

**Supplementary Appendix 1.** Search strategies for PubMed, EMBASE, Cochrane Library, Web of Science, KoreaMed, and hand searching

PICO		
Population	Patients who has been diagnosed with hip osteoporosis	
Intervention and Control	Hologic or Lunar or Norland or Osteosys	
Outcome	BDM	
Study Type	None	
Database	Search Query (Sep 15, 2020)	Results
PubMed	(("Bone densitometry"[MeSH Terms] OR "Bone densitometry"[All Fields]) AND ("osteoporosis"[MeSH Terms] OR "Hologic"[All Fields] OR "Lunar"[All Fields] OR "Norland"[All Fields] OR "Osteosys"[All Fields]) OR "Dual X-ray absorptiometry"[All Fields]) AND ("Accuracy"[Mesh] OR "Accuracy"[All Fields] OR "precision"[All Fields] OR "pencil beam mode"[All Fields] OR "fan beam mode"[All Fields])	293
EMBASE	('Bone densitometry'/exp OR 'Osteoporosis'/exp) OR ("Hologic"[All Fields] OR "Lunar"[All Fields] OR "Norland"[All Fields] OR "Osteosys"[All Fields]) AND ('Accuracy' OR 'Accuracy' OR 'precision' OR 'pencil beam mode' OR 'fan beam mode')	254
Cochrane Library	234 (70 reviews, 148 trials, and 16 protocols)	
#1	bone densitometry	762
#2	dual X-ray absorptiometry	5,319
#3	hologic	288
#4	lunar	302
#5	norlan	1
#6	osteosys	2
#7	accuracy	23,768
#8	precision	7,722
#9	pencil beam	34
#10	fan beam	37
#11	(#1 or #2 or #3 or #4) and (#5 or #6 or #7 or #8 or #9)	234
Web of Science	Subject: ((Dual X-ray absorptiometry or bone densitometry or osteoporosis) OR ("Hologic"[All Fields] OR "Lunar"[All Fields] OR "Norland"[All Fields] OR "Osteosys"[All Fields])) AND ('Accuracy' OR 'Accuracy' OR 'precision' OR 'pencil beam mode' OR 'fan beam mode')	211
KoreaMed	(Dual[ALL] and X-ray[ALL] and absorptiometry[ALL] or bone[ALL] and densitometry[ALL] or osteoporosis[ALL]) AND (Accuracy OR precision OR pencil beam mode OR fan beam mode)	54
Hand Searching		5