

## **Abstract**

**Introduction:** Thymic epithelial tumors (TETs) are a rare type of neoplasm. Accordingly, it is difficult to perform phase III trials in patients with TETs, and thus no standard treatment has been established for these tumors. In this study, we aimed to investigate the current status of TET treatment in Japan.

**Methods:** This retrospective observational study enrolled patients with TET who were recorded in a nationwide Hospital-based Cancer Registry (HBCR) between 2012 and 2014. The patients' treatment details were obtained from a health insurance claims database.

**Results:** A total of 813 patients with thymoma and 547 with thymic carcinoma were included in the analysis. A total of 549 (67.5%) thymoma patients underwent surgical resection alone. Among patients with thymic carcinoma, 230 (42.0%) underwent initial surgery, and 124 (53.9%) received subsequent radiotherapy and chemotherapy. As no anti-cancer agent has been approved for TET treatment in Japan, various chemotherapy regimens were selected by each hospital. Twenty-one and 22 regimens were used to treat thymoma and thymic carcinoma, respectively. Platinum-based combination

regimens were predominantly selected for both diseases.

**Conclusions:** This study has revealed the real-world patterns of TET treatment in Japan.

Although the nature of this study did not enable the determination of optimal treatment strategies, the simultaneous analysis of nationwide registry, insurance, efficacy, and prognostic data may contribute to the establishment of a standard treatment strategy for rarely occurring cancers such as TET.

### **Keywords**

Thymoma, Thymic carcinoma, Multimodality therapy, Chemotherapy regimen,  
Nationwide registry