

Title: Effectiveness of anti-osteoporotic drugs to prevent secondary fragility fractures: systematic review and meta-analysis

Ovid Medline & Ovid Medline In-Process & Other Non-Indexed Citations

1. (((wrist* or colles or radius or articulatio radiocarpea or carpus or carpal or radiocarp* or radial or forearm* or humerus or metacarp* or barton or monteggia* or ulna or ulnar or upper limb* or hip or hips or trochanteric or intertrochanteric or subtrochanteric or femoral neck or femur neck or spine or spinal or vertebra or vertebral or vertebrae or lumbar or shoulder* or glenohumeral or humeroscapular or scapulo humeral or proximal humeral) adj3 fractur*).tw. or (exp hip fractures/ or spinal fractures/ or shoulder fractures/ or osteoporotic fractures/ or exp radius fractures/) or (fractures, bone/ and (exp wrist joint/ or exp spine/ or shoulder/ or shoulder joint/ or hip/))) and (exp osteoporosis/ or (osteoporo* or bone loss*).tw.)
2. exp bone density conservation agents/ or exp diphosphonates/ or exp calcitonin/ or exp selective estrogen receptor modulators/ or exp raloxifene hydrochloride/ or exp teriparatide/ or (exp antibodies, monoclonal/ and exp rank ligand/) or (aclasta or actonel or alend or alendro* or alovell or amgiva or aminodron* or aminobutane* or aminoheptane* or aminohydroxy* or aminomux or aminopropane* or aminopropylidene* or aredia or aredronet or arendal or atelvia or belfosdil or benet or bifemelan or bifosa or binosto or bisphonal or bisphosphon* or bonapex or bondenza or bondronat* or bonefos or boniva or bonmax or bonviva or butedron* or calcitar or calciton* or calcitrin or cangrelor or celvista or cibalcin or cimadron* or clodron* or coldron* or cycloheptylaminomethylenebis or defixal or denosumab or dequest or destara or diadronel or dichlorometh* or didronal or didronat* or didronel or difosfonal or difosfen or dinol or diphos or diphosphon* or dronal or dronate or editron* or ehdp or endronax or ethane* or ethylenehydroxy* or ethylidenebisphosphon* or etibon or etidron* or eucalen or evista or fixopan or forsteo or forteo or fosalan or fosamax or fosmin or fosval or hedp or hexane* or hydroxyeth* or hydroxyhex* or hydroxyl* or iasibon or ibandron* or incadron* or kengreal or kengrexal or keoxifene or lidadronate or lodronat* or loxar or loxifen or marvil or maxibone or mebonat or medron* or medrotec or methane* or methanon* or methylene* or minodron* or neobon or neridron* or nerixia or olpadron* or oncalst or onclast or optinate or optruma or orazol or osdron or osdronat or oseotenk or osficar or oslene or ossiten or ostac or osteof* or osteopam or osteopor or osteosan or osteotop or osteovan or osticalcin or pamidronate or pamisol or panolin or parathar or parathormone* or parathyroid hormone* or porosol or prolia or propane* or propylidenediphosphon* or raloxifene or raxeto or

reclast or ribastamin or risedron* or serm or serms or skelid or staporos or teiroc or teriparatide or thyreocalciton* or thyrocalciton* or tiludron* or tibolene or turpinal or voroste or xgeva or xidifon or xidiphone or xydiphon* or zoledron* or zomera or zometa).tw. or (bone resorpti* adj3 inhibitor*).tw. or ((estrogen or oestrogen) adj3 receptor modulator*).tw. or ((anti-resorpti* or anti-osteopor* or bone density) adj3 (drug* or agent* or medicin* or medication* or therap* or treatment*)).tw.

3. (and/1-2) not (case reports or editorial or comment or letter or review).pt. not (cancer* or tumor* or tumour* or malignan* or neoplas* or carcinoma*).ti.

Embase.com

1. 'wrist fracture'/exp OR 'hip fracture'/exp OR 'spine fracture'/exp OR 'shoulder fracture'/exp OR 'fragility fracture'/exp OR 'radius fracture'/exp OR ((wrist* OR colle* OR radius OR 'articulatio radiocarpea' OR carpus OR carpal OR radiocarp* OR radial OR forearm* OR humerus OR metacarp* OR barton OR monteggi* OR ulna OR ulnar OR 'upper limb' OR 'upper limbs' OR hip OR hips OR trochanteric OR intertrochanteric OR subtrochanteric OR 'femoral neck' OR 'femur neck' OR spine OR spinal OR vertebra* OR lumbar OR shoulder* OR glenohumeral OR humeroscapular OR 'scapulo humeral' OR 'proximal humeral') NEAR/3 fractur*):ab,ti OR ('fracture'/exp AND ('wrist'/exp OR 'hip'/exp OR 'spine'/exp OR 'shoulder'/exp OR 'wrist injury'/de OR 'shoulder injury'/exp OR 'hip injury'/exp OR 'spine injury'/exp)) AND ('osteoporosis'/exp OR osteoporo*:ab,ti OR 'bone loss':ab,ti)

2. 'bone density conservation agent'/exp OR 'osteoporosis'/exp/dm_dt OR 'bisphosphonic acid derivative'/exp OR 'calcitonin'/exp OR 'selective estrogen receptor modulator'/exp OR 'raloxifene'/exp OR 'denosumab'/exp OR 'parathyroid hormone[1-34]'/exp OR ('osteoclast differentiation factor'/exp AND 'monoclonal antibody'/exp) OR aclasta:ab,ti OR actonel:ab,ti OR alend:ab,ti OR alendro*:ab,ti OR alovell:ab,ti OR amgiva:ab,ti OR aminodron*:ab,ti OR aminobutane*:ab,ti OR aminohexane*:ab,ti OR aminohydroxy*:ab,ti OR aminomux:ab,ti OR aminopropane*:ab,ti OR aminopropylidene*:ab,ti OR aredia:ab,ti OR aredronet:ab,ti OR arendal:ab,ti OR atelvia:ab,ti OR belfosdil:ab,ti OR benet:ab,ti OR bifemelan:ab,ti OR bifosa:ab,ti OR binosto:ab,ti OR bisphonal:ab,ti OR bisphosphon*:ab,ti OR bonapex:ab,ti OR bondenza:ab,ti OR bondronat*:ab,ti OR bonefos:ab,ti OR boniva:ab,ti OR bonmax:ab,ti OR bonviva:ab,ti OR butedron*:ab,ti OR calcitar:ab,ti OR calciton*:ab,ti OR calcitrin:ab,ti OR cangrelor:ab,ti OR celvista:ab,ti OR cibalcin:ab,ti OR cimadron*:ab,ti OR clodron*:ab,ti OR coldron*:ab,ti OR cycloheptylaminomethylenebis:ab,ti OR defixal:ab,ti OR denosumab:ab,ti OR dequest:ab,ti OR destara:ab,ti OR diadronel:ab,ti

OR dichlorometh*:ab,ti OR didronal:ab,ti OR didronat*:ab,ti OR didronel:ab,ti OR difosfonal:ab,ti OR difosfen:ab,ti OR dinol:ab,ti OR diphos:ab,ti OR diphosphon*:ab,ti OR dronal:ab,ti OR dronate:ab,ti OR editron*:ab,ti OR ehdp:ab,ti OR endronax:ab,ti OR ethane*:ab,ti OR ethylenehydroxy*:ab,ti OR ethylidene bisphosphon*:ab,ti OR etibon:ab,ti OR etidron*:ab,ti OR eucalen:ab,ti OR evista:ab,ti OR fixopan:ab,ti OR forsteo:ab,ti OR forteo:ab,ti OR fosalan:ab,ti OR fosamax:ab,ti OR fosmin:ab,ti OR fosval:ab,ti OR hedp:ab,ti OR hexane*:ab,ti OR hydroxyeth*:ab,ti OR hydroxyhex*:ab,ti OR hydroxyl*:ab,ti OR iasibon:ab,ti OR ibandron*:ab,ti OR incadron*:ab,ti OR kengreal:ab,ti OR kengrexal:ab,ti OR keoxifene:ab,ti OR lidadronate:ab,ti OR lodronat*:ab,ti OR loxar:ab,ti OR loxifen:ab,ti OR marvil:ab,ti OR maxibone:ab,ti OR mebonat:ab,ti OR medron*:ab,ti OR medrotec:ab,ti OR methane*:ab,ti OR methanon*:ab,ti OR methylene*:ab,ti OR minodron*:ab,ti OR neobon:ab,ti OR neridron*:ab,ti OR nerixia:ab,ti OR olpadron*:ab,ti OR oncalst:ab,ti OR onclast:ab,ti OR optinate:ab,ti OR optruma:ab,ti OR orazol:ab,ti OR osdron:ab,ti OR osdronat:ab,ti OR oseotenk:ab,ti OR osficar:ab,ti OR oslene:ab,ti OR ossiten:ab,ti OR ostac:ab,ti OR osteof*:ab,ti OR osteopam:ab,ti OR osteopor:ab,ti OR osteosan:ab,ti OR osteotop:ab,ti OR osteovan:ab,ti OR osticalcin:ab,ti OR pamidronate:ab,ti OR pamisol:ab,ti OR panolin:ab,ti OR parathar:ab,ti OR parathormone*:ab,ti OR 'parathyroid hormone':ab,ti OR 'parathyroid hormones':ab,ti OR porosol:ab,ti OR prolia:ab,ti OR propane*:ab,ti OR propylidenediphosphon*:ab,ti OR raloxifene:ab,ti OR raxeto:ab,ti OR reclast:ab,ti OR ribastamin:ab,ti OR risedron*:ab,ti OR serm:ab,ti OR serms:ab,ti OR skelid:ab,ti OR staporos:ab,ti OR teiroc:ab,ti OR teriparatide:ab,ti OR thyreocalciton*:ab,ti OR thyrocalciton*:ab,ti OR tiludron*:ab,ti OR tibolene:ab,ti OR turpinal:ab,ti OR voroste:ab,ti OR xgeva:ab,ti OR xidifon:ab,ti OR xidiphone:ab,ti OR xydi phon*:ab,ti OR zoledron*:ab,ti OR zomera:ab,ti OR zometa:ab,ti OR (bone NEAR/3 resorpti* NEAR/3 inhibitor*):ab,ti OR ((estrogen OR oestrogen) NEAR/3 receptor* NEAR/3 modulator*):ab,ti OR (('anti-resorption' OR 'anti-osteoporosis' OR 'anti-osteoporotic' OR 'bone density' OR osteopor* OR decalcificat*) NEAR/3 (drug* OR agent* OR medicin* OR medication* OR therap* OR treatment*)):ab,ti

3. #1 AND #2 NOT (note:it OR letter:it OR editorial:it OR 'conference abstract':it OR 'conference paper':it OR review:it OR 'erratum':it OR 'case report'/de) NOT (cancer*:ti OR tumor*:ti OR tumour*:ti OR malignan*:ti OR neoplas*:ti OR carcinoma*:ti) NOT [medline]/lim NOT ([animals]/lim NOT [humans]/lim)

Cochrane Central Register of Controlled Trials

1. ((wrist* or colle* or radius or "articulatio radiocarpea" or carpus or carpal or

radiocarp* or radial or forearm* or humerus or metacarp* or barton or monteggi* or ulna or ulnar or "upper limb" or "upper limbs" or hip or hips or trochanteric or intertrochanteric or subtrochanteric or "femoral neck" or "femur neck" or spine or spinal or vertebra* or lumbar or shoulder* or glenohumeral or humeroscapular or "scapulo humeral" or "proximal humeral") near/3 fractur*):ti,ab or [mh "hip fractures"] or [mh "spinal fractures"] or [mh "shoulder fractures"] or [mh "osteoporotic fractures"] or [mh "radius fractures"] or ([mh "bone fractures"] and ([mh "wrist joint"] or [mh spine] or [mh shoulder] or [mh "shoulder joint"] or [mh hip])) and ([mh osteoporosis] or (osteoporo* or "bone loss"):ti,ab)

2. [mh "bone density conservation agents"] or [mh osteoporosis/DT] or [mh diphosphonates] or [mh calcitonin] or [mh "selective estrogen receptor modulators"] or [mh "raloxifene hydrochloride"] or [mh teriparatide] or ([mh "antibodies, monoclonal"] and [mh "rank ligand"]) or (aclasta or actonel or alend or alendro* or alovell or amgiva or aminodron* or aminobutane* or aminohexane* or aminohydroxy* or aminomux or aminopropane* or aminopropylidene* or aredia or aredronet or arendal or atelvia or belfosdil or benet or bifemelan or bifosa or binosto or bisphonal or bisphosphon* or bonapex or bondenza or bondronat* or bonefos or boniva or bonmax or bonviva or butedron* or calcitar or calciton* or calcitrin or cangrelor or celvista or cibalcin or cimadron* or clodron* or coldron* or cycloheptylaminomethylenebis or defixal or denosumab or dequest or destara or diadronel or dichlorometh* or didronal or didronat* or didronel or difosfonal or difosfen or dinol or diphos or diphosphon* or dronal or dronate or editron* or ehdp or endronax or ethane* or ethylenehydroxy* or ethylidenebisphosphon* or etibon or etidron* or eucalen or evista or fixopan or forsteo or forteo or fosalan or fosamax or fosmin or fosval or hedp or hexane* or hydroxyeth* or hydroxyhex* or hydroxyl* or iasibon or ibandron* or incadron* or kengreal or kengrexal or keoxifene or lidadronate or lodronat* or loxar or loxifen or marvil or maxibone or mebonat or medron* or medrotecor or methane* or methanon* or methylene* or minodron* or neobon or neridron* or nerixia or olpadron* or oncalst or onclast or optinate or optruma or orazol or osdron or osdronat or oseotenk or osficar or oslene or ossiten or ostac or osteof* or osteopam or osteopor or osteosan or osteotop or osteovan or osticalcin or pamidronate or pamisol or panolin or parathar or parathormone* or "parathyroid hormone*" or porosol or prolia or propane* or propylidenediphosphon* or raloxifene or raxeto or reclast or ribastamin or risedron* or serm or serms or skelid or staporos or teiroc or teriparetide or thyreocalictron* or thyrocalciton* or tiludron* or tibolene or turpinal or voroste or xgeva or xidifon or xidiphone or xydiphon* or zoledron* or

zomera or zometa):ti,ab or (bone resorpti* near/3 inhibitor*):ti,ab or ((estrogen or oestrogen) near/3 "receptor modulator*"):ab,ti or ((anti-resorpti* or anti-osteopor* or bone density or osteoporosis) near/3 (drug* or agent* or medicin* or medication* or therap* or treatment*)):ti,ab

3. #1 and #2