

Efficacy of Octreotide Long-Acting Repeatable (OCT) From the Phase III RADIANT-2 Study in Patients With Advanced Neuroendocrine Tumors (NET): A Post-Hoc Analysis of the Placebo (PBO) Arm With Updated Survival Data

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Background: OCT demonstrated antitumor activity and significantly extended time to tumor progression (TTP) vs PBO in patients with metastatic midgut NET (PROMID trial, Rinke et al. 2009). The RADIANT-2 study evaluated patients with symptomatic advanced NET. Here we report a post-hoc analysis assessing progression free survival (PFS) and overall survival (OS) of OCT (30 mg q28d) in the PBO+OCT arm of this study for the overall population and patients with midgut NET.

Methods: Patients eligible for the RADIANT-2 study had progressive disease within the past 12 months and a history of carcinoid symptoms (diarrhea or flushing). PFS (by central review as per RECIST 1.0, cutoff, April 2, 2010) and OS (cutoff, June 13, 2013) in the PBO+OCT arm were estimated by prior somatostatin analogue (SSA) use and primary tumor location subgroups using the Kaplan-Meier method.

Results: 213 patients were randomized to PBO+OCT. Of these, 47 (22%) were SSA naive (foregut, 32%; midgut, 51%; hindgut, 4%; not classified or missing, 13%) and 166 (78%) had received SSA (foregut, 10%; midgut, 72%; hindgut, 11%; not classified or missing, 7%) prior to study entry. Median PFS and OS findings are presented in the Table.

Table. PFS and OS in Patients With and Without Prior SSA in the PBO Arm of RADIANT-2

	No-prior SSA median (95% CI)	Prior SSA^a median (95% CI)
PFS (months)	13.6 (8.2-22.7) (n=47)	11.1 (8.4-14.2) (n=166)
PFS, midgut NET (months)	22.2 (8.3-29.5) (n=24)	12.0 (8.4-17.7) (n=119)
OS (months)	50.6 (36.4-NR) (n=47)	33.0 (24.5-43.7) (n=166)
OS, midgut NET (months)	NR ^b (42.4-NR) (n=24)	33.5 (27.5-49.4) (n=119)

^aIncludes patients who previously received OCT or lanreotide. ^bFor patients with midgut NET who did not receive prior SSA, the OS was not reached (NR) at a median follow-up of 64 months.

Conclusions: This post-hoc analysis, for the first time, provides prospective data on survival outcomes of patients with progressive NET treated with SSA therapy. SSA-naive patients with progressive midgut NET treated with OCT had a relatively long median PFS of 22.2 months, exceeding the TTP of 14.3 months observed in the PROMID study (World Health Organization criteria). This data may represent a more accurate reflection of PFS by RECIST associated with first-line SSA use in midgut NET.