

Expert Panel Consensus Statements on the Medical Treatment of Unresectable Pancreatic Neuroendocrine Tumors

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Background: Neuroendocrine tumors (NETs) of the pancreas (PNETs), a major subtype of gastrointestinal NETs, are rare neoplasms that lack some specificity in current treatment guidelines. We describe a physician expert panel consensus on medical treatment of well-differentiated (grade 1-2) unresectable PNETs.

Methods: PNET treatment appropriateness ratings were collected using the RAND/UCLA Delphi process: recruited physician experts (e.g., by specialty, geography, practice), reviewed treatment literature, and collected 2 rounds of ratings (before and after a face-to-face meeting) from the experts. Experts and the moderator were blinded to the funding source. Patient scenarios (rated on a 1-9 scale indicating appropriateness of interventions for a given scenario) were labeled as appropriate, inappropriate, or uncertain. No appropriateness rating was assigned to a scenario in presence of disagreement: >2 ratings from 1-3 and >2 from 7-9 range.

Results: Ten panelists (mean age: 50.4 years) from the northeast, midwest, south, and west census regions convened for a 1 day meeting. Specialties represented were medical and surgical oncology, interventional radiology, and gastroenterology. Panelists had practiced for a mean of 15.5 years (range: 6-33). Among 202 rated scenarios, disagreement decreased from 13.2% (26 scenarios) before the meeting to 1% (2) after. In the 2nd round, 46.5% (94 scenarios) were rated

inappropriate, 21.8% (44) were uncertain, and 30.7% (62) were appropriate. Consensus statements from the scenarios included: 1) it is appropriate to use somatostatin analogs (SA) as 1st line therapy in patients with hormonally functional tumors, 2) it is appropriate to use everolimus, sunitinib, or cytotoxic chemotherapy therapy as 1st line therapy in patients with symptomatic or progressive tumors, and 3) beyond 1st line, these same agents can be used as can octreotide LAR (in patients with uncontrolled secretory symptoms) in doses up to 60 mg every 4 weeks or up to 40 mg every 3 or 4 weeks.

Conclusion: We systematically obtained appropriateness ratings for a variety of medical therapies in PNETs from a group of physician experts. The Delphi process allowed the experts to reliably quantify complex qualitative data in order to arrive at consensus on the appropriateness of medical therapies for the treatment of PNETs.