common ICIs were pembrolizumab, nivolumab, followed by ipilimumab-nivolumab, ipilimumab, and durvalumab. 81 patients of 218 received antibiotics within 6 months of receiving checkpoint inhibitors. Of antibiotics administered, the most common classes were cephalosporins (86%), fluoroquinolones (28%), and glycopeptides (23%) with substantial overlap. Overall survival and progression-free survival was improved for those who did not receive antibiotics prior to ICI therapy (median OS 6.5 vs. 2.3 years, HR 0.36, p<0.0001; median PFS 1.1 vs 0.5 years, HR 0.6, p=0.0027) (figure 1 and 2 respectively). Linear regression showed no significant association between antibiotic use prior to ICI use and age, sex, race, ICI type, or ECOG status.

Conclusions This data adds to the growing body of knowledge that the use of antibiotics prior to ICI treatment leads to inferior overall and progression-free survival.

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775 RARE CASE REPORTS ON THYMIC CARCINOMA PATIENTS TREATED WITH PEMBROLIZUMAB

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Background Thymomas and thymic carcinomas (TC) are intrathoracic malignancies that, although rare, represent the most common anterior mediastinal tumors in adults (comprising approximately 0.2-1.5% of all malignancies).[1] Recent accumulating evidence on immune checkpoint pathways suggests that immunotherapy might be a promising therapeutic option for refractory TCs.[2] We herein report two cases of a pembrolizumab-treated TC patient.

Methods Immunotherapy is accessible through individual permission for the treatment of TC in Hungary. We retrospectively collected data of two TC patients treated with pembrolizumab in one institute.

Results The first patient was a 66-year-old woman. Squamous cell TC was diagnosed in her left parasternal region. She was a former smoker, had no history of autoimmune disorders, and had no associated symptoms at the time of diagnosis. She underwent open thymectomy. The histology proved type C (WHO classification) TC with a pathological TNM of T1aN0 and microscopic-positive margins. Consequently, the patient received 60 Gy of postoperative radiotherapy. Nine months after the surgery local recurrence and multiple hepatic metastases appeared. Six cycles of chemotherapy (ADOC regimen) were introduced as first-line systemic therapy which resulted in stable disease (SD) for 8 months. Pembrolizumab was administered as second-line treatment (200 mg every 3 weeks) for 6 cycles. The best result was SD. Due to progression, third-line docetaxel treatment was initiated. Shortly after, ptosis and diplopia developed. Myasthenia gravis was diagnosed, and third-line chemotherapy was judged ineffective. The second patient was a 63-year-old man. He was diagnosed with unresectable TC and treated with chemotherapy (ADOC regimen) up-front. After six cycles the tumor regressed, and surgery was performed with R2 result. Postoperatively, the patient was given six cycles of chemotherapy (cisplatin/etoposide) and radiotherapy. Six months later local progression was detected and pembrolizumab was commenced. Eight cycles of pembrolizumab produced SD as best response. No immune-related adverse effects (irAEs) were detected. After progression Sunitinib therapy was started. In both cases, additional immunohistochemistry investigations were performed.

Conclusions In the literature, there is no phase 3 trial on immune-checkpoint inhibitor (ICI) therapy of TC. Phase 2 trials reported promising results with pembrolizumab.[3 4] However, there are conflicting results with other ICIs.[5] Before starting, it is important to rule out autoimmune disorders to evade serious, even life-threatening immune-complications. The high likelihood of irAEs in TC also underpin the importance of predictive biomarkers. Further studies are required to evaluate the efficacy and safety of immunotherapy in TC.

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776 A ROLE FOR IMMUNE CHECKPOINT BLOCKADE TO ENHANCE T CELL-MEDIATED RESPONSES IN COMBINATION WITH CHEMOTHERAPY IN OESOPHAGEAL ADENOCARCINOMA

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Background Combining immune checkpoint inhibitors (ICIs) with immunogenic chemotherapies is a promising approach in