

Hormone mix could cut breast cancer risk and treat symptoms of menopause

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The right combination of estrogen and a selective estrogen receptor modulator (SERM), which blocks the effects of estrogen in breast tissue, could relieve menopause symptoms and cut breast cancer risk, Yale researchers report in an abstract presented at the American Society for Reproductive Medicine (ASRM) scientific meeting in Atlanta, Georgia, October 17-21.

Women in menopause who have symptoms, but have not had a hysterectomy are currently treated with a combination of [estrogen](#) plus [progestin](#) hormone therapy, but this treatment comes with side effects, including a higher risk of [breast cancer](#) caused by the progestin.

To find a better way of administering hormone therapy without the breast cancer risk, Hugh S. Taylor, M.D., professor in the Department of Obstetrics, [Gynecology](#) & Reproductive Sciences at Yale, and his colleagues treated breast and endometrial cell lines with either estrogen or estrogen plus one of the SERMs. The team then looked at various markers of cell growth, including proliferating cell nuclear antigen (PCNA), one of the best-characterized markers of cell growth. The team found that PCNA was increased when they stimulated cells with estrogen and decreased when they added a SERM, indicating that the SERM blocked cell growth.

Taylor said that breast and uterine cells won't be stimulated by the estrogen plus SERM combination, so women in menopause get the benefits of estrogen without the risk of progestin. Progestin is a double-

edged sword, Taylor said. It poses a breast cancer risk, but if you use estrogen alone without progestin, there is a higher risk of uterine cancer. SERMs appear to be a good substitute for progestin.

"In our study, the right combination of estrogen and various SERMs was able to prevent the proliferation of breast and endometrial cells, said Taylor. "These preliminary findings could lead to a better way of administering [hormone therapy](#) to women in [menopause](#)."

These laboratory results are currently being tested in large-scale clinical trials.

Source: Yale University ([news](#) : [web](#))

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