

# Pain Relief Post Abdominoplasty

## A Single Surgeon's Experience in Minimizing Patient Discomfort and Narcotic Use

H. Christopher Coley, MD; Coley Cosmetic & Hand Surgery Center, PA



### INTRODUCTION AND OBJECTIVES

- Abdominoplasty is one of the most common aesthetic surgical procedures worldwide. Because of the extensive dissection and rectus plication, it is also one of the most uncomfortable procedures performed and has one of the longest recover periods.
- Adequate pain management is a primary goal of the surgeon and team to provide the patient with a more satisfying recovery.
- Unfortunately, narcotic pain medication both intra operatively and post operatively has some challenges such as nausea, decreased bowel function which results in constipation, and even addiction.
- ZYNRELEF (HTX-011) is an extended-release, dual-acting local anesthetic (DALA) formulation comprising bupivacaine and low-dose meloxicam in a controlled-diffusion polymer that allows for controlled delivery of active ingredients over 72 hours (1)
- ZYNRELEF was approved in the United States On May 12, 2021
- The NSAID meloxicam in ZYNRELEF reduces surgery-related inflammation, thereby normalizing the local pH, which enhances penetration of bupivacaine into the nerve cell and potentiates its analgesic effect (2)
- Neither the low dose of meloxicam contained in ZYNRELEF nor the addition of NSAID-containing multimodal analgesia (MMA) have been shown to increase NSAID-related adverse events (3-5)

### METHODS

The objective of this study is to assess the drug ZYNRELEF (14 ML) in post operative pain control in patients undergoing abdominoplasty procedure 3 days following surgery

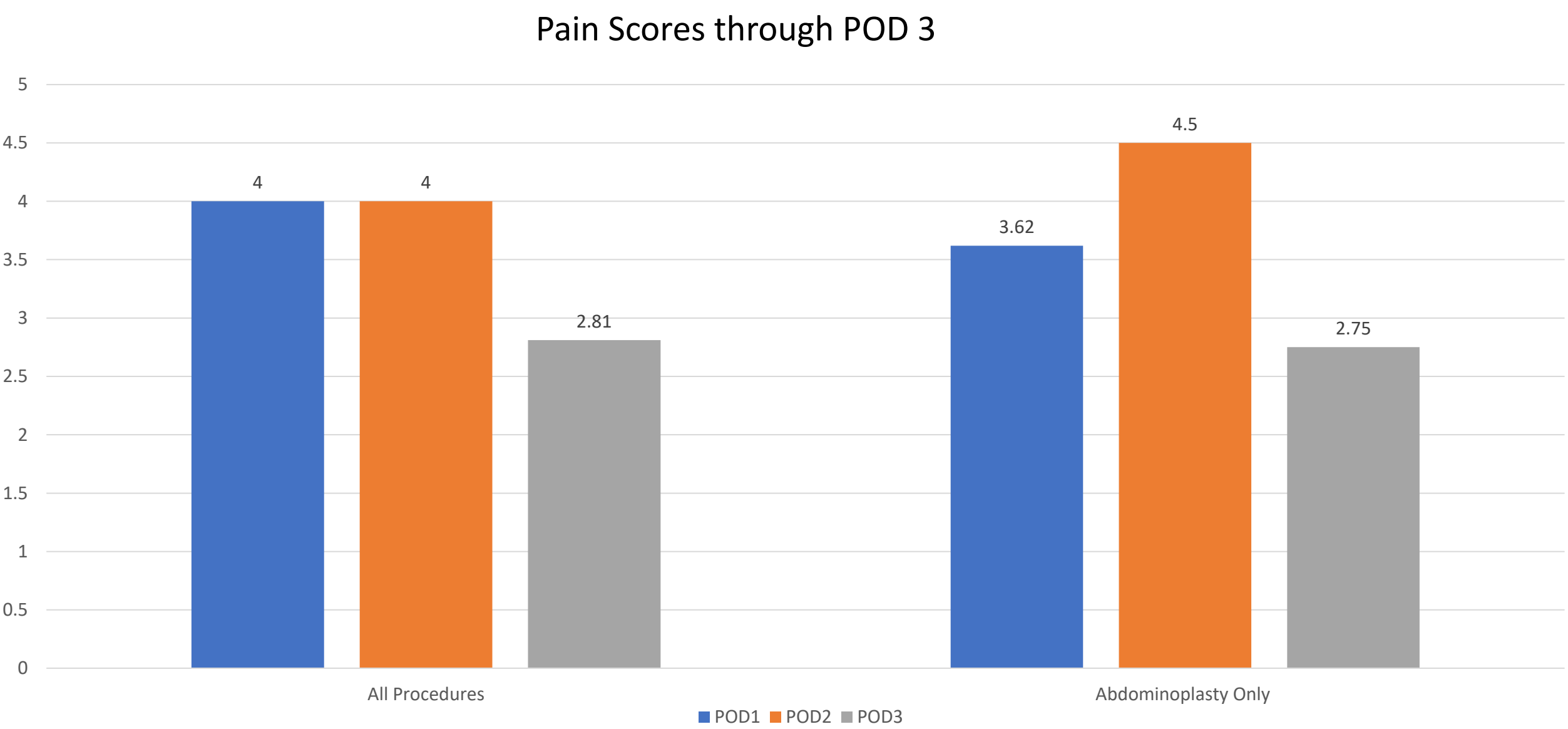
- Open-label single-arm study
- Patients were included if they had an American Society of Anesthesiologists Physical Status of I, II, or III undergoing abdominoplasty
- All patients received a single, intasraoperative dose of ZYNRELEF (400 mg bupivacaine/12 mg meloxicam) via needle free application into the surgical site prior to closure
- All patients received a perioperative scheduled acetaminophen 1000 mg PO around the clock every 8 hours and oxycodone 5 mg q 6 hours as need for breakthrough pain was prescribed
- A Nurse called patients following surgery on POD1, POD2 and POD3 to assess pain scores and opioid consumption
- Pain level was assessed on NRS scale (0-10)



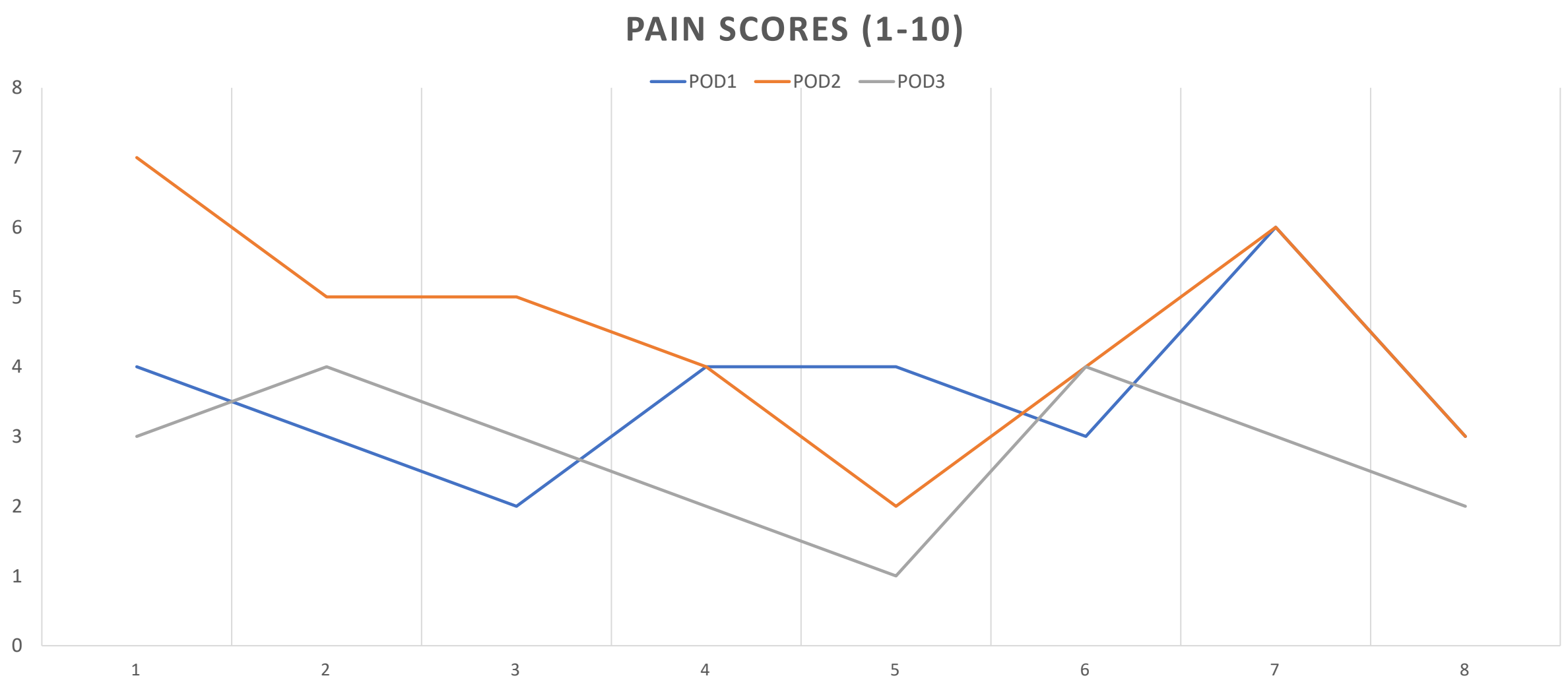
### METHODS CON'T

Application Technique - ZYRELEF (14 ML) was instilled in the trough created by abdominal wall plication, along the lateral and inferior edges of the dissection, and on the anterior abdominal wall, essentially covering the entire dissected area.

### RESULTS

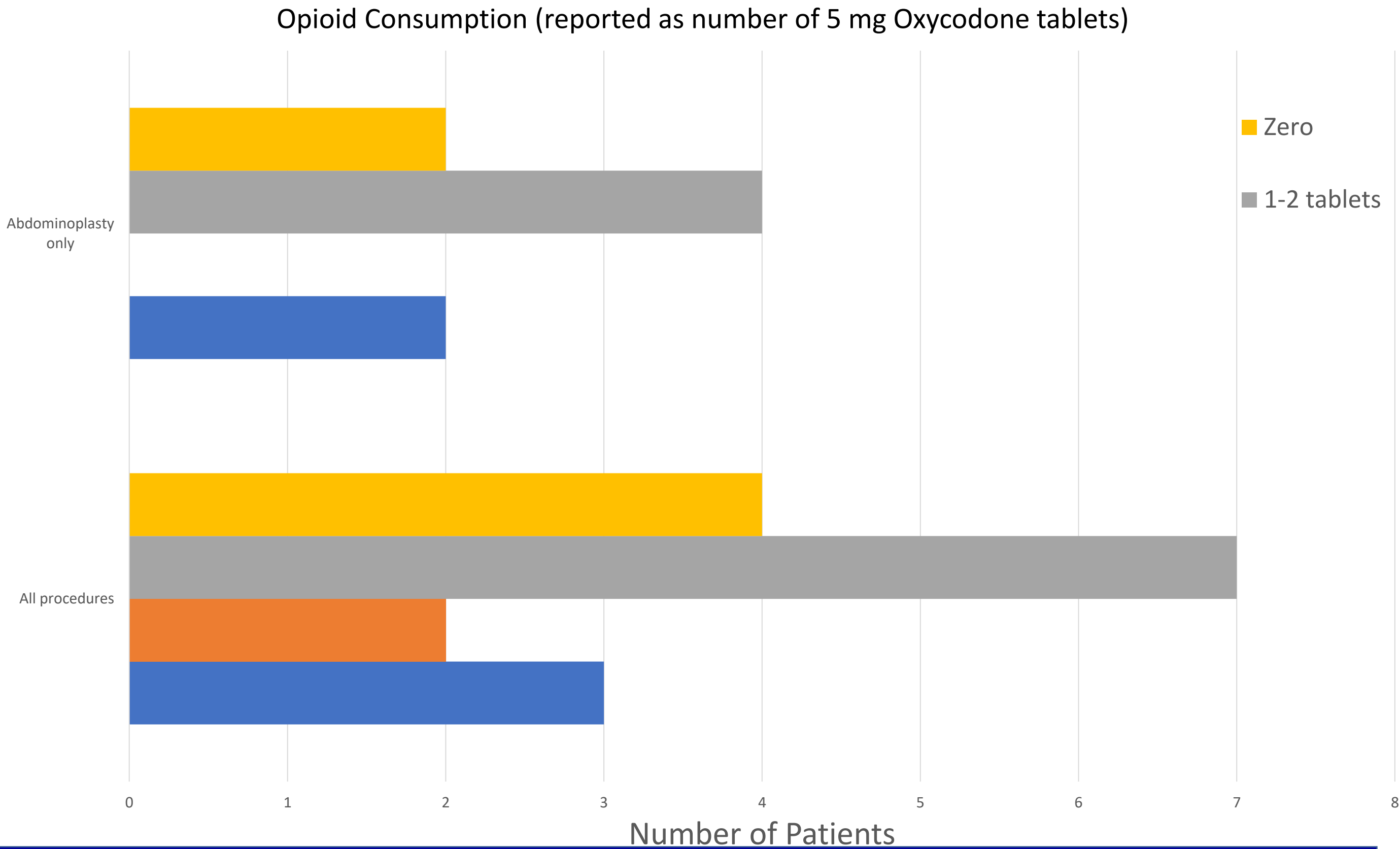


Pain Scores for POD1; POD2, and POD3 Abdominoplasty Only Arm



- 16 patients underwent abdominoplasty (+/- liposuction, +/- breast augmentation) from May 2022 until August 2022
- 8 patients underwent abdominoplasty alone from May 2022 until August 2022
- Average pain score for patients that underwent abdominoplasty only was 2.54
- 4 patients in the all-procedure arm took no post op opioids
- 2 patients in the abdominoplasty only arm took no post op opioids
- No patients in either arm experienced severe pain (defined as > 7 on NRS 0-10)

### RESULTS CON'T



### DISCUSSION AND CONCLUSIONS

Administration of ZYNRELEF is a simple process. Pain relief for the first 72 hours post operatively was clinically superior to other methods previously used. Narcotic consumption was reduced with the use of ZYNRELEF. ZYNRELEF is cost effective when compared to other modalities. Patient satisfaction is improved with better post op pain control, reducing the need for potentially addictive narcotic use and the issues associated with narcotic use. There were no adverse events or safety issues related to the application of ZYNRELEF

### ACKNOWLEDGMENTS

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### FINANANCIAL DISCLOSURES

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