An analysis of the use of neo-adjuvant chemotherapy with trastuzumab for patients with HER-2 positive breast cancer

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Use of anti-HER-2 therapy with chemotherapy in the neoadjuvant setting improves pathological complete response (PCR) rate. Patients with HER2-overexpressing tumors who achieve PCR had better event-free survival and overall survival. The proportion of patients achieving PCR with addition of neoadjuvant trastuzumab is 22.6-65.2%. Dual anti-HER-2 therapy has been recommended in selected high risk cases. This study primary aim is to determine PCR rate in HER-2 positive breast cancer patients who have received neoadjuvant chemotherapy and trastuzumab in the heart of England Foundation Trust, and to identify their tumor characteristics. Secondary aims are to establish proportion of patients who had breast conserving surgery and those who developed recurrence or metastases. Data was collected retrospectively to include cases from January 2011 to 2016 using the hospital electronic system. 18 patients were identified who had HER-2 positive invasive ductal carcinoma and received neoadjuvant fluorouracil, epirubicin and cyclophosphamide followed by docetacel and trastuzumab 16(89%) had a pathological response and 10(56%) had a complete pathological response. Among those who achieved PCR, 50% were hormonal receptor negative and 70% had graded 3 tumors and positive lymph nodes. Overall, 44% of patients had breast conserving surgery. One patient developed local recurrence and two patients had metastases. Our data showed that the rate of PCR achieved in our unit is comparable with other studies. Patients with more aggressive tumors appeared to achieve a better response however a larger sample size is needed to further strengthen this association.

Biography
Ik Shin Chin is a Specialty Registrar Trainee in medical oncology. She is currently working with the breast care team in the Heart of England NHS Foundation Trust in Birmingham, West Midlands.

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