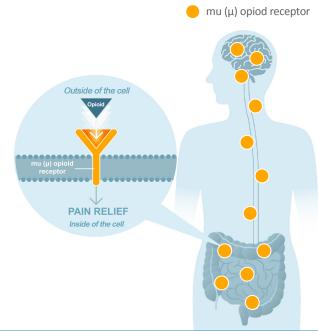
UNPAUSE THE GUT OPIOIDS AND THE GUT

OPIOIDS ARE A COMMON TREATMENT FOR PAIN

They interact with opioid receptors in different places in the body such as the brain and the gut, and help to stop or reduce the feeling of pain.

- The most commonly used opioids for pain management act on one type of opioid receptor called the mu receptor¹
- The central nervous system has lots of mu receptors which help reduce pain^{1,2}
- Once activated the mu receptors can also lead to changes in the gastrointestinal tract, affecting the muscles around your intestines and stopping them from moving properly - this could cause opioid-induced constipation (OIC)^{3,4}





OIC is defined as: "New or worsening symptoms of constipation when initiating, changing or increasing opioid therapy, that must include two or more of the symptoms defining functional constipation"⁵:

- Reflux/heartburn
- Nausea/vomiting
- Infrequent bowel movements
- Pain when going to the toilet
- Feeling full or heavy
- Flatulence
- Hard, lumpy and dry stools
- Straining
- Bloating
- Abdominal cramping/spasms
- Sensation of incomplete evacuation

PATIENTS WITH OIC ARE FREQUENTLY PRESCRIBED DIFFERENT TREATMENTS THAT ARE NOT ALWAYS SUCCESSFUL IN TREATING THE UNDERLYING CAUSE OF OIC. THESE CAN INCLUDE⁶:



THE ULTIMATE GOAL OF OIC TREATMENT IS TO ALLEVIATE CONSTIPATION WHILE MAINTAINING PAIN RELIEF⁷ IF OIC IS NOT RELIEVED BY NON-PHARMACOLOGICAL APPROACHES AND LAXATIVES, THERE ARE OTHER TREATMENTS THAT COULD BE TRIED. SPEAK TO YOUR DOCTOR OR NURSE ABOUT THESE.^{5, 7, 8}

1. Trescot AM, et al. Pain Phys 2008;11:5133–53. 2. Chahl LA. Aust Prescr 1996;19:63–5. 3. Panchal SJ, et al. Int J Clin Pract 2007;61:1181–7. 4. Holzer P. Neurosci Lett 2004;361:192–5. 5. Simren M, et al. Curr Gastroenterol Rep 2017;19:15. 6. Kumar L, et al. Gastroenterol Res Pract 2014;141737. doi:10.1155/2014/141737. 7. Bell TJ, et al. Pain Med 2009;10:35–42. 8. Rumman A, et al. Exp Rev Quality Life Cancer Care 2016;1:25–35. NP-EU-NAL-0210 Date of preparation: July 2022

AC, adenylyl cyclase; ATP, adenosine triphosphate; cAMP, cyclic adenosine monophosphate; Ca, calcium; G, g-protein coupled receptor; K, potassium. OIC, opioid-induced constipation; PAMORAs, peripherally acting μ -opioid receptor antagonists.