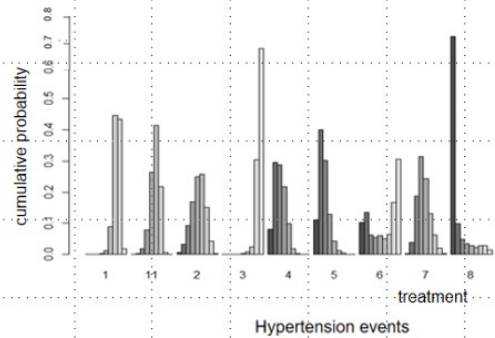


Table S1 PubMed search strategy

#1	Anti-Inflammatory Agents, Non-Steroidal[MeSH Terms]
#2	"anti inflammatory agents, non steroidal"[Title/Abstract] OR "antiinflammatory agent, nonsteroid"[Title/Abstract] OR "anti-inflammatory agents, non-steroidal"[Title/Abstract] OR "Anti-Inflammatory Analgesics"[Title/Abstract] OR "Aspirin Like Agent*"[Title/Abstract] OR "Aspirin-Like Agent*"[Title/Abstract] OR "Celebrex[Title/Abstract] OR Celecoxib"[Title/Abstract] OR "COX"[Title/Abstract] OR "COX 2 Inhibitor"[Title/Abstract] OR "COX-2 Inhibitor"[Title/Abstract] OR "Coxib"[Title/Abstract] OR "Cyclo-Oxygenase Inhibitor"[Title/Abstract] OR "Cyclooxygenase 2 Inhibitor*"[Title/Abstract] OR "Cyclooxygenase Inhibitors"[Title/Abstract] OR "Diclofenac[Title/Abstract] OR Diclophenac"[Title/Abstract] OR "Dicrofenac"[Title/Abstract] OR "etoricoxib"[Title/Abstract] OR "flurbiprofen"[Title/Abstract] OR "flurbiprofen axetil"[Title/Abstract] OR "Ibuprofen"[Title/Abstract] OR "Ibuprofen"[Title/Abstract] OR "non steroid antiinflammatory agent"[Title/Abstract] OR "non steroid antiinflammatory drug"[Title/Abstract] OR "non steroidal anti inflammatory agent*"[Title/Abstract] OR "non steroidal anti inflammatory drug"[Title/Abstract] OR "non steroidal antiinflammatory drug"[Title/Abstract] OR "nonsteroid antiinflammatory agent"[Title/Abstract] OR "nonsteroid antiinflammatory drug"[Title/Abstract] OR "nonsteroid antirheumatic agent"[Title/Abstract] OR "Nonsteroidal Anti Inflammatory Agent*"[Title/Abstract] OR "nonsteroidal anti inflammatory drug*"[Title/Abstract] OR "nonsteroidal antiinflammatory agent"[Title/Abstract] OR "Nonsteroidal Anti-Inflammatory Agent*"[Title/Abstract] OR "Non-Steroidal Anti-Inflammatory Agent*"[Title/Abstract] OR "Nonsteroidal Antiinflammatory Agents"[Title/Abstract] OR "nonsteroidal antiinflammatory drug*"[Title/Abstract] OR "nonsteroidal anti-inflammatory drug*"[Title/Abstract] OR "NSAID*"[Title/Abstract] OR "Parecoxib"[Title/Abstract]
#3	arthritis[MeSH Terms]
#4	"Arthritides"[Title/Abstract] OR "arthritis"[Title/Abstract] OR "arthrochondritis"[Title/Abstract] OR "arthrosynovitis"[Title/Abstract] OR "chronic arthritis"[Title/Abstract] OR "chronic senescent arthritis"[Title/Abstract] OR "joint inflammation"[Title/Abstract] OR "monoarthritis"[Title/Abstract] OR "oligoarthritis"[Title/Abstract] OR "osteoarthritis"[Title/Abstract] OR "Polyarthritides"[Title/Abstract] OR "Polyarthritis"[Title/Abstract] OR "rheumatoid arthritis"[Title/Abstract] OR "sero negative arthritis"[Title/Abstract] OR "spondylitis"[Title/Abstract] OR "undifferentiated arthritis"[Title/Abstract]
#5	"cardiac"[Title/Abstract] OR "cardial"[Title/Abstract] OR "Cardio*"[Title/Abstract] OR "cerebrovascu*"[Title/Abstract] OR "coronary"[Title/Abstract] OR "heart"[Title/Abstract] OR "myocardial"[Title/Abstract] OR "vascul*"[Title/Abstract] OR "kidney*"[Title/Abstract] OR "renal*"[Title/Abstract] OR "neph*"[Title/Abstract]
#6	("aneurysm*"[Title/Abstract] OR "attack*"[Title/Abstract] OR "damage*"[Title/Abstract] OR "disease*"[Title/Abstract] OR "disorder*"[Title/Abstract] OR "dysfunction*"[Title/Abstract] OR "failure"[Title/Abstract] OR "fibrosis"[Title/Abstract] OR "function*"[Title/Abstract] OR "impair*"[Title/Abstract] OR "injur*"[Title/Abstract] OR "insuffic*"[Title/Abstract] OR "isch?emi*"[Title/Abstract] OR "necrosis*"[Title/Abstract] OR "stenosis"[Title/Abstract] OR "syndrome"[Title/Abstract] OR "thrombosis"[Title/Abstract])
#7	(#1 OR #2) AND (#3 OR #4) AND (#5 AND #6)
#8	"controlled clinical trial*"[Title/Abstract] OR "random*"[Title/Abstract] OR "RCT"[Title/Abstract]
#9	#7 AND #8

### SUCRA rankings and graphical ranking of hypertension probability

Treatments	SUCRA
1 Etorcoxib	0.20537500
11 Diclofenac	0.40683125
2 Naproxen	0.47261250
3 Ibuprofen	0.04933125
4 Placebo	0.74752500
5 Rofecoxib	0.79350000
6 Nabumetone	0.38731250
7 Celecoxib	0.56109375
8 Amlolmetin guacyl	0.87541875



**Ranking of preferability:** Amlolmetin guacyl > Rofecoxib > Placebo > Celecoxib > Naproxen > Diclofenac > Nabumetone > Etorcoxib > Ibuprofen

Figure S1 SUCRA rankings and graphical ranking of hypertension probability.

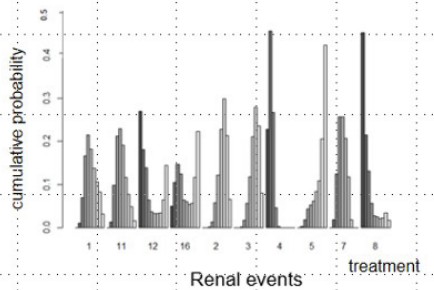
### League table with OR value for the incidence of hypertension

Etorcoxib	0.74 (0.48, 1.12)	1.68 (0.95, 2.79)	<b>0.52 (0.35, 0.75)</b>	<b>0.48 (0.26, 0.87)</b>	0.95 (0.09, 9.35)	0.65 (0.38, 1.09)	0.2 (0.01, 1.43)	<b>0.8 (0.67, 0.96)</b>
1.34 (0.9, 2.07)	<b>Naproxen</b>	<b>2.25 (1.21, 4.1)</b>	0.69 (0.42, 1.15)	0.64 (0.31, 1.33)	1.3 (0.12, 12.86)	0.87 (0.45, 1.71)	0.27 (0.01, 1.99)	1.08 (0.69, 1.72)
0.59 (0.36, 1.06)	<b>0.44 (0.24, 0.83)</b>	<b>Ibuprofen</b>	<b>0.31 (0.17, 0.58)</b>	<b>0.29 (0.13, 0.65)</b>	0.57 (0.05, 5.94)	<b>0.38 (0.19, 0.84)</b>	<b>0.12 (0, 0.92)</b>	<b>0.48 (0.28, 0.87)</b>
<b>1.93 (1.32, 2.88)</b>	1.44 (0.87, 2.36)	<b>3.24 (1.71, 5.82)</b>	<b>Placebo</b>	0.92 (0.46, 1.86)	1.86 (0.18, 18.15)	1.24 (0.66, 2.39)	0.39 (0.01, 2.83)	<b>1.55 (1.02, 2.4)</b>
<b>2.09 (1.15, 3.85)</b>	1.56 (0.75, 3.21)	<b>3.5 (1.93, 7.69)</b>	1.08 (0.54, 2.17)	<b>Rofecoxib</b>	<b>2 (0.21, 18.65)</b>	1.35 (0.96, 1.91)	0.42 (0.02, 3.03)	1.68 (0.95, 3.03)
1.05 (0.11, 10.59)	0.77 (0.08, 8.24)	1.75 (0.17, 18.55)	0.54 (0.06, 5.45)	0.5 (0.05, 4.73)	<b>Nabumetone</b>	0.68 (0.07, 6.51)	0.2 (0, 4.07)	0.85 (0.09, 8.5)
1.55 (0.92, 2.61)	1.15 (0.58, 2.22)	<b>2.6 (1.19, 5.36)</b>	0.8 (0.42, 1.51)	0.74 (0.52, 1.04)	1.48 (0.15, 14.13)	<b>Celecoxib</b>	0.31 (0.01, 2.24)	1.25 (0.76, 2.04)
4.98 (0.7, 127.88)	3.71 (0.5, 98.76)	<b>8.36 (1.09, 220.65)</b>	2.57 (0.35, 67.31)	2.36 (0.33, 62.98)	5.06 (0.25, 227.03)	3.21 (0.45, 83.56)	<b>Amlolmetin guacyl</b>	<b>3.99 (0.57, 104.01)</b>
<b>1.24 (1.04, 1.49)</b>	0.93 (0.58, 1.44)	<b>2.09 (1.15, 3.56)</b>	0.64 (0.42, 0.98)	0.59 (0.33, 1.06)	1.18 (0.12, 11.54)	0.8 (0.49, 1.32)	0.25 (0.01, 1.76)	<b>Diclofenac</b>

Figure S2 League table with OR value for the incidence of hypertension.

### SUCRA rankings and graphical ranking of renal events probability

Treatments	SUCRA
1 Etorcoxib	0.4536056
11 Diclofenac	0.5022056
12 Acetaminophen	0.6425444
16 Indometacin	0.4465389
2 Naproxen	0.2629222
3 Ibuprofen	0.2556000
4 Placebo	0.8728667
5 Rofecoxib	0.1775278
7 Celecoxib	0.5628056
8 Amlolmetin guacyl	0.8233833



**Ranking of preferability:** Placebo > Amlolmetin guacyl > Acetaminophen > Celecoxib > Diclofenac > Etorcoxib > Indometacin > Naproxen > Ibuprofen > Rofecoxib

Figure S3 SUCRA rankings and graphical ranking of renal events probability.

League table with OR value for the incidence of renal adverse events

<b>Etorcoxib</b>	1.27 (0.63, 2.47)	1.28 (0.63, 2.54)	<b>0.37 (0.17, 0.75)</b>	1.64 (0.55, 5.07)	0.91 (0.45, 1.78)	0.29 (0.01, 2.25)	0.94 (0.52, 1.68)	0.51 (0.02, 6.91)	0.99 (0.17, 5.32)
0.79 (0.4, 1.58)	<b>Naproxen</b>	1.01 (0.81, 1.24)	<b>0.29 (0.13, 0.62)</b>	1.28 (0.49, 3.61)	<b>0.71 (0.57, 0.9)</b>	0.23 (0.01, 1.7)	0.74 (0.39, 1.42)	0.4 (0.01, 5.05)	0.78 (0.12, 4.92)
0.78 (0.39, 1.59)	0.99 (0.8, 1.23)	<b>Ibuprofen</b>	<b>0.29 (0.13, 0.62)</b>	1.28 (0.49, 3.58)	<b>0.71 (0.56, 0.89)</b>	0.23 (0.01, 1.68)	0.74 (0.38, 1.43)	0.4 (0.01, 4.99)	0.78 (0.12, 4.95)
2.7 (1.33, 5.8)	<b>3.42 (1.6, 7.76)</b>	3.46 (1.6, 7.95)	<b>Placebo</b>	4.46 (1.49, 14.73)	<b>2.45 (1.15, 5.59)</b>	0.79 (0.02, 6.22)	<b>2.53 (1.51, 4.64)</b>	1.38 (0.04, 20.06)	2.72 (0.4, 17.9)
0.61 (0.2, 1.81)	0.78 (0.28, 2.03)	0.78 (0.28, 2.05)	<b>0.22 (0.07, 0.67)</b>	<b>Rofecoxib</b>	0.56 (0.2, 1.41)	0.18 (0.01, 1.14)	0.58 (0.2, 1.55)	0.31 (0.01, 4.72)	0.6 (0.08, 4.64)
1.1 (0.56, 2.21)	<b>1.4 (1.11, 1.77)</b>	<b>1.41 (1.12, 1.78)</b>	<b>0.41 (0.18, 0.87)</b>	1.8 (0.71, 4.9)	<b>Celecoxib</b>	0.32 (0.01, 2.33)	1.04 (0.54, 1.97)	0.57 (0.02, 7.01)	1.09 (0.16, 6.98)
3.46 (0.44, 111.94)	4.4 (0.59, 139.44)	4.42 (0.6, 140.06)	1.27 (0.16, 42.08)	5.67 (0.88, 175.68)	3.14 (0.43, 100.87)	<b>Antolmetin guacyl</b>	3.24 (0.45, 101.26)	1.87 (0.03, 129.49)	3.69 (0.23, 161.97)
1.07 (0.59, 1.91)	1.35 (0.7, 2.58)	1.36 (0.7, 2.64)	<b>0.4 (0.22, 0.66)</b>	1.74 (0.65, 4.99)	0.96 (0.51, 1.84)	0.31 (0.01, 2.24)	<b>Diclofenac</b>	0.54 (0.02, 7.54)	1.05 (0.17, 6.49)
1.94 (0.14, 63.79)	2.48 (0.2, 79.19)	2.49 (0.2, 79.47)	0.72 (0.05, 24.94)	3.22 (0.21, 117.09)	1.76 (0.14, 57.24)	0.53 (0.01, 30.32)	1.84 (0.13, 60.82)	<b>Acetaminophen</b>	1.99 (0.09, 92.53)
1.01 (0.18, 5.81)	1.28 (0.2, 8.48)	1.29 (0.2, 8.53)	0.37 (0.06, 2.49)	1.66 (0.22, 13.3)	0.92 (0.14, 6.07)	0.27 (0.01, 4.26)	0.95 (0.15, 5.99)	0.5 (0.01, 11.56)	<b>Indometacin</b>

Figure S4 League table with OR value for the incidence of renal adverse events.

SUCRA rankings and graphical ranking of cardiovascular events probability

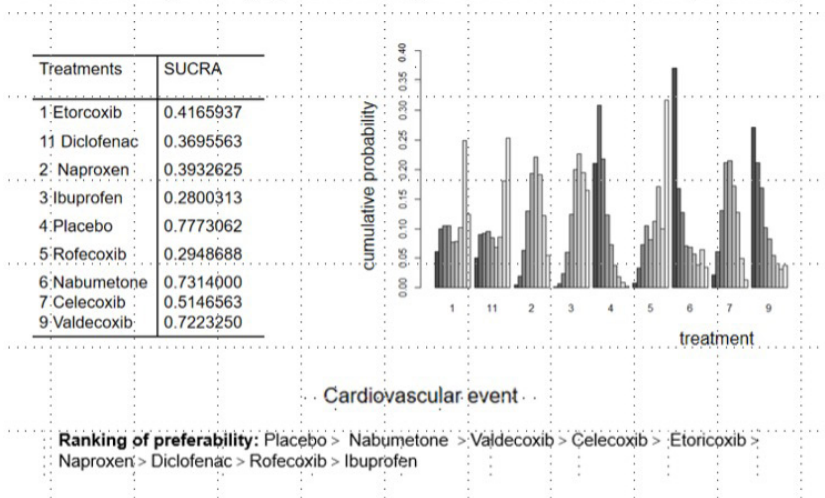


Figure S5 SUCRA rankings and graphical ranking of cardiovascular probability.

League table with OR value for the incidence of cardiovascular adverse events

<b>Etorcoxib</b>	0.95 (0.13, 6.73)	1.09 (0.14, 7.94)	0.45 (0.05, 3.24)	1.17 (0.11, 12.12)	0.42 (0.03, 6.08)	0.81 (0.1, 5.72)	0.47 (0.04, 5.18)	1.07 (0.61, 1.92)
1.05 (0.15, 7.83)	<b>Naproxen</b>	1.15 (0.63, 2.21)	0.48 (0.15, 1.4)	1.25 (0.3, 5.14)	0.45 (0.06, 3.11)	0.88 (0.42, 1.37)	0.5 (0.12, 2.2)	1.13 (0.15, 9.09)
0.92 (0.13, 7.15)	0.87 (0.45, 1.59)	<b>Ibuprofen</b>	0.42 (0.12, 1.22)	1.09 (0.25, 4.56)	0.39 (0.05, 2.74)	0.77 (0.33, 1.27)	0.44 (0.12, 1.7)	0.98 (0.13, 8.23)
2.21 (0.31, 18.27)	2.07 (0.71, 6.81)	2.39 (0.82, 8.06)	<b>Placebo</b>	2.6 (0.68, 10.9)	0.95 (0.13, 6.04)	1.78 (0.56, 5.67)	1.06 (0.23, 5.46)	2.37 (0.31, 20.95)
0.85 (0.08, 9.4)	0.8 (0.19, 3.36)	0.92 (0.22, 4.07)	0.38 (0.09, 1.46)	<b>Rofecoxib</b>	0.36 (0.07, 1.57)	0.68 (0.17, 2.63)	0.4 (0.06, 2.78)	0.91 (0.08, 10.66)
2.37 (0.16, 37.34)	2.22 (0.32, 17.38)	2.54 (0.37, 20.39)	1.06 (0.17, 7.45)	2.75 (0.64, 14.84)	<b>Nabumetone</b>	1.89 (0.27, 14.29)	1.12 (0.12, 12.43)	2.55 (0.17, 42.87)
1.23 (0.17, 10)	1.14 (0.73, 2.37)	1.3 (0.79, 3.02)	0.56 (0.18, 1.78)	1.46 (0.38, 5.96)	0.53 (0.07, 3.71)	<b>Celecoxib</b>	0.58 (0.15, 2.86)	1.32 (0.18, 11.56)
2.11 (0.19, 22.48)	2 (0.45, 8.14)	2.29 (0.59, 8.65)	0.95 (0.18, 4.27)	2.5 (0.36, 15.72)	0.89 (0.08, 8.3)	1.73 (0.35, 6.72)	<b>Valdecoxib</b>	2.27 (0.2, 26.11)
0.94 (0.52, 1.65)	0.88 (0.11, 6.55)	1.02 (0.12, 7.95)	0.42 (0.05, 3.23)	1.1 (0.09, 12.22)	0.39 (0.02, 5.95)	0.76 (0.09, 5.67)	0.44 (0.04, 5.05)	<b>Diclofenac</b>

Figure S6 League table with OR value for the incidence of cardiovascular adverse events.

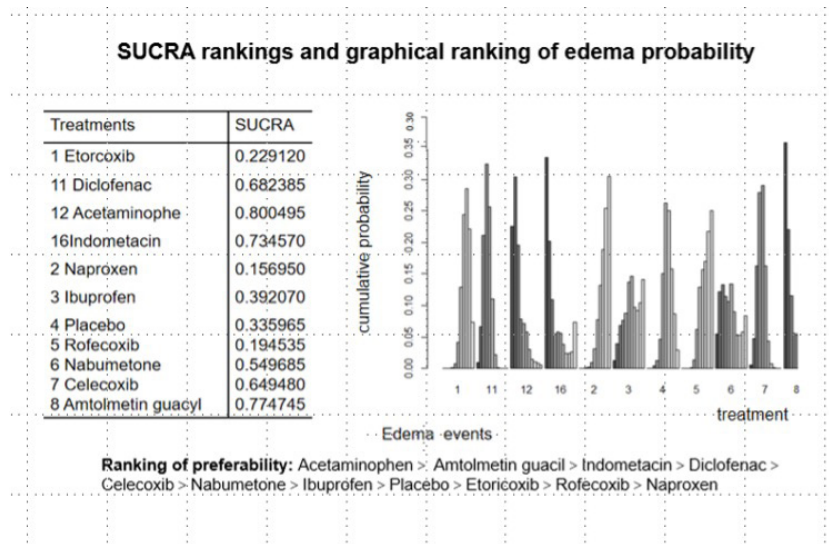


Figure S7 SUCRA rankings and graphical ranking of edema probability.

#### League table with OR value for the incidence of edema

<b>Etorcoxib</b>	1.12 (0.68, 1.83)	0.8 (0.24, 1.98)	0.87 (0.55, 1.34)	1.06 (0.58, 2.03)	0.55 (0.12, 2.09)	<b>0.49 (0.3, 0.79)</b>	0.24 (0.01, 1.78)	<b>0.47 (0.31, 0.69)</b>	0.28 (0.05, 1.04)	0.26 (0.01, 2.34)
0.89 (0.55, 1.48)	<b>Naproxen</b>	0.71 (0.21, 1.85)	0.77 (0.45, 1.33)	0.95 (0.45, 2.11)	0.5 (0.1, 2.01)	<b>0.43 (0.22, 0.86)</b>	0.21 (0.01, 1.69)	<b>0.42 (0.22, 0.79)</b>	<b>0.25 (0.05, 0.82)</b>	0.23 (0.01, 2.24)
1.26 (0.51, 4.23)	1.42 (0.54, 4.87)	<b>Ibuprofen</b>	1.09 (0.43, 3.73)	1.35 (0.45, 5.06)	0.71 (0.12, 4.1)	0.61 (0.22, 2.22)	0.3 (0.01, 3.34)	0.59 (0.22, 2.11)	0.35 (0.06, 1.96)	0.34 (0.01, 4.01)
1.16 (0.74, 1.81)	1.3 (0.75, 2.22)	0.92 (0.27, 2.35)	<b>Placebo</b>	1.23 (0.61, 2.57)	0.64 (0.13, 2.49)	0.56 (0.31, 1.05)	0.27 (0.01, 2.17)	<b>0.54 (0.31, 0.96)</b>	0.32 (0.06, 1.21)	0.3 (0.01, 2.86)
0.94 (0.49, 1.74)	1.05 (0.47, 2.24)	0.74 (0.2, 2.23)	0.82 (0.39, 1.64)	1.93 (0.57, 8.62)	<b>Rofecoxib</b>	0.52 (0.12, 1.76)	<b>0.46 (0.28, 0.73)</b>	0.22 (0.01, 1.54)	<b>0.44 (0.25, 0.73)</b>	0.26 (0.04, 1.12)
1.81 (0.48, 8.66)	2.01 (0.5, 10.26)	1.41 (0.24, 8.65)	1.57 (0.4, 7.76)	1.14 (0.25, 4.14)	<b>Nabumetone</b>	0.88 (0.24, 4.08)	0.42 (0.01, 5.04)	0.84 (0.23, 3.91)	0.5 (0.06, 3.82)	0.47 (0.01, 7.17)
<b>2.05 (1.27, 3.33)</b>	<b>2.31 (1.16, 4.47)</b>	1.63 (0.45, 4.61)	1.78 (0.96, 3.26)	<b>2.19 (1.37, 3.61)</b>	1.14 (0.25, 4.14)	<b>Celecoxib</b>	0.49 (0.02, 3.5)	0.96 (0.72, 1.26)	0.57 (0.1, 2.32)	0.54 (0.02, 5.01)
4.25 (0.56, 117)	4.78 (0.59, 128.8)	3.33 (0.3, 100.95)	3.69 (0.46, 100.2)	4.51 (0.65, 121.93)	2.36 (0.2, 76.82)	2.05 (0.29, 54.75)	<b>Amlolmetin guacyl</b>	1.98 (0.27, 53.53)	1.19 (0.08, 40.81)	1.11 (0.02, 58.85)
<b>2.14 (1.45, 3.21)</b>	<b>2.4 (1.27, 4.46)</b>	1.7 (0.47, 4.64)	<b>1.86 (1.04, 3.24)</b>	<b>2.27 (1.37, 3.96)</b>	1.19 (0.26, 4.39)	1.04 (0.79, 1.39)	0.51 (0.02, 3.67)	<b>Diclofenac</b>	0.59 (0.11, 2.33)	0.56 (0.02, 5.08)
3.6 (0.97, 18.42)	<b>4.02 (1.22, 19.53)</b>	2.85 (0.51, 17.27)	3.12 (0.83, 16.34)	3.87 (0.9, 22.49)	2.01 (0.26, 16.06)	1.76 (0.43, 9.85)	0.84 (0.02, 11.82)	1.69 (0.43, 9.14)	<b>Acetaminophen</b>	0.95 (0.02, 14.61)
3.8 (0.43, 116.3)	4.3 (0.45, 132.61)	2.98 (0.25, 99.58)	3.31 (0.35, 101.65)	4.11 (0.41, 128.88)	2.15 (0.14, 78.88)	1.86 (0.2, 57.87)	0.9 (0.02, 44.3)	1.78 (0.2, 55.3)	1.05 (0.07, 40.02)	<b>Indometacin</b>

Figure S8 League table with OR value for the incidence of edema.