

## Appendix 1. Search strategy examples

### MEDLINE (PUBMED)

1. “non-steroidal anti-inflammatory agents”[Text Word] OR “anti-inflammatory agents, non-steroidal”[Mesh] OR “antiinflammatory agents, non-steroidal”[Pharmacological Action] OR “Anti-Inflammatory Agents, Non-Steroidal”[Text Word] OR “NSAIDs”[tiab] OR “nonsteroidal antiinflammatory”[tiab] OR “Non-Steroidal Anti-Inflammator\*”[tiab] OR “Selective Non-Steroidal Anti-Inflammator\*”[tiab]
2. "Cyclooxygenase 2 Inhibitors"[Mesh] OR (cyclooxygenase-2[tiab] inhibitor\*[tiab]) OR (cyclooxygenase-II[tiab] inhibitor\*[tiab]) OR (cyclo-oxygenase-2[tiab] inhibitor\*[tiab]) OR (cyclo-oxygenase-II[tiab] inhibitor\*[tiab]) or (COX2[tiab] inhibitor\*[tiab]) OR (COX-2[tiab] inhibitor\*[tiab]) OR (COX-II[tiab] inhibitor\*[tiab]) OR (COXII[tiab] inhibitor\*[tiab])
3. (cyclooxygenase-2[tiab] antagonist\*[tiab]) OR (cyclooxygenase-II[tiab] antagonist\*[tiab]) OR (cyclo-oxygenase-2[tiab] antagonist\*[tiab]) OR (cyclo-oxygenase-II[tiab] antagonist\*[tiab]) OR (COX2[tiab] antagonist\*[tiab]) OR (COX-2[tiab] antagonist\*[tiab]) OR (COX-II[tiab] antagonist\*[tiab]) OR (COXII[tiab] antagonist\*[tiab])
4. (prostaglandin[tiab] synthase[tiab] inhibitor[tiab]) OR (prostaglandin[tiab] synthase[tiab] inhibitor\*[tiab]) OR (prostaglandin[tiab] synthase[tiab] antagonist[tiab]) OR (prostaglandin[tiab] synthase[tiab] antagonist\*[tiab])
5. (Acetaminophen OR Paracetamol OR Tylenol or ibuprofen OR ketoprofen or fenoprofen OR oxaprozin OR sulindac OR flurbiprofen OR diclofenac OR naproxen OR tenoxicam OR piroxicam OR droxicam OR indometacin OR indomethacin OR feprazone OR phenylbutazone OR isoxicam OR meclofenamate OR ketorolac OR lornoxicam OR nabumetone OR meloxicam OR aceclofenac OR alclofenac OR dexibuprofen OR dexketoprofen OR metamizol OR phenazone OR propyphenazone OR Prenazone OR ximoprofen OR Apazone OR Bufexamac OR Clonixin OR Curcumin OR Dexibuprofen OR Dipyron OR Epirizole OR Fenbufen OR Fenclofenac OR Lederfen OR “Niflumic Acid” OR Oxyphenbutazone OR pirazolac OR piroprofen OR Ponstan OR Suprofen OR “Tiaprofenic acid” OR “tolfenamic acid” OR Tolmetin OR “meclofenamic acid” OR “mefenamic acid”)[tiab]
6. (coxib\* OR apricoxib OR celecoxib OR cimicoxib OR darbufelone OR deracoxib OR etoricoxib OR firocoxib OR flosulide OR lumiracoxib OR mavacoxib OR methanesulfonamide OR nimesulide OR parecoxib OR robenacoxib OR tiracoxib OR valdecoxib OR vedaprofen OR etodolac OR rofecoxib OR vioxx OR Celebrex OR bextra OR prexige OR arcoxia OR floctafenine OR meclofenam\* OR Mesalamine OR Ceoxx OR Ceeoxx OR Cimalgex OR Deramaxx OR Onsior OR “JTE-522” OR movalis OR mobec OR Mobic OR movicox OR mobicox OR parocin OR uticox OR Daypro OR Dayrun OR Duraprox OR meclomen OR Ponstan OR Xefo OR Seractil OR Antipyrine OR Metherazone OR Loxonin OR indoprofen OR Diflunisal OR Carprofen OR “Flufenamic acid” OR Flunixin OR Ramifenazone)[tiab]
7. OR/1-6
8. osteoarthritis\*[tiab] OR osteoarthritis\*[mh]

9. osteoarthro\*[tiab] OR gonarthriti\*[tiab] OR gonarthro\*[tiab] OR coxarthriti\*[tiab] OR coxarthro\*[tiab] OR osteo?arthritis[tiab]
10. OR/8-9
11. random\*[tiab] OR placebo[tiab] OR controlled[tiab] OR trial\*[tiab]
12. 7 AND 10 AND 11

## EMBASE

1. ((nonsteroid antiinflammatory agent\*) OR (non-steroidal anti-inflammatory agent\*) OR NSAIDs):ti,ab
2. ((Cyclooxygenase 2 Inhibitor\*) OR (cyclooxygenase-2 inhibitor\*) OR (cyclooxygenase-II inhibitor\*) OR (cyclo-oxygenase-2 inhibitor\*) OR (cyclo-oxygenase-II inhibitor\*) OR (COX2 inhibitor\*) OR (COX-2 inhibitor\*) OR (COX-II inhibitor\*) OR (COXII inhibitor\*)):ti,ab
3. (Acetaminophen OR Paracetamol OR Tylenol OR ibuprofen OR ketoprofen OR fenoprofen OR oxaprozin OR sulindac OR flurbiprofen OR diclofenac OR naproxen OR tenoxicam OR piroxicam OR droxicam OR indometacin OR indomethacin OR feprazone OR phenylbutazone OR isoxicam OR meclofenamate OR ketorolac OR lornoxicam OR nabumetone OR meloxicam OR aceclofenac OR alclofenac OR dexibuprofen OR dexketoprofen OR metamizol OR phenazone OR propyphenazone OR Prenazone OR ximoprofen OR Apazone OR Bufexamac OR Clonixin OR Curcumin OR Dexibuprofen OR Dipyron OR Epirizole OR Fenbufen OR Fenclofenac OR Lederfen OR “Niflumic Acid” OR Oxyphenbutazone OR pirazolac OR pirprofen OR Ponstan OR Suprofen OR “Tiaprofenic acid” OR “tolfenamic acid” OR Tolmetin OR “meclofenamic acid” OR “mefenamic acid”):ti,ab
4. (coxib\* OR apricoxib OR celecoxib OR cimicoxib OR darbufelone OR deracoxib OR etoricoxib OR firocoxib OR flosulide OR lumiracoxib OR mavacoxib OR methanesulfonamide OR nimesulide OR parecoxib OR robenacoxib OR tiracoxib OR valdecoxib OR vedaprofen OR etodolac OR rofecoxib OR vioxx OR Celebrex OR bextra OR prexige OR arcoxia OR floctafenine OR meclofenam\* OR Mesalamine OR Ceox OR Ceeox OR Cimalgex OR Deramaxx OR Onsior OR “JTE-522” OR movalis OR mobec OR Mobic OR movicox OR mobicox OR parocin OR uticox OR Daypro OR Dayrun OR Duraprox OR meclomen OR Ponstan OR Xefo OR Seractil OR Antipyrene OR Metherazone OR Loxonin OR indoprofen OR Diflunisal OR Carprofen OR “Flufenamic acid” OR Flunixin OR Ramifenazone):ti,ab
5. OR/1-4
6. (osteoarthriti\* OR osteoarthro\* OR gonarthriti\* OR gonarthro\* OR coxarthriti\* OR coxarthro\* OR arthros\* or arthrot\*):ti,ab
7. (random\* OR controlled OR trial\* OR placebo):ti,ab
8. 5 AND 6 AND 7

## Web of Science

1. TOPIC: (“non-steroidal anti-inflammatory agents” OR “anti-inflammatory agents, non-steroidal” OR “antiinflammatory agents, non-steroidal” OR “Anti-Inflammatory Agents, Non-Steroidal” OR “NSAID\*” OR “nonsteroidal antiinflammatory” OR “non-steroidal anti-inflammatory”)
2. TOPIC: ((Cyclooxygenase 2 Inhibitor\*) OR (cyclooxygenase-2 inhibitor\*) OR (cyclooxygenase-II inhibitor\*) OR (cyclo-oxygenase-2 inhibitor\*) OR (cyclo-oxygenase-II inhibitor\*) OR (COX2 inhibitor\*) OR (COX-2 inhibitor\*) OR (COX-II inhibitor\*) OR (COXII inhibitor\*))
3. TITLE: (Acetaminophen OR Paracetamol OR Tylenol OR ibuprofen OR ketoprofen OR fenoprofen OR oxaprozin OR sulindac OR flurbiprofen OR diclofenac OR naproxen OR tenoxicam OR piroxicam OR droxicam OR indometacin OR indomethacin OR feprazone OR phenylbutazone OR isoxicam OR meclofenamate OR ketorolac OR lornoxicam OR nabumetone OR meloxicam OR aceclofenac OR alclofenac OR dexibuprofen OR dexketoprofen OR metamizol OR phenazone OR propyphenazone OR Prenazone OR ximoprofen OR Apazone OR Bufexamac OR Clonixin OR Curcumin OR Dexibuprofen OR Dipyrone OR Epirizole OR Fenbufen OR Fenclofenac OR Lederfen OR “Niflumic Acid” OR Oxyphenbutazone OR pirazolac OR pirprofen OR Ponstan OR Suprofen OR “Tiaprofenic acid” OR “tolfenamic acid” OR Tolmetin OR “meclofenamic acid” OR “mefenamic acid” OR coxib\* OR apricoxib OR celecoxib OR cimicoxib OR darbufelone OR deracoxib OR etoricoxib OR firocoxib OR flosulide OR lumiracoxib OR mavacoxib OR methanesulfonamide OR nimesulide OR parecoxib OR robenacoxib OR tiracoxib OR valdecoxib OR vedaprofen OR etodolac OR rofecoxib OR vioxx OR Celebrex OR bextra OR prexige OR arcoxia OR floctafenine OR meclofenam\* OR Mesalamine OR Ceox OR Ceeox OR Cimalgex OR Deramaxx OR Onsior OR “JTE-522” OR movalis OR mobec OR Mobic OR movicox OR mobicox OR parocin OR uticox OR Daypro OR Dayrun OR Duraprox OR meclomen OR Ponstan OR Xefo OR Seractil OR Antipyrine OR Metherazone OR Loxonin OR indoprofen OR Diflunisal OR Carprofen OR “Flufenamic acid” OR Flunixin OR Ramifenazone)
4. OR/1-3
5. TOPIC: (osteoarthritis\* OR osteoarthro\* OR gonarthriti\* OR gonarthro\* OR coxarthriti\* OR coxarthro\* OR arthros\* OR arthrot\*)
6. TOPIC: (random\* OR control\* OR placebo)
7. 4 AND 5 AND 6

## Cochrane Library

1. MeSH descriptor Osteoarthritis explode all trees
2. (osteoarthritis\* OR osteoarthro\* OR gonarthriti\* OR gonarthro\* OR coxarthriti\* OR coxarthro\* OR arthros\* OR arthrot\*):ab,ti
3. 1 OR 2
4. MESH descriptor “anti-inflammatory agents, non-steroidal” explode all trees
5. MESH descriptor “cyclooxygenase 2 inhibitor” explode all trees
6. (Acetaminophen OR Paracetamol OR Tylenol OR ibuprofen OR ketoprofen OR fenoprofen OR oxaprozin OR sulindac OR flurbiprofen OR diclofenac OR naproxen OR tenoxicam OR piroxicam OR droxicam OR indometacin OR indomethacin OR feprazone OR phenylbutazone OR isoxicam OR meclofenamate OR ketorolac OR lornoxicam OR nabumetone OR meloxicam OR aceclofenac OR alclofenac OR dexibuprofen OR dexketoprofen OR metamizol OR phenazone OR propyphenazone OR Prenazone OR ximoprofen OR Apazone OR Bufexamac OR Clonixin OR Curcumin OR Dexibuprofen OR Dipyron OR Epirizole OR Fenbufen OR Fenclofenac OR Lederfen OR “Niflumic Acid” OR Oxyphenbutazone OR pirazolac OR pirprofen OR Ponstan OR Suprofen OR “Tiaprofenic acid” OR “tolfenamic acid” OR Tolmetin OR “meclofenamic acid” OR “mefenamic acid”):ti,ab
7. (coxib\* OR apricoxib OR celecoxib OR cimicoxib OR darbufelone OR deracoxib OR etoricoxib OR firocoxib OR flosulide OR lumiracoxib OR mavacoxib OR methanesulfonamide OR nimesulide OR parecoxib OR robenacoxib OR tiracoxib OR valdecoxib OR vedaprofen OR etodolac OR rofecoxib OR vioxx OR Celebrex OR bextra OR prexige OR arcoxia OR floctafenine OR meclofenam\* OR Mesalamine OR Ceox OR Ceeox OR Cimalgex OR Deramaxx OR Onsior OR “JTE-522” OR movalis OR mobec OR Mobic OR movicox OR mobicox OR parocin OR uticox OR Daypro OR Dayrun OR Duraprox OR meclomen OR Ponstan OR Xefo OR Seractil OR Antipyrine OR Metherazone OR Loxonin OR indoprofen OR Diflunisal OR Carprofen OR “Flufenamic acid” OR Flunixin OR Ramifenazone):ti,ab
8. OR/4-7
9. 3 AND 8