

# ENETS Consensus Guidelines for the Standard of Care in Neuroendocrine Tumors

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**Abstract**

The landscape of treatment options in NET has changed in the last 5 years. Novel targeted drugs have been introduced and approved for distinct types of NET. Furthermore, with the first randomized trial on <sup>177</sup>Lu-DOTATATE peptide receptor targeted therapy (PRRT) in midgut NET, not only approval of this treatment is awaited but also its more widespread use. Techniques and choices of radionuclides have changed over time as well as imaging tools. Recognition of well differentiated NET G3 within the group of neuroendocrine neoplasms G3, has widened the spectrum of chemotherapeutic drugs used in this field. Even more it has become important to provide recommendations for daily clinical practice on how to safely use novel drugs, chemotherapeutic agents and PRRT. The updated ENETS consensus guidelines for standard of care in neuroendocrine tumors (NET) provide a tool to accurately assess the diagnosis of NET and provide practical recommendations for the use of surgery, and the different systemic therapeutic options that are available for the management of NET.

## Introduction

In 2009, the first Consensus Guidelines on standards of care in Neuroendocrine Tumors have been published by the European Neuroendocrine Tumor Society (ENETS) based on a consensus conference held in Palma de Mallorca, Spain in November 2007 with leading experts in the field (see Neuroendocrinology 2009; 90:159ff). Since then the landscape of treatment options has changed. Novel targeted drugs, such as the mTOR inhibitor everolimus and the multiple tyrosine kinase inhibitor sunitinib have been introduced in the treatment of neuroendocrine tumors and approved for distinct types of neuroendocrine tumors. Furthermore, with the first randomized trial on <sup>177</sup>Lu-DOTATATE peptide receptor targeted therapy (PRRT) in midgut neuroendocrine tumors, not only approval of this treatment is awaited but also its more widespread use. Techniques and choices of radionuclides have changed over time as well as imaging tools. In the same period the recognition of well differentiated neuroendocrine tumors G3 within the group of neuroendocrine neoplasms G3, has widened the spectrum of chemotherapeutic drugs used in this field. Even more it has become important to provide recommendations for daily clinical practice on how to safely use novel drugs, chemotherapeutic agents and PRRT.

While recently updated and published Consensus Guidelines for the management of digestive neuroendocrine tumors (Neuroendocrinology 2016;103:117ff) provide guidance for appropriate therapy selection, standards of care needed to be addressed for recently introduced novel therapies and updated for established standard therapies. The same group of experts who developed the recent ENETS Consensus guidelines update for the management of patients with digestive neuroendocrine tumors convened at a consensus meeting held in Antibes on November 5-6 in 2015 to update technical and practical details necessary for implementing consensus guidelines.

The consensus sessions covered the following topics:

- Pathology- Diagnosis and Prognostic Stratification
- Biochemical Markers
- Radiological, Nuclear Medicine & Hybrid Imaging
- Surgery for Small Intestinal and Pancreatic Neuroendocrine Tumours
- Pre- and perioperative Therapy

- Systemic Therapy: Biotherapy, Novel Targeted Agents, Chemotherapy
- Peptide Receptor Radionuclide Therapy with Radiolabeled Somatostatin Analogues
- Follow-Up and Documentation in Patients with Neuroendocrine Tumours.

### Working format

Fifty-five experts active in the field of neuroendocrine tumors from 22 countries attended the Antibes consensus conference. Attendees were members of the ENETS advisory board including adjunct members and recognized US physicians with high level expertise in the field. The attendees represented all medical specialities involved in managing patients with gastroenteropancreatic neuroendocrine tumors. They were assigned to different working groups according to the topics outlined above. The complete list of participants is provided at the end of each of the following papers. Eight working groups and their group leaders were determined before the conference. The group leaders prepared a first draft on standards of care in their field reviewing and integrating all relevant literature published beyond 2009. The draft manuscript was sent to all group members before the consensus conference and served as a structure for the discussion. On the first day of the meeting after a short introduction and presentation of the topic in a plenary session, each working group gathered separately to discuss group-specific questions. The group leaders presented the management to their breakout group members and the management was discussed in detail. On site comments were collected continuously throughout the conference. Each working group gathered separately to discuss group-specific questions. The results of each working group were presented on the second day of the meeting to the general assembly where all participants attended. Consensus statements were discussed and approved or rejected by all participants gathered in the general assembly. This procedure was followed for all eight sessions.

After the conference the group leaders revised their manuscripts including all consensus statements and adding additional information where requested before sending the revised manuscripts to all participants of their breakout sessions for review. The Organizing Committee defined the rules to establish the design of each paper, the tasks for authors, and the general authorship policy. The papers

were designed to update and amend the previously published ENETS Standard of Care Guidelines, incorporating all novel information and approved consensus statements.

### **Achievements and final remarks**

The following nine papers [3-11] are the result of an Advisory Board Consensus Conference meeting. These ENETS Guidelines on standards of care in neuroendocrine tumors provide a tool to accurately assess the diagnosis of neuroendocrine tumors and provide practical recommendations for the use of surgery, and the different systemic therapeutic options that are available for the management of neuroendocrine tumors. A great effort was made by all participants devoting their time, experience and enthusiasm to building the standard of care consensus guidelines. We expect that this practical information will provide useful and important information for health care providers and will support the endeavour to provide high quality care for neuroendocrine tumor patients. We thank all participants for their efforts, contributions, and great dedication to construct these guidelines.

### **Acknowledgement**

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