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Antagonist Antibodies to PD-1 and B7-H1 (PD-L1) in the Treatment of Advanced Human Cancer

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We wish to thank Radvanyi and colleagues for their excellent letter that documents the strong rationale to combine PD-1 signaling blockade with adoptively transferred antigen-specific T cells or ex vivo expanded tumor infiltrating lymphocytes (TIL). Our review was not meant to be comprehensive and space limitations precluded mention of all potentially relevant combinations with antagonists of PD-1 signaling. In fact, the first experimental data showing the application of anti-PD-L1 antibody for the treatment of cancer were generated in an adoptive T-cell transfer model (1). Very recent data from the phase I trial of nivolumab and ipilimumab in metastatic melanoma provided evidence for the hypothesis that combining PD-1 signaling blockade with other immunotherapy agents or approaches will improve treatment outcome (2). One of our patients on the latter trial, whose disease progressed on the combination of nivolumab and ipilimumab, subsequently responded to TIL therapy administered at another center. Although only an anecdote, it suggests a relevant role for cell therapies even in this era of other highly active immune-modulating agents (2). We look forward to the clinical data from trials combining adoptive cell therapy with anti-PD1 or anti-PD-L1.

References:

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Disclosure of Potential Conflicts of Interest:

M. Sznol is a consultant/advisory board member of Bristol-Myers Squibb, Genesis Biopharma, and MedImmune. No potential conflicts of interest were disclosed by the other author.