

FINAL— G 2013 NEA Pancreatic NET vs. Pancreatic Cancer Fact Sheet - Update

G-NEA-1069907

Date of Approval: July 24, 2013

## **Understanding the Difference: Is it Pancreatic Neuroendocrine Tumors or Pancreatic Cancer (exocrine)?**

	Pancreatic Neuroendocrine Tumors	Pancreatic Cancer (exocrine)
Definition	Arise from endocrine pancreas cells, which produce several kinds of hormones and cluster together in many small groups, or islets, throughout the pancreas. Pancreatic NET is an uncommon type of pancreatic cancer. It is different from pancreatic exocrine cancer, which is generally referred to as pancreatic cancer <sup>1</sup> .  Classified as either functional, meaning the hormones that are released cause symptoms, or nonfunctional, meaning the hormones that are released do not cause symptoms <sup>2</sup> . Subtypes of pancreatic NET are named according to the type of hormone-making cell they start in, and include gastrinomas (gastrin-producing cells), insulinomas (insulin-producing cells) and glucagonomas (glucagon-producing cells) <sup>1</sup> .	Arise from exocrine pancreas cells, which produce enzymes that are released into the small intestine to help the body digest food <sup>1,2</sup> .  Most of the pancreas is made of ducts with small sacs at the end, which are lined with exocrine cells <sup>2</sup> . About 95% of pancreatic cancers are adenocarcinomas, which begin in exocrine cells <sup>1,7</sup> .  Also known as pancreatic exocrine cancer <sup>1</sup> .
Incidence	Also known as islet cell tumors <sup>1</sup> .  According to the Surveillance, Epidemiology and End Results (SEER) registry, the annual incidence of pancreatic NET was 1.8 females and 2.6 males per million from 1973 to 2000 <sup>3</sup> .	According to SEER, the annual incidence of pancreatic cancer was 12.2 per 100,000 men and women per year from 2006-20108.
Signs & Symptoms	Symptoms from functioning and/or non-functioning tumors include, but are not limited to <sup>2</sup> :  • Diarrhea  • Indigestion  • Persistent stomach ulcers  • Skin rashes  • Blood clots in the lung  • Gallstones	Symptoms include, but are not limited to <sup>1</sup> :  • Jaundice  • Abdominal or back pain  • Weight loss or poor appetite  • Digestive problems  • Gallbladder enlargement  • Blood clots or fatty tissue abnormalities
Prognosis	The relative 5-year survival rate for all pancreatic NET is 47.7%, whereas the 5-year survival rate for patients with the advanced disease is 27% <sup>4,5</sup> .	The relative 5-year survival rate for all pancreatic exocrine cancer is 3.5%, whereas the relative 5-year survival rate of advanced pancreatic cancer is 1.9% <sup>4,8</sup> .
Diagnosis  www.novartis.com	At time of diagnosis the majority of patients have advanced disease, meaning the cancer has spread to other parts of the body and has become more difficult to treat <sup>3,6</sup> . Lab tests and imaging tests, such as abdominal computerized axial tomography scans (CT	Tests that examine the pancreas are used to detect, diagnose and stage pancreatic cancer include, but are but not limited to, imaging tests, such as CT scans, magnetic resonance imaging (MRI) and positron emission tomography scans (PET scans);



FINAL— G 2013 NEA Pancreatic NET vs. Pancreatic Cancer Fact Sheet - Update

FOR MEDIA USE ONLY

G-NEA-1069907

Date of Approval: July 24, 2013

scans) and abdominal or endoscopic ultrasounds, blood tests examining the levels of certain pancreatic hormones and biopsies are used to detect and diagnose pancreatic NET<sup>1,2</sup>.

physical exam and history; biopsy and laparoscopy<sup>7</sup>.

###

## References

- American Cancer Society Detailed Guides. Pancreatic Cancer. Available at http://www.cancer.org/Cancer/PancreaticCancer/DetailedGuide/pancreatic-cancer-what-is-pancreatic-cancer. Accessed January 2011.
- National Cancer Institute. Islet Cell Tumors (endocrine Prancreas) Treatment (PDQ). Available at http://www.cancer.gov/cancertopics/pdq/treatment/isletcell/Patient. Accessed January 2011.
- Halfdanarson, et al. Pancreatic neuroendocrine tumors (PNETs): incidence, prognosis and recent trend toward improved survival. Annals of Onc 19: 1727-1733, 2008.
- Key, Charles. Chapter 7: Cancer of the Pancreas. SEER Survival Monograph. Available at http://seer.cancer.gov/publications/survival/surv\_pancreas.pdf. Accessed January 2011.
- 5. Yao, et al. One Hundred Years After "Carcinoid:" Epidemiology of and Prognostic Factors for Neuroendocrine Tumors in 35,825 Cases in the United States. Journal of Clinical Oncology. June 20 2009; vol. 26, number 18.
- National Library of Medicine and the National Institutes of Health. Pancreatic islet cell tumor. Available at http://www.nlm.nih.gov/medlineplus/ency/article/000393.htm. Accessed January 2011.
- National Cancer Institute. Pancreatic Cancer Treatment (PDQ). Available at http://www.cancer.gov/cancertopics/pdq/treatment/pancreatic/Patient/page1. Accessed January 2011.
- 8. National Cancer Institute. SEER Stat Fact Sheets: Pancreas. Available at: http://seer.cancer.gov/statfacts/html/pancreas.html. Accessed July 2013.