

C-28

AZEDRA® (iobenguane I 131) in Patients with Malignant and/or Recurrent Pheochromocytoma/ Paraganglioma (PPGL): Final Results of a Multi-Center, Open-Label, Pivotal Phase 2b Study

Camilo Jimenez¹; Bennett B. Chin²; Richard B. Noto³; Joseph S. Dillon⁴; Lilja Solnes⁵; Jessica Jensen⁶; Terry White⁶; Nancy Stambler⁶; Stuart Apfel⁶; Vivien Wong⁶; Daniel A. Pryma⁷

¹University of Texas M. D. Anderson Cancer Center; ²Duke University; ³Warren Alpert Medical School of Brown University; ⁴University of Iowa Carver College of Medicine; ⁵Johns Hopkins Medicine; ⁶Progenics Pharmaceuticals, Inc.; ⁷Perelman School of Medicine at the University of Pennsylvania

BACKGROUND: AZEDRA, a high specific activity, proprietary Ultratrace® form of I-131 MIBG, has been developed for the treatment of MIBG-avid metastatic and/or recurrent and/or unresectable PPGL.

METHODS: MIBG-avid patients with PPGL ineligible for curative surgery, failed prior therapy or not candidates for chemotherapy, and on a stable antihypertensive regimen for tumor-related hypertension, were enrolled. 71% of patients received at least 2 prior lines of therapy. Patients received a dosimetric dose (111-222 MBq) followed by up to 2 therapeutic doses, each at 296 MBq/kg to a maximum of 18.5 GBq, approximately 3 months apart. The primary endpoint measured clinical benefit as defined by the proportion of patients with at least 50% reduction of all antihypertensive medications lasting ≥6 months, and the key secondary endpoint was objective tumor response (RECIST).

RESULTS: 68 patients received at least one therapeutic dose (full analysis; FA). 50 patients received two therapeutic doses (per protocol; PP). The primary endpoint was met by 25% (95% CI 16%-37%) of FA patients, and 32% (95% CI 21%-46%) of PP patients, achieving pre-specified success criteria of the primary endpoint. 23% and 30% of evaluable FA and PP populations, respectively, achieved best confirmed tumor response of PR. 69% of FA patients and 68% of PP patients achieved best overall response of stable disease. The most common ($\geq 50\%$) treatment-emergent adverse events (TEAEs) were nausea, myelosuppression and fatigue. No acute drug-related hypertensive crises were observed.

CONCLUSION: Clinical evidence from this study suggests that treatment with AZEDRA offers meaningful benefits to patients with MIBG-avid malignant, recurrent and/or unresectable PPGL, as measured by reduction in antihypertensive medications, and objective tumor response. AZEDRA is an effective and well tolerated treatment for an ultra-orphan disease with no approved therapies in the United States.