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## **Long-Term Follow-up Finds No Increased Overall Risk with Menopausal Hormone Therapy**

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Among postmenopausal women in the Women's Health Initiative trials, use of hormone therapy for 5 to 7 years was not associated with risk of all-cause, cardiovascular or cancer death over 18 years of follow-up, according to a study published by *JAMA*.

The Women's Health Initiative (WHI) hormone therapy trials were designed to assess the benefits and risks of menopausal hormone therapy taken for chronic disease prevention by predominantly healthy postmenopausal women. Health outcomes have been reported, but previous publications have generally not focused on all-cause and cause-specific mortality. **All-cause mortality is a critically important summary measure representing the net effect of hormone therapy on serious and life-threatening health conditions.**

JoAnn E. Manson, M.D., Dr.P.H., of Brigham and Women's Hospital, Harvard Medical School, Boston, and colleagues examined total and cause-specific mortality during cumulative 18-year follow-up (intervention plus extended post-intervention phases) of the two randomized WHI hormone therapy trials: conjugated equine estrogens (CEE, 0.625 mg/d) plus medroxyprogesterone acetate (MPA, 2.5 mg/d) (n = 8,506) vs placebo (n = 8,102) for 5.6 years (median); or CEE alone (n = 5,310) vs placebo (n = 5,429) for 7.2 years (median). The analysis included postmenopausal women ages 50 to 79 years who were enrolled in the trials between 1993 and 1998 and followed up through 2014.

Among 27,347 women who were randomized, mortality follow-up was available for more than 98 percent. During the cumulative 18-year follow-up, 7,489 deaths occurred (1,088 deaths during the intervention phase and 6,401 deaths during post-intervention follow-up). **All-cause mortality was 27.1 percent in the hormone therapy group vs 27.6 percent in the placebo group in the overall pooled cohort. Analyses indicated that CEE plus MPA and CEE alone were not associated with increased or decreased risk of all-cause, cardiovascular, or total cancer mortality.** During cumulative follow-up, trends in cause-specific mortality across age groups were not significantly different.

“In view of the complex balance of benefits and risks of hormone therapy, the all-cause mortality outcome provides an important summary measure, representing the net effect of hormone therapy use for 5 to 7 years on life-threatening outcomes,” the authors write.

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The editorial, “**Menopausal Hormone Therapy - Understanding Long-term Risks and Benefits**,” by Melissa McNeil, M.D., M.P.H., of the University of Pittsburgh, also is available at the [For The Media website](#).