**Appendix**

Appendix 1. Search strategy for MEDLINE (PubMed platform)

|  |  |
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|  |  |
| 1 | Search (bone OR bony) |
| 2 | Search ((Fracture Healing) AND (drug effects)) |
| 3 | Search Arm Bones |
| 4 | Search femoral |
| 5 | Search Femur |
| 6 | Search Fibula |
| 7 | Search fibular |
| 8 | Search fracture |
| 9 | Search Fracture Healing |
| 10 | Search Fracture nonunion |
| 11 | Search Fractures |
| 12 | Search Fractures, Bone |
| 13 | Search Fractures, Malunited |
| 14 | Search Fractures, Ununited |
| 15 | Search Fusion |
| 16 | Search Fusion surgery |
| 17 | Search healing |
| 18 | Search humeral |
| 19 | Search Humerus |
| 20 | Search Leg Bones |
| 21 | Search Osteotomy |
| 22 | Search Pelvic Bones |
| 23 | Search Pseudoarthrosis |
| 24 | Search radial |
| 25 | Search Radius |
| 26 | Search Tibia |
| 27 | Search tibial |
| 28 | Search Ulna |
| 29 | Search ulnar |
| 30 | Search union |
| 31 | Search (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30) |
| 32 | Search (human OR Humans) |
| 33 | Search (#31 AND #32) |
| 34 | Search Anti-Inflammatory Agents, Non-Steroidal |
| 35 | Search Indomethacin |
| 36 | Search Ketorolac |
| 37 | Search nonsteroid antiinflammatory agent |
| 38 | Search NSAID |
| 39 | Search (#34 OR #35 OR #36 OR #37 OR #38) |
| 40 | Search (day OR days) |
| 41 | Search (month OR months) |
| 42 | Search (nonunion OR (non union)) |
| 43 | Search Rate of non-bone union |
| 44 | Search Recovery of Function |
| 45 | Search Time |
| 46 | Search Time Factors |
| 47 | Search Time to bone union |
| 48 | Search (week OR weeks) |
| 49 | Search (year OR years) |
| 50 | Search (#40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49) |
| 51 | Search (#33 AND #39 AND #50) |
| 52 | Search (#33 AND #39 AND #50) Filters: Publication date from 1990/01/01 to 2016/12/31 |

Search string for PubMed

((bone OR bony) OR ((Fracture Healing) AND (drug effects)) OR (Arm Bones) OR femoral OR Femur OR Fibula OR fibular OR fracture OR (Fracture Healing) OR Fractures OR (Fractures, Bone) OR (Fractures, Malunited) OR (Fractures, Ununited) OR Fusion OR (Fusion surgery) OR healing OR humeral OR Humerus OR (Leg Bones) OR Osteotomy OR (Pelvic Bones) OR Pseudoarthrosis OR radial OR Radius OR Tibia OR tibial OR Ulna OR ulnar OR union) **AND** (human OR Humans) **AND** ((Anti-Inflammatory Agents, Non-Steroidal) OR Indomethacin OR Ketorolac OR (nonsteroid antiinflammatory agent) OR NSAID) **AND** ((day OR days) OR (month OR months) OR (nonunion OR (non union)) OR (Rate of non-bone union) OR (Recovery of Function) OR Time OR (Time Factors) OR (Time to bone union) OR (week OR weeks) OR (year OR years))

Filters: Publication date from 1990/01/01 to 2016/12/31

Appendix 2. Search strategy for Embase

(Fracture Healing) OR

(Fracture nonunion) OR

(Fractures, Bone) OR

(Fractures, Malunited) OR

(Fractures, Ununited)

AND

human OR

Humans

AND

(Anti-Inflammatory Agents, Non-Steroidal) OR

Indomethacin OR

Ketorolac OR

(nonsteroid antiinflammatory agent) OR

NSAID

AND

(day OR days) OR

(month OR months) OR

nonunion OR

(non union) OR

(Rate of non-bone union) OR

(Recovery of Function) OR

Time OR

(Time Factors) OR

(Time to bone union) OR

(week OR weeks) OR

(year OR years)

Publication date from 1990 to 2016

Appendix 3. Search strategy for Joanna Briggs, EBM Reviews, MEDLINE (Ovid platform)

# Searches

1 Fracture Healing.mp

2 Fracture nonunion.mp

3 Fractures, Bone.mp

4 Fractures, Malunited.mp

5 Fractures, Ununited.mp

6 1 or 2 or 3 or 4 or 5

7 (human or Humans).mp

8 6 and 7

9 Anti-Inflammatory Agents, Non-Steroidal.mp

10 Indomethacin.mp

11 Ketorolac.mp

12 nonsteroid antiinflammatory agent.mp

13 NSAID.mp

14 9 or 10 or 11 or 12 or 13

15 (day or days).mp

16 (month or months).mp

17 (nonunion or non union).mp

18 Rate of non-bone union.mp

19 Recovery of Function.mp

20 Time.mp

21 Time Factors.mp

22 Time to bone union.mp

23 (week or weeks).mp

24 (year or years).mp

25 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24

26 8 and 14 and 25