## AB022. PS01.04. Myasthenia gravis in thymic epithelial tumors incidence and prognosis

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**Background**: The prognostic effect of myasthenia gravis (MG) is controversial. In contrast to traditional belief of negative effect, a recent study from Chinese Database reported superior survival for patients with MG. The aim of this study was to study the significance of MG presentation overall survival (OS) and compare to that of no myasthenia gravis (NMG).

**Methods:** This is a retrospective analysis of patients from our institution from 1975 to 2015. Patients with a minimum follow-up of 24 months were eligible. Factors analyzed for survival significance include patient factors (age, gender, race) and tumor factors (tumor size, histology grade, Masaoka stage), and surgical resection status. Survival was estimated from the time of diagnosis to the last contact.



**Results:** A total of 733 consecutive patients were identified from the database: 130 (17.7%) patients with MG at diagnosis [24.0% (126/523) for thymoma, 1.9% (4/210) for thymic carcinoma]. MG was a significant factor for OS (P=0.011), favoring MG (HR =0.64). The median survivals, 5-/10-year OS rates were 192 months (95% CI, 148–244) and 90.4% (95% CI, 84.9–96.3)/71.1% (95% CI, 61.7–82.0), and 131 months (95% CI, 111–164), 75.4% (95% CI, 71.1–80.0), 51.1% (95% CI, 45.1–58.0), for MG and NMG groups, respectively. There were significant differences in age (P=1.75e-5), gender (P=0.048), stage (P=9.066e-06) and WHO grade of tumor (P=4.041e-10), no significant difference in race between MG and NMG groups.

**Conclusions:** MG is associated with superior survival in patients with thymic epithelial tumors (TET). This is similar to results of a modern series from China, differs from our traditional belief. Future study will study whether treatment response of MG is associated with survival.

Keywords: Thymic epithelial tumor (TET); myasthenia gravis (MG)

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