

**New report from the Women's Health Initiative (WHI) regarding estrogen plus progestin hormone therapy and breast cancer
JAMA on 10/20/10 (Chlebowski RT, et al)**

Study:

["Estrogen Plus Progestin and Breast Cancer Incidence and Mortality in Postmenopausal Women"](#) is a further analysis of the Women's Health Initiative randomized study of postmenopausal women taking conjugated equine estrogen plus medroxyprogesterone acetate, conjugated equine estrogen alone or placebo.

Findings:

After a total mean follow-up of 11 years, there was an increased finding of invasive breast cancer in women taking estrogen plus progestin compared with placebo (385 cases [0.42% per year] vs 293 cases [0.34% per year], respectively; Hazard Ratio (HR), 1.25; 95% confidence interval [CI], 1.07-1.46; $P = .004$). Frequency of mammography was the same in both groups, the combined hormone and placebo groups (86%).

A significantly larger proportion of women with breast cancers had positive lymph nodes in the combined hormone therapy group compared with the placebo group (81 [23.7%] vs 43 [16.2%], respectively, with a HR of 1.78; 95% CI, 1.23-2.58; $P = .03$). The breast cancers detected were similar in histology and grade to breast cancers in the placebo group. The increased incidence of invasive breast cancer with estrogen plus progestin compared with placebo was 385 cases [0.42% per year] vs 293 cases [0.34% per year], respectively; HR, 1.25; 95% CI, 1.07-1.46; $P = .004$.

Breast cancer mortality was increased in women taking combined estrogen plus progestin compared with women taking placebo. The study reported 25 deaths [0.03% per year] vs 12 deaths [0.01% per year], with a Hazard ratio of 1.96; 95% CI, 1.00-4.04; $P = .049$). This represents an absolute risk of 2.6 deaths from breast cancer (in the combined hormone group) vs 1.3 deaths (in the placebo group) per 10,000 women per year.

There were more deaths from all causes occurring after a breast cancer diagnosis (51 deaths [0.05% per year] vs 31 deaths [0.03% per year]; HR, 1.57; 95% CI, 1.01-2.48; $P = .045$) in women taking combined estrogen and progestin compared with placebo. This represents 5.3 vs 3.4 deaths per 10,000 women per year, respectively.

Summary:

The recent report from follow-up to the WHI study demonstrates the risk of breast cancer for women taking combined estrogen plus progestin. There is an increased risk of invasive breast cancer, breast cancers presenting with positive lymph nodes, and breast cancer mortality. While the absolute risk of breast cancer mortality is small, it is significantly increased for women taking combined estrogen plus daily progestin.

A [2004 report published in JAMA](#) on the estrogen-alone component of the WHI found no increase in breast cancer risk among women with hysterectomy over an average of 7 years of randomized treatment.

Women considering hormone therapy for relief of menopausal symptoms should continue to be counseled that they should use the lowest effective dose, for the shortest period of time.