

Table S1: Diagnosis codes used for identification from the International Classification of Diseases, 10th Edition, German Modification (ICD-10-GM)

Number	Description	ICD-10-GM Code
	Osteoporosis	
1	Osteoporosis with current pathological fracture	M80.x, M48.5*
2	Osteoporosis without current pathological fracture	M81.x
	Fractures	
3	Vertebral fracture	S22.0x, S22.1 S32.0x M80.x8*, M48.5*
4	Hip fracture	S72.0x except S72.08 S72.1, S72.2 M 80.x5*
5	Non-hip fracture, non-vertebral fractures	(S.22.3 (ribs)) S32.1, S32.4, S32.5 (pelvis) S42.2 (proximal humerus) S52.5 (distal radius) M80.x0,1,2,3,4,6,7,9*) or (M 80.x* (including, among others, M80.99*, M80.08*)) AND NOT (Number 1 or Number 2 or S22.3 or S32.1 or S32.4 or S32.5 or S42.2 or S52.5 or M80.x0,1,2,3,4,6,7,9))
6	Forearm fracture	S52.5, S52.6. 52.8, 52.9, M80.x3*
7	Fracture of humerus	S42.2x, M80.x2*
8	Fracture of pelvis	S32.1, S32.4, S32.5
9	Fracture of neck of the femur	S72.0x except S72.08
10	Pertrochanteric fracture	S72.1
11	Large osteoporotic fracture	S22.01-06 S32.00 S32.01-05S 52.4 S72.0 S72.00

		S72.01-05 S72.1 S72.2 S52.4, S42.2 S42.2, S42.20, S42.21 S42.22 S42.23 S42.24 S42.29, M80.x2,3,5,8*
12	Osteoporotic fracture, any form	Number 1 or Number 2 or Number 3 or M80.x* (including, among others, M80.99*, M80.08*)

An asterisk (*) indicates that at this position a modifier for any feature is allowed.

Table S2: Codes used from the Anatomical Therapeutic Chemical (ATC) Classification System

Class	ATC code
Calcium	A12A
Hormone therapy	G03
Vitamin D	A11C2 or A11C3
Bisphosphonates	M05BA
Denosumab	M05BX04
Tibolone	G03CX01
Raloxifene	G03XC01
Strontium ranelate	M05BX03
Parathormone	H05AA03