Details of included studies

Reference	Design	Dose, route and patients	Outcomes	Analgesic results	Withdrawals and adverse events	Quality score
Valdecoxib trials						
Fricke et al 2002 Valdecoxib is more efficacious than rofecoxib in relieving pain associated with oral surgery. Am J Ther 2002;9: 89-97	**Randomised**, **double blind placebo** and active controlled trial in post **third molar surgery** pain (extraction of impacted third molars). Medication administered when baseline pain reached moderate or severe intensity.	Placebo n=41 Valdecoxib 40 mg n=80 Rofecoxib 50 mg n=82 There were no significant differences in baseline patient characteristics between groups. Mean age 22 years 38% male/62% female Mean weight 73 kg Mean baseline pain intensity 66 mm (VAS).	PI CAT 4 pt scale (standard) 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 2/41 Valdecoxib 40 mg 42/80 Rofecoxib 50 mg Remedication - data not useable. Patients permitted a second valdecoxib 40 mg dose before being classified as remedicating. Patients in comparator groups moved straight to rescue medication. Unclear from report how many patients received the extra valdecoxib dose (statement of numbers in valdecoxib group not remedicating contradictory - 36% or 65%?)	One patient was withdrawn for protocol noncompliance. Pcb / Valde 40 mg / Rofe 50 mg Any event 21(51%) / 36(45%) / 39(48%) Headache 13(32%) / 10(12%) / 12(15%) Nausea 2(5%) / 14(17%) / 12(15%) Vomiting 3(7%) / 8(10%) / 7(8%) Alveolitis 4(9.8%) / 13(16.3%) / 23(28)	R =1 DB =1 WD =1 Total =3
Daniels et al 2002 The analgesic efficacy of valdecoxib vs. oxycodone/ acetaminophen after oral surgery. JADA 2002; 133: 611-621	**Randomised**, **double blind placebo** and active controlled trials in post **third molar surgery** pain (extraction of impacted third molars). Medication administered when baseline pain reached moderate or severe intensity.	**Study 1** Placebo n=52 Valdecoxib 20 mg n=52 Valdecoxib 40 mg n=50 Oxycodone 10 mg + paracetamol 1000 mg n=51 There were no significant differences in baseline patient characteristics between groups. Mean age 23 years 42% male/58% female Mean weight 74 kg Mean baseline pain intensity 74 mm (VAS). **Study 2** Placebo n=51 Valdecoxib 20 mg n=49 Valdecoxib 40 mg n=50 Oxycodone 10 mg +paracetamol 1000 mg n=51 There were no significant differences in baseline patient characteristics between groups. Mean age 23 years 40% male/60% female Mean weight 72 kg Mean baseline pain intensity 76 mm (VAS).	PI CAT 4 pt scale (standard) 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	**Study 1** Placebo 5/52 Valdecoxib 20 mg 31/52 Valdecoxib 40 mg 42/50 Median time to remedication Placebo 1hr 5 mins Valdecoxib 20 mg >24 hrs Valdecoxib 40 mg >24 hrs Oxy/par 11 hrs 17 mins Number of patients remedicating Placebo 44(85%) Valdecoxib 20 mg 24(46%) Valdecoxib 40 mg 12(24 %) Oxy/par 28(55%) **Study 2** Placebo 3/51 Valdecoxib 20 mg 38/49 Valdecoxib 40 mg 37/50 Median time to remedication Placebo 1hr 4 mins Valdecoxib 20 mg 10 hrs 58 mins Valdecoxib 40 mg >24 hrs Oxy/par 6 hrs 4 mins Number of patients remedicating Placebo 46(90%) Valdecoxib 20 mg 28(57%) Valdecoxib 40 mg 22(44%) Oxy/par 40(78%)	No patients were excluded or discontinued. Adverse events analysis pooled across both studies. Pcb / Valde 20 mg / Valde 40 mg / Oxy/par Any event 55(53%) / 36(36%) / 27(27%) / 71(70%) Headache 23(22%) / 11(11%) / 8(8%) / 19(19%) Nausea 28(27%) / 7(7%) / 7(7%) / 33(32%) Vomiting 12(12%) / 4(4%) / 4(4%) / 23(23%)	R =2 DB =2 WD =1 Total =5
Christensen et al 2002 Valdecoxib, a novel potent COX-2 specific inhibitor, is effective in treating postoperative dental pain and provides a more rapid onset of action compared with rofecoxib. ACEP Oct 2002 Poster	**Randomised**, **double blind placebo** and active controlled trials in post **third molar surgery** pain (extraction of impacted third molars). Medication administered when baseline pain reached moderate or severe intensity.	Placebo n=50 Valdecoxib 40 mg n=99 Rofecoxib 50 mg n=101 There were no significant differences in baseline patient characteristics between groups. Mean age 20 years 43% male/57% female Mean baseline pain intensity 81 mm (VAS).	PR CAT 5 pt scale (assumed to be standard as y axis of corresponding graph from 0 to 4) Time to onset of analgesia Time to remedication	Placebo 9/50 Valdecoxib 40 mg 83/99 Median time to remedication Placebo 2 hrs 10 mins Valdecoxib 40 mg >24 hrs Rofecoxib 50 mg >24 hrs Number of patients remedicating Placebo 72% Valdecoxib 40 mg 17% Rofecoxib 50 mg 9%	No useful adverse event data provided.	R =2 DB =2 WD =0 Total =2
Parecoxib trials						
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	**Randomised**, **double blind placebo** and active controlled trial in post **third molar surgery** 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 There were no significant differences in baseline patient characteristics between groups apart from the mean body weight was lower in the placebo group. 62% female/38% male Mean age 22 years Mean weight 73 kg	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 21.4 (10:1 to >24) Ketorolac 60 mg IM 11.01(9:3 to 12:6) Number of patients remedicating 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%) Alveolitis 3(6%) / 6(12%) / 5(10%) 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%) Alveolitis 5(10%) / 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	**Randomised**, **double blind placebo** and active controlled study in post **orthopedic** knee surgery 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 There were no significant differences in baseline patient characteristics between groups. 65% female/35% male Mean age 65 years Mean weight 92 kg Mean baseline pain intensity 68 mm (VAS).	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 remedicating 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 adminstration, 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	**Randomised**, **double blind placebo** and active controlled study in post **gynecologic laparotomy** 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 There were no significant differences in baseline patient characteristics between groups. 100% female Mean age 42 years Mean weight 78 kg Mean baseline pain intensity 68 mm (VAS).	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 remedicating 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 grooup 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	**Randomised**, **double blind placebo** and active controlled single and multiple dose study in post **gynecologic laparotomy** 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 There were no significant differences in baseline patient characteristics between groups. 100% female Mean age 43 years Mean weight 78 kg Mean baseline pain intensity 62 mm (VAS).	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 remedicating Placebo 32/44 Parecoxib 20 mg 14/38 Parecoxib 40 mg 13/42 Ketorlac 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