molecular interventions
pharmacological perspectives from biology, chemistry and genomics

February 2007 Volume 7, Issue 1
www.molinterv.org

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*Molecular Interventions* (ISSN 1534-0384) is published by the American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD 20814-3995. Published bimonthly in February, April, June, August, October, and December. Annual subscription rates: U.S.: $240 for institutions: and $78 for individuals. Outside the U.S.: $261 for institutions and $99 for individuals. The subscription price to ASPET members ($30) is included in membership dues. Single issue: $44. Subscriptions include access to the online version of *MI* at molinterv.org (ISSN 1543-2548). Indexed or abstracted by Biochemistry & Biophysics Citation Index, EMBASE/Excerpta Medica, Index to Scientific Reviews, ISI Alerting Services, ISI Web of Science, PubMed/Medline, and Science Citation Index-Expanded.

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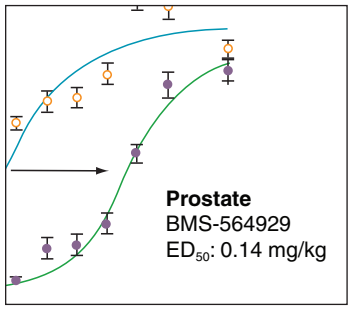


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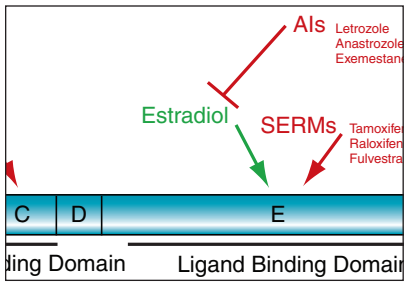
*Is 5α-reductase the key?*

## VIEWPOINTS



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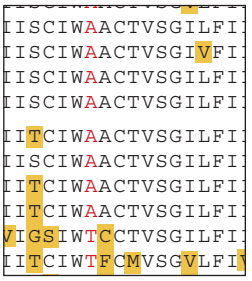
*Aromatase therapy*

Tamoxifen is one of the most successful and widely used chemopreventive agents ever, and is an effective therapeutic agent for inhibiting growth of hormone receptor positive breast cancers. Tamoxifen and some of its metabolites bind to estrogen receptors and allow subsequent DNA binding at estrogen responsive genes, blocking some estrogenic signals while maintaining others, depending on the tissue. When used therapeutically for up to five years, cases of tamoxifen resistance appear, requiring alternative therapies. One recent proposal uniquely targets a zinc finger of the DNA binding domain of estrogen receptors, rather than the ligand binding domain, to circumvent resistance. In light of the most recent clinical data, however, it is now clear that aromatase inhibitors are the preferred first line therapy for all stages of breast cancer in post-menopausal women, whether they have had previous tamoxifen exposure or resistance.

*Mark Nichols*

## REVIEWS





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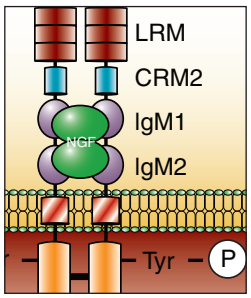
*GPCR genealogy*



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*Making sense of sensitization*