

Preoperative Olanzapine and Quality of Recovery after Discharge from Ambulatory Surgery: A Randomized Clinical Trial



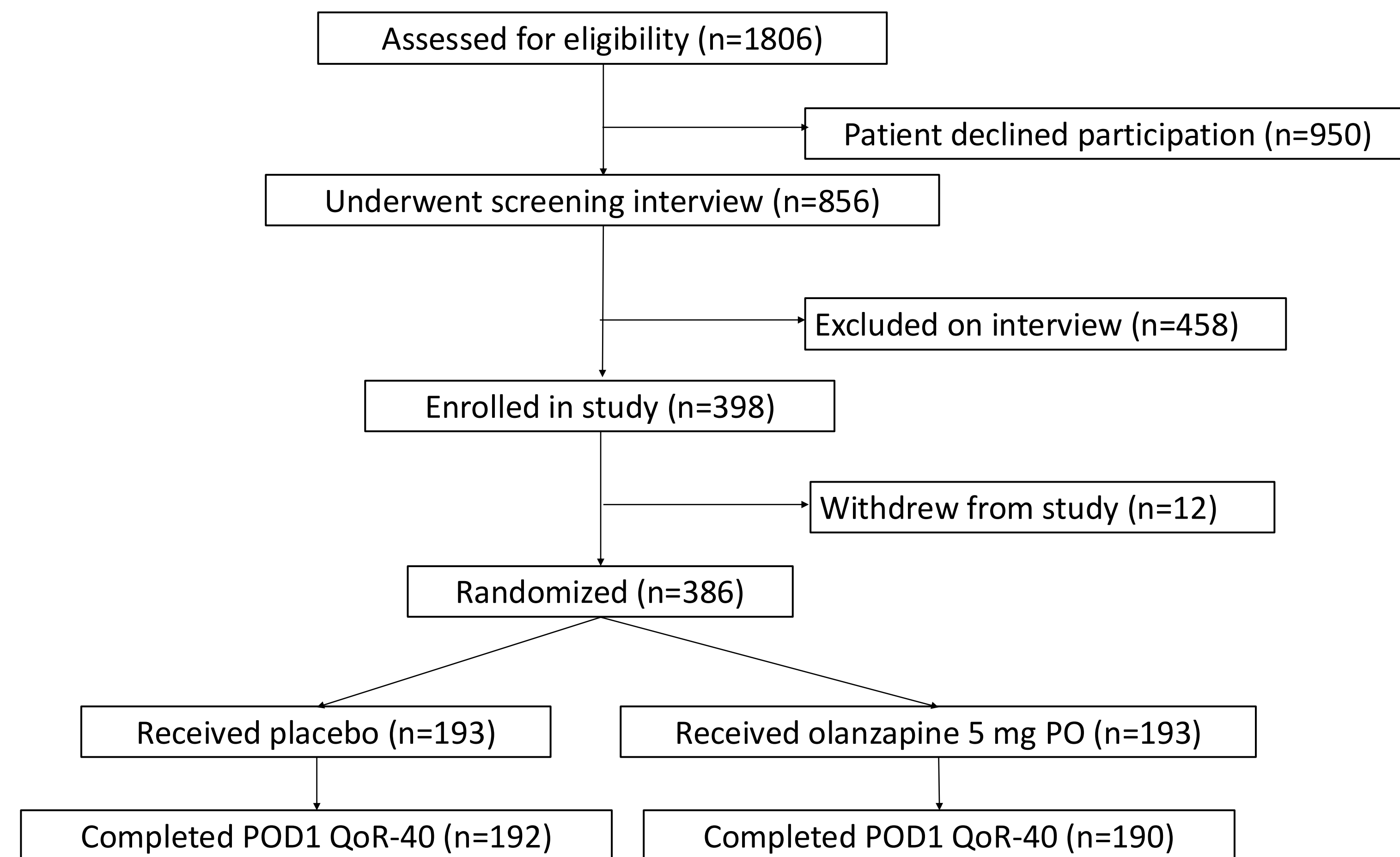
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Question

Does a single preoperative oral dose of olanzapine 5 mg improve quality of recovery (QoR) after ambulatory surgery under general anesthesia in women at elevated risk of PDNV receiving standardized prophylaxis with dexamethasone and ondansetron?

Primary outcome: QoR-40 item survey score on POD1

Figure 1: Study Design



Patient Demographics & Intraoperative Management

Characteristic	Olanzapine (n=191)	Placebo (n=193)
Age	38 (8)	38 (8)
BMI (kg/m ²)	29 (7)	29 (8)
Ethnicity		
Hispanic	18 (9.4%)	33 (17%)
non-Hispanic	167 (87%)	151 (78%)
Unknown	6 (3.1%)	9 (4.7%)
Race		
White	154 (81%)	145 (75%)
Black	15 (7.9%)	17 (8.8%)
Other/Unknown	22 (12%)	31 (16%)
Surgery location		
Hospital outpatient	165 (86%)	161 (83%)
Surgery Center	26 (14%)	32 (17%)
Surgery type		
Hysteroscopy	42 (22%)	37 (19%)
Laparoscopic Gyn	70 (37%)	66 (34%)
Vaginal	16 (8.4%)	22 (11%)
Breast	20 (10%)	21 (11%)
Otolaryngology	28 (15%)	30 (16%)
Other	15 (7.9%)	17 (8.8%)
ASA Physical Status		
1	26 (14%)	18 (9.3%)
2	137 (72%)	147 (76%)
3	28 (15%)	28 (15%)
Apfel Score		
2	77 (40%)	58 (30%)
3	83 (43%)	91 (47%)
4	31 (16%)	44 (23%)
Airway type		
Tracheal Tube	113 (59%)	120 (62%)
Supraglottic Airway	60 (31%)	56 (29%)
Natural Airway	18 (9.4%)	17 (8.8%)
Maintenance		
Inhalational	10 (5.2%)	11 (5.7%)
TIVA	149 (78%)	150 (78%)
Combination	32 (17%)	32 (17%)
Intraoperative MME	42 [30, 60]	38 [30, 60]
Fascial Plane Block	22 (12%)	25 (13%)
Multimodal Analgesia		
Acetaminophen	182 (95%)	180 (93%)
NSAIDs	130 (68%)	124 (64%)
Dexmedetomidine	29 (15%)	21 (11%)
Ketamine	1 (0.5%)	3 (1.6%)
Surgery duration (min)	63 [27, 121]	66 [34, 121]

Results

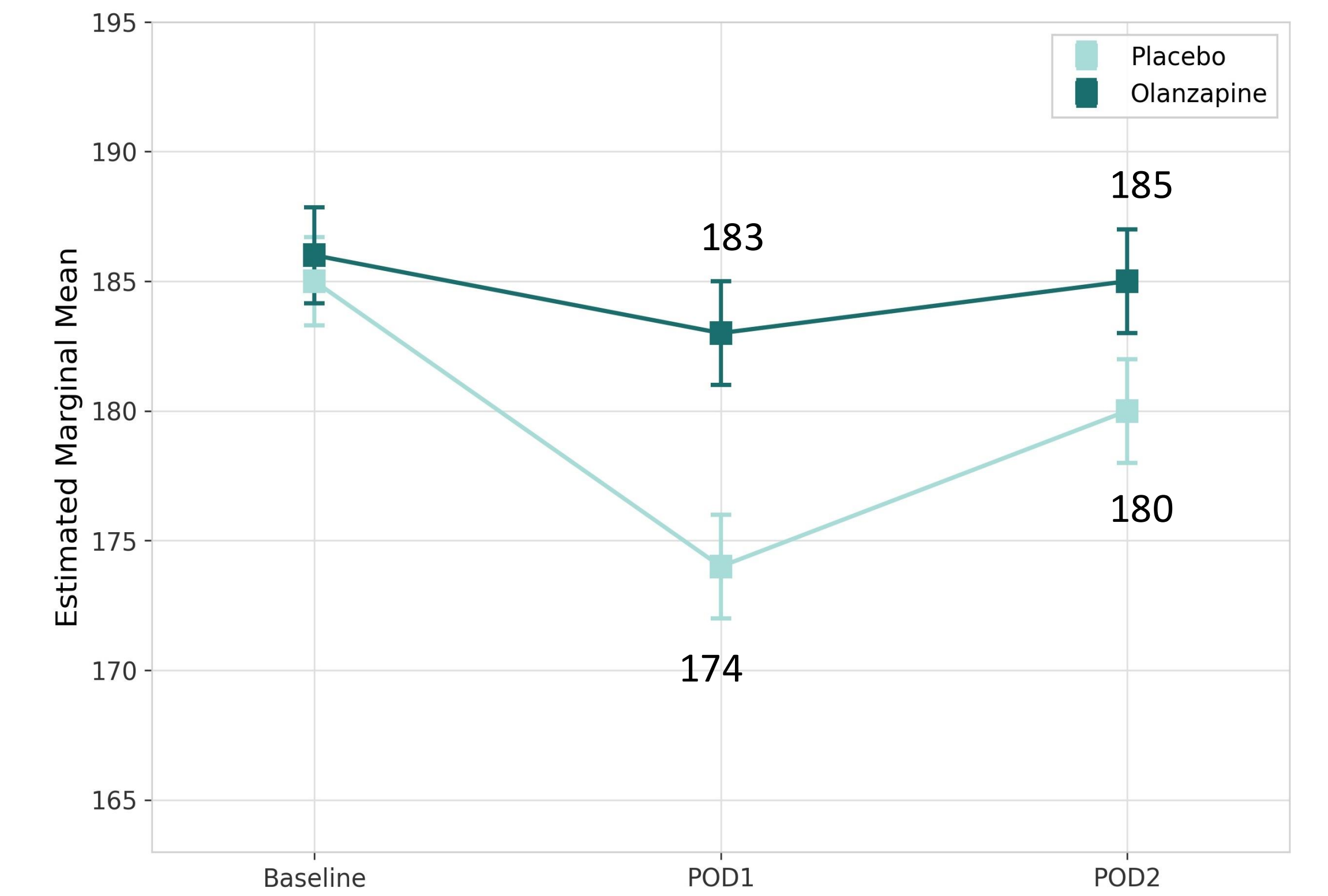


Figure 2: QoR scores at baseline, POD1, and POD2

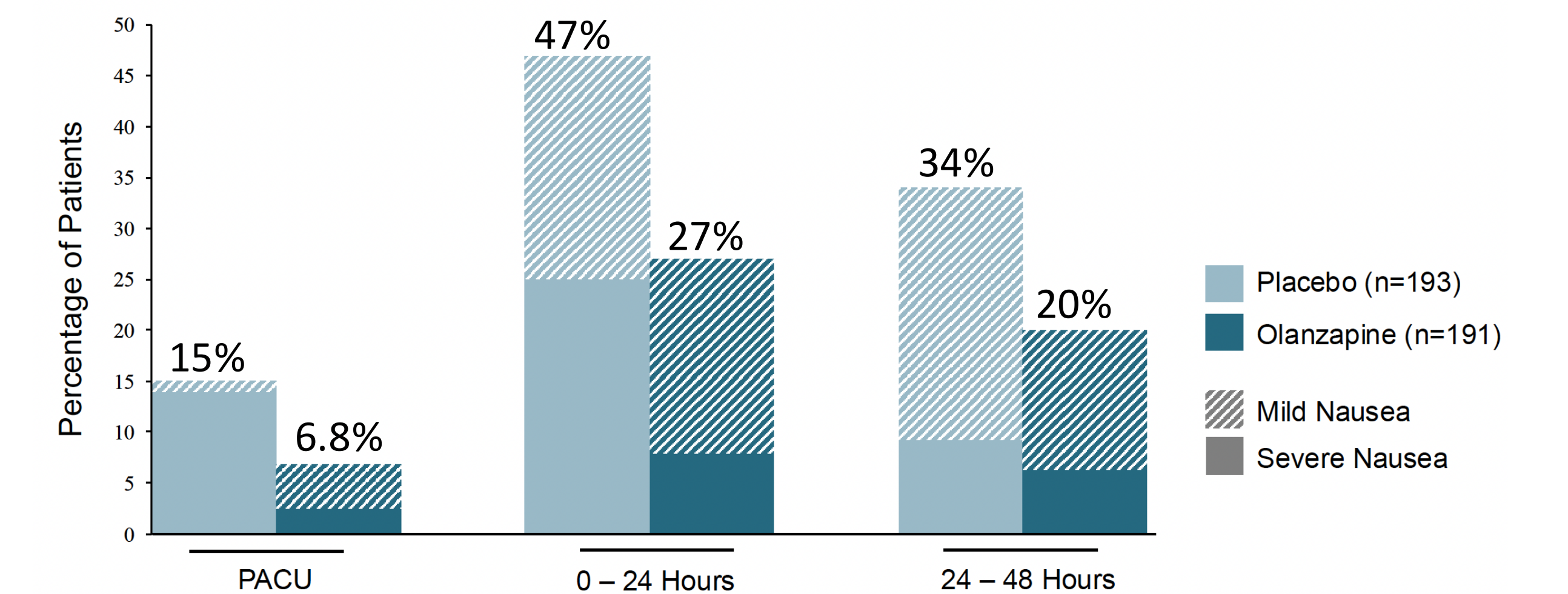


Figure 3: Nausea outcomes in PACU, POD1, and POD2

Discussion

In this high-risk patient population, a single preoperative dose of olanzapine 5 mg PO improved quality of recovery (QoR) to a clinically-significant degree.

To prevent *any* nausea on POD1 in this patient population, olanzapine 5 mg PO has a number needed to treat (NNT) of 5.

This improvement in QoR was seen in the setting of a practice environment that already minimizes risk of PONV.