



Comparison of 100 mcg vs. 150 mcg Intrathecal Morphine Doses for Post Cesarean Delivery Analgesia with Regards to Efficacy and Opioid-related Side Effects: A Retrospective Cohort Study

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- Intrathecal morphine (ITM) is the gold standard
- ITM can result in pruritus, nausea, and vomiting
- Optimal ITM dose is unclear
- Standardized multimodal analgesic
- In Jan 2022, we reduced the ITM dose from 150 mcg to 100 mcg
- **Hypothesis:** Comparable analgesia with less side effects with 100 mcg ITM



Methods

Cesarean deliveries including ITM
between Jan 2020 - Oct 2022

Excluded chronic pain, truncal
blocks, or other doses of ITM

1^{ry} outcome: 24 h Opioid consumption
2^{ry} outcomes: Antipruritics, antiemetics

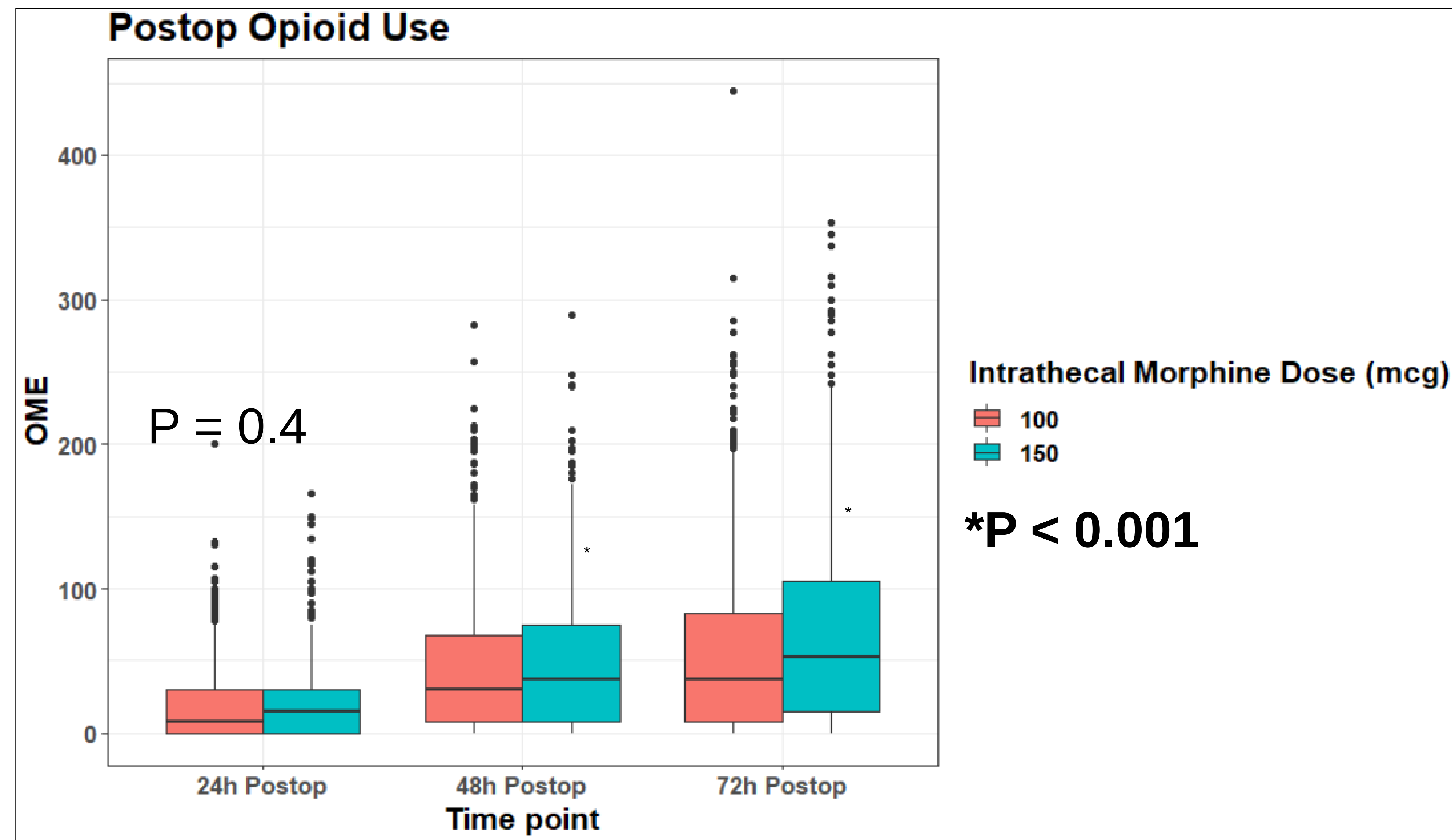
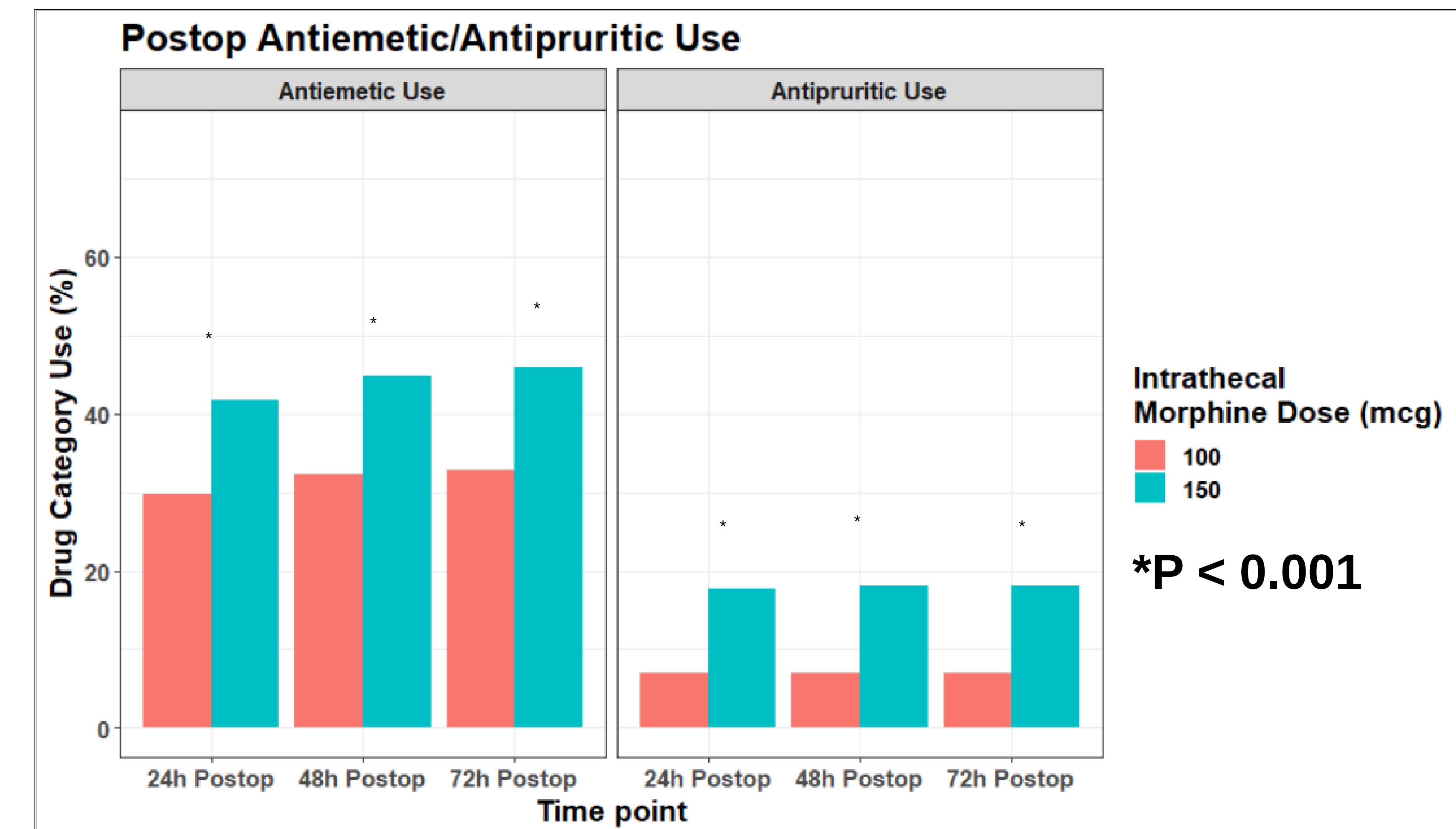
Zero-inflated negative binomial
models, and logistic regression
models for analysis

Results

	100 mcg dose (n=1689)	150 mcg dose (n=1604)	ASMD
Age, years	32 [28, 36]	32 [28, 36]	0.02
Race			0.25
Asian	89 (5.3%)	116 (7.2%)	
Black	479 (28.4%)	539 (33.6%)	
White	861 (51.0%)	666 (41.5%)	
Other/Multiple	178 (10.5%)	239 (14.9%)	
Not Reported/Declined	82 (4.9%)	44 (2.7%)	
Height, cm	163 [158, 168]	163 [158, 168]	0.02
Weight, kg	87 [76, 101]	88 [76, 105]	0.17
BMI, kg/m ²	33 [29, 38]	34 [29, 40]	0.20
Gravidity	2 [1, 3]	3 [2, 4]	0.31
Parity	2 [1, 2]	2 [1, 3]	0.31
Anxiety	254 (15.0%)	244 (15.2%)	0.03
Depression	61 (3.6%)	202 (12.6%)	0.33
Gestational age, weeks	39 [37, 39]	37 [36, 39]	0.47
Category			0.08
Primary	885 (52.6%)	676 (42.4%)	
Repeat	796 (47.4%)	919 (57.6%)	
Priority			0.17
Emergent	19 (1.1%)	24 (1.5%)	
Scheduled	843 (50.1%)	877 (55.0%)	
Unscheduled	552 (32.8%)	418 (26.2%)	
Urgent	268 (15.9%)	276 (17.3%)	

Data are median (IQR) or number (%). ASMD: Absolute standardized mean ratio

Results



Conclusion

Less need and dose of rescue opioids, less need for antiemetics and antipruritics with **100 mcg ITM dose**