Supplementary Methods

Data Acquisition: Specific Items Characterized

Demographic information collected on the Registration and Baseline Medical History forms included age (years), sex, and self-reported race (white, black, other). Attribution of gastroparesis to diabetic vs idiopathic vs other etiologies was made by site investigators based on patient self-report and record review. Scintigraphy parameters included the percentage of solid-phase retention at 2 and 4 hours and the percentage of liquid-phase retention at 1 hour. Four-hour solid-phase retention values were stratified into mild (11%-20%), moderate (21%-35%), and severe (>35% retained) gastric delays based on expert consensus emptying determinations. 15

The PAGI-SYM survey was administered to assess the severity of both gastroparesis and lower GI symptoms. The nausea/vomiting subscale score was the mean of scores for nausea (feeling sick to your stomach as if you were going to vomit or throw up), retching (heaving as if to vomit, but nothing comes up), and vomiting. The postprandial fullness/early satiety subscale score was the mean of scores for stomach fullness, not able to finish

a normal-sized meal, feeling excessively full after meals, and loss of appetite. The bloating/visible distention subscale score was the mean of scores for bloating (feeling like you need to loosen your clothes) and stomach or belly visibly larger. Individual upper abdominal pain scores from the PAGI-SYM also were included in gastroparesis symptom severity assessments. Individual PAGI-SYM subscale scores for lower abdominal pain, constipation, and diarrhea quantified lower GI symptoms.

Use of medications other than opioids was determined as a measure of health resource utilization. Medication classes queried included prokinetics (metoclopramide, erythromycin, clarithromycin, azithromycin, domperidone, pyloric botulinum toxin injection [within the past 4 weeks]), antiemetics (prochlorperazine, promethazine, trimethobenzamide, meclizine, ondansetron, granisetron, dolasetron, aprepitant, dronabinol, others), nonopiate analgesics (acetaminophen, aspirin, celecoxib, ibuprofen, indomethacin, naproxen, others), and neuropathic pain modulators (duloxetine, gabapentin, pregabalin, others). Use of laxatives (polyethylene glycol, lubiprostone, lactulose, bisacodyl, methylnaltrexone, colchicine, misoprostol, others) was recorded for Gastroparesis Registry 2.