Survival in the Pre- and Post-Octreotide LAR Era in Carcinoid Syndrome Patients

Neha Ray1; and Lowell Anthony, M.D.1

1Department of Medicine, The Markey Cancer Center, The University of Kentucky, Lexington, KY 40536

Background: The targeted therapy era for patients with carcinoid syndrome secondary to metastatic well-differentiated distal small bowel or proximal large bowel neuroendocrine neoplasms began in the mid-1980’s with the introduction of octreotide acetate, a somatostatin congener. The initial octreotide formulation was administered subcutaneously multiple times daily. A decade later, microencapsulated octreotide (D,L-lactic and glycolic acids) became available as an intramuscular monthly repeatable formulation.

Methods: To determine whether this change in formulation impacted survival, Kaplan Meier survival curves were calculated in the following 2 cohorts of carcinoid syndrome patients: 1) subcutaneous octreotide (150-500 mcg every 8 hours) (N=64) and 2) intramuscular octreotide (20-60 mg every 30 days) (N=77). Doses were titrated to control symptoms (flushing and/or secretory diarrhea).

Results: The median survivals (95% confidence intervals) are: 1) subcutaneous octreotide: 85.1 (67.7-123) months 2) intramuscular octreotide: 142 (124-156) months. Statistical significance was reached as indicated by non-overlapping 95% confidence intervals.

Conclusions: Survival in patients with carcinoid syndrome is statistically greater in the octreotide LAR era when compared to that in the subcutaneous octreotide era.