

# P-10

## Gastro-Entero-Pancreatic Neuroendocrine Tumors in Young Adults - Fare Better Than Older Patients

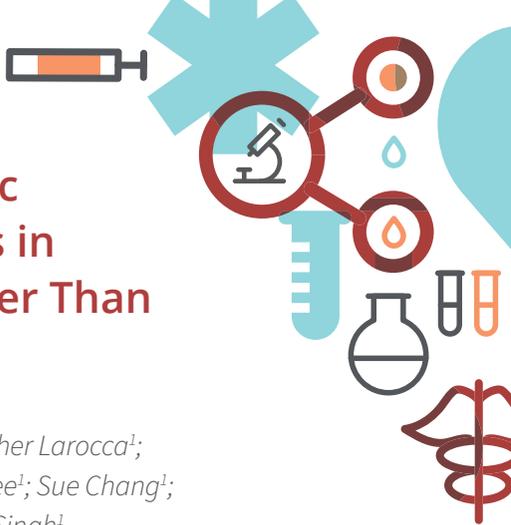
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**BACKGROUND:** While patients who are treated for gastro-entero-pancreatic neuroendocrine tumors (GEP-NETs) tend to be in their 6th and 7th decades of life, there is a distinct subset of patients who face this diagnosis earlier. Herein, we query in a population-based study, clinical and pathologic features and survival of patients of ages 18-35 with a diagnosis of a primary GEP-NET.

**METHODS:** A retrospective study of the NCDB including patients from 2004 to 2014 with a primary gastrointestinal or pancreatic neuroendocrine tumor was performed. Patients were stratified by age. Kaplan-Meier and multivariate Cox proportional hazards analyses were performed.

**RESULTS:** We identified 31,983 patients with a diagnosis of a primary GEP-NETs in the NCDB. The median age of diagnosis was 59 years and 5% of patients were under the age of 35. While 5-year overall survival for all patients was 66%, for those patients of ages 18-35, it was 84%, which was higher than any other age group ( $p < 0.001$ ). We looked at distributions of stage and grade across age groups. 55.9% of patients ages 18-35 had stage 1 disease, whereas those in groups ages 36-70, and  $\geq 70$ , had frequencies of stage 1 disease of 36.2%, and 27.8%, respectively. Young patients had lower grade of disease as 78.5% of patients ages 18-35 had well-differentiated grade, whereas those in groups ages 36-70, and  $\geq 70$ , had frequencies of well-differentiated grade of 72.4%, and 64.4%, respectively. Multivariate analysis for overall survival found that young age, low grade, and early stage to be associated with lower risk of mortality.



**CONCLUSION:** Five percent of patients with GEP-NETs are under the age of 35. These patients tend to have earlier stage disease and lower grade tumors, which contribute to a much better survival compared to older patients. These findings suggest that younger patients are ideal candidates for an aggressive surgical approach when deemed resectable.