Adjuvant chemotherapy for breast cancer has evolved over several decades and includes a variety of regimen choices. The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) endorse a number of anthracycline- and non-anthracycline–based options. Data in this figure are adapted from distribution data provided by McKesson Specialty Care Solutions. These data reflect treatment delivered by 458 practices across 46 states.

Several findings shown are notable. First, use of anthracycline-based chemotherapy accounts for approximately 55% of adjuvant treatment regimens in HER2-negative breast cancers, whereas non-anthracycline–based regimens, especially the combination of docetaxel and cyclophosphamide (TC), accounts for 45%. The vast majority of patients in this setting now receive taxane-based treatments. Among women with HER2-positive tumors receiving trastuzumab-based therapy, use of the non-anthracycline regimen docetaxel plus carboplatin plus trastuzumab now accounts for approximately two thirds of adjuvant treatments, compared with AC followed by taxane and trastuzumab, which accounts for the remaining third.

These practice patterns are of interest in part because of retrospective, historical data suggesting that the greatest benefit from anthracycline-based treatment may be for HER2 overexpressing tumors. In addition, this kind of practice pattern data may have practical implications for the design of next-generation clinical trials in both HER2-positive and -negative breast cancer.

Reference