Alvimopan

Pronunciation: AL-vi-MOE-pan
Class: GI agent

Trade Names

Entereg
- Capsules, oral 12 mg

Pharmacology

Antagonizes the peripheral effects of opioids on GI motility and secretion by competitively binding to GI tract mu-opioid receptors.

Pharmacokinetics

Absorption

Following oral administration, C_{max} is approximately 2 h postdose. Absolute bioavailability is approximately 6%.

Distribution

Vd is approximately 30 L. Plasma protein binding (to albumin) of alvimopan and its metabolite averages 80% and 94%, respectively.

Metabolism

No evidence of hepatic metabolism. Unabsorbed and unchanged drug is hydrolyzed to the metabolite by gut microflora.

Elimination

Renal excretion accounts for approximately 35% of the total drug Cl. The metabolite is eliminated in the feces and urine. Mean terminal $t_{½}$ of alvimopan and the metabolite range from 10 to 17 h and 10 to 18 h, respectively.

Special Populations

Renal Function Impairment
The $t_{½}$ was comparable in patients with mild or moderate renal function impairment. There may be drug accumulation in patients with severe renal function impairment receiving multiple doses.

Hepatic Function Impairment

Drug exposure tended to be higher in patients with mild or moderate hepatic function impairment compared with healthy controls. There were no consistent effects on C_{max} or $t_{½}$ in patients with hepatic function impairment.

Elderly
No dosage adjustment is needed.

Gender
Gender does not affect the pharmacokinetics of alvimopan.

Race
Dosage adjustments are not necessary based on race.

Indications and Usage

Accelerate the time of upper and lower GI recovery following partial large or small bowel resection surgery with primary anastomosis.

Contraindications

Patients who have taken opioids for more than 7 consecutive days prior to taking alvimopan.

Dosage and Administration

Adults
PO 12 mg 30 min to 5 h prior to surgery followed by 12 mg twice daily beginning the day after surgery for a max of 7 days or until discharge (max, 15 doses).

General Advice

- For hospital use only.

Storage/Stability

Store at 59° to 86°F.

Drug Interactions

None well documented.

Laboratory Test Interactions

None well documented.

Adverse Reactions

GI

Constipation (10%); flatulence (9%); dyspepsia (7%).

Genitourinary

Urinary retention (4%).

Hematologic-Lymphatic

Anemia (5%).

Metabolic-Nutritional

Hypokalemia (10%).

Musculoskeletal

Back pain (3%).

Precautions

Warnings

Available only for short-term use in hospitalized patients.

Monitor

Closely monitor patients with mild to moderate hepatic or mild to severe renal function impairment for adverse reactions.

Pregnancy

Category B .

Lactation

Undetermined.

Children

Safety and efficacy not established.

Renal Function

Not recommended in patients with end-stage renal disease.

Hepatic Function

Not recommended for use in patients with severe hepatic function impairment. There is a potential for 10-fold higher plasma levels in patients with severe hepatic function impairment.

Bowel obstruction

Not recommended for use in patients undergoing surgery for correction of complete bowel obstruction.

GI adverse reactions

Patients recently exposed to opioids are expected to be more sensitive to alvimopan GI adverse reactions.

MI

Conflicting results; however, a 12-month study of patients receiving opioids for chronic pain found an increase in MI in patients receiving alvimopan 0.5 mg twice daily compared with placebo.

Overdosage

Symptoms

Data not available; single doses of up to 120 mg and multiple doses of up to 48 mg for 7 days were well tolerated by healthy subjects.

Patient Information

- Inform patients that the most common adverse reactions are constipation, dyspepsia, and flatulence.
- Inform patients that they must disclose long-term or intermittent opioid pain therapy because recent opioid use may make them more susceptible to alvimopan adverse reactions (eg, abdominal pain, diarrhea, nausea, vomiting).