

# Decreasing Opioids in the Emergency Room:

# Pramipexole Adjuvant Cuts Opioid Dose in Half in Acute Renal Colic Patients

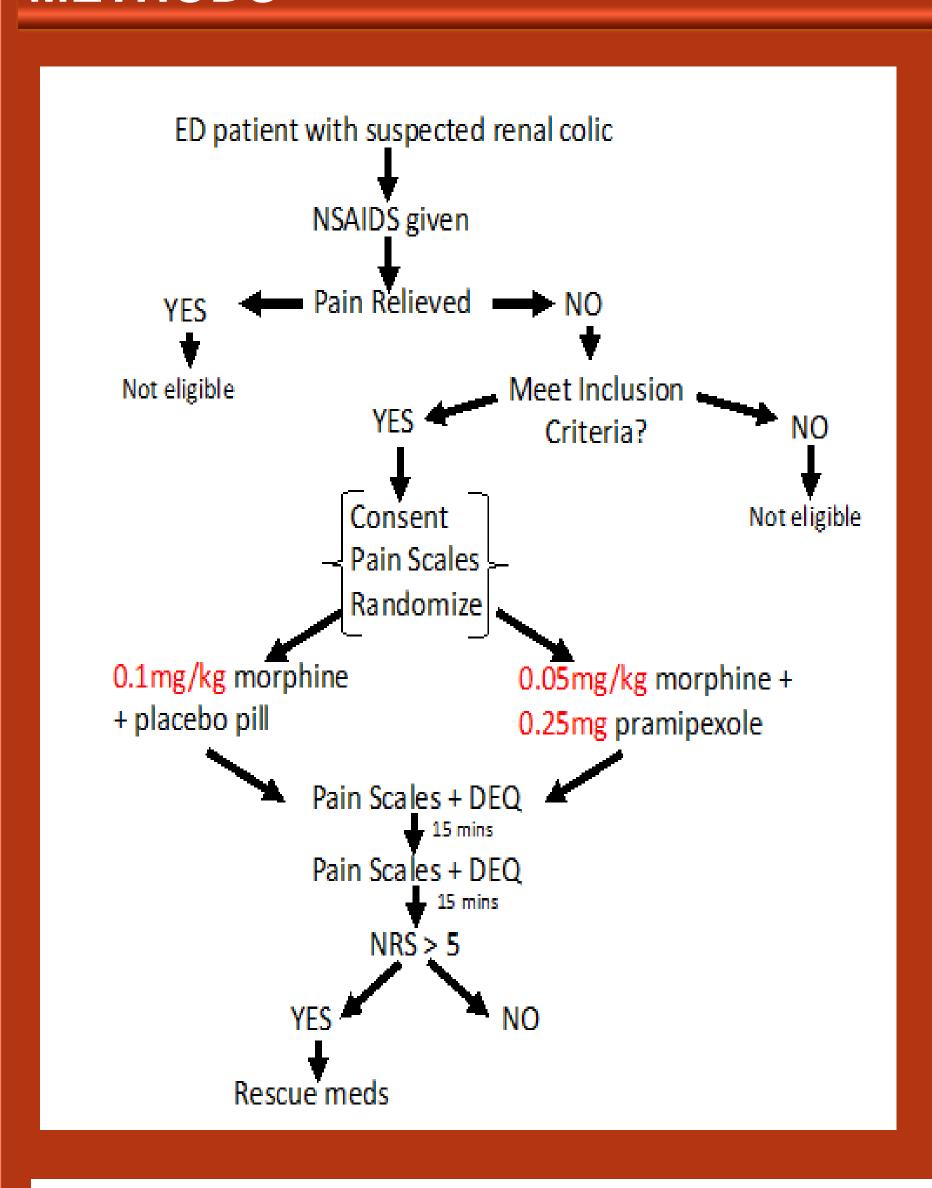
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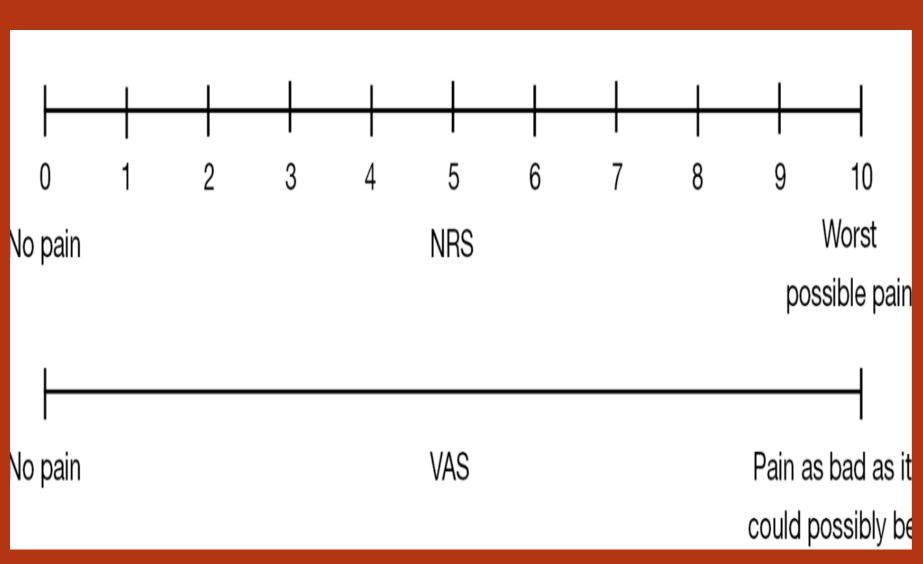


### INTRODUCTION

- Renal colic is a common emergency room presentation requiring acute pain management
- Current standard of care: opioid regimen, including morphine, when NSAIDs are contraindicated
- Renal colic pain management is a potential area to **reduce opioid use** with alternative methods
- Preclinical animal studies suggest adding
  Pramipexole, a dopamine-agonist typically
  used in Parkinson's disease, to morphine
  may provide a greater analgesic effect than
  morphine alone.

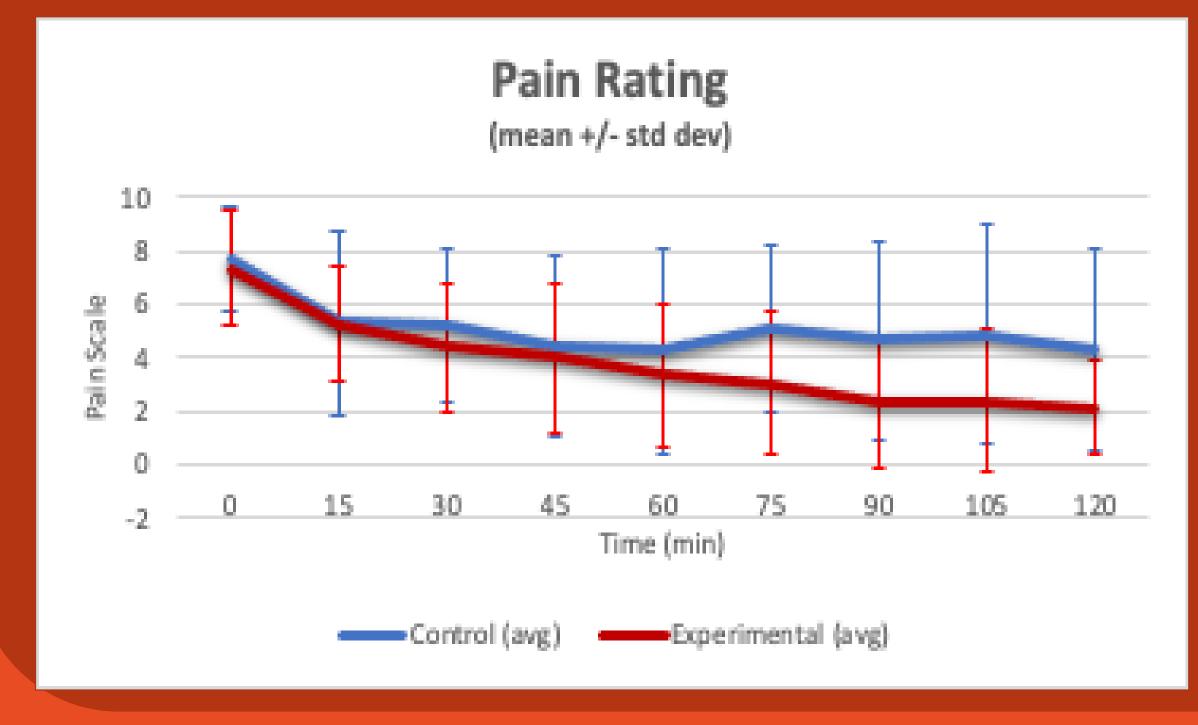
## METHODS

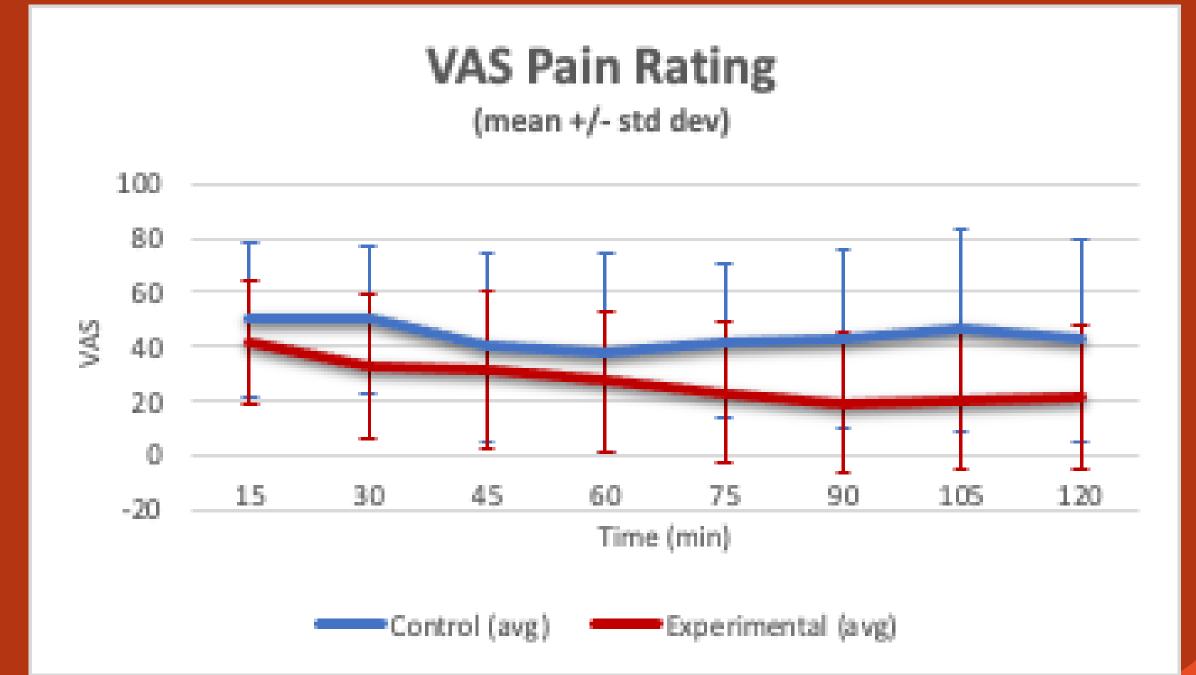


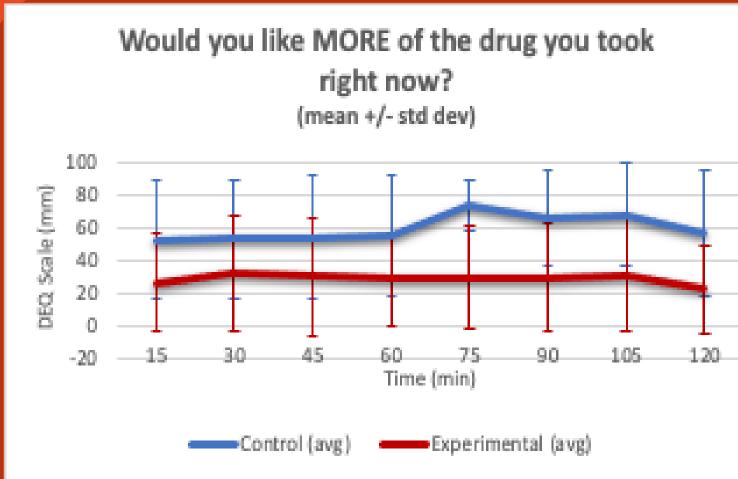


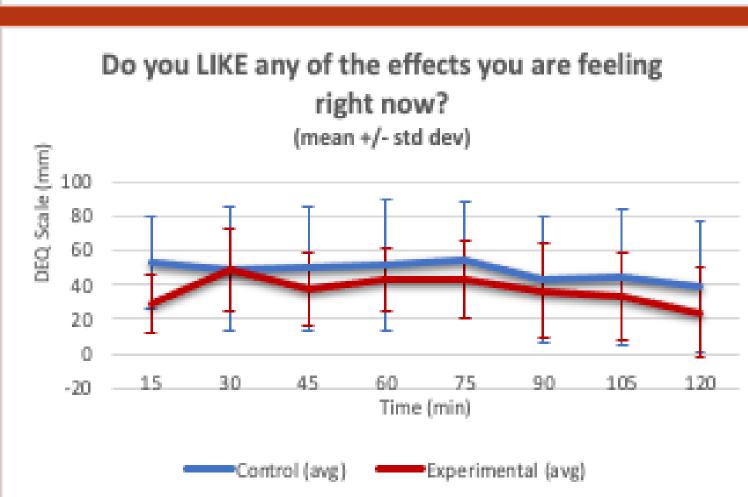
## RESULTS

# Experimental and Control Arms Shows Similar Average Pain Decrease Over Time with Both 0-10 Pain Scale and Visual Analog Scale

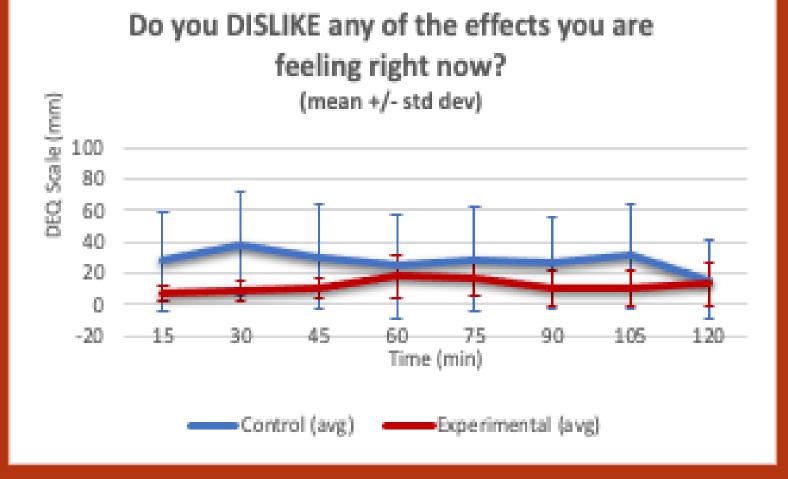


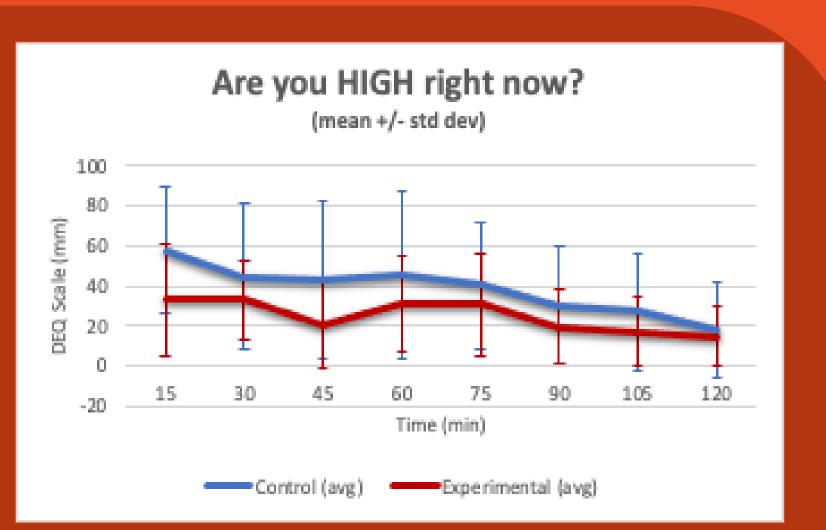


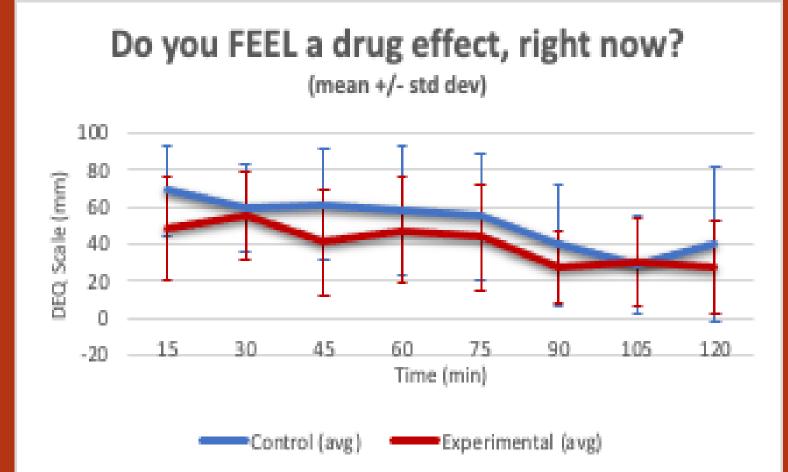




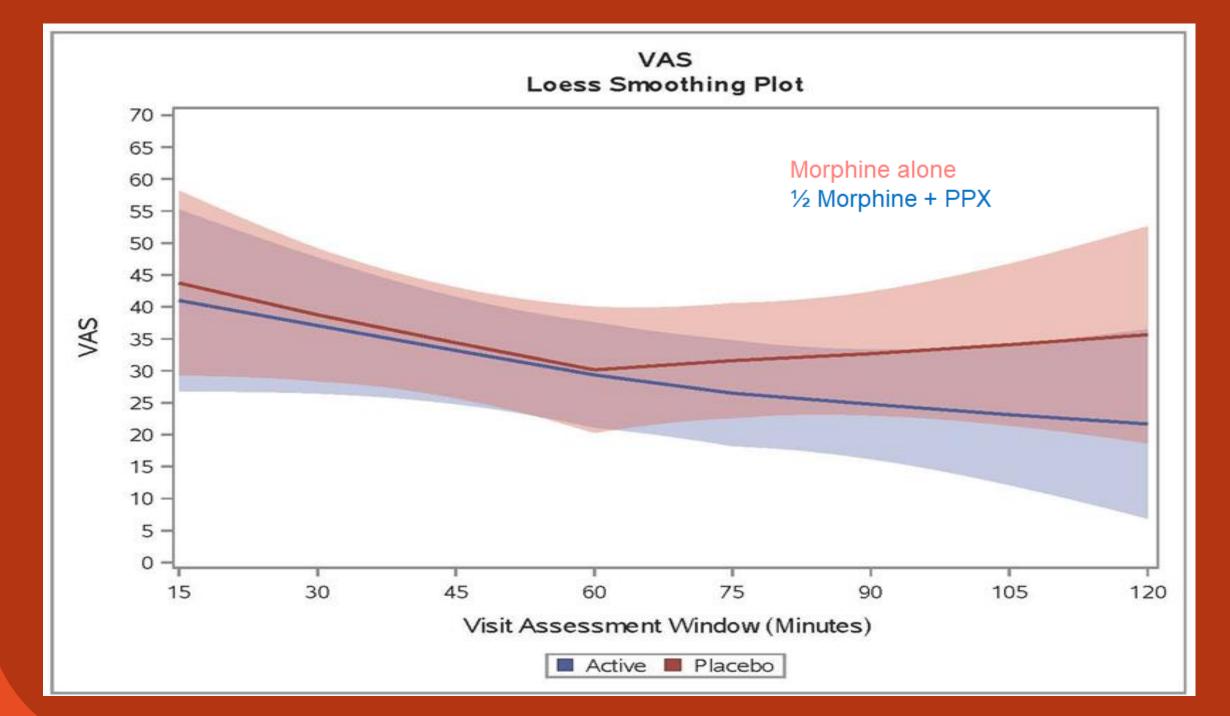
# Drug Effect Questionnaire: Experimental Arm trends LOWER Overall for All Questions

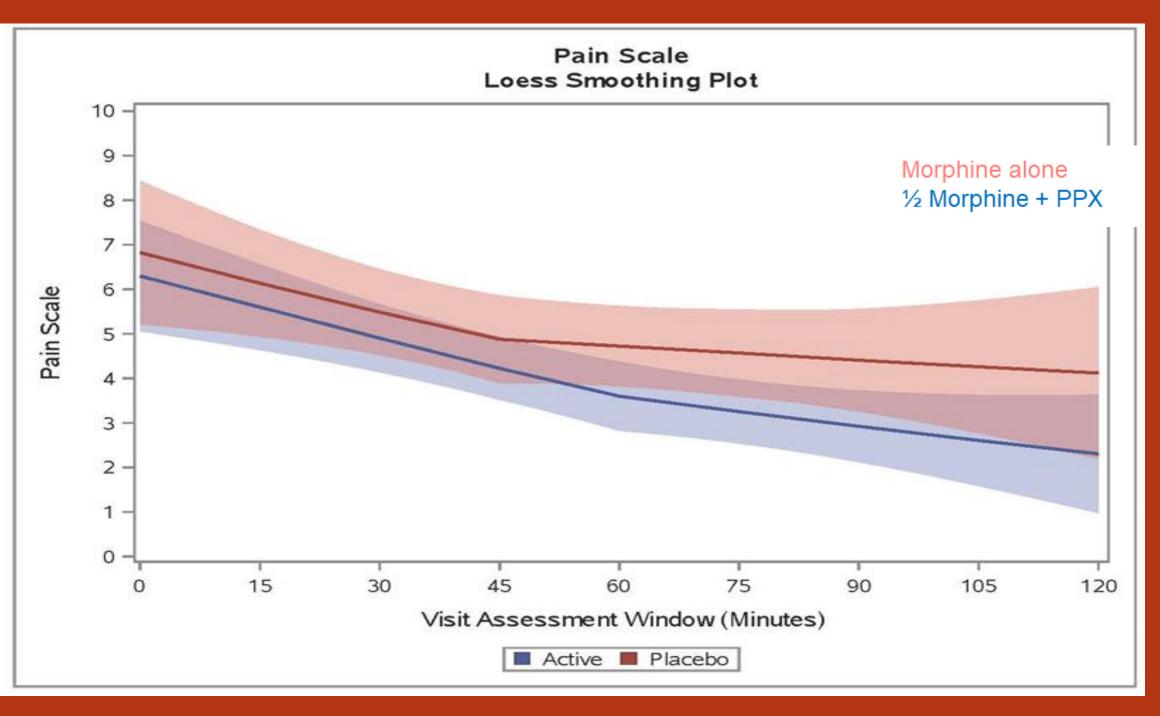






# LOESS Plot Predicts Superior Pain Management with Experimental Arm





EARLY DATA SHOWS
PRAMIPEXOLE + ½
MORPHINE TO HAVE A
COMPARABLE ANALGESIC
EFFECT TO STANDARD
MORPHINE

## DISCUSSION

- Should the study arm see a significant decrease in these pain scores, we can conclude that Pramipexole as an adjuvant to morphine is just as effective as morphine alone in reducing acute renal colic in an emergency department setting.
- To determine Pramipexole's **broader**scope of analgesic effects future studies
  will apply similar protocol to additional
  acute pain conditions.

### REFERENCES

Rodgers HM, Yow J, Evans E, Clemens S, Brewer KL. Dopamine D1 and D3 receptor modulators restore morphine analgesia and prevent opioid preference in a model of neuropathic pain. Neuroscience. 2019 May 15;406:376-388. doi: 10.1016/j.neuroscience.2019.03.034. Epub 2019 Mar 23. PMID: 30910641.

#### **ACKNOWLEDGEMENTS & CONTACT**

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