

**P143. Breast cancer recurrence after immediate and delayed reconstruction: a single institution study**

**Annika Thaithongchai, Soni Soumian, Konstantinos Seretis, Radovan Boca, Victoria Rusius, Luna Vishwanath, Guy Sterne**  
Department of Plastic Surgery, City Hospital, Birmingham, West Midlands, UK

**Aim:** The last decade has seen a remarkable shift towards offering breast reconstruction as a part of the standard treatment for breast cancer. Although literature strongly seems to endorse the oncological safety of the reconstructive procedures, concerns do remain with regard to breast cancer recurrence. As a regional referral centre for breast reconstruction, we wanted to assess the rates of local and distant recurrences in both immediate (IBR) and delayed (DBR) reconstruction in our institution.

**Methods:** A retrospective analysis of all IBR and DBR breasts from 2000 to 2007 with four year follow up was performed specifically assessing demographics, types of reconstruction, local and distant recurrence rates and mortality.

**Results:** Out of a total of 211 procedures, there were 108 IBR and 103 DBR reconstructions. There was a trend towards higher local recurrence rate in the IBR group although it did not achieve statistical significance (8(7.4%) IBR vs 3(2.9%) DBR). However the rates of distant metastases were significantly higher in the DBR group (12(11.6%) vs 5(4.6%)( $p=0.012$ ). Eighty percent of distant metastases in the DBR group were diagnosed within an average of two years after reconstructive surgery. Four year mortality was 2.7% and 5.8% in the IBR and DBR group respectively.

**Conclusion:** This study has shown a significant increase in the rates of distant metastatic disease in the DBR group but no difference in local recurrence between the groups. This probably reflects the relatively advanced stage of the primary pathology in the DBR group