Estrogen blocker cuts breast cancer risk 65%: study

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An anti-estrogen drug has shown a "promising" 65-percent reduction of breast cancer risk among post-menopausal women, according to the findings of a study released Saturday.

The research could lead to a breakthrough for women who are at increased risk of developing breast cancer, which strikes some 1.3 million women worldwide each year and leads to the death of 500,000 women annually, said lead study author Paul Goss of Harvard Medical School.

"The potential public health impact of these findings is important," Goss said in a statement coinciding with the release of the study at the annual meeting of the American Society of Clinical Oncology, the world's largest oncology conference, gathering in Chicago.

A random phase III trial led by Canadian trial group NCIC CTG showed that risk of breast cancer in menopausal women dropped by 65 percent compared to a placebo when patients used exemestane, an oral drug that decreases the body's production of estrogen, the hormone that has been implicated in causing the disease.

"Results from the MAP.3 (mammary prevention - 3) trial indicate that exemestane is a promising new way to prevent breast cancer in menopausal women most commonly affected with breast cancer," said Goss.

"Our study not only showed an impressive reduction in breast cancers, but also an excellent side effect profile, although my cautionary note is that average follow-up to date has been only three years."

The study says aromastate inhibitors (AIs) like exemestane -- sold under the brand name Aromasin -- are distinct from other anti-estrogen therapies such as tamoxifen and raloxifene, which have been approved by the US Food and Drug Administration as preventative therapies for women at high breast cancer risk.

Exemestane too has been approved by the FDA, for use in early breast cancer patients.

Serious side effects have been recorded with drugs like tamoxifen, including rare but serious uterine cancer and potentially fatal blood clots, and Goss's study says AIs counteract estrogen "without the serious toxicities seen with tamoxifen," the statement said.

The clinical study was conducted from 2004 to 2010 and enrolled 4,560 women from the United States, Canada, Spain and France, who had at least one major risk factor such as being age 60 or older, or having prior breast cancer tumors, including breast cancer with mastectomy.

Half the participants received Aromasin, produced by US pharmaceutical giant Pfizer, and half were given a placebo.

After a period of three years, the Aromasin group had about one third as many invasive cancers as those in the placebo group -- a result corresponding to what researchers expected at the beginning of the trial, Goss said.

In addition, for those with breast cancer, "there also appeared to be fewer of the more aggressive tumors on exemestane," he added.

The most common side effects reported by Aromasin users include fatigue, hot flashes, insomnia and joint pain.

Results of the study are being published in the New England Journal of Medicine.

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