

## SUPPLEMENTARY MATERIAL

**Supplementary Appendix 1.** Detailed search strategies for each database. MeSH terms, search terms, and combinations of the 2 were used for each database search

Database	Detailed search strategies			Records founded
MEDLINE/PubMed	("breast cancer"[All Fields] OR ("Breast Neoplasms"[MeSH]) OR "Unilateral Breast Neoplasms"[MeSH] OR "Mastectomy, Segmental"[MeSH]) AND ("osteoporosis"[All Fields] OR "osteoporosis"[MeSH Terms] OR "bone density"[MeSH Terms] OR ("bone"[All Fields] AND "density"[All Fields]) OR "bone density"[All Fields] OR ("bone"[All Fields] AND "mineral"[All Fields] AND "density"[All Fields]) OR "bone mineral density"[All Fields]) AND ("fractures, bone"[MeSH Terms] OR "bone fractures"[All Fields] OR "fracture"[All Fields])			777
EMBASE	'breast cancer'/exp OR 'mastectomy'/exp OR 'breast cancer' OR 'breast neoplasm' OR 'mastectomy') AND ('fragility fracture'/exp OR 'osteoporotic fracture')			816
	ID	Search Hits	Results	
Cochrane Central Register of Controlled Trials	#1	MeSH descriptor: [Breast Neoplasms] explode all trees	11,134	568
	#2	MeSH descriptor: [Mastectomy] explode all trees	1,446	
	#3	MeSH descriptor: [Unilateral Breast Neoplasms] explode all trees	7	
	#4	'mastectomy' or 'breast cancer' or 'breast neoplasm'	28,236	
	#5	#1 OR #2 OR #3 OR #4	28,517	
	#6	MeSH descriptor: [Osteoporosis] explode all trees	3,685	
	#7	MeSH descriptor: [Osteoporotic Fractures] explode all trees	236	
	#8	MeSH descriptor: [Bone Density] explode all trees	4,369	
	#9	'osteoporotic fracture' or 'osteoporosis' or 'bone mineral density'	11,702	
	#10	#6 OR #7 OR #8 OR #9	12,265	
	#11	#5 AND #10	671	

Ultimately, 2,161 records were found, 777 from MEDLINE/PubMed, 816 from EMBASE, and 568 from the Cochrane Library. Studies were further selected according to the inclusion criteria listed in the material and methods (Fig. 1).