

# C-44

## Incidence and prognostic analysis of neuroendocrine differentiation in CRC, GC, ESCC and BTC cohorts

Susheng Shi, Yaru Wen.

Cancer Hospital Chinese Academy of Medical Sciences, Beijing, China.

### BACKGROUND

Neuroendocrine differentiated (NED) occurs in various non-neuroendocrine organs and is associated with unique clinical profiles, disease progression, and poor prognosis. However, there are few relevant studies worldwide to explore the clinical characteristics of NED. This study aims to clarify the pathological features and prognostic significance of NED and provide reference for clinical diagnosis and treatment.

### METHODS

Patients (18-75 years) with cancers including colorectal, gastric, pancreatic, esophagus and cholangiocarcinoma, were analyzed post-surgery. Criteria for inclusion were normal organ function and no pre-surgery neoadjuvant therapy. Tumors were staged postoperatively using AJCC 8th criteria (stages I-III), followed by standard adjuvant chemotherapy. NED markers like Chromogranin A, Synaptophysin, and CD56 were detected in tumors via immunohistochemical staining.

### RESULTS

Between January 2017 and June 2018, over 450 cases were enrolled. Initial analysis included 59 CRC, 70 GC (36 gastric tubular adenocarcinoma [GAC] and 34 gastric signet ring cell carcinoma [GSRC]), 50 ESCC and 49 BTC samples. NED markers were positive in 9 (15.3%) CRC, 10 (27.8%) GAC, 18 (52.9%) GSRC, 5 (10.0%) ESCC and 19 (38.8%) BTC samples. Patients with positive NED markers had worse outcomes, the mOS (negative vs positive) were NA (95%CI 41.2-NA) vs 33.4 (95%CI 13.4-NA) months (mo) in CRC, NA (95%CI 33.5-NA) vs 25.2 (95%CI 19.5-NA) mo in GAC and 40.2 (95%CI 16.1-NA) vs 16.2 (95%CI 8.8-NA) mo in ESCC. In the BTC cohort, NEC marker expression status had little impact on prognosis, with mOS 61.6 (95%CI 38.7-NA) vs NA (95%CI 21.5-NA) mo. Interestingly, patients with positive NED markers for GSRC had a better prognosis, the mOS (negative vs positive) was 22.35 (95%CI 14.9-36.9) vs NA (95%CI 18.0-NA)..

### CONCLUSIONS

This study reveals a significant occurrence of neuroendocrine differentiation in CRC, GC, ESCC and BTC. In CRC, GAC and ESCC, patients with positive NED markers had worse prognosis, suggesting that new treatment strategies are needed for these patients.

### ABSTRACT ID 28574