Chemoprevention: The Latest Strategy in Reducing Breast Cancer Risk

By ACSH Staff — November 28, 2007

New York, NY--November 28, 2007. Drugs are radically reducing the toll of breast cancer--both by reducing the likelihood of breast cancer recurring and, for certain high-risk women, decreasing the likelihood it will appear in the first place.

Women should consider the scientific evidence, consult their physicians, and decide whether to take a chemopreventive agent to lower their risk of breast cancer, according to scientists affiliated with the American Council on Science and Health (ACSH), a New York-based consumer education and advocacy group.

The current medical approach to this topic is reviewed in a new publication, Reducing Breast Cancer Risk with Drugs [1], written by Gilbert Ross, M.D., ACSH's medical director, and peer-reviewed by a number of world-renowned experts in this field.

The only such chemopreventive agents approved now for this use are tamoxifen and raloxifene. These drugs are selective estrogen receptor modifiers, or SERMs, and lower the risk of breast cancer, it is believed, by blocking the effect of estrogen on breast tissue.

• Tamoxifen has been used for over 20 years to make less likely the development of new lesions after the removal of a primary breast cancer. In 1998 it was approved for chemoprevention, which is the reduction of cancer risk before cancer has even been detected.

• Raloxifene was introduced for the prevention of osteoporosis in 1998 and for the treatment of osteoporosis in 1999, and was recently also approved for the chemoprevention of breast cancer. Several studies have suggested that it may be as effective as tamoxifen, and might be safer, in this area.

Tamoxifen can cause the proliferation of uterine cells and thus increases the risk of uterine cancer. Raloxifene does not have this side effect, but both drugs have adverse effects that have to be taken into account before they are prescribed. Ongoing studies may shed much more light on who should and should not take these drugs.

• An entire new class of agents--which has shown beneficial effects in preventing the spread of breast cancer (secondary prevention)--has also been developed: the aromatase inhibitors (AIs). These drugs may also become an option for certain women at high risk of breast cancer to consider (with their doctors), to reduce the risk of breast cancer developing. As with all drugs, these too have specific side effects and indications, and they are only used in postmenopausal women.
"These drugs are not for every woman," notes Dr. Ross. "While these agents are relatively safe, there are potential adverse effects. But those women who do have an elevated risk of breast cancer may stand to benefit. Any woman with questions should consult a doctor they trust to advise them. Additionally, there are computerized tools available to help both patients and physicians assess the severity of risk." Adds Dr. Ross: "The large majority of women should not take any chemopreventive agent at this time, but current studies will give us a clearer picture of who will be the most likely to benefit."

"While a lot of attention and funding has been directed towards 'finding a cure,' the real progress scientifically has been in the area of prevention, specifically, using drugs to prevent breast cancer, especially in high-risk women," says Dr. Elizabeth Whelan, president and founder of ACSH.

Download ACSH's full report, Reducing Breast Cancer Risk with Drugs [1].

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The American Council on Science and Health is an independent, non-profit consumer education organization concerned with issues related to food, nutrition, chemicals, pharmaceuticals, lifestyle, the environment, and health.