

**SERM Therapy for patients of breast cancer and otherwise**

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*Madam*, In Pakistan, the most frequently diagnosed cancer among females is breast cancer, where every year at least 90,000 women suffer from the disease.<sup>1</sup> This incidence is 2.5 times higher than that of Pakistan's neighbouring countries and the highest in Asia.<sup>1</sup> The current treatments for breast cancer in the country are all invasive forms of therapy and include radiation therapy, chemotherapy, lymph node removal, and mastectomy. This letter aims to draw attention to a newer form of treatment for breast cancer known as selective estrogen receptor modulators (SERMs).

Selective estrogen receptor modulators (SERMs) are synthetic molecules that provide a non-invasive therapy for breast cancer patients. Recent studies have proposed that the specificity of SERM's mechanism of action and antiviral properties yield fruitful outcomes in treating covid-positive breast cancer patients<sup>2</sup> giving SERMs a significant advantage over former treatments such as radiation therapy or chemotherapy which reduce the body's ability to fight infections. SERMs block the effects of estrogen on breast tissue, preventing cancer cells from dividing. They also act as an adjuvant in breast cancer therapy<sup>3</sup> suppressing secondary tumour formation. A recent study published in the *Journal of Clinical Oncology* showed significant benefits from two years of tamoxifen therapy in oestrogen receptor-positive premenopausal patients of breast cancer.<sup>4</sup> On various other tissues, they act as oestrogen, allowing for their use alongside other treatments for postmenopausal women to prevent bone loss and osteoporosis.<sup>3</sup>

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Despite SERM 's wide range of benefits in patients with breast cancer, it is not a fully recognized form of treatment for this population in Pakistan. Such hormonal therapy is only offered by a handful of high-end private-sector hospitals. This is attributed to a lack of research in this area due to various socio-economic factors. A limited choice of treatment for women with breast cancer in Pakistan results from fear of stigmatization and feminine sensitivity.<sup>5</sup> Attention should be brought to alternative therapies for breast cancer treatment to improve prognosis and help patients make the best possible shared decision-making choices.

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ES: Conceptualisation, final editing.

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MA: Writing