P - 008 The impact of pathologic differentiation (well/poorly) and the degree of Ki-67 index in patients with metastatic WHO grade 3 GEP-NECs

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Introduction: We investigated the impact of pathologic differentiation (well or poorly differentiated) in metastatic grade 3 GEP-NEC patients receiving etoposide and platinum (EP)-based therapy, and evaluated a more exact Ki67 index cut-off point to select patients with grade 3 GEP-NEC who might benefit from EP-based therapy.

Methods: A total of 31 patients with metastatic grade 3 GEP-NECs receiving EP-based therapy were included in this study.

Results: Primary sites included 13 foregut-derived GEP-NECs (stomach (n = 4), duodenum (n = 4), and pancreas (n = 5)) and 2 hindgut-derived GEP-NECs of the rectum. 14 patients had well differentiated (WD) and 17 had poorly differentiated (PD).

Between WD and PD grade 3 GEP-NECs, there was a significant difference in the distribution of Ki67 index. There was no significant difference of treatment efficacy between WD and PD grade 3 GEP-NECs (RR; 35.7% vs. 41.2%, p = 0.525). Tumor response to EP occurred in 5 of 7 patients with Ki67 >60% and 7 of 24 with Ki67 ≤60%, which was significantly different (RR; 71.4% vs. 29.2%, P = 0.043). Among grade 3 GEP-NECs, there was a significant difference in ranges of Ki67 index between WD and PD NECs.

Conclusion: Higher levels (>60%) of Ki67 index might be a predictive marker for efficacy of EP as a standard regimen in grade 3 GEP-NECs.