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Systemic chemotherapy for gastro-oesophagogastric junction adenocarcinoma and stomach adenocarcinoma in a metastatic setting

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Gastro-oesophageal (GE) cancers are a heterogeneous disease that traditionally have been approached as a monolith. Data regarding the benefit of systemic chemotherapy among the anatomical, histological and molecular subgroups of GE cancers are sparse. The authors of the recent article 'Single-institute comparison of the efficacy of systemic chemotherapy for oesophagogastric junction adenocarcinoma and stomach adenocarcinoma in a metastatic setting' should be commended for publishing their valuable data.[1] We do, however. have a few critical observations.

A key question the authors sought to answer was whether tumour location has an impact on the effectiveness of the particular chemotherapy regimen as is seen in colon cancer. 47.5% of patients with GE junction tumours (29/61) had diffuse histology in this paper. This is unusually high for GE junction tumours reported in the USA, and we wish to inquire if this cohort is comparable to other published cohorts in Japan. We believe the high representation of diffuse histology in GE junction tumours has impacted the conclusions of this paper.

Data from The Cancer Genome Atlas Programme (TCGA) and Asian Cancer Research Group (ACRG) show higher concentrations of 'genomically stable' (GS) (TCGA subgroup) and 'Epithelial to Mesenchymal Transition' (EMT) (ACRG subgroup) in the distal gastric location.[2 3] In their respective cohorts, these subgroups had the worst prognosis. Differential sensitivity of these subgroups to front-line chemotherapy might explain the poor outcomes and should be investigated further.

In the absence of international consensus regarding molecular classification, histology remains important. GS and EMT subgroups are enriched in diffuse gastric cancers which in turn are concentrated in the distal stomach. This data should be taken into consideration when answering the critical question of chemotherapy effectiveness based on tumour location. Lastly, the role of other chemotherapy agents such as taxanes in the first-line treatment of distal gastric cancers should be explored further in light of recent data that point towards better efficacy of docetaxel containing chemotherapy regimen for diffuse gastric cancers in the perioperative setting.[4]

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REFERENCES

1 Nakayama I, Takahari D, Wakatsuki T, *et al*. Single-institute comparison of the efficacy of systemic chemotherapy for oesophagogastric junction adenocarcinoma and stomach adenocarscinoma in a metastatic setting. *ESMO Open* 2020;5:e000595.
2 Cancer Genome Atlas Research Network. The cancer genome atlas research network comprehensive molecular characterization of gastric adenocarcinoma. *Nature* 2014;513:202–9.

3 Cristescu R, Lee J, Nebozhyn M, *et al*. Molecular analysis of gastric cancer identifies subtypes associated with distinct clinical outcomes. *Nat Med* 2015;21:449–56.
4 Al-Batran S-E, Homann N, Pauligk C, *et al*. Perioperative chemotherapy with fluorouracil plus leucovorin, oxaliplatin, and docetaxel versus fluorouracil or capecitabine plus cisplatin and epirubicin for locally advanced, resectable gastric or gastro-oesophageal junction adenocarcinoma (FLOT4): a randomised, phase 2/3 trial. *Lancet* 2019;393:1948–57.