

**Announcing a New Partner
for the Management of
Neuroendocrine Tumors (NETs)**



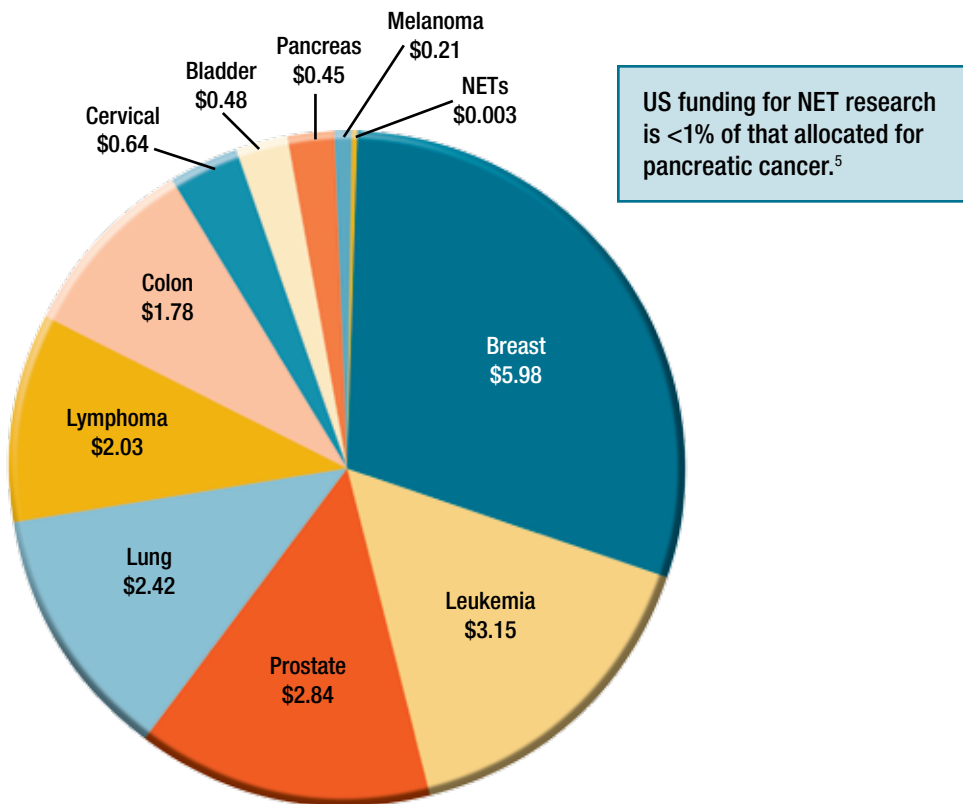
Because Neuroendocrine Tumors (NETs) Are Often Overlooked...

A serious condition that can be hard to recognize

- Because the symptoms of NETs are frequently vague and nonspecific, they are usually diagnosed late in the course of the disease^{1,2}
- Median survival is only 33 months for patients with metastatic well- or moderately differentiated NETs³

A relatively uncommon cancer with little public support

- The incidence of NETs in different populations ranges from 3 per 100,000 to more than 6 per 100,000 and appears to be rising dramatically^{3,4}
- Although the incidence of NETs is more than double that of pancreatic cancer,³ it receives far less research support (*figure*)⁵

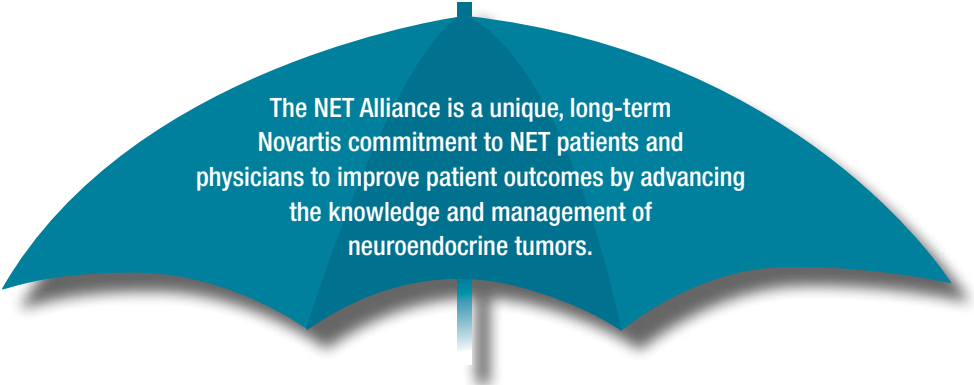


Research funding in billions of US dollars from the National Institutes of Health for 11 malignancies from 1994 through 2002.⁵

Adapted with permission from Modlin IM et al. *J Natl Cancer Inst.* 2008;100(18):1287.

Novartis Introduces The NET Alliance

The NET Alliance vision: Working to transform the management of NETs to the benefit of patients and HCPs



The NET Alliance is a unique, long-term Novartis commitment to NET patients and physicians to improve patient outcomes by advancing the knowledge and management of neuroendocrine tumors.

Advancing the management of NETs by



Improving disease awareness & understanding

Improving NET diagnosis & monitoring

Accelerating development & adoption of new NET therapies

Supporting patient-focused initiatives



The NET Alliance: A Global Program With a Local Impact

Operating principles of The NET Alliance

- Focus on patient needs throughout their journey of NET diagnosis and treatment
- Designed to support a multidisciplinary HCP approach to patient management
- Created with a solid strategic framework, for easy adaptation of program for local country needs
- Commitment to growing and evolving the science and clinical management of NETs



The NET Alliance Initiatives

5 programs with 1 goal: Improving patient outcomes in NETs

How The NET Alliance Will Work to Improve Patient Outcomes in NETs

Alliance NETwork™

- Drive integrated patient management
- Support Multidisciplinary Referral Centers (MRCs)

NET-Detect™

- Improve patient diagnosis and optimize treatment
- Improve use of CgA biomarker
- Investigate CgA as a predictor of treatment outcome

NET DataBank™

- Leverage/build NET disease registries to improve clinical understanding of NETs
- Establish a reliable data source for clinical trial initiatives

NET Discover™

- Search for better biomarkers for prognosis in NETs
- Support investigator-initiated trials in NETs

NET Community™

- Provide educational videos on NETs through the Internet
- Support global patient advocacy
- Enable a worldwide NET Awareness Day



Working to Improve Outcomes in Patients with Neuroendocrine Tumors

Alliance NETwork™: Supporting a Multidisciplinary Approach


...Because patient outcomes can improve due to the expertise and resources of a Multidisciplinary Referral Center (MRC) for NETs

- The management of NETs differs markedly from that of other, more frequently seen malignancies⁵
 - Patients benefit from access to the specialized skills of oncologists, endocrinologists, surgeons, radiologists, and pathologists⁵
- Local medical institutions and physicians may not be able to dedicate the necessary resources for the management of NETs⁵

Alliance NETwork will support the efforts of local physicians and medical institutions to develop highly specialized multidisciplinary teams dedicated to the management of NETs

- Provide educational materials for use within the institution and for outreach to the surrounding medical community
- Provide financial support for educational forums and/or tumor boards focusing on NETs within the institution (as permitted by local laws and regulations)

The goals of Alliance NETwork

- Support the establishment of specialized hospital centers in the treatment of NETs
 - Encourage a multidisciplinary approach to NET patient management
- 

NET-Detect™: Improving Existing Biomarkers

...Because hormonal profiles are valuable in identifying and monitoring NETs

- Up to 90% of NETs, irrespective of symptoms, secrete chromogranin A (CgA)⁶
- CgA is the most sensitive biomarker for the detection and prognosis of NETs
 - Levels are indicative of tumor burden⁷
 - Changes from baseline may indicate disease progression or response to treatment⁸

The NET-Detect program will work to optimize the use of biomarkers today—and enhance their usefulness in the future

- NET-Detect is a program that encompasses education and research to improve the effectiveness of existing biomarkers as diagnostic and prognostic tools
- Free CgA tests may be provided in some countries where the test is currently not available readily due to healthcare financing (as permitted by local laws and regulations)

The goals of NET-Detect

- Support the scientific rationale for CgA testing
- Develop standardized methodologies
- Increase the use of CgA testing to improve diagnosis and optimize treatment

References:

1. Modlin IM, Champaneria MC, Chan AKC, Kidd M. A three-decade analysis of 3,911 small intestinal neuroendocrine tumors: the rapid pace of no progress. *Am J Gastroenterol.* 2007;102(7):1464-1473. 2. Vinik A, Moattari AR. Use of somatostatin analog in management of carcinoid syndrome. *Dig Dis Sci.* 1989;34(3)(suppl):14S-27S. 3. Yao JC, Hassan M, Phan A, et al. One hundred years after "carcinoid": epidemiology of and prognostic factors for neuroendocrine tumors in 35,825 cases in the United States. *J Clin Oncol.* 2008;26(18):3063-3072. 4. Hauso O, Gustafsson BI, Kidd M, et al. Neuroendocrine tumor epidemiology: contrasting Norway and North America. *Cancer.* 2008;113(10):2655-2664. 5. Modlin IM, Moss SF, Chung DC, Jensen RT, Snyderwine E. Priorities for improving the management of gastroenteropancreatic neuroendocrine tumors. *J Natl Cancer Inst.* 2008;100(18):1282-1289. 6. Peracchi M, Conte D, Gebbia C, et al. Plasma chromogranin A in patients with sporadic gastro-entero-pancreatic neuroendocrine tumors or multiple endocrine neoplasia type 1. *Eur J Endocrinol.* 2003;148(1):39-43. 7. Eriksson B, Öberg K, Stridsberg M. Tumor markers in neuroendocrine tumors. *Digestion.* 2000;62(suppl 1):33-38. 8. Jensen EH, Kvols L, McLoughlin JM, et al. Biomarkers predict outcomes following cytoreductive surgery for hepatic metastases from functional carcinoid tumors. *Ann Surg Oncol.* 2007;14(2):780-785.



Advancing the management of NETs by

- Improving disease awareness & understanding
- Improving NET diagnosis & monitoring
- Accelerating development & adoption of new NET therapies
- Supporting patient-focused initiatives

For more information, please talk to your local Novartis representative.

