

P103 Re-treatment with immune checkpoint inhibitors in renal cell carcinoma: A systematic review and meta-analysis

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Introduction & Objectives: The use of immune checkpoint inhibitors (ICIs) as a front-line treatment for metastatic renal cell carcinoma (RCC) has significantly improved patient outcomes. The aim of this systematic review and meta-analysis was to assess the efficacy or lack thereof of immunotherapy after prior use of anti-PD1/PD-L1 or/and anti-CTLA monoclonal antibodies in the second-line setting.

Materials & Methods: Electronic databases, including PubMed, EMBASE, Medline, Web of Science, and Cochrane Library, were comprehensively searched from inception to July 2022. Objective response rates (ORR), progression-free survival (PFS), and \geq grade 3 adverse events (AEs) were assessed in the meta-analysis, along with corresponding 95% confidence intervals (CIs).

Results: Ten studies which contained a total of 500 patients were included. The pooled ORR using the Freeman-Tukey double arcsine transformation was calculated equal to 0.19 (95% CI: 0.10, 0.31), with I-squared equal to 88.30%. The pooled PFS was found equal to 5.655 months (95% CI: 4.120, 7.762 months) with I-squared equal to 76.9%. There were \geq grade 3 AEs noted in 25% of patients (95% CI: 14, 37), with I-squared equal to 88.79%.

Conclusions: This meta-analysis on different second-line ICI-containing therapies in ICI-pretreated metastatic RCC patients supports a modest efficacy and tolerable toxicity.