AB005. Post operative management and outcome of high risk thymoma and thymic carcinoma following curative intent surgery: a single centre experience

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**Background:** Thymomas and Thymic carcinomas are rare epithelial tumours, presenting in about 1.5 per 1000,000 people and so research and long-term follow-up data to guide treatment is scarce. Since 2009 in Manchester we have worked closely with thoracic surgery to ensure all patients with thymic malignancies are referred to the oncology team at the Christie for review and a longer term management plan. In this report we reviewed records of patients who were considered for post-operative radiotherapy and their outcomes.

**Methods:** A retrospective electronic case note review of all cases of thymic malignancy seen at the Christie between 1/1/2010 and 31/12/2019 was undertaken. Cases with clear metastatic disease and cases with a complete surgical resection and low risk features where post-operative radiotherapy would not be considered (T1, type A/AB) were removed from further analysis. We looked at demographics, radiotherapy details and relapse/death of these higher risk cases in more detail.

**Results:** One hundred and eleven cases were initially identified with 64 cases considered for post-operative radiotherapy and included in our study. Thirty-nine patients (58%) received post-operative radiotherapy with doses from 45–60 Gy in 20–30 fractions. After a median follow-up of 44 months (range, 5–125 months), 13 patients (20%) had recurred 1 patient with isolated localised recurrence, 7 patients with distant metastases and 5 patients with both.

10 of these 13 had received post-operative radiotherapy and the patient with localised relapse was given curative radiotherapy at relapse. Recurrences were more common in patients with B3 or thymic carcinoma (11/13 cases) and higher T stage (12/13 cases). Eleven patients (17%) have died—2 of thymic disease, 4 of unrelated diseases and 5 unknown.

**Conclusions:** Our study shows that despite most patients (58%) receiving post-operative radiotherapy 1/5 with poor risk thymic disease will recur—predominantly distantly— often quite late (median 35 months). The low chance of isolated localised recurrence raises the question of whether annual surveillance rather than upfront radiotherapy could be considered for lower risk patients but larger data sets with longer follow-up are needed.

Keywords: Thymoma; thymic carcinoma; radiotherapy

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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