

## AB003. Unexpected long-lasting control of thymic carcinoma treated with anti-PD1 and oral etoposide: a real-life experience of combination therapy

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**Background:** Thymic epithelial tumors (TETs) are rare malignancies. Surgery is the only curative treatment for long-term survival. Patients with locally advanced or metastatic disease should be considered for multimodality treatment with chemotherapy, surgery and radiotherapy. In the last years the immune checkpoint inhibitors (ICIs) have been introduced with success in the therapeutic scenario of thoracic malignancies; however, since the potential association of TETs with autoimmune disorders is well acknowledged, the administration of ICIs has to be carefully evaluated for each patient, as shown in the clinical experience at the University of Naples Federico II, here reported.

**Case Description:** In 2004, a 33-year-old Caucasian

man, was diagnosed with unresectable thymic carcinoma (Masaoka-Koga stage IVA). The patient was treated with several chemotherapy agents, target therapies and radiotherapy. Because of worsening clinical conditions and occurrence of respiratory distress, in 2018, the patient underwent fibro-bronchoscopy with biopsy. Histological examination revealed the presence of a squamous-cell carcinoma with immunohistochemistry profile coherent with a thymic origin and a PDL-1 expression >50%, thus started anti-PD1 therapy (pembrolizumab 200 mg every 3 weeks). After two cycles, due to the worsening of the clinical conditions, metronomic oral Etoposide was added, at dosage of 100 mg/daily 3 week on/1 week off. To highlight that during treatment, for the onset of recurrent respiratory and digestive infections, Good's syndrome (GS) diagnosis was done. Patient started treatment with intravenous immunoglobulins (IVIgG) 30 mg once a month, obtaining a reduction of the infectious episodes. The combination therapy is still ongoing after 5 years from the start, achieving an impressive long-lasting control disease and a remarkable improvement in patient's clinical conditions without any relevant adverse effects.

**Conclusions:** This is the first report about efficacy and safety of the combination therapy of anti-PD1 and oral etoposide in a patient with advanced thymic carcinoma, complicated by GS, then managed with IgG infusion. The onset of GS as potential autoimmune side event of anti-PD1 therapy need to be further elucidated. Since TETs are very rare tumors and clinical studies are difficult to conduct, case reports about the use of new successfully therapeutic strategies must be carefully documented and published.

**Keywords:** Anti-PD1; etoposide; thymic carcinoma; case report

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### Footnote

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*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All procedures

performed in this study were in accordance with the ethical standards of the Ethical Committee of University of Naples Federico II and with the Helsinki Declaration (as revised in 2013). Written informed consent was obtained from the patient for the publication of this case report. A copy of the written consent is available for review by the editorial office of this journal.

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