

# Estrogen not associated with lung cancer incidence and mortality among postmenopausal women

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Use of estrogen alone did not increase lung cancer mortality in postmenopausal women, according to a study published online August 13 in *The Journal of the National Cancer Institute*.

In the Women's Health Initiative (WHI) trial, which consisted of several clinical trials on postmenopausal women, one study showed women with previous hysterectomy taking combined [estrogen](#) plus progestin therapy had a statistically significant increase in lung cancer mortality, but not incidence. Other studies with combined hormone therapy have had conflicting results. But the influence of estrogen alone was unclear.

To determine whether use of estrogen alone was associated with lung cancer incidence and increased lung cancer mortality, Rowan T. Chlebowski, M.D., Ph.D., of the Los Angeles Biomedical Research Institute, and colleagues, in a post-hoc analysis examined data from a previous randomized, double-blind, placebo-controlled trial in the WHI. This trial was conducted in 40 centers in the U.S., in which 10,739 postmenopausal women aged 50-79 years with a hysterectomy were randomly assigned to groups receiving estrogen alone or placebo.

The researchers found there was only one more death from lung cancer in the estrogen group (34 deaths) compared with the placebo group (33 deaths). Their conclusion was that use of estrogen alone was not associated with lung cancer incidence or death from [lung cancer](#) in women with hysterectomies.

The researchers also found that although the effects of combined estrogen and progestin and estrogen alone on coronary heart disease were similar, there were differences in the two therapies'

effect on various types of cancer. Combined therapy showed a statistically significant increase of [breast cancer](#) incidence, whereas estrogen alone showed a reduced incidence. However, combined therapy showed a statistically significant reduction in colorectal cancer, whereas estrogen alone was not associated with colorectal cancer.

The authors say that a limitation of the study was the small sample size and that further investigation comparing combined therapy to estrogen alone is needed. However, they write, "These findings should be reassuring for women with previous hysterectomy, who use estrogen alone for climacteric symptom management."

Provided by Journal of the National Cancer Institute

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