

# The Oxford Pain Group League table of analgesic efficacy

**Derek Richards**

Director, Centre for Evidence-based Dentistry, Oxford, UK

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The two Canadian Collaboration on Clinical Practice Guidelines in Dentistry (CCCD) discussed in this issue of *Evidence-Based Dentistry* recommend the use of analgesics rather than antibiotic therapy for acute apical abscess where drainage cannot be achieved immediately, or in the treatment of acute apical periodontitis. Linked to this we have reproduced the Oxford League Table of Analgesic Efficacy: this is also freely available from the Oxford Pain Group internet site ([www.jr2.ox.ac.uk/bandolier/booth/painpag/index2.html](http://www.jr2.ox.ac.uk/bandolier/booth/painpag/index2.html)) see Figure 1. Table 1 has been developed

over many years by the Oxford Pain Research Group.

The information in the table has been derived from a large number of systematic reviews of randomised, double-blind, single-dose studies in patients who had moderate to severe pain. Each of the reviews has the same outcome measure, at least 50% pain relief over 4–6 h. The pain measurements were standardised, and have been validated. Numbers-needed-to-treat are calculated for the proportion of subjects who had at least 50% pain relief over 4–6 h compared with placebo in rando-

mised, double-blind, and single-dose studies in people with moderate to severe pain. Drugs were oral, unless specified, and doses are given in milligrams.

The relevance of this table to acute dental pain has been raised in this journal before in an editorial by Moore *et al*,<sup>1</sup> when the author noted that dental pain is no different from other acute pain models.

1. Moore A. The evidence base in acute pain. *Evid Based Dent* 2000; 2:32–33.
2. Edwards JE, Oldman AD, Smith LA, *et al*. Oral aspirin in postoperative pain: a quantitative systematic review. *Pain* 2004; 107:86–90.



**Figure 1. The Oxford Pain Group site.**

**Table 1. The Oxford League table of analgesic efficacy.**

Analgesic and dose	People in comparison ( <i>n</i> )	Proportion with 50% pain relief (%)	NNT	Lower CI	Higher CI
Ibuprofen 800	76	100	1.6	1.3	2.2
Ketorolac 20	69	57	1.8	1.4	2.5
Ketorolac 60 (intramuscular)	116	56	1.8	1.5	2.3
Diclofenac 100	411	67	1.9	1.6	2.2
Piroxicam 40	30	80	1.9	1.2	4.3
Paracetamol 1000 + codeine 60	197	57	2.2	1.7	2.9
Oxycodone IR 5 + paracetamol 500	150	60	2.2	1.7	3.2
Bromfenac 25	370	51	2.2	1.9	2.6
Rofecoxib 50	675	54	2.3	2.0	2.6
Diclofenac 50	738	63	2.3	2.0	2.7
Naproxen 440	257	50	2.3	2.0	2.9
Oxycodone IR 15	60	73	2.3	1.5	4.9
Ibuprofen 600	203	79	2.4	2.0	4.2
Ibuprofen 400	4703	56	2.4	2.3	2.6
Aspirin 1200	279	61	2.4	1.9	3.2
Bromfenac 50	247	53	2.4	2.0	3.3
Bromfenac 100	95	62	2.6	1.8	4.9
Oxycodone IR 10 + paracetamol 650	315	66	2.6	2.0	3.5
Ketorolac 10	790	50	2.6	2.3	3.1
Ibuprofen 200	1414	45	2.7	2.5	3.1
Oxycodone IR 10 + paracetamol 1000	83	67	2.7	1.7	5.6
Piroxicam 20	280	63	2.7	2.1	3.8
Diclofenac 25	204	54	2.8	2.1	4.3
Dextropropoxyphene 130	50	40	2.8	1.8	6.5
Bromfenac 10	223	39	2.9	2.3	4.0
Pethidine 100 (intramuscular)	364	54	2.9	2.3	3.9
Tramadol 150	561	48	2.9	2.4	3.6
Morphine 10 (intramuscular)	946	50	2.9	2.6	3.6
Naproxen 550	169	46	3.0	2.2	4.8
Naproxen 220/250	183	58	3.1	2.2	5.2
Ketorolac 30 (intramuscular)	359	53	3.4	2.5	4.9
Paracetamol 500	561	61	3.5	2.2	13.3
Paracetamol 1500	138	65	3.7	2.3	9.5
Paracetamol 1000	2759	46	3.8	3.4	4.4
Oxycodone IR 5 + paracetamol 1000	78	55	3.8	2.1	20.0
Paracetamol 600/650 + codeine 60	1123	42	4.2	3.4	5.3
Ibuprofen 100	396	31	4.3	3.2	6.3
Paracetamol 650 + dextropropoxyphene (65 mg hydrochloride or 100 mg napsylate)	963	38	4.4	3.5	5.6
Aspirin 600/650	5061	38	4.4	4.0	4.9
Paracetamol 600/650	1886	38	4.6	3.9	5.5
Ibuprofen 50	316	31	4.7	3.3	7.9
Tramadol 100	882	30	4.8	3.8	6.1
Tramadol 75	563	32	5.3	3.9	8.2
Aspirin 650 + codeine 60	598	25	5.3	4.1	7.4
Oxycodone IR 5 + paracetamol 325	149	24	5.5	3.4	14.0
Ketorolac 10 (intramuscular)	142	48	5.7	3.0	53.0
Paracetamol 300 + codeine 30	379	26	5.7	4.0	9.8
Bromfenac 5	138	20	7.1	3.9	28.0
Tramadol 50	770	19	8.3	6.0	13.0
Codeine 60	1305	15	16.7	11.0	48.0
Placebo	>10 000	18	NA	NA	NA

More information regarding the use of the table can be found at [www.jr2.ox.ac.uk/bandolier/booth/painpag/Acutrev/Analgesics/Leagtab.html](http://www.jr2.ox.ac.uk/bandolier/booth/painpag/Acutrev/Analgesics/Leagtab.html).  
 NNT, Number-needed-to-treat; CI, confidence interval.