

## O3

### Open-Label Phase 2 Clinical Trial of LX1606 / LX1032 in Europe: A Novel Agent for Reducing Serotonin Production in Carcinoid Syndrome

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**Background:** Carcinoid syndrome (CS) is a combination of symptoms, including severe diarrhea and flushing, caused by excessive release of serotonin (5-HT) and other substances into the blood stream from metastatic carcinoid tumors. LX1606 (a.k.a. LX1032), an orally delivered peripheral tryptophan hydroxylase (TPH) inhibitor, represents a novel approach to potentially alleviate symptoms caused by excess 5-HT in carcinoid patients. LX1606 has received Orphan Drug designation from the European Medicines Agency.

**Methods:** The ongoing Phase 2 clinical trial in Europe is an open-label, dose-finding study to evaluate the safety and tolerability of LX1606 in patients with symptomatic CS. The serial ascending-dose design allows patients to increase their dosage every 14 days until an optimal dose is reached. The optimal dose is continued thereafter for an additional 4 weeks, for a total treatment period of up to 12 weeks.

**Results:** In Phase 1 clinical trials in healthy volunteers, LX1606 was well tolerated when given up to 500 mg 3 times daily. A dose-dependent reduction in urinary 5-HIAA levels was observed, achieving a 50-60% reduction, relative to placebo, by Day 14. Additionally, the 500 mg regimens showed a statistically significant decrease in blood 5-HT levels compared to placebo, confirming the compound's mechanism of action.

**Conclusion:** Reducing 5-HT production by carcinoid tumors via inhibition of TPH represents a potential new approach for managing the symptoms of CS. LX1606, a novel, orally-delivered TPH inhibitor, displayed a favorable safety profile and significantly reduced peripheral 5-HT production in healthy volunteers. An open-label Phase 2 clinical trial in Europe to evaluate the safety,

tolerability and effect on symptoms of LX1606 in patients with symptomatic CS is ongoing.