

Immunotherapy Rechallenge Successful in Some Cancer Patients

Aug 10, 2018

Patients treated with anti-programmed death 1 (PD-1) or anti-programmed death ligand 1 (PD-L1) inhibitors in clinical trials were successfully retreated with the inhibitors after discontinuing the treatment per trial protocol, according to the results of a study [published](#) in the *European Journal of Cancer*.

“Rechallenge of anti-PD-1/anti-PD-L1 after a planned interruption should be resumed if disease progression occurs,” Alice Bernard-Tessier, of the Université Paris-Saclay in Villejuif, France, told *Cancer Network*. “Prospective studies are needed to investigate the rechallenge efficacy.”

Long-term responders to immune checkpoint inhibition have been observed in clinical trials of several tumor types. However, the “optimal duration of anti-PD-1/anti-PD-L1 in responding patients and management of progression after a planned interruption are still unclear,” Bernard-Tessier said.

To further explore optimal duration, the researchers reported on 13 patients who discontinued immune checkpoint inhibition in phase I clinical trials per trial protocol, while experiencing tumor-controlled disease. Among these patients, five had colorectal microsatellite instability-high disease, three had urothelial carcinoma, two had melanoma, two had non-small-cell lung cancer, and one had triple-negative breast cancer.

Patients were treated for a median of 1 year. During that time, 1 patient had complete response (8%), 10 (77%) had partial response, and two (15%) had stable disease. The median progression-free survival from first infusion to progression was 24.4 months.

“Among 13 long-responder patients who discontinued anti-PD-1/anti-PD-L1 as per protocol, 8 were rechallenged for disease progression,” Bernard-Tessier said.

Progression occurred after a median of 11.7 months. Four patients had disease in the initial tumor, and four had new lesions. During rechallenge, patients were given the same treatment as initially given on the clinical trial.

“Rechallenge seems to be associated with shorter progression-free survival, even though 25% of patients experienced partial response,” Bernard-Tessier noted.

Two patients achieved a partial response with rechallenge, and six patients achieved stable disease. Median progression-free survival with rechallenge was 12.9 months. No grade 3/4 adverse events occurred during the study period.

“Although patient numbers are too small to draw definitive conclusions, the rechallenge of anti-PD-L1 in patients after treatment completion with the same immunotherapy appears to be associated with lower response rates and shorter responses compared with the first induction phase,” Bernard-Tessier and colleagues wrote in the study. “However, with 25% [having] partial response, our data suggest that anti-PD-L1 therapy should be resumed if progression occurs after a planned anti-PD-L1 interruption.”