

## ABOVE THE STANDARD DOSE OF OCTREOTIDE-LAR IN PATIENTS WITH NEUROENDOCRINE TUMORS (NET)

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**Background:** Octreotide acetate for injectable suspension (octreotide-LAR) is commonly used in patients for control of carcinoid syndrome (CS) and other symptoms of hormone hypersecretion. The product-label indicates increasing octreotide-LAR depot dosage to 30 mg every 4 weeks if CS symptoms are uncontrolled or no longer controlled. However, in clinical practice, higher doses or dose-frequencies adjustments may be needed in some patients to achieve CS symptom relief. This study aims to understand the relationship between above standard doses of octreotide-LAR and CS symptom improvement. Medical records were reviewed at three large neuroendocrine tumor referral centers to examine reasons for octreotide-LAR dose-escalation and clinical outcomes in patients who underwent octreotide-LAR dose-escalation.

**Methods:** Medical records were abstracted for NET patients with diagnosis of carcinoid or pancreatic endocrine tumor,  $\geq 18$  years old, and who had received  $\geq 1$  dose of octreotide-LAR ( $>30$  mg/4 weeks). Reasons for dose-escalation and reports of flushing and diarrhea were abstracted for each patient 3 months prior to and up to 12 months following the dose-escalation.

**Results:** Medical records of 239 NET patients from 2000-2012 who had escalated Octreotide-LAR dose above the standard dose of 30 mg/4 weeks were evaluated. Of the evaluated patients, 53% were male, mean (SD) age at first dose-escalation was 60 (11) years, and mean (SD) time from octreotide-LAR initiation to first dose-escalation was 1.7 (3.7) years. The primary stated reasons for dose-escalation were carcinoid or hormonal syndrome (62%) or radiographic progression (14%). The most common dose change at first dose-escalation were 40 mg/4 weeks

(71%) or 60 mg/4 weeks (18%). Of 90 patients in whom flushing was reported prior to dose-escalation, 73 (81%) were reported to have experienced improvement/resolution of their symptoms following the dose-escalation. Of 107 patients who were reported to have experienced diarrhea before the first dose-escalation, 85 (79%) were reported to have experienced improvement/resolution post first dose-escalation. Similar results (resolution/improvement – 80% flushing and 77% diarrhea) were observed when patients were excluded who had received concurrent treatments (e.g., liver-directed therapy, interferon- $\alpha$ ) within 30days of first dose-escalation.

**Conclusion:** A goal of improved symptom control is a common reason for dose-escalation of octreotide-LAR. This retrospective review of medical records suggests that above the standard dose may result in improved symptom control.

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