are overall survival (OS) and progression-free survival (PFS) per RECIST v1.1 by BICR. Secondary endpoints are PFS, objective response rate (ORR), disease control rate (DCR), duration of response (DOR), and time to progression (TTP) per modified RECIST by BICR; ORR, DCR, DOR, and TTP per RECIST v1.1 by BICR; and safety. Exploratory endpoints are PFS, ORR, DCR, DOR, TTP and time from randomization to second/subsequent progression (PFS2) per RECIST v1.1 by investigator review; identification of molecular biomarkers; and health-related quality of life (EORTC QLQ-C30, EORTC QLQ-HCC18, and EQ-5D-5L). Recruitment for this study began in April 2020.

Acknowledgement: We thank the patients and their families and caregivers for participating in this trial, and all investigators and site personnel. Medical writing and editorial assistance were provided by Arman Nabatiyan and Jemimah Walker of the ApotheCom pembrolizumab team (Yardley, PA, USA). This assistance was funded by Merck Sharp & Dohme, a subsidiary of Merck & Co, Kenilworth, NJ, USA.

Legal entity responsible for the study: Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

Funding: Funding for this research was provided by Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

Disclosure: Sadahisa Ogasawara has an affiliation with Grant/Research Support: Eisai; Consultant: Eisai, Merck & Co., In.

https://doi.org/10.1016/j.annonc.2020.04.189

P-108 Perioperative chemotherapy in locally advanced, resectable gastric cancer: A single-center experience

M. Vilaca[1], D. Silva[1], D. Magalhães[1], E. Cipriano[2], A. Tavares[1], F. Estevinho[2], H. Magalhães[2]

[1]Hospital Pedro Hispano, Matosinhos, Portugal; [2]Hospital Pedro Hispano, Matosinhos Local Health Unit, Matosinhos, Portugal

Background: Gastric cancer (GC) is the fifth most common cancer, but only 20% have resectable disease at diagnosis. Perioperative chemotherapy decreases local and distant relapses and improves survival rates.

Methods: This retrospective observational study included all patients admitted to the oncology department between January 2016 and December 2019 with locally advanced gastric GC, who submitted to perioperative chemotherapy.

Results: We included 43 patients with locally advanced GC (37 from body and antrum; 6 from the gastroesophageal junction). 79% were male with a median age of 64 years old (59-72) and 79% had an ECOG 1 at admission. Histologically, 56% were intestinal type, 35% were diffuse type and 9% mixed type. Clinical staging at admission was stage III in 32,6%, stage IIB in 14%, stage IIA in 14%, stage IB in 4,7% and IVA in 4,7%. The perioperative chemotherapy regime used was FLOT in 42%, followed by EOX in 30,2%, FOLFOX 14%, and ECF 14%. 30% of patients had G3 toxicity related to chemotherapy; haematological toxicity was the main cause (febrile neutropenia was present in 2 patients in the FLOT subgroup), followed by G3 gastrointestinal toxicity (n=2 in the FLOT subgroup). 1 patient had G4 toxicity with gastric perforation in the FLOT subgroup in the post-operative setting. 63% of the patients were submitted to total gastrectomy, 30% to partial gastrectomy. 7% are still waiting for surgery. 32,6% were in pathological staging I, 23,3% in stage II, 20,9% in stage III and 9,3% in stage IV. In 6 patients we could not access the pathological staging. Only 1 patient in the FLOT subgroup had a complete response to chemotherapy. Most of the patients had a partial response (32,6%), 18,6% with a minimum response; in 46,5% response was not described. 65% of patients resumed and completed the initial chemotherapy regimen. During follow-up, 19% of patients recurred with local or distant metastasis (1 in FLOT subgroup and 7 in EOX subgroup). 8 ended up dying 10 months after the initial diagnosis (6 because of disease progression; 4 due to other complications). The overall survival was 16 months in this population.

Conclusion: Early diagnosis and multimodal treatment are of paramount importance in the survival of GC patients. This work had limitations given the small number of patients included, the short follow-up and the heterogeneity of the population.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: The presenting author has declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2020.04.190

P-109 Global mortality for biliary tract cancer

H. Wang, B. Yu, Z. Jiang, K. Baria

AstraZeneca, Gaithersburg, United States

Background: Biliary Tract Cancer (BTC) represents a high disease burden due to late diagnosis, poor prognosis, and limited treatment options. Current knowledge is limited regarding the global mortality of various subtypes of BTC and how that may have changed during the past decade.

Methods: BTC mortality was evaluated using the latest World Health Organization (WHO) Mortality Database. Mortality was examined in patients ≥20 years who were diagnosed with BTC as identified by ICD-10 and evaluated by subtype (extrahepatic cholangiocarcinoma [ECC], intrahepatic cholangiocarcinoma [ICC], gall bladder cancer [GBC], and ampulla of Vater cancer [AVC]), gender, geography, and age. Data are reported for selected countries that had ≥5 years of data on both patients with BTC and their total populations between 2006 and 2016. Age-standardized mortality rates (ASR; per 100,000 person-years) with standard error (SE) were calculated using the latest world standard population. Temporal trends of total BTC were described and estimates of average annual percent change (AAPC) were calculated for each country.

Results: There were 39 Asia-Pacific and European countries with data that met the criteria; of those, the highest mortality rate for BTC overall was observed for patients in the Republic of Korea, both < 75 and ≥75 years (ASR=12.99 and ASR=130.00, respectively). The lowest mortality rate was in Georgia and Kyrgyzstan for patients < 75 years (ASR=2.07) and in the Republic of Moldova for patients ≥75 years (ASR=9.27). An assessment of regional differences in the UK revealed that patients in Northern Ireland and Scotland had higher mortality rates than patients in England and Wales. As is typical of most cancers, elderly patients had a higher mortality rate than younger patients: the highest relative mortality rate (RMR; reference < 75 years) between the 2 age groups was in Japan (20.43) and the lowest RMR was in Kyrgyzstan (6.61). Mortality rates increased overtime for 25 out of 39 countries. The highest increase in mortality was seen in Lithuania (AAPC=4.65%). Of the BTC subtypes, ICC showed the highest mortality in 26 countries, GBC in 12 countries, and ECC had the highest mortality rate in Japan. Mortality rates for most subtypes were evenly distributed between sexes or were higher for males in some cases, but GBC mortality rates were higher in females in most countries.

Conclusion: Though a relatively rare diagnosis in many countries, the mortality rate of BTC is high and is exponentially higher in elderly patients. Higher BTC mortality rates coincide with previously reported higher incidence in certain geographic areas, particularly in Japan. These reported mortality rates and the overall increases in mortality rates make it clear that a high unmet need remains for improved treatment for BTC.

Editorial acknowledgement: Medical writing support, which was in accordance with Good Publication Practice (GPP3) guidelines, was provided by Jubilee Stewart, PhD of Parexel (Hackensack, NJ, USA).

Legal entity responsible for the study: AstraZeneca.

Funding: AstraZeneca.

Disclosure: Huifen Wang has an affiliation with Financial/Material Support: GSK - current employer, AstraZeneca - past employer when this work was conducted, Pfizer - spouse's employer.

https://doi.org/10.1016/j.annonc.2020.04.191

P-110 Prediction of peritoneal recurrence in patients with gastric cancer: A multicenter study

T. Kus[1], F. Kose[2], G. Aktas[1], U. Yalcintas[3], A. Sedef[4], H. Cinkir[1], M. Dirikoc[5], G. Akkus[6], N. Ozdemir[7]

[1]Gaziantep University, Gaziantep, Turkey; [2]Baskent University, Adana, Turkey; [3]Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital, Ankara, Turkey; [4]Tarsus Medical Park Hospital, Mersin, Turkey; [5]T.C. Sağlık Bakanlığı Ankara Şehir Hastanesi, Ankara, Turkey; [6]Sutcuimam University, Kahramanmaras, Turkey; [7]Ankara Yıldırım Beyazıt University Department of Biostatistics, Ankara, Turkey

Background: The peritoneum is the common recurrence site of gastric cancer (GC) presenting with worse survival. Although some predictive clinicopathological factors were determined, comprehensive assessment of peritoneal recurrence risk prediction for patients treated with adjuvant chemotherapy (CR) or chemoradiotherapy (CRT) after surgery is lacking. We aimed to predict peritoneal recurrence and to develop a new scoring model in GC.

Methods: This retrospective study included 274 GC patients who presented with recurrence after curative gastrectomy followed by adjuvant chemotherapy (CT) or chemoradiotherapy (CRT). Risk factors for peritoneal recurrence were analyzed using the following parameters: age, gender, tumor location and characteristics, and differences between treatment modalities. All parameters were assessed by binary logistic regression analysis to compare the patients with and without peritoneal recurrence. Then, a new risk scoring model was developed.

Results: Peritoneal recurrence was observed in 115 (44.1%) patients. Peritoneal recurrence was higher in female gender (Odds ratio [OR]:1.93;1.07-3.49, P=0.030, 1 point), T4a-b stage (OR:2.47;1.14-5.36, P=0.022, 1 point), poor/undifferentiated (OR:2.04;1.31-4.06, P=0.004, 1 point), and signet-cell carcinoma (OR:2.04;1.04-4.02, P=0.038, 1 point) after being adjusted for resection and dissection types. The risk scoring model was developed using the related parameters: peritoneal recurrence rates were 24.6%, 42.6%, and 71.4% for group 1 (0 point), group 2 (1-2 points), and group 3 (3-4 points), respectively.

Conclusion: Female gender, T4 tumor stage, undifferentiated histopathology, and signet cell type had a tendency to peritoneal recurrence after being adjusted for treatment modalities. Patients with 3 or 4 risk factors had an 8.8 fold increased risk for the development of peritoneal recurrence.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: The first author and the presenting author have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2020.04.192