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Background: Trastuzumab was licensed for adjuvant therapy in early breast cancer (EBC) in the UK in 2006. The objectives of this multicentre audit were to determine the incidence of HER2+ breast cancers, proportion of HER2+ EBC women who received Trastuzumab and ascertain reasons why some HER2+ patients did not receive Trastuzumab.

Methods: Data collected for all invasive breast cancers diagnosed at seven UK centres over 18-months from 2007 onwards. All HER2+ cancers diagnosed by a combination of IHC and FISH identified using each centre's database. Case records checked and reasons noted if they had not received Trastuzumab.

Results: Patients (4488) diagnosed with invasive breast cancer. 645 (14%) were HER2+ cancers, 523 being EBCs. 326 (62%) HER2+ EBCs received Trastuzumab.

Reasons for not receiving Trastuzumab	n = 197(%)
Tumour ≤10 mm, node negative	65(33)
Small node negative tumours (11–20 mm)	18(9)
Age	42(21)
Comorbidities	27(13)
Therapy refused	28(14)
Other reasons	17(9)

Conclusions: Incidence of HER2+ breast cancers is 14%, majority being EBCs (81%). Only 62% of the HER2+ EBC patients received Trastuzumab. Whilst the commonest reason for not receiving Trastuzumab is small node negative tumours (which is compatible with UK guidelines), an equal number of patients potentially missed optimal therapy for reasons not noted in the guidelines. Recent studies have demonstrated that being HER2+ is a significant risk factor for relapse in patients previously perceived to be at low risk and no HER2+ patient should now be considered low risk.<sup>1</sup>

## Reference:

 Tovey SM et al. Poor survival outcomes in HER2+ breast cancer patients with low-grade, node-negative tumours. BJC 2009;100(5):680-3.

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## O-40 BREAST CANCER TREATMENT IN THE ELDERLY

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Objective: Of the 49,452 breast cancers diagnosed in the UK in 2006, 25,049 (51%) were diagnosed symptomatically in patients aged 50 and over. This study compares the nature and treatment of symptomatic invasive cancers in patients aged 50–69 and 70 years or over ('elderly').

Methods: Data were extracted from national audit databases and from the merged cancer registry database linked to HES.

Results: 84% of Patients aged 50–69 had surgery recorded compared with 55% of patients aged 70 or over. Surgery rates increased to 79% in 'elderly' patients known to be ER negative. 'Elderly' patients were more likely to have a mastectomy (61% versus 50%). For surgically treated tumours, prognostic factors were similar in both groups: node positivity: 54% in 50–69 versus 50% in 'elderly', ER status (73% ER positive in 50–69 versus 77% in 'elderly') and grade (52% Grade 1 or 2 in 50–69 versus 59% in 'elderly'). For cases with adjuvant therapy data available, radiotherapy after conserving surgery was slightly lower in the 'elderly' (87% versus 94%), chemotherapy for node positive patients was much lower in the 'elderly' (21% versus 75%) and more 'elderly' patients received hormone therapy (90% versus 83%).

Conclusion: 'Elderly' patients were less likely to receive surgery or chemotherapy. Patient choice, the presence of co-morbidities, lack of evidence on the relative risks/benefits of adjuvant therapy or reduced access to surgery for older patients are factors which might explain the differential treatment of these patients.

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## O-41 AGE SPECIFIC BREAST CANCER RELATIVE SURVIVAL IN THE EAST OF ENGLAND

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Background: Breast cancer relative survival (BCRS) tends to be poorer in older women, but the reasons for this are not clear. We examined the influence of patient and tumour characteristics, and treatment on BCRS to see if these could explain the age specific effects.

Methodology: Data for 14,048 female breast cancer patients diagnosed from 1999 to 2007 aged 50 years or over were obtained from the Eastern Cancer Registration and Information Centre. We estimated relative 5- and 10-year survival for patients in four age groups (50–69, 70–74, 75–79, and 80+). We also modelled relative excess mortality rate (REM) adjusting for potential confounders. Covariates included in the analysis were age, TNM stage, histologic grade, ER status, mode of detection, volume at hospital of diagnosis, and treatment (surgery, radiotherapy, chemotherapy and hormonal therapy.

Results: Median follow-up time was 4.7 years. Relative 5-year survival was 90%, 81%, 76% and 68% for patients aged 50–69, 70–74, 75–79 and 80+, respectively. Corresponding relative 10-year survival was 84%, 77%, 66% and 60%. Similar patterns were seen for both ER+ and ER- and for low and high volume hospitals.

Unadjusted REM was 1.95, 2.86 and 4.30 for patients aged 70–74, 75–79 and 80+, respectively (50–69 reference). These were