Safety Profile of Nivolumab for Advanced Refractory Esophageal and Gastro-esophageal Junction Cancer: Systemic Review and Meta-Analysis

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Introduction
Recently Nivolumab, a fully human IgG4 monoclonal antibody inhibitor of programmed death-1, was studied as adjuvant treatment for patients with advanced esophageal or gastro-esophageal junction (GEJ) cancer while taking or after taking standard therapy, chemoradiotherapy or surgery. Our study aimed to evaluate the safety profile of Nivolumab for advanced refractory esophageal or GEJ cancer.

Methods
MEDLINE, the Cochrane Library, and EMBASE were searched up to 6/1/2021.

Keywords used either alone or in combination:
Nivolumab, esophageal cancer, esophagus cancer.

Clinical trials that utilized Nivolumab for refractory esophageal cancer were included.

The primary outcome was adverse effects from Nivolumab, according to Common Terminology Criteria for Adverse Events v4.0.

The rate of each event was calculated through meta-analysis. Data were analyzed with STATA version 16.0

Results
Figure. Forest plot

Discussion
In our meta-analysis, the incidence of side effects from Nivolumab was similar to that seen in treatment of other types of solid tumors, which indicated tolerability and feasibility of treatment. However, more studies are warranted to validate the safety profile of nivolumab.

References