

Supplemental Table 2. Peripherally acting opioid antagonists

	Clinical Use(s)	Year Approved	Brand Name(s)	Formulation(s)	Oral Bioavailability, %	Parenteral/ Other Bioavailability, %	Receptor Profile	Half-life, hours	Common AE(s)	Special Considerations
Alvimopan <sup>1,2</sup>	GI recovery after bowel surgery	2008	Entereg	Oral	6	NA	MOR antagonist, low affinity for KORs and DORs	10–17	Dyspepsia	Available only through a REMS program for short-term use in hospital
Methylnaltrexone <sup>3,4</sup>	Opioid-induced constipation	2008	Relistor	Oral	Undetermined	NA	MOR and KOR antagonist, low affinity for DORs	8–15	Abdominal pain, flatulence, nausea	Should not be used in patients with or at risk for GI obstruction
				SC injection	NA	82				
Naldemedine <sup>5,6</sup>	Opioid-induced constipation	2017	Symproic	Oral	20–56	NA	MOR, DOR, and KOR antagonist	11	Abdominal pain, diarrhea, nausea, gastroenteritis	Should not be used in patients with or at risk for GI obstruction
Naloxegol <sup>7,8</sup>	Opioid-induced constipation	2014	Movantik	Oral	Undetermined	NA	MOR and DOR antagonist, partial KOR agonist	6–11	Abdominal pain, nausea, diarrhea	Should not be used in patients with or at risk for GI obstruction

AE, adverse event; DOR, delta opioid receptor; GI, gastrointestinal; KOR, kappa opioid receptor; MOR, mu opioid receptor; NA, not applicable; REMS, risk evaluation and mitigation strategy; SC, subcutaneous.

## REFERENCES

1. *Entereg [package insert]*. Rahway, NJ: Merck Sharp & Dohme; 2022.
2. Neary P, Delaney CP. Alvimopan. *Expert Opin Investig Drugs*. 2005;14(4):479-488.
3. *Relistor [package insert]*. Raleigh, NC: Salix Pharmaceuticals, Inc.; 2020.
4. *Relistor [summary of product characteristics]*. Dublin, Ireland: Bausch Health Ireland; 2022.
5. *Symproic [package insert]*. Raleigh, NC: BioDelivery Sciences International, Inc.; 2020.
6. *Rizmoic [summary of product characteristics]*. Amsterdam, Netherlands: Shionogi; 2023.
7. *Movantik [package insert]*. Wilmington, DE: AstraZeneca Pharmaceuticals; 2014.
8. European Medicines Agency. Moventig assessment report. 2014. Available at: [https://www.ema.europa.eu/en/documents/assessment-report/moventig-epar-public-assessment-report\\_en.pdf](https://www.ema.europa.eu/en/documents/assessment-report/moventig-epar-public-assessment-report_en.pdf). Accessed: April 25, 2023.