their life.

References