

### **The Changing Landscape of Breast Cancer Treatment**

Mihai Stana<sup>1</sup>, Teodor Florin Georgescu<sup>1,2</sup>, Dragoş Eugen Georgescu<sup>2,3</sup>, Maria Francisca Georgescu<sup>4</sup>, Vlad Alexandru Ionescu<sup>2,5</sup>, Gina Gheorghe<sup>2,5</sup>, Mihai Teodor Georgescu<sup>2,6</sup>, Claudiu Turculeţ<sup>1,2</sup>

<sup>1</sup>Department of General Surgery, Clinical Emergency Hospital Bucharest, Romania

<sup>2</sup>Faculty of Medicine, University of Medicine and Pharmacy Carol Davila Bucharest, Romania

<sup>3</sup>Department of General Surgery, Dr. I. Cantacuzino Clinical Hospital, Bucharest, Romania

<sup>4</sup>Department of Dermatology, Elias University Emergency Hospital, Bucharest, Romania

<sup>5</sup>Internal Medicine Department, Clinical Emergency Hospital of Bucharest, Bucharest, Romania

<sup>6</sup>Oncology Department 2, Prof. Dr. Alexandru Trestioreanu Oncological Institute, Bucharest, Romania

### **Abstract**

*Background:* Breast cancer management has undergone an important evolution, from aggressive, invasive surgical interventions towards personalized, multidisciplinary strategies guided by tumor biology and patient oriented outcomes.

*Recent advances:* Randomized trials have enabled the possibility of less invasive surgery in some cases, while advances in systemic therapy including targeted agents, antibody drug conjugates (ADCs) such as Trastuzumab emtansine (T-DM1) and Trastuzumab deruxtecan (T-Dxd), endocrine therapy and immunotherapy in selected cases have improved survival and quality of life. Emerging technologies such as oral selective estrogen receptor degraders (SERDs), selective estrogen receptor covalent antagonists (SERCAs), proteolysis targeting chimeric (PROTACs) and complete estrogen receptor antagonists (CERANs) are expanding therapeutic options.

*Conclusions:* Modern breast cancer management is defined by precision medicine, multidisciplinary integration and less invasive surgical interventions in selected cases. Ongoing challenges include therapeutic resistance, toxicity, cost, and equitable access to innovation.

**Keywords:** breast cancer, oncoplastic surgery, endocrine therapy, chemotherapy