Background and Importance

Established treatment for advanced, recurrent or unresectable oesophageal squamous cell cancer (ESCC) includes systemic therapy, definitive chemotherapy, and/or palliative treatment depending on the stage of the cancer. These drugs increase the therapeutic options available.

Aim and Objectives

To determine if nivolumab, pembrolizumab and camrelizumab can be considered equivalent second-line therapeutic alternatives (ATE) by using a common comparator, for patients with unresectable and/or advanced ESCC.

Material and Methods

- A bibliographic search was conducted to select phase III randomised clinical trials of second-line treatments for ESCC.
- Indirect comparisons were made by using the Bucher method using nivolumab as the reference drug and overall survival (OS) as the main variable.
- The maximum acceptable difference as a clinical non-inferiority standard Delta (Δ), and its inverse were set at 0.65 and 1.54, respectively. They were established by ESMO-Magnitude of Clinical Benefit Scale.

Results

ATE Guide: Type A therapeutic positioning

The HR of OS for both drugs is within the limits of Δ and its 95% CI does not exceed the neutral value and the equivalence margin

Limitations found: chemotherapy used as comparator:
- ATRACCTION-3: nivolumab vs paclitaxel/docetaxel
- KEYNOTE-181: pembrolizumab vs paclitaxel/docetaxel/irinotecan
- ESCORT: camrelizumab vs docetaxel/irinotecan

The results of the comparison with nivolumab were adjusted pembrolizumab
HR=1(0.738–1.355) and adjusted camrelizumab
HR=0.922(0.694–1.225)

Keynote-181 study divides OS in patients with PDL-1>10%, with ESCC and in all patients, with higher statistical significance (p<0.008) for the population with ESCC

Bucher method:
HR values (95% CI) were obtained for OS:nivolumab 0.77(0.62-0.96), pembrolizumab 0.77(0.63-0.96) and camrelizumab 0.71(0.57-0.87)

Conclusion and Relevance

Nivolumab, pembrolizumab and camrelizumab could be considered ATE. It is necessary to take into account that there is a certain degree of uncertainty in this positioning result.