PCN23 COMPARISON BETWEEN EVEROLIMUS (AFINITOR®) AND CHEMOTHERAPY AGENTS (CAPECITABINE, DOXETAXEL AND DOXORUBICIN) FOR THE TREATMENT OF HORMONE-RECEPTOR POSITIVE (HR+) HER2 NEGATIVE (HER2–) ADVANCED OR METASTATIC BREAST CANCER

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OBJECTIVES: This study compares everolimus (EVER) versus the most commonly used chemotherapy agents in UK clinical practice (capecitabine [CAPE], doxetaxel [DOX]), patients with advanced or metastatic breast cancer with the purpose of determining the effect of everolimus versus chemotherapy through the derivation of hazard ratios (HR). METHODS: A systematic review of the literature was performed to find randomized controlled trials (RCTs) versus chemotherapy in patients with hormone receptor positive (HR+) HER2-negative (HER2–) advanced or metastatic breast cancer. The studies were included if: they were RCTs; they compared EVER versus chemotherapy; they reported OS, disease-free survival, or progression-free survival; and they were published in English. RESULTS: 18 RCTs met the inclusion criteria. Studies were grouped by HR status and patient characteristics and results were summarized in a forest plot. The meta-analysis showed that compared to chemotherapy, EVER improved OS (HR 0.88, 95% CI 0.79–0.98), disease-free survival (HR 0.73, 95% CI 0.63–0.84), and progression-free survival (HR 0.78, 95% CI 0.65–0.94). CONCLUSIONS: EVER improves both overall survival and progression-free survival compared to chemotherapy. However, further studies are needed to confirm the results and to evaluate the long-term effects of EVER in breast cancer patients.