

# C-57

## Assessment of Disease Aggression in Cystic Pancreatic NET: a CT and Pathology Correlation Study

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**BACKGROUND:** There are inconsistencies in the literature regarding the clinical significance of cystic components in pancreatic neuroendocrine tumors (NET). This may be related to differences in the identification of cystic NET through imaging and/or pathology. Tumors may also be microscopically or macroscopically cystic. Our primary objective is to determine radiology-pathology correlation for the identification cystic components. Our secondary objective is to determine if cystic components are associated with indices of tumor aggression.

**METHODS:** 60 tumors with correlative surgical pathology were assessed retrospectively for cystic components on CT and pathology. Tumor was categorized as solid or cystic on CT and pathology. If cystic on pathology, cystic components were categorized as macroscopic or microscopic. Cystic components were estimated as <50% and  $\geq$  50% tumor volume. WHO/Hochwald grade and presence of metastases were used to stratify disease aggression. Associations were tested with Chi square/Fisher's exact test and differences were tested with ttest/Wilcoxon rank sums test.

**RESULTS:** There is moderate agreement between CT and histology for presence of cystic components. Discrepancies were mostly attributable to the presence of microscopic cystic components in tumors appearing solid on CT. There was

no difference in size between cystic and solid tumors on CT or pathology. No association between CT-determined cystic components and tumor grade was found. Tumors with cystic components (cystic by CT, and macroscopically cystic by pathology) demonstrated less association with metastases than solid tumors.

**CONCLUSION:** Cystic components, comprising  $\geq 50\%$  of the tumor by CT and observed macroscopically on pathology, are associated with less aggressive disease.