

Abstracts

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COMPARISON OF OUTCOMES BETWEEN NEUROENDOCRINE THYMIC TUMOURS AND OTHER SUBTYPES OF THYMIC CARCINOMAS: A JOINT ANALYSIS OF THE EUROPEAN SOCIETY OF THORACIC SURGEONS (ESTS) AND THE INTERNATIONAL THYMIC MALIGNANCY INTEREST GROUP (ITMIG)

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Objectives: The latest World Health Organization (WHO) histologic classification divides thymic tumours in Thymomas and Thymic Carcinomas, the latter also including the Neuroendocrine Thymic Tumours (NETTs). NETTs and other

Thymic Carcinomas histotypes (TCs) portend a significantly lower survival than Thymomas, but differences between these two groups of tumours have rarely been investigated. Using the European Society of Thoracic Surgeons (ESTS) and the International Thymic Malignancy Interest Group (ITMIG) datasets, we aimed at addressing this issue.

Methods: This is a retrospective multicentric (66 institutions worldwide) cohort study of patients treated for thymic carcinoma. Study end-points were: overall survival (OS) and cumulative incidence of recurrences (CIR). OS was analysed using the Kaplan-Meier method and CIR was assessed using competing risk analysis. The association with clinical and prognostic factors for OS and CIR were evaluated with log rank test and Gray's test, respectively.

Results: Overall, 1247 tumours were collected between 1984 and 2012. A R0 resection was performed in 308 TCs and in 42 NETTs. The median follow-up was 4.4 years for TCs and 4.1 years for NETTs. At the end of follow-up 303 TC and 52 NETT patients died. The median OS was 6.6 years for TC and 7.5 years for NETTs. While the overall 5-year survival rates were 60% for TC and 68% for NETTs, the 10-year survival rates for TCs and NETTs were 40% and 39% respectively ($P = .19$). Five-year CIR were .35 and .34 for TCs and NETTs, respectively ($P = .36$). At multivariate analysis, histology did not influence either OS ($P = .36$) or CIR ($P = .41$).

Conclusions: This is the largest clinical series of thymic carcinomas ever collected. Our results confirm the remarkable biological aggressiveness of such rare neoplasms. After surgery, TCs and NETT showed a similar survival and probability to develop recurrences.

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