

### INTRODUCTION

- **Opioid Analgesics** remain standard of care for moderate to severe pain with few alternatives
- **Pre-clinical studies** have shown using a dopamine 3 receptor (D3R) agonist as an adjuvant to morphine provides superior analgesia against painful stimuli compared to morphine alone
- **Purpose:** Investigate an alternative to opioid therapy for moderate to severe pain
- **Objective:** To test if adjunct treatment with a D3R agonist can lead to a reduction in opioid use while maintaining effective analgesia

### **MATERIALS & METHODS**

- **Methods:** This study was set up as a double-blinded, placebo controlled randomized trial
- Control Group: received standard treatment of care (morphine, 0.1 mg/kg; i.v.) and an oral placebo pill
- **Experimental Group:** received halfdosed morphine and oral pramipexole pill (0.25 mg)



# **A Novel Opioid / Pramipexole Combination Treatment for the** Management of Acute Pain: A Pilot Study

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### CONCLUSION

- opioid dosing
- pain

## REFERENCES





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Our pilot clinical trial demonstrated that D3R recruitment can serve as an effective adjuvant to lowdose morphine for control of renal colic pain and potentially other acute pain conditions

This combination of morphine and pramipexole represents a potential novel therapeutic intervention for pain conditions as it reduces patient exposure to opioids and lessens the risks associated with standard

 While the current study used an acute pain condition in which to test this drug combination, there is preclinical data to suggest that dopamine modulation may also contribute to the effective management of chronic conditions such as neuropathic pain and migraine

This novel therapeutic approach has the potential to minimize the quantity of prescribed opioids and thus reduce the risks of side adverse side effects of these drugs, including overdose, tolerance and addiction