## Appendix 1. Literature search strategies [posted as supplied by author]

MEDLINE (Ovid)

- 1 Fracture Healing/
- 2 Bony Callus/
- 3 bone remod\*.mp.
- 4 exp Fractures, Bone/
- 5 fracture\*.mp.
- 6 exp Orthopedic Procedures/
- 7 or/1-6
- 8 Ultrasonic Therapy/ or Ultrasonic Waves/
- 9 LIPUS.mp.
- 10 8 or 9
- 11 7 and 10

## EMBASE (Ovid)

- 1 exp fracture healing/
- 2 callus/
- 3 bone remod\*.mp.
- 4 exp fracture/

5 (Fracture\* and (bone\* or osteo\* or verteb\* or bony or extremity)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading]

- 6 exp orthopedic surgery/
- 7 or/1-6

8 exp ultrasound therapy/ or ultrasound.mp. or ultrasonic.mp. or LIPUS.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading]

9 exp echography/

- 10 8 or 9
- 11 7 and 10

12 limit 11 to ("therapy (maximizes sensitivity)" or "therapy (maximizes specificity)" or "therapy (best balance of sensitivity and specificity)")

## CINAHL (Ebsco)

# Query

S12 S11 Limiters - Clinical Queries: Therapy - High Sensitivity, Therapy - High Specificity, Therapy - Best Balance

S11 S6 AND S10

- S10 S8 OR S9
- S9 (MH "Ultrasonic Therapy")
- S8 "LIPUS" or "ultrasound"
- S7 S1 OR S2 OR S3 OR S4 OR S5 OR S6
- S6 (MH "Orthopedic Surgery+")
- S5 "fracture\*"
- S4 bone remod\*
- S3 (MH "Bone Remodeling+")
- S2 (MH "Fracture Healing")
- S1 (MH "Fractures+")

Cochrane Library (Wiley)

- #1 MeSH descriptor: [Fracture Healing] explode all trees
- #2 MeSH descriptor: [Bony Callus] explode all trees
- #3 MeSH descriptor: [Fractures, Bone] explode all trees
- #4 bone remod\*:ti,ab,kw (Word variations have been searched)
- #5 fracture\*:ti,ab,kw (Word variations have been searched)
- #6 MeSH descriptor: [Orthopedic Procedures] explode all trees
- #7 osteotom\*
- #8 #1 or #2 or #3 or #4 or #5 or #6 or #7
- #9 MeSH descriptor: [Ultrasonic Therapy] explode all trees
- #10 ultrasound:ti,ab,kw (Word variations have been searched)
- #11 or #9 or #10
- #14 #8 and #11 in Trials

## PubMed

Search (Therapy/Broad[filter]) AND ((((fracture) AND ultrasound)) AND (((publisher[sb] OR inprocess[sb] OR pubmednotmedline[sb] OR pubstatusaheadofprint)))

Trials registry search in Clinical Trials.gov service of the U.S. National Institutes of Health and World Health Organization International Clinical Trials Registry Platform Search Portal (Search term: low intensity pulsed ultrasound)