

35. SUCCESSFUL THREE-YEAR MELANOMA TREATMENT AFTER NIVOLUMAB FAILURE

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BACKGROUND: Since approval of kinase inhibitors and programmed death receptor-1 (PD-1) and CTLA-4 blocking antibody, therapeutic approach to treat metastatic melanoma have demonstrated better efficacy than traditional chemotherapy. While kinase inhibitors target specific mutations and have demonstrated response rate around 50%, resistance to treatment ultimately develops. Treatment with check point inhibitor can produce durable response which translated into long term survival, but the key question is the marker(s) to predict response is not clear yet. Another questions are: whether both drugs have equal efficacy, target similar domain on PD-1, and possible cross resistance. Here, we report a melanoma patient who clearly progressed after 10 doses of nivolumab. The treatment was changed to pembrolizumab with good response.

CASE REPORT: We report a case of a 76-year-old man with aggressive metastatic melanoma and a 3-year history of treatment. After lymph node dissection in Dec 2013 for a T4bN3 disease of neck, (BRAF V600E positive), he was planned for post-operative radiation. Unfortunately, his malignancy recurred very quickly in Jan 2014 with dermal infiltration and subcutaneous nodule. Initial treatment with vemurafenib was not tolerated. Subsequently, he was given trametinib plus dabrafenib with some response, then melanoma recurred after 10 months. Ipilimumab was started, patient tolerated it well, but disease progressed. Nivolumab was started, but disease progressed with lymph nodes, liver, lung and spleen metastasis. While there is no data, we decided to try pembrolizumab and patient showed a significant response, with disappearing of the metastasis. The only metastatic site that remained was in spleen. Interestingly, biopsy from metastatic lesion in the spleen showed 40% of tumor cells were positive for PD-L1 in the membrane but immune cells were negative. Patient has received a total of 29 cycles of pembrolizumab and is doing well.

CONCLUSION: This case provides an interesting observation of long duration of response of pembrolizumab after failing nivolumab. This could be due to some pharmacological differences between these inhibitors as well as variations of immune cells in the tumor microenvironment. Further study is needed to clarify this issue.