



Roma, 8-11 novembre 2018

NEN del pancreas: stato dell' arte



ITALIAN CHAPTER



TAKE HOME MESSAGES

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Conflitti di interesse



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Ai sensi dell'art. 3.3 sul conflitto di interessi, pag 17 del Regolamento Applicativo Stato-Regioni del 5/11/2009, dichiaro che negli ultimi 2 anni ho avuto rapporti diretti di finanziamento con i seguenti soggetti portatori di interessi commerciali in campo sanitario:

- Novartis
- Ipsen
- Bruno Farmaceutici



Initial characterization of the patient and of the pathology



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Initial characterization of the patient

Initial characterization of the pathology

Integration between:

- **Pathological Status** (histology, grading, TNM, hormonal secretions)
- **Patient Status** (performance status, comorbidities, clinical evolution, social role)

- ❑ The **anatomopathological report** is of fundamental importance for the characterization of the pathology
- ❑ A correctly quantified **Ki67** is the first step for an appropriate treatment
- ❑ **Imaging :**
 - **Octreoscan® or Ga-68 PET/CT: G1-G2 NEN and G3 NEC** well differentiated or in some cases if they are high grade
 - **18F-FDG-PET/CT: G3-NEC**
 - **Octreoscan® or Ga-68 PET/CT + 18F-FDG-PET/CT:** limit in the forms not clearly defined.

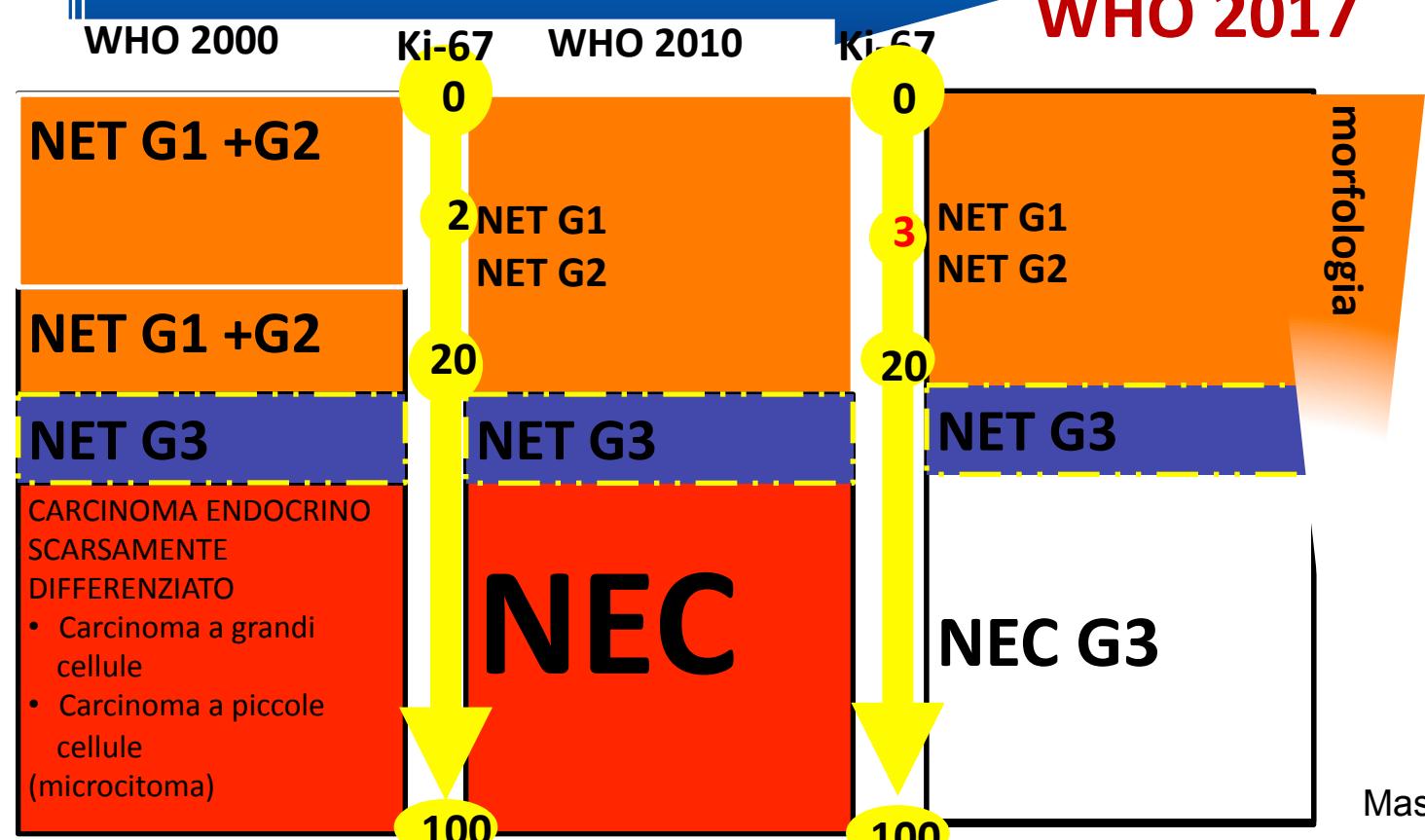


Table 6.02 Comparison of the WHO classifications of pancreatic neuroendocrine neoplasms (NNs)			
WHO 1999	WHO 2000/2004	WHO 2010	WHO 2017
Islet cell tumour (adenoma/carcinoma)	Well-differentiated endocrine tumour/carcinoma (NETG1/DEC)	NET G1/G2	NET G1/G3 / well-differentiated NE
Poorly differentiated endocrine carcinoma	Poorly differentiated endocrine carcinoma / small cell carcinoma (PDEC)	NEC (G3), large cell or small cell type	NEC (G3), large cell or small cell type (poorly differentiated NET)
	Mixed exocrine-endocrine carcinoma (MEEC)	Mixed adenoneuroendocrine carcinoma	Mixed neuroendocrine-non-neuroendocrine neoplasm
Pseudotumour lesions	Tumour-like lesions (TLLs)	Hyperplastic and preneoplastic lesions	
			WHO Classification of Tumours of Endocrine Organs
			NEC, neuroendocrine carcinoma; NET, neuroendocrine tumour.



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Clinical decisions according to the pathological picture: Dynamic risk stratification

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These are the components of the dynamic risk stratification



- Functionality
- Resecability (complete, R0)
- Primitive site
- Morphology and Grading, TNM Staging
- Bio-humoral markers
- Morphological imaging (CT – MRI)
- Functional imaging and receptor status (SRS, Ga-68 PET/CT, 18F-FDG-PET)
- State of the disease (stable, in progression)
- **QoL**
- **Life expectation**



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Interdisciplinary Discussion

What treatment/follow up?



Endocrinology

Oncology

Pathology

Radiology

Nuclear Medicine

Gastroenterology-
Endoscopy

Surgery



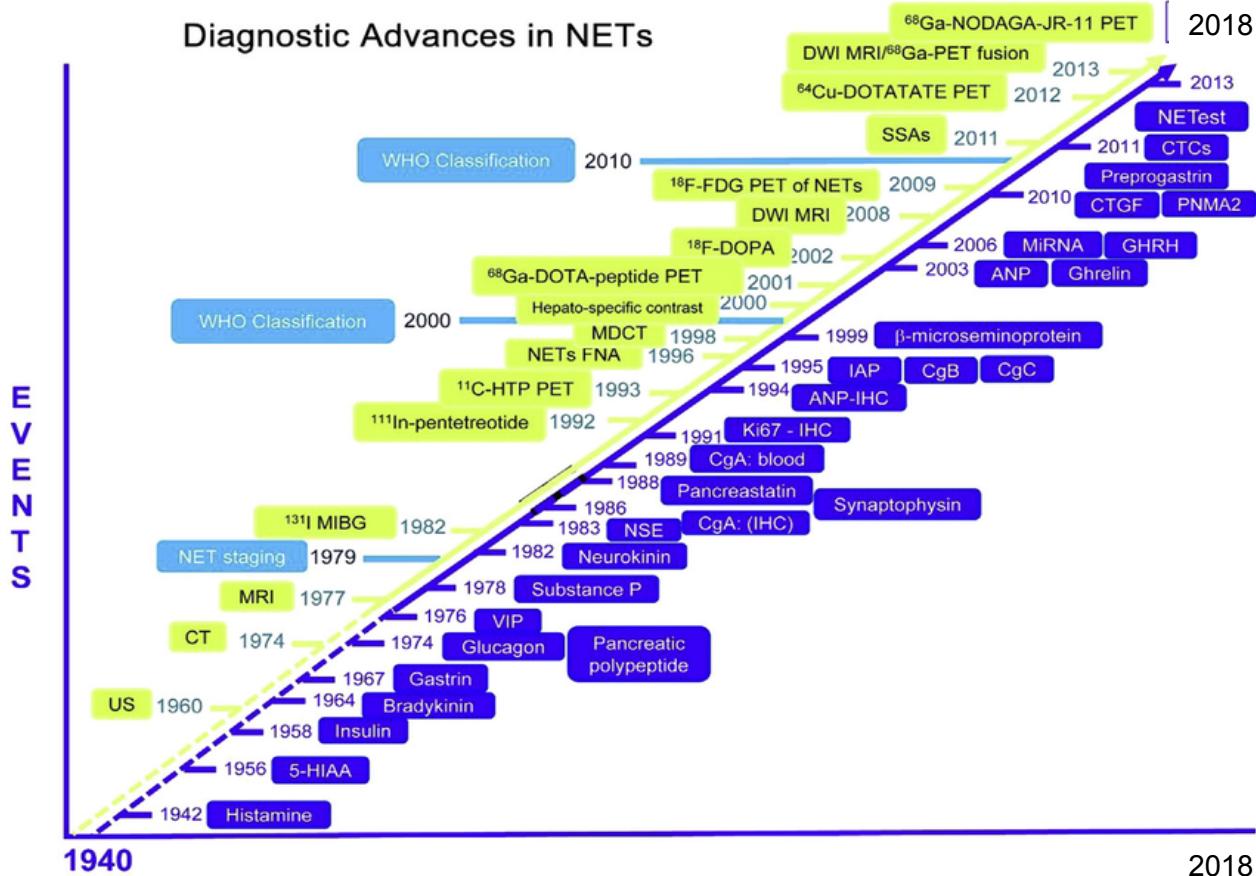


NEN pancreas: inquadramento clinico



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Valutazione iniziale: ruolo dell'endocrinologo nella possibile associazione con forme ereditarie



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Clinical Practice Guideline

Clinical Practice Guidelines for Multiple Endocrine Neoplasia Type 1 (MEN1)

J Clin Endocrinol Metab 97: 2990–3011, 2012

MEN1: MANIFESTAZIONI CLINICHE

Type (chromosome location)	Tumors (estimated penetrance)	Gene, most frequently mutated codons
MEN1 (11q13)	<p>Parathyroid adenoma (90%)</p> <p>Enteropancreatic tumor (30–70%): gastrinoma (40%), insulinoma (10%), nonfunctioning and PPoma (20–55%), glucagonoma (<1%), VIPoma (<1%)</p> <p>Pituitary adenoma (30–40%): prolactinoma (20%), somatotropinoma (10%), corticotropinoma (<5%), nonfunctioning (<5%)</p> <p>Associated tumors: adrenal cortical tumor (40%), pheochromocytoma (<1%), bronchopulmonary NET (2%), thymic NET (2%), gastric NET (10%), lipomas (30%), angiomyomas (85%), collagenomas (70%), meningiomas (8%)</p>	<p>MEN1</p> <p>83/84, 4-bp del (~4%)</p> <p>119, 3-bp del (~3%)</p> <p>209–211, 4-bp del (~8%)</p> <p>418, 3-bp del (~4%)</p> <p>514–516, del or ins (~7%)</p> <p>Intron 4 ss, (~10%)</p>



PanNET NF: strategia terapeutica

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J Endocrinol Invest (2014) 37:875–909
DOI 10.1007/s40618-014-0119-0



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POSITION STATEMENT

Italian Association of Clinical Endocrinologists (AME) position statement: a stepwise clinical approach to the diagnosis of gastroenteropancreatic neuroendocrine neoplasms

Franco Grimaldi · Nicola Fazio · Roberto Attanasio · Andrea Frasoldati · Enrico Papini · Francesco Angelini · Roberto Baldelli · Debora Berretti · Sara Bianchetti · Giancarlo Bizzarri · Marco Caputo · Roberto Castello · Nadia Cremonini · Anna Crescenzi · Maria Vittoria Davì · Angela Valentina D'Elia · Anton Giulio Faggiano · Stefano Pizzolitto · Annibale Versari · Michele Zini · Guido Rindi · Kjell Öberg

We recommend chest-abdomen MDCT as the rou-

- 1. Stadiazione sistematica**
- 2. Evolutività radiologica**

ization of liver involvement.

We recommend the use of SSTR functional imaging for localization and staging of G1-G2 GEP-NENs.

We recommend PET/CT with ⁶⁸Ga-labeled SA as the procedure of choice. When not available, ¹¹¹In-pentetetreotide (Octreoscan®) scintigraphy may be used.

We recommend against the routine use of ¹⁸F-FDG PET/CT.

We suggest ¹⁸F-FDG PET/CT for staging high grade (G3) and selected G2 GEP-NENs.



PanNET NF: strategia terapeutica



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CARATTERISTICHE DEL TUMORE

CARATTERISTICHE DEL PAZIENTE



Anatomo-patologiche
morfologiche, funzionali



Sind... P.S.,

SINO

OBIETTIVI IMMEDIATI E TARDIVI DELLA
TERAPIA



TERAPIA MEDICA DEI PNET

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Evidenze scientifiche consistenti: studi positivi di fase III

- Clarinet: Lanreotide nei GEP-NEN: P-NET
- Radiant 3: Everolimus nei P-NET
- Sunitinib: nei P-NET
- Terapia radiorecettoriale - PPRT
- Nuovo ruolo della chemioterapia: Temozolomide - Capecitabina



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In clinical practice the choice of a single therapeutic option should consider the global treatment strategy.

It is strongly advised to have a multidisciplinary discussion relative to the global therapeutic strategy, the response to the therapy and follow-up.

Take Home Messages



After the initial characterization of the patient and the tumor the immediate and long term treatment should be determined by a multidisciplinary consultation.



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Take Home Messages

The evaluation of treatment response can modify the initial prognostic risk, thus changing the therapeutic strategy towards second line treatment, if available, or increased monitoring



AN CHAPTER



GRAZIE PER L'ATTENZIONE

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