



Cora* is a 57-year-old executive and enjoys cooking for friends and family.

*Patient portrayed by an actor, and represents a hypothetical case.

[†]PFS=progression-free survival.

PATIENT CASE STUDY #3:

CARCINOID SYNDROME



Patient Workup

- Symptoms began 3 years ago and include diarrhea, intermittent dry flushing, anxiety, and abdominal pain
- Past diagnoses have included Crohn's disease, menopause, and anxiety disorder
- Stool sample without blood helps rule out Crohn's; intermittent dry flushing helps rule out menopausal origin; diarrhea and flushing together raise suspicion of NET
- Workup confirms diagnosis of metastatic midgut carcinoid (neuroendocrine) tumor
- Dissatisfied with the frequency of short-acting SSA injections for carcinoid syndrome



Treatment Consideration: Somatuline® Depot (lanreotide), a 1st-line (1L) therapy¹

- Somatostatin analog (SSA) therapy for PFS[†] improvement in adult patients with unresectable, well- or moderately-differentiated, locally advanced or metastatic GEP-NETs
- Somatostatin analog (SSA) therapy for adults with carcinoid syndrome (CS); when used, it reduces frequency of short-acting SSA rescue therapy

IMPORTANT SAFETY INFORMATION

Contraindications

- SOMATULINE DEPOT is contraindicated in patients with hypersensitivity to lanreotide. Allergic reactions (including angioedema and anaphylaxis) have been reported following administration of lanreotide.

Warnings and Precautions

- **Cholelithiasis and Gallbladder Sludge**
 - SOMATULINE DEPOT may reduce gallbladder motility and lead to gallstone formation.
 - Periodic monitoring may be needed.
 - If complications of cholelithiasis are suspected, discontinue SOMATULINE DEPOT and treat appropriately.

Please see Indications and full Important Safety Information throughout and click here for the full [Prescribing Information](#) and [Patient Information](#).



Somatuline® Depot
(lanreotide) Injection 120 mg

PATIENT CASE STUDY #3:

PRACTICE POINTERS



Daneng Li, MD

Co-director of the Neuroendocrine
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Biopharmaceuticals, Inc.

- Consider a broad range of diagnoses when assessing patients with diarrhea and flushing—including NETs³⁻⁶:
 - Use the “FDR” mnemonic—flushing, diarrhea, and right-sided heart failure—to raise suspicion of NET
 - Differentiate carcinoid diarrhea from IBS and IBD if it is persistent and non-flaring, occurs at night and daytime, and appears related to excess serotonin secretion. Further testing may help rule these out
 - Dry flushing may help rule out menopause as a cause
 - Flushing and anxiety not related to a particular cause can rule out anxiety disorder
- 5-HIAA test can help diagnose new patients, but false positives can occur. Results should be considered with the patient’s overall presentation⁴
- Customize diet recommendations to the patient⁷:
 - Consider avoiding foods high in amines like aged cheese or smoked meats to help manage carcinoid symptoms
 - Monitor dehydration and fluid intake
 - A food journal can help the patient identify any symptom triggers

“Have a broad differential diagnosis when you’re seeing a patient that has symptoms that could potentially be carcinoid syndrome, such as diarrhea or flushing.”

—Dr. Daneng Li

IMPORTANT SAFETY INFORMATION (continued)

Warnings and Precautions (continued)

- **Hypoglycemia or Hyperglycemia**

- Patients treated with SOMATULINE DEPOT may experience hypoglycemia or hyperglycemia.
- Blood glucose levels should be monitored when SOMATULINE DEPOT treatment is initiated, or when the dose is altered, and antidiabetic treatment should be adjusted accordingly.

- **Cardiovascular Abnormalities**

- SOMATULINE DEPOT may decrease heart rate.
- In patients without underlying cardiac disease, SOMATULINE DEPOT may lead to a decrease in heart rate without necessarily reaching the threshold of bradycardia.
- In patients suffering from cardiac disorders prior to treatment, sinus bradycardia may occur. Care should be taken when initiating treatment in patients with bradycardia.

Please see Indications and full Important Safety Information throughout and click here for the full [Prescribing Information](#) and [Patient Information](#).

IMPORTANT SAFETY INFORMATION (continued)

Warnings and Precautions (continued)

- **Steatorrhea and Malabsorption of Dietary Fats**

- New onset steatorrhea, stool discoloration and loose stools have been reported in patients receiving somatostatin analogs, including SOMATULINE DEPOT. Somatostatin analogs reversibly inhibit secretion of pancreatic enzymes and bile acids, which may result in malabsorption of dietary fats and subsequent symptoms of steatorrhea, loose stools, abdominal bloating, and weight loss.
- If new occurrence or worsening of these symptoms are reported in patients receiving SOMATULINE DEPOT, evaluate patients for potential pancreatic exocrine insufficiency and manage accordingly.

Most Common Adverse Reactions

- **GEP-NETs:** Adverse reactions in >10% of patients who received SOMATULINE DEPOT were abdominal pain (34%), musculoskeletal pain (19%), vomiting (19%), headache (16%), injection site reaction (15%), hyperglycemia (14%), hypertension (14%), and cholelithiasis (14%).
- **Carcinoid Syndrome:** Adverse reactions occurring in the carcinoid syndrome trial were generally similar to those in the GEP-NET trial. Adverse reactions in ≥5% of patients who received SOMATULINE DEPOT and at least 5% greater than placebo were headache (12%), dizziness (7%) and muscle spasm (5%).

Drug Interactions

- SOMATULINE DEPOT may decrease the absorption of cyclosporine (dosage adjustment may be needed); increase the absorption of bromocriptine; and require dosage adjustment for bradycardia-inducing drugs (e.g., beta-blockers).

Special Populations

- **Lactation:** Advise women not to breastfeed during treatment and for 6 months after the last dose.

To report **SUSPECTED ADVERSE REACTIONS**, contact Ipsen Biopharmaceuticals, Inc. at 1-855-463-5127 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Please see accompanying full [Prescribing Information](#) and [Patient Information](#).

“What I say to my patients is that no one size fits all. Dietary guidance has to be done in terms of a personalized and individualized approach.”

–Dr. Daneng Li

References: **1.** Somatuline Depot (lanreotide) Injection [Prescribing Information]. Cambridge, MA: Ipsen Biopharmaceuticals, Inc.; July 2024. **2.** Cai B, Broder M, Chang E, Yan T, Metz D. Predictive factors associated with carcinoid syndrome in patients with gastrointestinal neuroendocrine tumors. World J Gastroenterol. 2017;23(40):7283-7291. **3.** Astor L. Diagnosing and Treating NET-Related Diarrhea. Targeted Oncology. <https://www.targetedonc.com/conference/2017-nanets/diagnosing-and-treating-netrelated-diarrhea>. Published October 21, 2017. Accessed August 2, 2024. **4.** Nasr C. Disease Management Project. <https://www.carcinoid.org/wp-content/uploads/2015/10/Flushing2004.pdf> December 7, 2004. Accessed August 2, 2024. **5.** Alper B, Raglow G. Diagnosing and treating generalized anxiety disorder. Clinical Advisor. <https://www.clinicaladvisor.com/features/diagnosing-and-treating-generalized-anxiety-disorder/> Published 2019. Accessed August 2, 2024. **7.** Warner M. Nutritional concerns for the carcinoid patient: developing nutrition guidelines for persons with carcinoid disease. Carcinoid Cancer Foundation. <https://www.carcinoid.org/for-patients/general-information/nutrition/nutritional-concerns-for-the-carcinoid-patient-developing-nutrition-guidelines-for-persons-with-carcinoid-disease/> Published 2008. Accessed August 2, 2024.