Why is this important?
Postmenopausal hormone therapy (HT) continues to be used clinically despite concerns for adverse outcomes including breast cancer and stroke.

Facts
- The Women’s Health Initiative included two hormone therapy trials with extended follow-up1: a study of combination hormone therapy with conjugated equine estrogen (hereinafter referred to as estrogen) plus medroxyprogesterone acetate (hereinafter referred to as progesterone) with an intervention phase which lasted a median of 5.6 years and a estrogen alone trial in women with a prior hysterectomy which lasted a median of 7.2 years.
- 81% of 27,347 participants were followed through a post intervention follow-up period until September 2010, with a median cumulative follow up of 13 years for both groups.
- Combination hormone therapy with estrogen and progesterone increased the risk of invasive breast cancer but not coronary heart disease. The effects remained the same during the intervention phase and the cumulative follow-up period. Hormone therapy with estrogen alone decreased the risk of invasive breast cancer at the end of cumulative follow-up period and did not affect risk of coronary heart disease. Increased risk of stroke was observed in both study arms, but the risk did not persist after stopping therapy.

The Bottom Line
- Women receiving combination hormone therapy with conjugated equine estrogen plus medroxyprogesterone acetate may have increased risk of invasive breast cancer which persists after stopping therapy, but have no increased risk of coronary heart disease.
- Women without a uterus receiving conjugated equine estrogen alone have a lower risk of invasive breast cancer and no change in their risk for coronary heart disease during or after the intervention.
- The increased risk of stroke seen in women in both the combination and estrogen alone groups during the intervention phase does not persist at the end of the cumulative follow-up period.
Strength of Evidence

(Adapted from Guyatt G BMJ, 26 April 2008)
This refers to the degree to which the findings of this study are likely to be free of bias.

| + + + + | High |
| + + + ○ | Moderate |
| + + ○ ○ | Low |
| + ○ ○ ○ | Very low |

Tips for Discussion of Results with Patients

- This is an extension study, results may have been affected by unmeasured variables.
- Risk of invasive breast cancer persists over time for combination therapy with estrogen and progesterone.
- Participants in this study received conjugated equine estrogen 0.625 mg/day and medroxyprogesterone acetate 2.5 mg/day. Therefore, the results are applicable to these specific products at these specific doses. This study did not consider lower dose hormone therapy options or estrogen products other than conjugated equine estrogen.

References


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The Bottom Line summaries reflect the expertise and opinions of the SGIM EBM Task Force as of the date of release of this summary.