

Details of included studies

Reference	Design	Dose, route and patients	Outcomes	Analgesic results	Withdrawals and adverse events	Quality score
Daniels et al 2001. A double-blind, randomized comparison of intramuscularly and intravenously administered parecoxib sodium versus ketorolac and placebo in a post-oral surgery pain model. Clin Ther 2001; 23(7):1018-1031	<b>Randomised, double blind placebo</b> and active controlled trial in post <b>third molar surgery</b> pain (extraction of ≤ impacted third molars). Medication administered when baseline pain reached moderate or severe intensity.	Placebo n=51 Parecoxib 20 mg IV n= 50 Parecoxib 20 mg IM n= 51 Parecoxib 40 mg IV n= 51 Parecoxib 40 mg IM n= 50 Ketorolac 60 mg IM n= 51	PI CAT 4 pt scale (standard) PI VAS PR CAT 5 pt scale (standard) Global 4 pt scale (nonstandard) Time to perceptible relief Time to meaningful relief Time to remedication	No of patients with at least 50% pain relief over 4 to 6 hours: Placebo 2/51 Parecoxib 20 mg IV 30/50 Parecoxib 20 mg IM 32/51 Parecoxib 40 mg IV 36/51 Parecoxib 40 mg IM 39/50  Median time to remedication Placebo 1:03 (1:02 to 1:26) Parecoxib 20 mg IV 7:03 (6:03 to 9:5) Parecoxib 20 mg IM 9:2 (6.4 to 10:1) Parecoxib 40 mg IV 15:4 (11:1 to >24) Parecoxib 40 mg IM 24:4 (10:1 to >24) Ketorolac 60 mg IM 11.01(9:3 to 12:6)  Number of patients remedication Placebo 48/51 Parecoxib 20 mg IV 40/50 Parecoxib 20 mg IM 39/51 Parecoxib 40 mg IV 27/51 Parecoxib 40 mg IM 25/50 Ketorolac 60 mg IM 43/51	One patient was withdrawn for protocol noncompliance.  Pcb Pare IV 20 Pare IM 20 Any event 18 (35%) 21 (42%) 14 (27%) Headache 6 (12%) 3 (6%) 4 (8%) Nausea 5 (10%) 5 (10%) 4 (8%) Vomiting 1 (2%) 1 (2%) 1 (2%)  Pcb Pare IV 40 Pare IM 40 Any event 20 (39%) 17 (34%) Headache 2 (4%) 3 (6%) Nausea 3 (6%) 6 (12%) Vomiting 1 (2%) 2 (4%)	R =2 DB =2 WD =1 Total =5
Rasmussen et al 2002 Intravenous parecoxib sodium for acute pain after orthopaedic knee surgery. Am J Orthop 2002;336-343	<b>Randomised, double blind placebo</b> and active controlled study in post <b>orthopedic knee surgery</b> pain (unilateral knee replacement surgery). Medication administered when pain reached ≥ 45 mm (VAS) within 6 hours of pca discontinuation.	Placebo n=39 Parecoxib 20 mg IV n= 43 Parecoxib 40 mg IV n= 42 Ketorolac 30 mg IM n=42 Morphine 4 mg n= 42	PI CAT 4 pt scale (standard) PI VAS PR CAT 5 pt scale (standard) Global 4 pt scale (nonstandard) Time to perceptible relief Time to meaningful relief Time to onset of analgesia Time to remedication	No of patients with at least 50% pain relief over 4 to 6 hours: Placebo 7/39 Parecoxib 20 mg IV 14/43 Parecoxib 40 mg IV 21/42  Median time to remedication Placebo 1:48 ((1:24 to 2:40) Parecoxib 20 mg IV 3:09 (2:11 to 3:40) Parecoxib 40 mg IV 5:10 (3:45 to 6:55) Ketorolac 30 mg IV 4.4 (3:3 to 6:2) Morphine 4 mg IV 2:1 (1:5 to 2:6)  Number of patients remedication Placebo 39/39 Parecoxib 20 mg 41/43 Parecoxib 40 mg 36/42 Ketorolac 30 mg 85% Morphine 4 mg 42/42	One patient withdrew due to adverse events, five patients failed to comply following study drug administration, five patients were withdrawn for protocol violation and one patient received the wrong dose of parecoxib.  Pcb Pare 20 Pare 40 Any event 24 (62%) 31 (72%) 25 (60%) Headache 2 (5%) 4 (9%) 2 (5%) Nausea 10 (26%) 14 (33%) 10 (24%) Vomiting 5 (13%) 9 (21%) 3 (7%)	R =2 DB =1 WD =1 Total =4
Barton et al 2002 Efficacy and safety of parecoxib, a new COX-2 specific inhibitor, in post-gynecologic surgery patients. Anesthesiol 2002;97(2):306-314	<b>Randomised, double blind placebo</b> and active controlled study in post <b>gynecologic laparotomy</b> surgery pain (total abdominal hysterectomy or myomectomy). Medication administered when pain reached > 45 mm (VAS) within 6 hours of pca discontinuation.	Placebo n=42 Parecoxib 20 mg IV n= 39 Parecoxib 40 mg IV n= 38 Ketorolac 30 mg IV n= 41 Morphine 4 mg IV n= 42	PI CAT 4 pt scale (standard) PI VAS PR CAT 5 pt scale (standard) Global 4 pt scale (nonstandard) Time to onset of analgesia Time to perceptible relief Time to meaningful relief Time to remedication	No of patients with at least 50% pain relief over 4 to 6 hours: Placebo 5/42 Parecoxib 20 mg 19/39 Parecoxib 40 mg 20/38  Median time to remedication Placebo 1:50 (1:40 to 3:05) Parecoxib 20 mg 6:10 (3:54 to 7:58) Parecoxib 40 mg 6:30 (4:35 to 9:19) Ketorolac 30 mg IV 6:0 (5:2 to 7:5) Morphine 4 mg IV 2:4 (2:1 to 4:1)  Number of patients remedication Placebo 38/42 Parecoxib 20 mg 35/39 Parecoxib 40 mg 33/38 Ketorolac 30 mg IV 38/41 Morphine 4 mg 40/41	Three placebo patients withdrew before completing the 1 hour assessment, one patient from the parecoxib 20 mg group was withdrawn for protocol violation.  Two patients from the morphine group were withdrawn due to severe adverse events, 20 patients withdrew as a result of adverse events (4/5 from each experimental group and 2 from placebo group).Headache and fever were the most common reasons for withdrawal.  Pcb Pare 20 Pare 40 Any event 31 (74%) 34 (87%) 32 (84%) Headache 9 (21%) 8 (21%) 10 (26%) Nausea 16 (38%) 13 (33%) 12 (32%) Vomiting 5 (12%) 6 (15%) 9 (24%)	R =2 DB =1 WD =1 Total =4
Bikhazi et al 2001 Parecoxib effectively treats post-laparotomy pain. 57th Annual meeting of the american society for reproductive medicine 2001, Orlando, Florida, Poster 481	<b>Randomised, double blind placebo</b> and active controlled single and multiple dose study in post <b>gynecologic laparotomy</b> surgery pain (total abdominal hysterectomy or myomecomy). Medication administered when pain reached > 45 mm (VAS) within 6 hours of pca morphine/meperidine discontinuation.	Placebo n=44 Parecoxib 20 mg IV n= 38 Parecoxib 40 mg IV n= 42 Ketorolac 30 mg IV n= 38 Morphine 4 mg IV n= 41	PI VAS (100 mm) PR 5 pt scale (standard) Global 4 pt scale (nonstandard) Time to onset of analgesia Time to remedication	No of patients with at least 50% pain relief over 4 to 6 hours: Placebo 15/44 Parecoxib 20 mg IV 22/38 Parecoxib 40 mg IV 32/42  Median time to remedication Placebo 2:50 (1:41 to 4:29) Parecoxib 20 mg IV 6:05 (4:05 to 6:12) Parecoxib 40 mg IV 6:20 (6:00 to 7:50) Ketorolac 30 mg IV 6:1 (6:0 to 8:0) Morphine 4 mg IV 4:6 (3:3 to 6:1)  Number of patients remedication Placebo 32/44 Parecoxib 20 mg 14/38 Parecoxib 40 mg 13/42 Ketorolac 30 mg IV 13/38 Morphine 4 mg IV 23/41	Four patients withdrew before completing the 1 hour assessment, 1 patient did not reach an adequate baseline pain level.  The most frequently reported adverse events were nausea/vomiting, headache, abdominal pain and flatulence. Highest incidence of adverse events reported by the morphine group where 85% of patients experienced an adverse event compared to 45 to 58% in the other treatment groups.	R =1 DB =1 WD =1 Total =3