**Appendix 1**

**Boolean Operation for Pubmed/Medline**

("osteoarthritis, knee"[MESH] OR ((knee[tiab] OR knee joint[MeSH] OR knee[MeSH]) AND (Osteoarthros\*[tiab] OR Osteoarthrit\*[tiab] OR Osteoarthritis[MeSH]))) AND ("resistance training"[MeSH] OR "Resistance training"[tiab] OR "strength training"[tiab] OR “Weight lifting”[tiab]) AND (("Randomized Controlled Trial"[publication type] OR controlled clinical trial[publication type] OR randomized[tiab] OR placebo[tiab] OR clinical trials[MeSH: noexp] OR randomly[tiab] OR trial[tiab]) NOT (animals [mh] NOT humans [mh]))

**Boolean Operation for Embase/Scopus**

('knee osteoarthritis'/de OR (('knee':ti,ab OR 'knee'/exp) AND (osteoarthros\* OR osteoarthrit\* OR 'osteoarthritis'/exp))) AND ('resistance training'/de OR 'strength training' OR 'resistance training' OR 'weight lifting'/de OR 'weight lifting') AND ('crossover procedure':de OR 'double-blind procedure':de OR 'randomized controlled trial':de OR 'single-blind procedure':de OR random\*:de,ab,ti OR factorial\*:de,ab,ti OR crossover\*:de,ab,ti OR ((cross NEXT/1 over\*):de,ab,ti) OR placebo\*:de,ab,ti OR ((doubl\* NEAR/1 blind\*):de,ab,ti) OR ((singl\* NEAR/1 blind\*):de,ab,ti) OR assign\*:de,ab,ti OR allocat\*:de,ab,ti OR volunteer\*:de,ab,ti) NOT ('conference abstract'/it OR 'letter'/it OR 'note'/it OR 'review'/it)

**Boolean Operation for CINAHL**

(((MH "Osteoarthritis, Knee") OR ((((MH "Knee") OR (MH "Knee Joint")) OR ((TI (knee OR knees)) OR (AB (knee OR knees)))) AND ((MH "Osteoarthritis") OR (TI (osteoarthros\* OR osteoarthrit\*) OR AB (osteoarthros\* OR osteoarthrit\*))))) AND (((MH "Resistance Training")) OR ((MH "Muscle Strengthening")) OR ((TI resistance N5 training) OR (AB resistance N5 training)) OR ((TI strength N5 training) OR (AB strength N5 training)) OR ((MH "Weight Lifting")) OR ((TI weight N3 lifting) OR (AB weight N3 lifting)))) AND (((TI resistance N5 training) OR (AB resistance N5 training)) (MH "Clinical Trials+") OR (PT Clinical trial) OR (TX clinic\* n1 trial\*) OR (TX ((singl\* n1 blind\*) OR (singl\* n1 mask\*)) OR TX ((doubl\* n1 blind\*) OR (doubl\* n1 mask\*)) OR TX ((tripl\* n1 blind\*) OR (tripl\* n1 mask\*)) OR TX ((trebl\* n1 blind\*) OR (trebl\* n1 mask\*))) OR (TX randomi\* control\* trial\*) OR (MH "Random Assignment") OR (TX random\* allocat\*) OR (TX placebo\*) OR ((MH "Placebos")) OR ((MH "Quantitative Studies")) OR (TX allocat\* random\*))