

Supplemental Table Mobile gastric reflux biomarkers

| Therapeutic Area | Technology | Position of device | Epochs | Study design | Type of clinical study | Other mobile outcomes | Other standard outcome assessment | Use of mobile outcomes | Objectives | Source |
|-----------------------------------|--|--|---------------|------------------------------|------------------------|-----------------------|-----------------------------------|------------------------|---|---------------------|
| Gastrointestinal disorders (GERD) | Ingestible pH monitor (BRAVO capsule pH monitoring device) | GI track (Attached to Esophageal Mucosa) | 6 seconds | Observational (Cohort study) | Diagnostic | NA | Gastric reflux (PRO) | Co-Primary Endpoint | To assess the need for doubling esomeprazole standard dose (40 mg) for 4 weeks in PPI naive patients with typical reflux symptoms and diagnosis of GERD based on endoscopy and 48 hours, wireless pH metry. | Kandulski 2013 [1] |
| Gastrointestinal disorders (GERD) | Ingestible pH monitor (BRAVO capsule pH monitoring device) | GI track (Attached to Esophageal Mucosa) | Not specified | Interventional (RCT) | Treatment (Phase IV) | NA | Gastric reflux (PRO) | Primary endpoint | To investigate the efficacy of three different dosages of esomeprazole in patients receiving maintenance therapy for GERD, using the Bravo pH system. | Vasiliadis 2010 [2] |

PRO = Patient Reported Outcome

References

1. Kandulski A, Peitz U, Monkemuller K, Neumann H, Weigt J, Malfertheiner P. GERD assessment including pH metry predicts a high response rate to PPI standard therapy. BMC gastroenterology. 2013;13:12. Epub 2013/01/18. doi: 10.1186/1471-230x-13-12. PubMed PMID: 23324360; PubMed Central PMCID: PMC3562521.
2. Vasiliadis KV, Viazis N, Vlachogiannakos J, Sgouros SN, Stefanidis G, Archimandritis A, et al. Efficacy of three different dosages of esomeprazole in the long-term management of reflux disease: a prospective, randomized study, using the wireless Bravo pH system. The American journal of gastroenterology. 2010;105(2):308-13. Epub 2009/10/08. doi: 10.1038/ajg.2009.556. PubMed PMID: 19809412.