

Supplemental Table 1. Adverse Events Frequency

Adverse Event, n(%)	Day	Ibuprofen	Oxycodone	Total	P-value
Any AE (n=236)	1	98 (55.1)	49 (81.7)	147 (61.2)	<0.001
(n=236)	2	73 (41.2)	34 (57.6)	107 (45.3)	0.03
(n=233)	3	41 (23.3)	20 (35.1)	61 (26.2) n=233	0.08
(n=235)	Cumulative	114 (64.8)	53 (89.8)	167 (71.1)	<0.001
Drowsiness (n=239)	1	70 (39.1)	40 (66.7)	110 (46.0)	<0.001
(n=236)	2	44 (24.9)	27 (45.8)	71 (30.1)	0.002
(n=234)	3	20 (11.3)	13 (22.8)	33 (14.1)	0.03
(n=236)	Cumulative	82 (46.3)	43 (72.9)	125 (53.0)	<0.001
Lack of Appetite (n=239)	1	48 (26.8)	22 (36.7)	70 (29.3)	0.15
(n=236)	2	32 (18.1)	15 (25.4)	47 (19.9)	0.22
(n=234)	3	19 (10.7)	8 (14.0)	27 (11.5)	0.50
(n=233)	Cumulative	64 (36.4)	27 (47.4)	91 (39.1)	0.14
Nausea (n=239)	1	19 (10.6)	20 (33.3)	39 (16.3)	<0.001
(n=236)	2	10 (5.6)	10 (16.9)	20 (8.5)	0.007
(n=234)	3	6 (3.4)	6 (10.5)	12 (5.1)	0.03
(n=234)	Cumulative	27 (15.3)	26 (44.8)	53 (22.6)	<0.001
Dizziness (n=239)	1	14 (7.8)	18 (30.0)	32 (13.4)	<0.001
(n=236)	2	8 (4.5)	10 (16.9)	18 (7.6)	0.002
(n=234)	3	7 (4.0)	7 (12.3)	14 (6.0)	0.02
(n=234)	Cumulative	18 (10.2)	24 (41.4)	42 (17.9)	<0.001
Constipation (n=237)	1	10 (5.6)	11 (18.3)	21 (8.9)	0.003
(n=236)	2	10 (5.6)	4 (6.8)	14 (5.9)	0.75
(n=233)	3	9 (5.1)	3 (5.3)	12 (5.2)	0.96
(n=230)	Cumulative	21 (12.1)	14 (24.6)	35 (15.2)	0.02
Abdominal Pain (n=239)	1	10 (5.6)	5 (8.3)	15 (6.3)	0.45
(n=236)	2	9 (5.1)	6 (1.0)	15 (6.4)	0.17

(n=234)	3	6 (3.4)	4 (7.0)	10 (4.3)	0.24
(n=234)	Cumulative	19 (10.7)	10 (17.5)	29 (12.4)	0.17
Vomiting (n=239)	1	3 (1.7)	7 (11.7)	10 (4.2)	<0.001
(n=236)	2	2 (1.1)	1 (1.7)	3 (1.3)	0.74
(n=234)	3	1 (0.6)	3 (5.3)	4 (1.7)	0.017
(n=233)	Cumulative	6 (3.4)	11 (19.3)	17 (7.3)	<0.001
Rash (n=239)	1	3 (1.7)	1 (1.7)	4 (1.7)	1.00
(n=236)	2	2 (1.1)	3 (5.1)	5 (2.1)	0.07
(n=234)	3	2 (1.1)	2 (3.5)	4 (1.7)	0.23
(n=233)	Cumulative	6 (3.4)	4 (7.0)	10 (4.3)	0.24
Other (n=240)	1	17 (9.5)	5 (8.2)	22 (9.2)	0.76
(n=240)	2	15 (8.4)	4 (6.6)	19 (7.9)	0.65
(n=240)	3	12 (6.7)	9 (14.8)	21 (8.7)	0.05
(n=240)	Cumulative	32 (17.9)	14 (23.0)	46 (19.2)	0.38

Supplemental Table 2. Intensity of Adverse Events

	Adverse Event, mean (SD)	Day 1	Day 2	Day 3	Cumulative
Ibuprofen	Drowsiness	4.5 (2.1)	3.6 (2.1)	3.1 (2.1)	4.0 (2.0)
	Lack of Appetite	5.1 (2.2)	4.1 (2.3)	3.2 (1.9)	4.4 (2.1)
	Nausea	4.6 (2.7)	4.8 (3.2)	3.5 (2.1)	4.5 (2.3)
	Dizziness	4.8 (2.2)	3.3 (1.7)	3.3 (1.6)	4.2 (1.9)
	Constipation	3.8 (1.9)	3.7 (2.7)	3.6 (2.6)	3.3 (2.2)
	Abdominal Pain	2.5 (1.4)	3.4 (2.9)	3.0 (1.9)	3.3 (2.3)
	Vomiting	8.7 (1.2)	5.5 (6.4)	8 (N/A)	7.5 (3.3)
	Rash	4.7 (2.1)	3.5 (3.5)	4 (2.8)	3.8 (2.3)
Oxycodone	Drowsiness	5.1 (1.9)	4.3 (2.0)	4.1 (2.0)	4.4 (1.6)
	Lack of Appetite	4.4 (2.2)	4.3 (2.3)	3.9 (1.2)	3.8 (1.6)
	Nausea	5.9 (2.7)	4.8 (2.5)	4.7 (3.1)	5.2 (2.8)
	Dizziness	4.2 (1.8)	3.5 (2.1)	4.4 (2.0)	4.3 (1.7)
	Constipation	4.5 (2.2)	6.5 (2.5)	6.3 (3.2)	4.9 (2.1)
	Abdominal Pain	5.4 (3.1)	3.8 (1.6)	3 (2)	3.6 (2.0)
	Vomiting	7.8 (3.1)	1 (N/A)	3.7 (2.9)	5.7 (3.6)
	Rash	4 (N/A)	4.7 (1.2)	4 (0)	4.3 (0.5)

Supplemental Table 3. Variables Associated with an Adverse Event on Day 1

Predictor	OR [95% CI]
Age per year	0.99 [0.97, 1.00]
Gender (Female)	1.03 [0.90, 1.17]
Medication taken (Oxycodone)	1.31 [1.13, 1.52]
Fracture Type (Lower)	1.12[0.96, 1.30]
Sedation in ED	1.08 [0.95, 1.24]
Any Non-Pharmacologic Agent Used	1.25 [0.91, 1.70]
Maximum Pain on Day 1 (per unit on FPS-R)	1.04 [1.01, 1.07]

Supplemental Table 4. Variables Associated with Functional Outcome Impairment on Day 1

Predictor	OR [95% CI]				
	Any Impairment	Eating	Sleeping	Playing	Attending School
Age (per year)	1.00 [0.99, 1.02]	0.99 [0.97, 1.01]	1.01 [0.99, 1.03]	0.99 [0.97, 1.01]	1.00 [0.98, 1.02]
Gender (Female)	0.93 [0.84, 1.04]	0.91 [0.80, 1.03]	1.01 [0.88, 1.17]	0.93 [0.81, 1.05]	0.90 [0.78, 1.03]
Medication taken (Oxycodone)	1.06 [0.94, 1.19]	1.07 [0.93, 1.23]	0.98 [0.83, 1.14]	1.13 [0.98, 1.30]	0.95 [0.82, 1.11]
Fracture Type (Lower)	1.20[1.07, 1.35]	1.14 [0.99, 1.32]	1.01 [0.86, 1.18]	1.23 [1.07,1.43]	1.25 [1.07, 1.47]
Sedation in ED	0.98 [0.88, 1.09]	1.00 [0.88, 1.14]	1.01 [0.87, 1.16]	0.96 [0.84, 1.09]	1.16 [1.01, 1.34]
Any Non-Pharmacologic Agent Used	1.08 [0.84, 1.38]	0.99 [0.74, 1.34]	1.15 [0.82, 1.60]	1.20 [0.88, 1.62]	0.92 [0.66, 1.27]
Maximum Pain on Day 1 (per unit on FPS-R)	1.04 [1.01, 1.06]	1.04 [1.01, 1.07]	1.05 [1.02, 1.08]	1.04 [1.01, 1.07]	1.04 [1.01, 1.07]