

Table S1: Search Terms

Proquest Search Terms (Includes: BIOSIS Previews®, COVID-19 Research, Derwent Drug File, Embase®, MEDLINE®)	
S1	((osteoporosis or osteoporoses or (osteopenia or “metabolic bone disease” or “metabolic bone diseases”) or age-related (bone or “os”) loss) NOT (case report)) and (pd(20150101- 20210330)) and (la.exact(“English” OR “Japanese” OR “Chinese” OR “Korean”)))
S2	((((thoracic or “thoracal”) (spine or “spina”) or lumbar (spine or “spina”) or thoracolumbar (spine or “spina”) or (lumbosacral or “sacrolumbar”) (spine or “spina”) or sacral (spine or “spina”)) AND (spine surgery or spinal surgery or spine surg* or spine operat* or instrumented spine surgery or spine instrument or spine implant or spine screw or vertebral body augmentation or kyphoplasty or spine stent or vertebroplasty) NOT (case report)) and (pd(20150101-20210331)) and (la.exact(“English” OR “Japanese” OR “Chinese” OR “Korean”)))
S3	((rtype.exact(“Journal Article” OR “Comparative Study” OR “Multicenter Study” OR “Randomized Controlled Trial” OR “Meta-Analysis” OR “Observational Study” OR “Clinical Trial” OR “Systematic Review” OR “Evaluation Study” OR “Clinical Study” OR “Twin Study”) NOT (“Article” OR “Conference Abstract” OR “Review” OR “Research Support, Non-U.S. Gov’t” OR “Article in Press” OR “Research Support, N.I.H., Extramural” OR “Meeting Abstract” OR “Letter” OR “Meeting Poster” OR “Note” OR “Editorial” OR “Conference Paper” OR “Literature Review” OR “Research Support, U.S. Gov’t, Non-P.H.S.” OR “Clinical Trial, Phase III” OR “Journal” OR “Peer Reviewed Journal” OR “Validation Study” OR “Clinical Trial, Phase II” OR “Comment” OR “Chapter” OR “Clinical Trial Protocol” OR “Conference Review” OR “Short Survey” OR “Video-Audio Media” OR “Consensus Development Conference” OR “Erratum” OR “Published Erratum” OR “Research Support, U.S. Gov’t, P.H.S.”)))
S4	S1 AND S2 AND S3
PubMed Search Terms	
S5	(((((vertebra*) OR (vertebra*[Text Word])) OR (vertebra*[Title/Abstract])) OR (vertebral body[Title/Abstract])) OR (vertebral body[Text Word])) OR (spine[Text Word])) OR (spine[Title/Abstract])) OR (spina*[Title/Abstract])) OR (spina*[Text Word])) OR (spina*)
S6	((((((((((((((((((surgery[Title/Abstract]) OR (surgery[Text Word])) OR (instrumented[Text Word])) OR (instrumented[Title/Abstract])) OR (instrumented surgery[Text Word])) OR (instrumented surgery[Title/Abstract])) OR (operat*[Title/Abstract])) OR (operat*[Text Word])) OR (operat*)) OR (implant[Title/Abstract])) OR (implant[Text Word])) OR (screw[Text Word])) OR (screw[Title/Abstract])) OR (stent*[Title/Abstract])) OR (stent*[Text Word])) OR (stent*) OR (augmentation[Title/Abstract])) OR (augmentation[Text Word])) OR (vertebroplasty[Text Word])) OR (vertebroplasty[Title/Abstract])) OR (kyphoplasty[Title/Abstract])) OR (kyphoplasty[Text Word])
S7	((((((((((((((((((“Osteoporosis”[Mesh]) OR (“Bone Diseases, Metabolic”[Mesh])) OR (osteoporoses)) OR (osteoporoses[Title/Abstract])) OR (osteoporoses[Text Word])) OR (osteoporosis[Text Word])) OR (osteoporosis[Title/Abstract])) OR (bone loss[Title/Abstract])) OR (bone loss[Text Word])) OR (bone losses[Text Word])) OR (bone losses[Title/Abstract])) OR (metabolic bone diseas*[Title/Abstract])) OR (metabolic bone diseas*[Text Word])) OR (metabolic bone diseas*)) OR (osteopenia[Title/Abstract])) OR (osteopenia[Text Word])) OR (age related osteoporos*[Text Word])) OR (age related osteoporos*[Title/Abstract])) OR (age related osteoporos)) OR (age-related bone loss*) OR (age-related bone loss*[Title/Abstract])) OR (age-related bone loss*[Text Word])
S8	S5 AND S6 AND S7 (Filters: the last 5 years, Humans, Chinese, English, Japanese, Korean)