### Supplementary Table 1: recruitment by region and GP practice

	Naproxen	Colchicine			
Dogwitment by region n (%)					
Recruitment by region, n (%)					
Keele	55 (27.5%)	52 (26.1%)			
Southampton	88 (44.0%)	101 (50.8%)			
Oxford	41 (20.5%)	31 (15.6%)			
Nottingham	16 (8.0%)	15 (7.5%)			
Participants recruited per practice, median (IQR)*	2 (1-4)	2 (1-3)			

<sup>\*75/100</sup> GP practices who agreed to take part recruited at least one participant. Numbers recruited per practice ranged from 1 (21 practices) to 41 for the best recruiting practice (skewed upwards); overall median of 3 (IQR 1-7). IQR, interquartile range

#### Supplementary table 2: per protocol analyses

	1		2		3		
	Mean P		Mean	P value	Mean	P	
	difference	value	difference		difference	value	
	(95% CI)		(95% CI)		(95% CI)		
Day 1	0.01	0.97	-0.04	0.85	-0.04	0.88	
·	(-0.45 to 0.46)		(-0.50 to 0.41)		(-0.54 to 0.46)		
Day 2	-0.43	0.063	-0.47	0.040	-0.57	0.024	
·	(-0.88 to 0.02)		(-0.92 to -0.02)		(-1.07 to -0.07)		
Day 3	-0.11	0.62	-0.17	0.47	-0.20	0.44	
·	(-0.56 to 0.33)		(-0.62 to 0.28)		(-0.69 to 0.30)		
Day 4	-0.11	0.62	-0.19	0.41	-0.23	0.37	
·	(-0.56 to 0.34)		(-0.64 to 0.26)		(-0.72 to 0.27)		
Day 5	-0.16	0.47	-0.25	0.27	-0.23	0.36	
·	(-0.61 to 0.28)		(-0.71 to 0.20)		(-0.73  to  0.27)		
Day 6	-0.18	0.42	-0.31	0.17	-0.22	0.38	
·	(-0.63 to 0.26)		(-0.77 to 0.14)		(-0.72 to 0.27)		
Day 7 <sup>#</sup>	-0.28	0.22	-0.43	0.061	-0.41	0.10	
·	(-0.72 to 0.16)		(-0.88 to 0.02)		(-0.91 to 0.08)		
Overall	-0.18	0.32	-0.27	0.14	-0.27	0.18	
(Days 1-7)	(-0.54 to 0.17)		(-0.62 to 0.09)		(-0.67 to 0.13)		
Week 4	-0.24	0.29	-0.48	0.038	-0.57	0.025	
	(-0.68 to 0.20)		(-0.94 to -0.03)		(-1.07 to -0.07)		

Definition of per-protocol analyses:-

 $<sup>1 = \</sup>text{No treatment violation by medical record note reporting (no treatment crossover + no early cessation of treatment)} \{n \text{ (A/B)} = 184/182; 1014 / 1054 \text{ repeat data across days 1-7}\}$ 

<sup>2 =</sup> At least 1-day use of randomised treatment by self-report (in addition to 1 above) {n (A/B) = 149/155; 998 / 1032 repeat data across days 1-7}

<sup>3 = 7</sup> days (4-7 days) use of randomised treatment naproxen (colchicine) by self-report (in addition to 1 above) {n (A/B) = 118/134; 807 / 890 repeat data across days 1-7}

<sup>#</sup> Summary is inclusive of minimum data collection (for scores at day 7)

## Supplementary table 3: Comparison of complete pain resolution over days 1-7 and at 4 weeks

	Naproxen	Colchicine	χ2	P value
Day 1	2/160 (1.3%)	8/164 (4.9%)	3.6	0.10*
Day 2	11/161 (6.8%)	12/164 (7.3%)	0.03	0.87
Day 3	29/163 (17.8%)	29/166 (17.5%)	0.01	0.94
Day 4	56/158 (35.4%)	55/168 (32.7%)	0.27	0.61
Day 5	79/156 (50.6%)	72/159 (45.3%)	0.91	0.34
Day 6	95/157 (60.5%)	89/160 (55.6%)	0.78	0.38
Day 7	115/171 (67.3%)	116/173 (67.1%)	< 0.01	0.97
Week 4	130/173 (75.1%)	130/177 (73.4%)	0.13	0.72

<sup>\*</sup> Complete-case responders to all pain questions (diary days 1 through 7 and at 4 weeks). Median = Day 5 for Naproxen; Median = Day 6 for Colchicine.

Interquartile range: Day 4, Week 4 [in both treatment groups].

P value by Mann-Whitney U test = 0.73.

### Supplementary Table 4: Self-reported daily side-effects within the first week of follow-up – complete-case data

	Da	ıy1	Da	ay2	Da	ıy3	Da	ny4	Da	ay5	Da	ny6	Da	ny7
	N	C	N	C	N	C	N	C	N	C	N	C	N	C
	(n=160)	(n=164)	(n=161)	(n=164)	(n=163)	(n=166)	(n=160)	(n=168)	(n=160)	(n=162)	(n=158)	(n=162)	(n=172)*	(n=176)*
	NP	CC	NP	CC										
Nausea	17	15	11	16	7	17	6	11	6	6	2	6	3	5
	(10.6%)	(9.1%)	(6.8%)	(9.8%)	(4.3%)	(10.2%)	(3.8%)	(6.5%)	(3.8%)	(3.7%)	(1.3%)	(3.7%)	(1.7%)	(2.8%)
Vomiting	3	1	2	1	1	1	0	0	0	0	0	1	0	0
	(1.9%)	(0.6%)	(1.2%)	(0.6%)	(0.6%)	(0.6%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.6%)	(0.0%)	(0.0%)
Nausea and/or	19	16	12	17	7	18	6	11	6	6	2	7	3	5
vomiting	(11.9%)	(9.8%)	(7.5%)	(10.4%)	(4.3%)	(10.8%)	(3.8%)	(6.5%)	(3.8%)	(3.7%)	(1.3%)	(4.3%)	(1.7%)	(2.8%)
Dyspepsia	10	13	11	11	11	14	9	11	5	7	6	6	4	6
	(6.3%)	(7.9%)	(6.8%)	(6.7%)	(6.7%)	(8.4%)	(5.6%)	(6.5%)	(3.1%)	(4.3%)	(3.8%)	(3.7%)	(2.3%)	(3.4%)
Abdominal pain	5	7	6	8	7	8	7	8	3	9	2	6	4	6
	(3.1%)	(4.3%)	(3.7%)	(4.9%)	(4.3%)	(4.8%)	(4.4%)	(4.8%)	(1.9%)	(5.6%)	(1.3%)	(3.7%)	(2.3%)	(3.4%)
Headache	9	16	10	12	3	13	3	13	5	10	4	5	3	4
	(5.6%)	(9.8%)	(6.2%)	(7.3%)	(1.8%)	(7.8%)	(1.9%)	(7.7%)	(3.1%)	(6.2%)	(2.5%)	(3.1%)	(1.7%)	(2.3%)
Constipation	8	1	15	2	16	5	8	4	6	3	6	2	5	3
	(5.0%)	(0.6%)	(9.3%)	(1.2%)	(9.8%)	(3.0%)	(5.0%)	(2.4%)	(3.8%)	(1.9%)	(3.8%)	(1.2%)	(2.9%)	(1.7%)
Diarrhoea	7	20	7	28	12	40	10	52	3	34	7	18	5	13
	(4.4%)	(12.2%)	(4.3%)	(17.1%)	(7.4%)	(24.1%)	(6.3%)	(31.0%)	(1.9%)	(21.0%)	(4.4%)	(11.1%)	(2.9%)	(7.4%)
Skin rash	2	3	2	2	0	1	0	1	1	1	0	1	0	2
	(1.3%)	(1.8%)	(1.2%)	(1.2%)	(0.0%)	(0.6%)	(0.0%)	(0.6%)	(0.6%)	(0.6%)	(0.0%)	(0.6%)	(0.0%)	(1.1%)
Any side	54	54	50	64	52	76	45	78	38	52	35	36	26	32
effect(s)#	(33.8%)	(32.9%)	(31.1%)	(39.0%)	(31.9%)	(45.8%)	(28.1%)	(46.4%)	(23.8%)	(32.1%)	(22.2%)	(22.2%)	(15.1%)	(18.2%)

N = Naproxen; C = Colchicine

<sup>\*</sup> These are higher denominator numbers since questions on side-effects on day 7 were included in minimal data collection retrieval.

<sup>#</sup> Includes the side-effects listed and 'other' (nominated free-text) side-effects.

# Supplementary table 5: Mean (SD) resource use, costs and outcomes per participant over 4 weeks follow-up $\,$

-	Naproxen (n=200)	Colchicine (n=199)	Difference (CI)			
RESOURCE USE						
GP visits	0.19 (0.34)	0.27 (0.40)	-0.08 (-0.15 to 0.0002)			
Nurse visits	0.05 (0.19)	0.07 (0.22)	-0.02 (-0.06 to 0.03)			
<b>Emergency GP visits</b>	0.05 (0.17)	0.04 (0.18)	0.01 (-0.03 to 0.04)			
A and E visits	0.006 (0.07)	0.007 (0.07)	-0.001 (-0.02 to 0.01)			
COSTS (£)						
Drug costs	0.83 (2.00)	1.20 (2.22)	-0.37 (-0.78 to 0.02)			
GP costs	6.44 (11.16)	8.80 (13.16)	-2.36 (-4.74 to 0.12)			
Nurse costs	0.66 (2.26)	0.86 (2.71)	-0.20 (-0.68 to 0.31)			
Emergency GP costs	2.45 (8.54)	2.14 (8.68)	0.31 (-1.28 to 2.04)			
A and E costs	0.41 (5.10)	0.48 (5.15)	-0.07 (-1.21 to 0.95)			
Intervention cost	6.77 (4.56)	9.83 (6.32)	-3.06 (-4.17 to -2.08)			
Total cost	17.57 (20.38)	23.31 (23.46)	-5.74 (-10.03 to -1.64)			
HEALTH OUTCOM	ES					
Baseline EQ-5D	0.665 (0.21)	0.663 (0.22)	0.002 (-0.04 to 0.04)			
Day 7 EQ-5D	0.882 (0.13)	0.873 (0.14)	0.009 (-0.02 to 0.03)			
Week 4 EQ-5D	0.900 (0.11)	0.894 (0.15)	0.006 (-0.02 to 0.03)			
QALYs	0.0663 (0.008)	0.0657 (0.01)	0.0006 (-0.001 to 0.002)			
Adjusted QALYs <sup>+</sup>	djusted QALYs <sup>+</sup> 0.0662 0.0658		0.0004			
WORK-RELATED O	OUTCOMES					
Time off work (days)	0.40 (2.47)	0.35 (2.51)	0.05 (-0.42 to 0.53)			
Productivity cost (£)	32.16 (190.40)	28.44(207.42)	3.72 (-34.27 to 40.73)			

<sup>&</sup>lt;sup>+</sup>Adjusted for baseline EQ-5D