**C41**

# Retrospective Review of Patients with Metastatic High Grade Neuroendocrine Carcinoma of the Pancreas: Memorial Sloan-Kettering Cancer Center Experience (MSKCC)

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**Background:** High grade pancreatic neuroendocrine carcinomas (HG pNECs) are rare and aggressive tumors. Therapy often includes platinum based chemotherapy but there are little data to guide therapy. We conducted a retrospective review of patients with metastatic HG pNECs treated at MSKCC to evaluate outcome and response to therapy.

**Methods:** Following IRB approval, patients with HG pNECs treated from 1/2000-4/2011 were identified from our institutional database. Patient charts and pathology reports were analyzed retrospectively for clinical and pathological factors. Patients with localized disease, well differentiated NETs (defined by pathologic architecture), well differentiated NETs with high grade transformation, or mixed tumors were excluded. Progression-free survival (PFS) and overall survival (OS) were calculated (Figure 1). Response rates were based on radiology records and oncologist electronic medical notes.

**Results:** Thirteen patients (mean age 55, 67% male) were identified, 1 small cell, 3 large cell and 9 NOS. The median OS was 7 months (95% CI, 2.8 to 10.1 months). For first-line therapy, 11/13 (85%) received platinum-based treatment, 2/15 (15%) gemcitabine-based chemotherapy. Median PFS was 2.6 months (95%CI, 1.2 to 5 months).

9/13 patients (60%) went on to receive second line therapy. Of these, 4/9 (44%) received platinum-based chemotherapy, 1/9 (11%) 5-FU based chemotherapy, 1/10 (10%) topotecan, 1/9 (11%) CAV, 1/10 (10%) received gemcitabine/taxotere, and 1/10 (10%) received PRRT. Median PFS in the second-line setting was 1 month (95% CI, 1-6 months). Only platinum based therapy achieved a PFS of greater than 2 months in both the first and 2$^{nd}$ line settings and no one lived for longer than a year.

**Conclusion:** High grade pancreatic NEC are extremely aggressive tumors with a poor prognosis. This entity is distinct to the well differentiated NETs. Further research and development of novel therapies or regimens are urgently needed to better treat these tumors.

Figure 1. Kaplan-Meier Curve for Overall Survival in First-Line Therapy

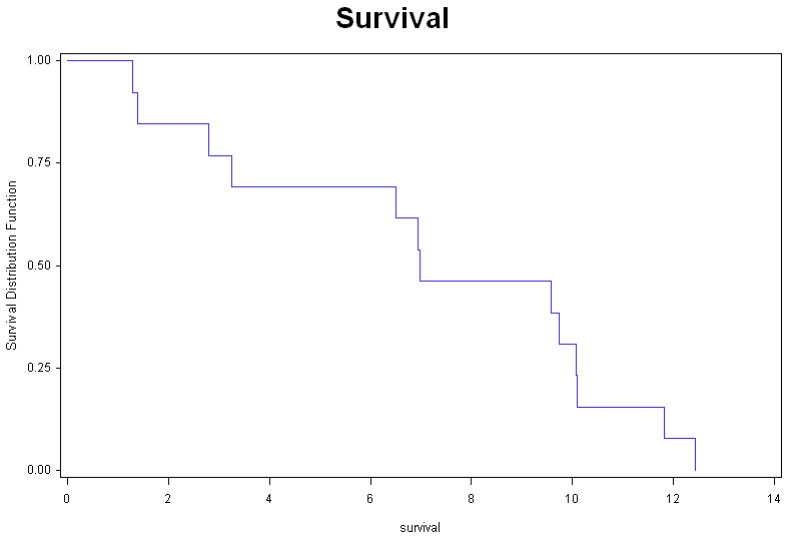


Figure 2. Kaplan-Meier Curve for PFS in First-Line Therapy