AB016. 114. Yield from systemic staging of breast cancer patients following a positive sentinel node biopsy

Patrick O’Donoghue1,2, Damian McCartan1, Ruth Prichard1, James Geraghty2, Denis Evoy2, Jane Rothwell1, Caroline Herron1, Helen Earley2, Shiva Sharma2, Andy Gervescu2, Enda McDermott2

1Department of Surgery, St. Vincent’s Hospital, Dublin, Ireland; 2Department of Surgery, University College Dublin, Dublin, Ireland

Background: The prognostic significance of axillary lymph node metastases in patients with breast cancer has long been established. Despite advances in the molecular profiling of breast cancers, nodal status remains an important determinant of treatment. The aim of this study was to identify the diagnostic yield from staging CT of the thorax, abdomen and pelvis (CT-TAP) prompted by the finding of axillary nodal metastases on sentinel lymph node biopsy (SLNB).

Methods: A retrospective review over a 5-year period from 2013 to 2017 was performed to identify patients with a positive SLNB who proceeded to undergo a staging CT-TAP, based on multidisciplinary team (MDT) recommendation. Findings on CT were recorded from radiology records and correlated with final pathological stage.

Results: In the 5-year study period, 255 patients were included who underwent staging CT-TAP following a positive SLNB. A total of 72 patients had a final pathological nodal status of micro-metastatic disease (pN1mi). None of these patients were shown to have distant metastatic disease on CT. Two patients had incidental findings of synchronous primary tumours. In contrast, the rate of incidental findings requiring additional surveillance was considerable. A total of 32 of the patients with pN1mi (44%) had incidental lung nodules, the majority of which require follow up. In patients with ≥ pN1 disease, distant metastases were identified in 2 patients.

Conclusions: The yield from systemic staging CT-TAP in patients with low volume axillary nodal metastases is low, especially for micro-metastatic disease and comes at a high opportunity cost, based on the need for surveillance of incidental findings.

Keywords: Sentinel node biopsy; staging CT; micro-metastatic; macro-metastatic