

Contents lists available at ScienceDirect

Seminars in Oncology

journal homepage: www.elsevier.com/locate/seminoncol



Advances in Care of the Breast Cancer Patient



Breast cancer is a very common malignancy with over 268,000 cases diagnosed in the United States in 2019,1 thus representing a large portion of the patients seen by practicing oncologists. Despite the frequency with which oncologists treat these patients, management of this disease can be challenging given an ever-evolving landscape of therapeutic options. In the last year, several practice changing studies have been reported including the KATHERINE study² which revolutionized the care of patients with early stage HER2 positive breast cancer treated with neoadjuvant chemotherapy/HER2-targeted therapy, the KEYNOTE-522 study³ which is likely to bring immunotherapy into the routine neoadjuvant care of patients with hormone receptor negative/HER2negative breast cancer, as well as the SOLAR-14 study which lead to approval of alpelisib, a novel α -specific PI3K inhibitor, for treatment of PIK3CA-mutated HER-positive, HER2-negative metastatic breast cancer. In addition, since December 2019, there have been four new FDA approvals⁵ for the treatment of patients with metastatic breast cancer including fam-trastuzumab deruxtecannxki (Enhertu, Daiichi Sankyo), neratinib (Nerlynx, Puma Biotechnology, Inc.), tucatinib (Tukysa, Seattle Genetics, Inc) for patients with refractory metastatic HER2-positive tumors and sacituzumab govitecan-hziy (Trodelvy, Immunomedics, Inc.) for refractory hormone receptor negative/HER2-negative breast cancer. These changes represent an opportunity for more efficacious, tolerable, and personalized care for our patients while also forcing those who care for these patients to continually challenge our traditional treatment paradigms.

This special edition of *Seminars in Oncology* aims to summarize recent changes in the treatment recommendations of patients with a diagnosis of breast cancer and highlight future directions for research in this space. Reviews regarding contemporary approaches to breast cancer screening, genetic testing & counseling, radiation therapy and reconstructive surgery are also included and highlight the importance of multi-disciplinary care of patients with breast cancer.

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References

- [1] Breast Cancer Facts and Figures 2019-2020. American Cancer Society. https: //www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/ breast-cancer-facts-and-figures/breast-cancer-facts-and-figures-2019-2020.pdf
- [2] Von Minckwitz G, Huang CS, Man MS, Loibl S, et al. Trastuzumab emtansine for residual invasive HER2-positive breast cancer. N Engl J Med 2019 Feb 14;380(7):617–62.
- [3] Schmid P, Cortes J, Pusztai L, McArthur H, et al. Pembrolizumab for early triple-negative breast cancer. N Engl J Med 2020 Feb 27;382(9):810–21.
- [4] Andre F, Ciruelos E, Rubovszky G, Campone M, et al. Alpelisib for PIK3CA-mutated, hormone receptor positive advanced breast cancer. N Engl J Med 2019 May 16;380:1929–40.
- [5] Hematology/Oncology (Cancer) Approvals and Safety Notifications. U.S. Food and Drug Administration. https://www.fda.gov/drugs/resources-informationapproved-drugs/hematologyoncology-cancer-approvals-safety-notifications