Re: In Search of the Perfect SERM: Beyond Tamoxifen and Raloxifene

This News article, by Caroline McNeil *(1)*, stated that there are two SERMs (selective estrogen receptor modulators) on the market and referred to a number of others that are in development. Curiously, the article did not mention toremifene (Fareston®), which has been available for years in Europe and Japan and, since 1997, in the United States. Coincidentally, Fareston was advertised in the inside front cover of the issue of the *Journal of the National Cancer Institute* that carried Ms. McNeil's news article. Toremifene, which is structurally related to tamoxifen, is clearly a SERM, exerting an antiestrogenic effect in the breast and estrogenic effects in bone and on serum lipids.

Ms. McNeil also offered some criteria for a ''perfect'' SERM. Conspicuously missing from the criteria was the absence of any adverse health effects. Given the fact that tamoxifen has been found to be genotoxic and carcinogenic in rodents and humans *(2)*, the developers of new SERMs certainly will be attentive to such issues, as were addressed in the development of Fareston *(3)*.

GARY M. WILLIAMS

REFERENCES

(1) McNeil C. In search of the perfect SERM: Beyond tamoxifen and raloxifene [news]. J Natl Cancer Inst 1998;90:956–7.

(2) International Agency for Research on Cancer Monographs on the Evaluation of Carcinogenic Risks to Humans (Tamoxifen) 1996;66: 253–365.

(3) Hard GC, Iatropoulos MJ, Jordan K, Radi L, Kaltenberg OP, Imondi AR, et al. Major difference in the hepatocarcinogenicity and DNA adduct forming ability between toremifene and tamoxifen in female Crl:CD(BR) rats. Cancer Res 1993;53:4534–41.

NOTES

Editor's note: Dr. Williams holds stock in Schering-Plough, the maker of Fareston, and he is a member of that company's speakers bureau. He has also conducted research for Orion Pharma, the developer of Fareston. No corporate support was provided for the preparation of this letter.

Correspondence to: Gary M. Williams, M.D., Naylor Dana Institute, American Health Foundation, 1 Dana Rd., Valhalla, NY 10595.

RESPONSE

Dr. Williams is correct that my reference to ''the two SERMs now on the market'' was inaccurate. It would have been not only more accurate, but also more in keeping with the aim of my article, to have written ''the two SERMs now in the news.'' My objective was to look beyond the publicity that had surrounded tamoxifen and raloxifene in the preceding few months and give an overview of SERMs currently in development.

CAROLINE MCNEIL

NOTE

Correspondence to: Caroline McNeil, News Correspondent, *Journal of the National Cancer Institute*, 10A19 Pepper Bldg., 31 Center Dr., MSC2580, Bethesda, MD 20892–2580 (e-mail: Mcneilc@occ.nci.nih.gov).