Potential for Reduced Postoperative Ileus with Use of Oliceridine, An IV Opioid Analgesic, In Colorectal Surgery

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BACKGROUND
- Postoperative ileus (POI) is a serious debilitating complication following abdominal or colorectal surgery.
- It is characterized by abdominal distention and bloating, nausea, vomiting, pain, accumulation of gas and fluids in the bowel, and delayed passage of flatus and defecation. 1
- Use of IV opioid analgesics can further exacerbate POI, prolonging length of stay, and increase morbidity. 2
- The incidence of POI following colectomy, cholecystectomy, or other abdominal surgeries is reported at 10 to 30%. 3
- Alvimopan is a peripherally acting μ-opioid receptor antagonist indicated to accelerate the gastrointestinal recovery following partial bowel resection surgery with primary anastomosis. 4
- In clinical studies for the management of POI, alvimopan was administered orally at doses of 12 mg preoperatively and continued following surgery for up to 7 days for a maximum of 15 days.
- Data from Phase 3 studies of alvimopan report a 12% incidence of POI with use of IV opioids (placebo group) and with use of alvimopan the incidence was 5 to 6%. 5
- Oliceridine, a new class of IV opioids, that is a G protein-selective agonist at the μ-opioid receptor, reported at 10 to 30%.
- The translation of these findings in humans has not been fully established. 6

OBJECTIVE
- In an exploratory analysis, we evaluated the incidence of observed or self-reported AEs of constipation or POI with oliceridine and multimodal non-opioid analgesics.
- The mean (SD) cumulative dose of oliceridine and the duration in the two groups is shown in Table 3. Patients receiving alvimopan had a longer duration of exposure than patients not receiving alvimopan (median hours: 56.3 vs 45.5).

RESULTS
- A total of 768 patients were enrolled in the ATHENA trial.
- 108 patients underwent colon resections (including colostomy, ileostomy, proctectomy, sigmoidectomy, rectum removal, and duodenoplasty) were included in the analysis.
- We report the incidence stratified by use of alvimopan.

LIMITATIONS
- The exploratory findings reported here are based on post-randomization events and the adverse events collected were spontaneously reported.

CONCLUSIONS
- These preliminary findings suggest a trend towards lower incidence of postoperative ileus with IV oliceridine.
- Data from an additional exploratory analysis at one site comparing standard of care at their institution, showed median time to bowel function recovery of 2.0 days with oliceridine and 3.5 days with use of conventional opioids.
- Future well designed trials are needed to confirm these preliminary findings.

REFERENCES
5. ENTEREG® Prescribing Information, Merck & Co., Inc. 2022.

DISCLOSURES AND ACKNOWLEDGEMENTS
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