Durable Remissions Associated with anti-CTLA-4 and anti-PD1 Checkpoint Inhibitors in a Single Center.

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Background
Melanoma
- Treatment with the anti-CTLA-4 checkpoint inhibitor ipilimumab and anti-PD1 nivolumab are associated with durable remissions in patients with solid tumors.
- We describe the durable remissions associated with these agents.
- There were 19 patients treated with ipilimumab and 25 patients treated with nivolumab and 1 patient was treated with combination of ipilimumab and nivolumab. In this analysis we included patients with metastatic malignant melanoma, non-small cell lung cancer (NSCLC), renal cell carcinoma and Hodgkin's disease.

Methods
- The purpose of this analysis is to describe the durable remissions associated with ipilimumab and nivolumab on a variety of solid tumors treated at a single centre.
- This is a retrospective data analysis from 45 patients treated either in an expanded access programme, clinical trial setting or post-registration protocol.

Results
- Total of 45 patients
  - Gender (30 males/15 females).
  - Nivolumab group = 25 patients
    - Metastatic malignant melanoma = 3
    - Non-small cell lung cancer = 18
    - Renal cell carcinoma = 2
    - Hodgkin's disease = 2
  - Ipilimumab group = 19 patients
    - Metastatic malignant melanoma = 19
  - Ipilimumab + Nivolumab
    - Non-small cell lung cancer = 1

Number of cycles
- Nivolumab 167 cycles (median = 4, range 1-16)
- Ipilimumab 64 cycles  (median = 4 cycles, range 1-4)

Metastatic malignant melanoma
- There were 5 responses out 20 patients (25%) treated with ipilimumab including 3 patients with durable complete response (CR) of 74+, 46+ and 34+ months.
- One metastatic malignant melanoma patient treated with nivolumab has an ongoing partial response (PR) of 23 months.

Non-small cell lung cancer
- In total 6 responses were documented among the 18 patients treated with nivolumab (33%). One patient had a durable CR of 10+ months, a second patient had a durable PR of 12+ months.

Renal cell carcinoma
- One patient treated with nivolumab has an ongoing PR of 13+ months.

Hodgkin's disease
- Two heavily pretreated patients with Hodgkin’s disease treated with nivolumab have very good PRs of 14+ and 13+ months.

Conclusions
- Anti-PD1 and anti-CTLA4 antibody treatment is associated with durable remissions in patients with a variety of solid tumors.
- Among our patients durable remissions and durable responses were documented in pretreated patients with metastatic malignant melanoma, NSCLC, renal cell carcinoma and Hodgkin’s disease.