

AB003. OA01.03: Comparison of two assessment criteria for thymic epithelial tumors after chemoradiotherapy

Kailiang Wu, Xingwen Fan, Yu Yang, Hongbing Wang

Department of Radiation Oncology, Fudan University Shanghai Cancer Center, Shanghai 200032, China

Correspondence to: Xingwen Fan. Department of Radiation Oncology, Fudan University Shanghai Cancer Center, Shanghai 212013, China. Email: wwxingfan@126.com.

Background: Measuring tumor response to treatment is important for both clinical decision-making and multi-institutional studies. There are two radiographic assessment criteria of treatment response for thymic epithelial tumors (TET): Response Evaluation Criteria In Solid Tumors version 1.1 (RECIST 1.1) and International Thymic Malignancy Interest Group (ITMIG) modified criteria. This study was to compare these two assessment criteria for TET treated with chemoradiotherapy.

Methods: A prospective phase II study (NCT02636556) for local advanced or advanced TET treated with chemoradiotherapy was conducted in our center. Patients were treated with cisplatin (25 mg/m^2) and etoposide (75 mg/m^2) on day 1 to day 3 of a 4-week cycle concurrent with median dose of 60 Gy (rang: 40–66 Gy) thoracic intensive modulated radiotherapy. The treatment response was assessed by RECIST

1.1 and ITMIG modified criteria, respectively. The best response rate was recorded. Statistical Product and Service Solutions version 20 (SPSS 20) was used for statistical analysis.

Results: Fifty-two patients were enrolled in this study. The median age was 53 years (range: 18–76 years). There were 28 males and 24 females. Twenty two patients were thymoma, and thirty patients were thymic carcinoma. And there were 8 stage III, 7 stage IVA, and 37 stage IVB, respectively. The median number of chemotherapy cycles was 4 (range: 1–6). Median follow-up times were 25 months (range: 4–69 months). There were 22 stable disease (SD) and 30 partial response (PR) assessed by RECIST 1.1. When assessed by ITMIG modified criteria, only one patient with multiple pleural metastases has changed from SD to PR. However, the response rate of ITMIG modified criteria was larger than that of RECIST 1.1 ($P=0.023$, paired t -test). The mean time to reach the best response was 4.3 ± 1.0 months. The mean local control was 38 and 52 months for SD and PR, respectively ($P=0.039$, log rank; $HR=1.107$; 95% CI, 1.004–7.622; $P=0.049$). There were no significant difference of overall survival and progression free survival between SD and PR.

Conclusions: Treatment response assessed by RECIST 1.1 and ITMIG modified criteria were similar for most local advanced or advanced TET patients with first line chemoradiotherapy.

Keywords: Radiotherapy; thymoma; radiographic assessment criteria

doi: 10.21037/med.2018.AB003

Cite this abstract as: Wu K, Fan X, Yang Y, Wang H. Comparison of two assessment criteria for thymic epithelial tumors after chemoradiotherapy. *Mediastinum* 2018;2:AB003.