

Supplementary Appendix

Additional analysis – “Significant” pain reduction at 60 and 90 minutes.

At 60 minutes n=14 (43.8%) in the IV group, and n=10 (30.3%) in the oral group achieved significant pain reduction as defined (p=0.31, chi square test). At 90 minutes, n=13 (40.6%) in the IV group, and n=8 (24.2%) in the oral group achieved significant pain reduction as defined (p=0.19, chi square test).

Table 4. Baseline characteristics (all randomised patients)

| | | IV Paracetamol (all) n=56 | Oral Paracetamol (all patients n= 52 | IV Paracetamol (mITT n=47) | Oral Paracetamol (mITT n=40) | P value (Comparing IV vs Oral mITT) |
|--|---------------------------------|------------------------------|---|--------------------------------|----------------------------------|--|
| Age (years) | | 45.5 (28.0- 57.2) | 42.5 (32.2- 52.0) | 47.0 (26.0- 58.0) | 43.0 (34.5- 54.2) | 0.74 [^] |
| Female n (%) | | 57.1% | 51.9% | 65% | 55.3% | 0.35 [#] |
| Cause of pain | Abdominal / Gastrointestinal | 42.9% | 38.5% | 42.6% | 32.5% | 0.63 [#] |
| | Musculoskeletal | 3.6% | 3.8% | 2.1% | 5.0% | |
| | Neurological | 41.1% | 50% | 42.6% | 52.5% | |
| | Other | 12.5% | 7.7% | 12.8% | 10.1% | |
| Previous opioids (mg Morphine equivalents) Medians (IQR) | | 5(2.7-5.0) | 5 (2.5-5.0) | 5 (2.5-5.0) | 5 (2.5-5.0) | 0.79 [^] |
| VAS score (mm) | | 59.5 (20.7) | 60.4 (24.7) | 65.0 (15.8) | 71.3 (15.6) | 0.06 ^{^^} |
| Pulse (bpm) | | 76.1 (18.4) | 76.9 (16.4) | 76.2 (17.4) | 80.3 (15.6) | 0.27 ^{^^} |
| Systolic Blood Pressure (mmHg) | | 135.8 (27.4) | 134.6 (20.1) | 137.0 (27.9) | 136.3 (20.9) | 0.90 ^{^^} |
| Respiratory rate (bpm) | | 18.0 (16.0- 20.0) | 18.0 (16.0- 18.0) | 18.0 (16.0- 20.0) | 18.0 (16.0- 18.0) | 0.82 [^] |
| Oxygen saturation (%) | | 98.0 (96.0- 99.0) | 97.5 (96.0- 99.0) | 98.0(96.0- 99.0) | 97.0 (96.0- 99.0) | 0.58 [^] |
| Time to intervention (min) median (IQR) | | | | 80 (59- 108) | 74 (58-100) | 0.35 ^{^^} |

[^] Man Whitney U test, ^{^^} Students t test, [#] Chi square test

Table 5. Pain score reduction from baseline at various time points – ITT analysis

| Time (min) | IV Paracetamol (n=56) mm | Oral Paracetamol (n=52) mm | Difference (mm) | P value ^^ |
|------------|------------------------------|--------------------------------|--------------------|------------|
| 15 | 9.5 (14.0) | 9.7 (23.5) | -0.2 | 0.95 |
| 30 | 14.3 (20.1) | 12.6 (24.7) | 2.3 | 0.71 |
| 45 | 21.2 (25.8) | 19.5 (28.3) | 1.7 | 0.77 |
| 60 | 19.4 (26.4) | 21.2 (29.2) | -1.8 | 0.78 |
| 120 | 25.0 (26.5) | 18.9 (29.5) | 6.1 | 0.46 |
| 180 | 23.4 (26.0) | 18.8 (36.4) | 4.6 | 0.73 |
| 240 | 32.0 (12.0) | 26.7 (37.4) | 5.3 | 0.67 |

^^ Students T test

Table 6. Secondary outcomes (all randomised patients)

| | IV Paracetamol (n=56) | Oral Paracetamol (n=52) | Difference | P value |
|--|---------------------------|-----------------------------|------------|---------|
| Adverse events (%) | 0 | 0 | 0 | na |
| ED length of stay (minutes) | 199 (151-235) | 199 (147-227) | 0 | 1.0^ |
| Rescue analgesia* n (%) | 80.5% (n=120) | 83.2% (n=144) | -2.7% | 0.52# |
| Rescue analgesia (mg Morphine equivalents) | 5 (2.5-5.0) | 5 (2.5-5.0) | 0 | 0.50 |
| Patient Satisfaction (%) | 100.0 (80.0-100.0) | 90.0 (80.0-100.0) | 10 % | 0.70^ |

*proportion of participants that received any rescue opioid analgesia during the follow up period, ^ Man Whitney U test # Chi Square test.