

A Double-Blind, Randomized, Placebo-Controlled Study of Pancreatin 25000 Minimicrospheres for Pancreatic Exocrine Insufficiency After Major Pancreatic Resection

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Context Pancreatic exocrine insufficiency (PEI) may occur following major pancreatic resection. **Objective** To demonstrate superior efficacy of pancreatin 25000 minimicrospheres over placebo in treating PEI after pancreatic resection. **Patients and Methods** A 1-week, double-blind (DB), randomized, placebo-controlled, parallel-group, multicenter study with 1-year open-label extension (OLE). Subjects ≥18-year-old with PEI after pancreatic resection, defined as baseline coefficient of fat absorption (CFA) <80%, were randomized to oral pancreatin or placebo (9-15 capsules/day: 3 with main meals, 2 with snacks). In the OLE, all subjects received pancreatin. The primary efficacy measure was least squares (LS) mean CFA change from baseline to end of DB treatment (ANCOVA). **Results** All 58 subjects randomized (32 pancreatin, 26 placebo) completed the DB phase and entered the OLE; 51 completed the OLE. In the DB

phase, the LS mean CFA change was significantly greater with pancreatin vs. placebo: 21.4% (95% CI: 13.7-29.2%) vs. -4.2% (95% CI: -12.8-4.5%); difference 25.6% (95% CI: 13.9-37.3%), P<0.001. In subjects randomized to pancreatin, the mean±SD CFA increase at the end of the OLE was 20.3±24.7%. Treatment-emergent adverse events (TEAEs) occurred in 37.5% subjects on pancreatin and 26.9% on placebo during DB treatment and in 75.9% during the OLE. The most common TEAEs were gastrointestinal disorders (DB: pancreatin 21.9%, placebo 11.5%; OLE: 6.9% patients). **Conclusion** This study demonstrates superior efficacy of pancreatin 25000 over placebo in patients with PEI after major pancreatic resection, as measured by change in CFA, with an expected safety and tolerability profile at the dosage administered.

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