



Aromatase Inhibitors for Lowering Breast Cancer Risk

For post-menopausal women with a higher-than-average risk of breast cancer who are considering taking medicine to lower their risk, drugs called aromatase inhibitors (AIs) may be an option instead of tamoxifen or raloxifene.

What are aromatase inhibitors?

Aromatase inhibitors (AIs) lower estrogen levels by stopping an enzyme in fat tissue (called **aromatase**) from changing other hormones into estrogen. (Estrogen can fuel the growth of breast cancer cells.)

These drugs don't stop the ovaries from making estrogen. They only lower estrogen levels in women whose ovaries aren't making estrogen (such as women who have already gone through menopause). Because of this, they are used mainly in women who have gone through menopause already.

The AIs that have been shown in studies to lower breast cancer risk include:

- **Anastrozole (Arimidex)**
- **Exemestane (Aromasin)**

Like tamoxifen, these drugs are more often used to treat hormone receptor-positive breast cancer than to lower breast cancer risk.

When used to lower breast cancer risk, these drugs are typically taken for 5 years. They are pills taken once a day.

Can aromatase inhibitors lower the risk of breast cancer?

In large studies, both anastrozole and exemestane have been shown to lower breast cancer risk in postmenopausal women who are at increased risk.

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While these drugs are not FDA approved to lower breast cancer risk, some expert groups include them as options (along with [tamoxifen and raloxifene](#)) to reduce breast cancer risk in post-menopausal women at increased risk. For example, you might be able to opt out of some cookies by using the [Manage Cookies](#) link. Therefore, should not take tamoxifen or raloxifene.

What are the risks and side effects of aromatase inhibitors?

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The most common side effects of AIs are **symptoms of menopause**, such as hot flashes, night sweats, and vaginal dryness.

These drugs can also cause **muscle and joint pain**. This side effect can be serious enough to cause some women to stop taking the drugs.

Unlike tamoxifen and raloxifene, AIs tend to speed up bone thinning, which can lead to **osteoporosis**. People with osteoporosis are more likely to have broken bones. Because of this, doctors often recommend checking bone density before starting one of these drugs.

AIs may **raise cholesterol**. Women with pre-existing heart disease who take an AI may be at higher risk of having a heart problem.

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