

## Medical Treatment Consensus in Unresectable Midgut Gastrointestinal Neuroendocrine Tumors

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**Background:** Neuroendocrine tumors (NETs) comprise mostly carcinoid or pancreatic NETs and are rare with symptoms that may be difficult to control. Current treatment guidelines lack some specificity. We summarize an expert panel consensus on medical treatment of well-differentiated unresectable midgut NETs.

**Methods:** Consensus statements were developed via RAND/UCLA Delphi process, which involved a diverse group of physician experts (e.g., by specialty, geography, practice) developing comprehensive clinical patient scenarios and rating the scenarios on the appropriateness of various medical therapies before and after a face-to-face meeting. Experts and moderator were blinded to funding source. Scenarios were rated on a 1-9 scale and were labeled as appropriate, inappropriate, or uncertain. Scenarios with >2 ratings in 1-3 and >2 in 7-9 range were considered to have disagreement and were not assigned an appropriateness rating.

**Results:** Panelists (age: 38-63 years) were from the northeast, midwest, south, and west regions. Specialties represented were medical and surgical oncology, interventional radiology, and gastroenterology. Panelists had practiced for a mean 15.5 years (range: 6-33). Panelists rated 202 scenarios. The proportion for which there was disagreement decreased from 11.7% (23 scenarios) before the meeting to 4.5% (9) after. Post-meeting, 49% (99 scenarios) were rated inappropriate,

29.7% (60) were uncertain, and 16.8% (34) were appropriate. Consensus statements from the scenarios included: 1) it is appropriate to use somatostatin analogs (SA) as 1<sup>st</sup>-line therapy in all patients, 2) it is appropriate to increase the dose/frequency of octreotide-LAR as 2<sup>nd</sup>-line therapy in patients with uncontrolled symptoms up to 60 mg every 4 weeks or up to 40 mg every 3 or 4 weeks for refractory carcinoid syndrome. Other treatment options may also be appropriate in 2<sup>nd</sup>-line.

**Conclusion:** Treatment consensus obtained in this study is concordant with NCCN recommendations. The Delphi process allowed quantification of ratings in a systematic and reliable way while improving consensus in a group of physicians on the appropriateness of medical therapies in midgut NETs.