

EARLY ACCESS NIVOLUMAB EXPERIENCE: PAMUKKALE UNIVERSITY MEDICAL ONCOLOGY DEPARTMENT

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Introduction - Purpose : Checkpoint inhibitors, immunomodulatory antibodies that are used for enhance the immune system, have substantially improved the prognosis for patients with advanced stage disease. Nivolumab is a human monoclonal antibody that blocks the interaction between PD-1 and its ligands, PD-L1 and PD-L2. Nivolumab is in IgG4 kappa immunoglobulin structure.

Methods - Tools : We aimed to discuss the general characteristics and treatment course of patients with malignant melanoma, non-small cell lung carcinoma (squamous or adenocarcinoma) and renal cell carcinoma which treated with nivolumab.

Findings : We practiced nivolumab therapy in twenty seven patients of three women and twenty four men. 10 renal cell carcinoma patients, 8 squamous NSCLC patients, 8 malignant melanoma patients and one adenocarcinoma NSCLC patient were treated with nivolumab. Nivolumab was administered at a dose of 3 mg / kg every 2 weeks. Patients received a total of 427 cycles. The median cycle number was 17 (borders 1-37). Cancer related fatigue and loss of appetite were first corrected symptoms. We observed that in some of the well-responded patients, there was an increase of about 10 kg weight in addition to the clinical healing. Immune related side effects occurred in 3 patients, grade 4 hepatotoxicity in one patient, hypopigmentation in one patient and mixed type peripheral neuropathy in one patient. It was thought that the taxane-based regimen may also have an effect, in which the peripheral neuropathy patient had been previously taken. Three patients developed secondary malignancies under treatment. A patient with squamous cell lung carcinoma developed colonic adenocarcinoma, a squamous skin cancer in a melanoma patient, and a sarcomatoid lung carcinoma in a patient with renal cell carcinoma. During treatment, 12 patients died due to disease progression. It was not observed due to toxicity.

Discussion : With regard to anti-PD-1 / PD-L1 inhibitors, there is no definitive data on how long the treatment should be continued, but it is currently being used until to the progression. In many types of cancer, it is predicted that in the near future immunotherapy will prolong survival and even cure in some patient groups. However, the fact that our patients have secondary cancer development under treatment makes the issue of curing with immunotherapy controversial and suggests that we are at the beginning of the journey. Our experience is that nivolumab is a well-tolerated agent.

Keywords: immune checkpoint inhibitors, nivolumab, immune-related adverse effect