

Dose-Escalation of Octreotide-LAR in Patients with Neuroendocrine Tumors (NET)

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Background: Octreotide-LAR is commonly used in patients for control of carcinoid syndrome (CS) and other symptoms of hormone hypersecretion. We performed a medical record review to examine reasons for Octreotide-LAR dose-escalation and clinical outcomes in patients who underwent Octreotide-LAR dose-escalation at three large neuroendocrine tumor referral centers.

Methods: Medical records were abstracted for NET patients with diagnosis of carcinoid or pancreatic endocrine, ≥ 18 years old, and who had received ≥ 1 dose of Octreotide-LAR ($>30\text{mg}/4$ 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 from 239 NET patients who had undergone dose-escalation above the standard Octreotide-LAR dose of $30\text{mg}/4$ weeks were evaluated from 2000-2012. 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 changes at first dose-escalation were $40\text{ mg}/4$ weeks (71%) or $60\text{ mg}/4$ 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- α) within 30 days 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 dose-escalation may result in improved symptom control.

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