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Neuroendocrine Tumors and Lanreotide Depot:
Clinical Considerations and Nurse and Patient Preferences

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Background: Somatostatin analogs (SSAs) are a mainstay therapy for the treatment of carcinoid syndrome associated with neuroendocrine tumors (NETs). They are effective for a range of gastroenteropancreatic NETs (GEP-NETs). Lanreotide depot (Somatuline®) is an SSA that is approved for the treatment of GEP-NETs to improve progression-free survival (PFS).

Objectives: The article reviews the efficacy, safety, and administration of lanreotide depot and relates those attributes to considerations and preferences of oncology nurses and their patients.

Methods: A review of the literature on the use of lanreotide for the treatment of NETs and carcinoid syndrome was conducted. In addition, the literature on drug delivery and routes of administration was surveyed to provide context for comparative studies related to clinical and patient preferences.

Findings: Lanreotide depot prolongs PFS and is well tolerated by patients who expressed satisfaction in the ability to control symptoms related to carcinoid syndrome. Nurses cited several benefits to using lanreotide depot in the clinical setting, including more time saved to address other patient care issues. Attributes of lanreotide depot—including its efficacy, safety and tolerability, dosing and administration, and cost—may contribute to healthcare decisions regarding the treatment and management of NETs.

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Neuroendocrine tumors (NETs) arise from secretory cells of the neuroendocrine system and are predominantly found in the gastrointestinal tract and pancreas, although they can occur in virtually every organ (Cives & Strosberg, 2014). The incidence of NETs may be as high as 5.86 in 100,000 (95% confidence interval [CI] [5.4, 6.35]), based on 2009 data (Hallet et al., 2014). Advanced metastatic NETs are associated with a relatively poor prognosis and may be unresectable. Treatment has traditionally focused on management of the symptoms of this chronic condition (Caplin, Pavel, et al., 2014; Oberg, 2012; Wolin, 2012).

Patients who present with well-differentiated (low and intermediate grade) NETs of the stomach, intestine, and pancreas are usually first treated with surgical resection whenever possible and/or ablation. Medical management for gastroenteropancreatic (GEP)-NETs may also involve chemotherapeutic agents, monoclonal antibodies, and/or biotherapy with somatostatin analogs (SSAs) (Falconi et al., 2012; Kulke et al., 2010; National Comprehensive Cancer Network [NCCN], 2015; Oberg, 2012). Long-acting SSAs have been used successfully to treat GEP-NETs (Caplin, Pavel, et al., 2014; NCCN, 2015). Generally well tolerated, SSAs are used for the relief of symptoms associated with carcinoid syndrome, a condition that typically presents in advanced neuroendocrine cancer that has metastasized to the liver or with secretory pancreatic or midgut NETs (Pavel et al., 2012).

This article reviews a long-acting SSA, lanreotide depot (Somatuline®), and examines factors such as efficacy, tolerability, dosing and administration, patient and nurse preferences,