understood in the elderly. We sought to determine survival outcomes for patients with metastatic GEC relative to age.

Methods: A retrospective database analysis (2007-2019) was performed with patients separated by age: 65-74y (old), and ≥75y (old-old) with survival for those receiving CTx analysed. Multivariate (MVA) Cox proportional hazard regression modelling was performed with adjustment for age, gender, Charlson co-morbidity index (CCI), ethnicity, histology, location of tumour and ECOG performance status (PS).

Results: 307 patients were included: 198 'old' and 109 'old-old'. The median age was 70 v 79.5y ($p<0.001$). There were no significant differences relative to gender, ethnicity, BMI and PS. Median CCI for 'old' was 0 (0,11) and 1 (0,8) for 'old-old' ($p<0.001$). Adenocarcinoma was the most common histology in both groups. The primary tumour location was predominately esophageal/AEG1-2 in 'old' (62%) and gastric/AGE3 in 'old-old' patients (52%) ($p=0.022$). 119 (60%) 'old' and 25 (23%) 'old-old' patients received CTx ($p<0.001$). Poor PS was the most common cited rationale for non-receipt of CTx in both 'old' (46%) and 'old-old' patients (36%). Age was the second most common reason in 'old-old' patients (25%) but not considered prohibitive in the 'old' cohort ($p<0.001$). Disease progression lead to CTx discontinuation in 67% (old) and 70% (old-old) patients, whilst toxicity was the reason in 15% and 13% respectively ($p=0.97$). Median PFS was 6.4 (95% CI 5.9-7.6) v 7.5 (95% CI 5.1-11.3) months in 'old' and old-old' respectively ($p=0.69$), whilst median OS was 12.3 (95% CI 10.1-15.5) v 10.4 (95% CI 9-14.6) months respectively ($p=0.0816$). MVA indicated that age did not influence PFS ($p=0.94$) or OS ($p=0.057$).

Conclusions: Whilst treatment with CTx was more common in younger patients, our analysis indicated survival outcomes were comparable with toxicity leading to treatment discontinuation rates similar. This suggests age itself should not predetermine treatment with palliative CTx.

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1407P Patterns of aggravation in gastric cancer patients with peritoneal metastases who underwent paclitaxel-based intraperitoneal therapy

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Background: We have shown promising results of intraperitoneal (ip) paclitaxel (PTX) in combination with systemic chemotherapy for gastric cancer (GC) with peritoneal metastases (PM) at the ESMO annual meeting in 2020 (Abstract 1535P). Of 157 patients (pts), median survival time (MST) was 13.5, and 36.8 mos. for 32 conversion surgery cases. ipPTX could provide significantly longer survival for GC pts with PM than conventional chemotherapy, and there were even several patients with the potential to be cured eventually. We analyzed patterns of aggravation and death in pts who underwent ipPTX to achieve better understanding of the disease and its potential outcomes.

Methods: We excluded cases with metastases other than peritoneal. There were GC 107 pts with PM only that received ipPTX from Feb 2013 to Dec 2020. 64 pts had the primary lesion and 43 pts underwent gastrectomy before ipPTX; their MST was 21.9 and 15.3 mos., respectively.

Results: 83 (78%) out of 107 pts had aggravation. The most frequent site was the peritoneum, 52 pts. 68 pts (64%) died. 38 pts of these deaths were related to PM. 7 pts died of meningitis carcinomatosa. 32 pts out of 64 achieved conversion surgery, their MST was 36.8 mos. Out of the 32 pts, 21 (66%) recurred, which 16 pts related to PM and 1 to meningitis carsinomatosa. 16 pts (50%) died.

Conclusions: ipPTX in combination with systemic chemotherapy provided significantly longer survival than conventional chemotherapy for GC with PM. However, the majority of patients, including the conversion surgery cases, recurred and eventually died due to reaggravated peritoneal metastases. There were mainly two patterns of aggravation, one was resistance to ipPTX which caused multiple intestinal stenosis or obstruction, the other was limited distribution of ipPTX which in time allows for development of extra peritoneal metastases, causing mostly meningitis and rectal stenosis.

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1408P Efficacy of immunotherapy in the first line treatment of advanced upper gastrointestinal tract malignancies: A pooled analysis of randomized clinical trials

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Background: Upper gastrointestinal tract malignancies include cancers of the oesophagus, gastro-esophageal junction and stomach. For the management of advanced disease, chemotherapy remains the primary treatment option in the 1st line, but the use of immune checkpoint inhibitors is a rapidly evolving field of research.

Methods: The volume of data from randomized clinical trials of the use of immunotherapy in upper gastrointestinal malignancies is steadily increasing over the last five years. Thus, we performed a systematic literature search and a pooled analysis of the available data, including both published articles and conference abstracts to identify trials evaluating immune checkpoint inhibitors in the 1st line of upper gastrointestinal malignancies.

Results: We identified overall four randomized trials comparing the addition of immunotherapy vs. standard chemotherapy as 1st line regimen in upper gastrointestinal malignancies. A total of 3561 patients were randomized, 1781 of whom received combination chemotherapy with immunotherapy and 1780 received standardized chemotherapy. The addition of immune checkpoint inhibitors in the first-line has been shown to benefit overall survival of patients compared to chemotherapy alone (HR = 0.81, 95% CI 0.75-0.87, $p<0.00001$) with a reduction in the risk of death by 20%, and up to 30% in a population of patients with CPS> 5%. Progression free survival was also increased by the addition of immunotherapy to chemotherapy (HR = 0.75, 95% CI 0.69 -0.81, $p<0.00001$). Furthermore, the addition of immunotherapy to chemotherapy appears to lead to a 70% increase in objective responses compared to chemotherapy alone.

Conclusions: The above findings pose new bases for the management of advanced upper gastrointestinal malignancies in the 1st line, highlighting the important role of immunotherapy in combination with standard chemotherapy.

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1409P Cost-effectiveness of pembrolizumab plus platinum and fluoropyrimidine-based chemotherapy as first-line treatment of advanced esophageal cancer in the United States

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Background: Pembrolizumab plus cisplatin and 5-fluorourcil (5-FU) has demonstrated superior efficacy and comparable safety compared with cisplatin plus 5-FU as a first-line (1L) treatment for locally advanced unresectable or metastatic carcinoma of the esophagus and gastroesophageal junction adenocarcinoma in a phase III trial (KEYNOTE-590). This study evaluates the cost-effectiveness of pembrolizumab plus chemotherapy vs. alternative treatment options from a US third-party healthcare payer's perspective with a 20% cost-sharing assumption.

Methods: A partitioned survival model containing three health states (progression-free, progressive disease, and death) was developed. Overall survival, progression-free survival, time on treatment, and adverse events were informed by the patient level data from KEYNOTE-590. The blended chemotherapy comparator reflected the current treatment landscape in the US and was assumed to have the same efficacy and safety as cisplatin plus 5-FU. Health utilities were estimated using linear mixed-effects models based on EQ-5D-5L data collected from the trial. Resource use and cost data were based on US standard sources and literature. The model reported costs, life years (LY), quality-adjusted life years (QALY), and incremental cost-effectiveness ratio (ICER). Sensitivity and scenario analyses were conducted to assess the robustness of the results. All outcomes and costs were discounted by 3% annually.

Results: Over a 40-year time horizon, pembrolizumab plus cisplatin and 5-FU resulted in a mean gain of 0.86 LY and 0.77 QALY with additional costs of $91,020vs. cisplatin plus 5-FU, leading to an ICER of $118,875/QALY. The results were similar with pembrolizumab plus alternative chemotherapy as the intervention or with blended chemotherapy as the comparator. Model results were most sensitive to the choice of overall survival extrapolation approach.