

Diagnostic and therapeutic advances in neuroendocrine tumours

Neuroendocrine neoplasms are derived from the diffuse endocrine system and represent a spectrum of tumours with a diverse range of molecular abnormalities, functionality and anatomical locations. Here, some key advances in molecular diagnosis, functional imaging and therapeutic strategies that have been published in 2020 are discussed.

Key advances

- The NETest could serve as a valid biomarker in diagnosis, follow up and monitoring response to treatment of neuroendocrine neoplasms (NENs)[2,3](#).
- The ⁶⁸Ga somatostatin analogue PET-CT has a higher diagnostic accuracy for well-differentiated grade I and II NENs than ¹⁸F-fluorodeoxyglucose PET-CT[4](#).
- Peptide receptor radionuclide therapy with ¹⁷⁷Lu DOTA-TATE has improved outcomes for patients with ⁶⁸Ga-DOTA-somatostatin receptor-positive advanced well-differentiated NENs[5](#).
- Findings from immunotherapy trials for patients with NENs have been somewhat disappointing in patients with low-grade NENs. However, analysis of immune-related genes in pancreatic NENs suggests that patients might be stratified by molecular subtypes and immune-related gene expression[9](#).
- Surgery with a radical intent could be a valid option for patients with grade III gastroenteropancreatic-NETs with Ki67 <55%[10](#).
- <https://www.nature.com/articles/s41574-020-00458-x>