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# Anastrozole

## A Viewpoint by Aman U. Buzdar

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Treatment of breast cancer both in early and advanced stages is rapidly evolving. A number of new hormonal, chemotherapeutic and biologic agents have become available with significant antitumour activity in advanced stages of the disease.[1-5] Most benefit from these therapies is achieved when they are given at an earlier stage of the disease.[6-8] Some aromatase inhibitors (anastrozole and letrozole) have proved to be superior to antiestrogen therapy in advanced disease, and some (anastrozole and exemestane) have demonstrated a survival advantage when compared to progestin as second-line therapy.

The Arimidex, Tamoxifen Alone or in Combination (ATAC) trial, a landmark study, evaluated the safety and efficacy profile of one of the new aromatase inhibitors against tamoxifen. The data from this trial, as reviewed in the accompanying article, demonstrated that anastrozole alone has superior efficacy to tamoxifen, and are consistent with earlier observations with this drug in metastatic disease. The safety profile of anastrozole was more favorable overall than that of tamoxifen. Anastrozole is a selective agent with no intrinsic hormonal properties. Most of the adverse effects of adjuvant tamoxifen therapy (e.g. thromboembolic events and endometrial cancer) are due to the agonist properties of this drug. Bone fractures are the only adverse effect of concern with anastrozole adjuvant therapy. Additional follow-up of the main trial and the bone sub-protocol in the ATAC trial will further define the effects of anastrozole on the bones. In the meantime, bone mineral density should be measured at the initiation of anastrozole adjuvant therapy to provide a baseline value, and should be evaluated at regular intervals thereafter. If and when there is evidence of bone loss, appropriate pharmacological interventions should be offered to the patient. However, these should not include selective estrogen receptor modulator (SERM)-like drugs (e.g. raloxifene) because of the potential for drug-drug interactions. Concomitant administration of tamoxifen (another SERM) and anastrozole[9] or letrozole[10] results in significant lowering of the aromatase inhibitor drug levels.

In newly diagnosed postmenopausal women with hormone receptor-positive disease, anastrozole now offers a new choice of therapy. Compared with tamoxifen, anastrozole has an overall better therapeutic index. Additional follow-up of the ATAC study will further define its safety and efficacy profile. ▲

## References

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