

# C-53

## Stage distribution of Midgut Neuroendocrine Tumors (NETs) Using Updated American Joint Committee on Cancer Classification

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**BACKGROUND:** Midgut neuroendocrine tumors are a heterogeneous group of tumors with varying clinical presentation and outcomes. The AJCC recently released the 8th Edition of Tumor-Node-Metastasis (TNM) staging system. Using the new classification, we assessed the TNM distribution of midgut NETs.

**METHODS:** Patients with pathologically confirmed midgut NETs diagnosed between 1988 and 2017 were identified using existing institutional pathological and clinical databases from The Mount Sinai Hospital. Demographic, clinical, and staging data were collected. TNM stage was assigned according to the new AJCC 8th edition. Tumor grade was assigned according to the World Health Organization.

**RESULTS:** We identified 302 patients with pathologically confirmed midgut NETs. Mean patient age was 60 years, 52% were female, and 61% were white. The most common presenting symptoms was carcinoid syndrome 33%. Two thirds of the patients had a single primary tumor. Overall, 6.3% were T1, 25% T2, 56% T3 and 12.2% were T4. 169 (56%) patients were N1 and 73 (24%) N2. Of the N2 patients, 22% had mesenteric mass. 35% had hepatic metastases (M1a), 6% had extrahepatic metastases (M1b) and 8% had both hepatic and extrahepatic metastases (M1c). 81% had grade 1 tumors.

**CONCLUSION:** The new AJCC staging classification recategorizes patients with nodal involvement into N1 and N2, with the majority of N2 having a mesenteric mass. Similarly, patients with metastatic disease are now subdivided into M1a, M1b and M1c based on the metastatic site. Future analyses will assess whether this new staging system improves prediction of outcomes in these patients.