MP14-01

Predictive impact of an early change in serum C-reactive protein levels in nivolumab therapy for metastatic renal cell carcinoma

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Objective

- To investigate the predictive impact of a change in serum CRP levels during the early phase of nivolumab therapy for mRCC.

Patients and Methods

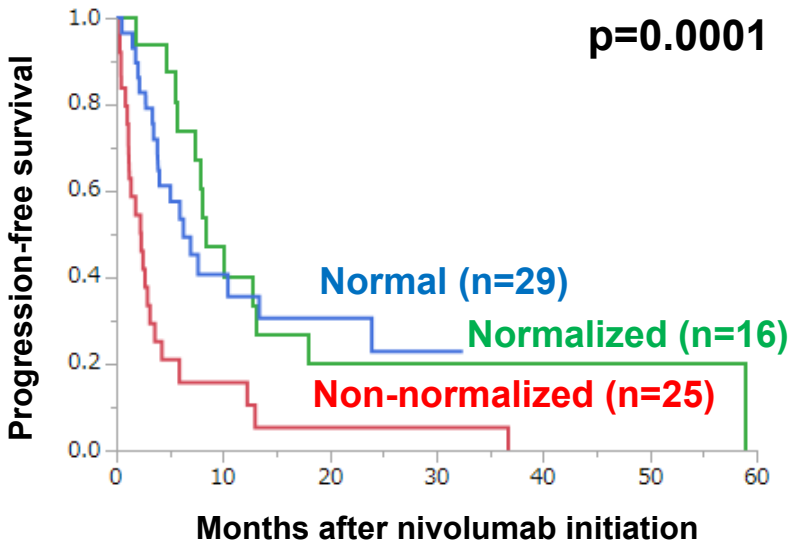
- **Patients**
  - 70 mRCC patients treated with nivolumab monotherapy as second- or later-line therapy

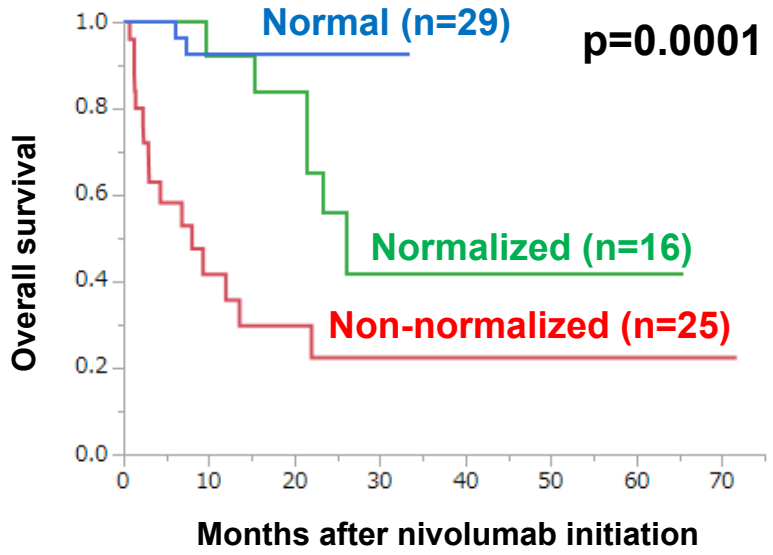
- **Early CRP change**
  - Change within the initial 3 months after nivolumab initiation

Group	Pretreatment	Within the initial 3 months
Normal	<1 mg/dL	-
Normalized	≥ 1 mg/dL	<1 mg/dL
Non-normalized	≥ 1 mg/dL	≥ 1 mg/dL

Results and Conclusions

✓ PFS and OS according to CRP change





✓ Multivariate analyses for PFS and OS

Variable	PFS		OS	
	HR (95% CI)	p	HR (95% CI)	p
Age, years				
≥65	0.67 (0.35-1.31)	0.236		
Histopathology				
Clear-cell carcinoma	0.56 (0.28-1.18)	0.123		
IMDC risk				
Poor	2.01 (1.01-3.99)	0.0479	2.27 (0.90-5.97)	0.0808
Liver metastasis status				
Presence			3.40 (1.30-8.41)	0.0138
CRP change		0.0025		0.0009
Normalized (ref. normal)	0.67 (0.30-1.40)	0.287	3.91 (0.89-26.9)	0.0727
Non-normalized (ref. normal)	2.33 (1.18-4.61)	0.0153	11.0 (2.84-63.0)	0.0002

Conclusions

- The CRP change during the early phase of nivolumab was significantly associated with mRCC patient survival.
- The early CRP change may be used for outcome prediction of nivolumab.