Singapore (Malay) - The probabilities of a major osteoporotic fracture in men

The following tables give the 10-year probability (%) of a major osteoporotic fracture (hip, clinical spine, forearm or proximal humerus fracture) according to the T-score for femoral neck BMD , the number of clinical risk factors (CRF) and age. Each table provides a mean estimate and a range, based on the epidemiology of Singapore (Malay). The range is not a confidence interval, but because the weight of different risk factors varies, is a true range.

Note that the BMI is set at 24 kg/m².

Age = 50 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	10	6.2	3.9	2.6	1.9	1.5	1.2	1.0	0.9	0.9	0.8
1	16 (13-20)	9.6 (8.2-12)	6.1 (5.3-7.8)	4.1 (3.4-5.2)	2.9 (2.3-3.7)	2.2 (1.6-2.8)	1.8 (1.3-2.3)	1.5 (1.0-2.0)	1.4 (0.9-1.9)	1.3 (0.8-1.8)	1.2 (0.8-1.7)
2	23 (17-33)	14 (11-21)	9.2 (7.1-13)	6.2 (4.7-8.8)	4.4 (3.1-6.3)	3.4 (2.1-5.2)	2.7 (1.6-4.4)	2.3 (1.3-3.8)	2.0 (1.1-3.5)	1.9 (1.0-3.3)	1.8 (0.9-3.2)
3	33 (23-46)	21 (15-29)	14 (9.6-18)	9.2 (6.5-13)	6.5 (4.2-10)	5.0 (2.9-8.3)	4.0 (2.1-7.1)	3.3 (1.7-6.1)	2.9 (1.4-5.6)	2.8 (1.3-5.3)	2.6 (1.2-5.1)
4	46 (33-59)	31 (21-40)	20 (13-25)	13 (8.8-17)	9.6 (6.2-13)	7.2 (4.7-11)	5.7 (3.5-9.1)	4.8 (2.7-7.9)	4.2 (2.3-7.1)	4.0 (2.1-6.8)	3.8 (1.9-6.6)
5	59 (49-69)	42 (33-50)	28 (22-33)	19 (14-22)	14 (10-17)	10 (7.6-13)	8.1 (6.1-11)	6.7 (5.0-9.4)	5.9 (4.3-8.5)	5.6 (3.9-8.0)	5.3 (3.6-7.7)
6	73	55	39	27	19	14	11	9.4	8.2	7.7	7.3

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Singapore (Malay).

Age = 55 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	15	9.3	6.1	4.2	3.1	2.4	1.9	1.6	1.4	1.3	1.3
1	22 (18-26)	14 (13-17)	9.3 (8.3-11)	6.4 (5.4-7.9)	4.7 (3.7-5.7)	3.6 (2.7-4.4)	2.9 (2.0-3.7)	2.4 (1.6-3.2)	2.1 (1.4-2.9)	2.0 (1.3-2.8)	1.9 (1.2-2.6)
2	31 (24-41)	21 (16-28)	14 (11-19)	9.5 (7.3-13)	6.9 (4.9-9.7)	5.3 (3.5-7.9)	4.2 (2.6-6.7)	3.5 (2.0-5.7)	3.1 (1.7-5.3)	2.9 (1.5-5.0)	2.7 (1.4-4.7)
3	42 (32-53)	29 (21-37)	20 (15-25)	14 (10-19)	10 (6.7-15)	7.7 (4.6-12)	6.1 (3.4-11)	5.0 (2.6-9.0)	4.5 (2.2-8.3)	4.2 (2.0-7.8)	3.9 (1.8-7.5)
4	55 (42-65)	40 (29-48)	28 (20-33)	20 (14-25)	14 (9.8-20)	11 (7.4-16)	8.7 (5.6-13)	7.2 (4.3-12)	6.4 (3.6-11)	5.9 (3.2-10)	5.6 (2.9-9.5)
5	67 (59-74)	52 (43-59)	38 (31-42)	27 (22-31)	20 (16-24)	15 (12-19)	12 (9.4-16)	10 (7.7-14)	8.9 (6.5-13)	8.2 (5.8-12)	7.7 (5.3-11)
6	77	64	49	36	27	21	17	14	12	11	11

Age = 60 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	19	13	8.9	6.4	4.8	3.7	3.0	2.4	2.2	2.0	1.9
1	27 (24-31)	18 (17-22)	13 (11-15)	9.4 (7.8-11)	7.0 (5.6-8.3)	5.4 (4.1-6.6)	4.4 (3.1-5.6)	3.6 (2.5-4.8)	3.2 (2.2-4.4)	3.0 (1.9-4.1)	2.8 (1.8-3.9)
2	36 (30-45)	26 (21-33)	19 (15-24)	14 (11-18)	10 (7.5-14)	7.9 (5.4-11)	6.3 (4.0-9.6)	5.2 (3.1-8.3)	4.7 (2.7-7.7)	4.3 (2.3-7.2)	4.0 (2.1-6.7)
3	47 (38-56)	35 (28-43)	26 (20-33)	19 (14-26)	14 (10-21)	11 (7.2-17)	9.0 (5.3-15)	7.4 (4.1-13)	6.6 (3.5-12)	6.1 (3.1-11)	5.7 (2.8-10)
4	58 (49-66)	46 (36-53)	35 (26-41)	26 (19-33)	20 (14-27)	16 (11-22)	12 (8.5-19)	10 (6.5-16)	9.3 (5.5-15)	8.5 (4.8-14)	7.9 (4.3-13)
5	68 (62-73)	57 (50-62)	45 (38-49)	35 (29-40)	27 (22-32)	21 (17-27)	17 (14-22)	14 (11-19)	13 (9.5-18)	12 (8.3-16)	11 (7.5-15)
6	76	67	55	44	35	28	23	19	17	15	14

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Singapore (Malay).

Age = 65 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	21	15	11	8.3	6.4	5.0	4.1	3.4	3.0	2.8	2.5
1	29 (27-32)	21 (19-24)	16 (14-18)	12 (9.9-14)	9.2 (7.3-11)	7.3 (5.5-8.9)	5.9 (4.2-7.5)	4.9 (3.4-6.5)	4.4 (3.0-6.0)	4.0 (2.6-5.6)	3.7 (2.4-5.2)
2	38 (32-45)	29 (24-35)	22 (18-27)	17 (13-21)	13 (9.7-18)	10 (7.2-15)	8.4 (5.5-12)	7.0 (4.3-11)	6.3 (3.7-10)	5.7 (3.2-9.3)	5.2 (2.9-8.7)
3	48 (40-55)	38 (31-45)	29 (24-37)	23 (18-31)	18 (13-26)	14 (9.6-22)	12 (7.3-18)	9.8 (5.7-16)	8.8 (4.8-15)	8.0 (4.2-14)	7.3 (3.7-13)
4	58 (50-65)	48 (40-54)	38 (31-45)	30 (24-38)	24 (18-32)	19 (15-27)	16 (11-23)	13 (8.8-21)	12 (7.4-19)	11 (6.4-18)	10 (5.7-17)
5	66 (62-71)	57 (52-62)	48 (42-53)	39 (34-45)	31 (27-38)	26 (21-32)	21 (17-28)	18 (14-24)	16 (12-22)	15 (11-21)	13 (9.5-19)
6	73	66	57	48	40	33	27	23	21	19	18

Age = 70 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	20	15	11	8.9	7.0	5.6	4.5	3.9	3.4	3.1	2.8
1	28 (24-34)	21 (18-26)	16 (13-20)	13 (10-15)	9.9 (7.7-12)	7.9 (6.0-9.5)	6.3 (4.7-7.6)	5.4 (3.9-6.4)	4.7 (3.3-5.6)	4.2 (2.9-5.0)	3.8 (2.6-4.6)
2	38 (31-46)	30 (24-37)	23 (18-29)	18 (14-23)	14 (10-18)	11 (7.8-15)	8.8 (6.1-12)	7.4 (4.9-10)	6.5 (4.2-9.0)	5.7 (3.6-8.0)	5.2 (3.2-7.2)
3	49 (40-58)	40 (31-49)	32 (24-41)	25 (18-33)	19 (14-27)	15 (10-22)	12 (8.1-18)	10 (6.5-15)	8.8 (5.5-13)	7.8 (4.8-12)	6.9 (4.2-11)
4	60 (51-67)	51 (42-59)	42 (33-50)	33 (26-41)	27 (20-34)	21 (15-28)	17 (12-23)	14 (9.8-19)	12 (8.2-17)	10 (7.1-15)	9.2 (6.2-14)
5	69 (63-74)	61 (54-67)	53 (45-59)	44 (36-50)	35 (29-42)	28 (23-34)	23 (18-28)	19 (15-24)	16 (13-21)	14 (11-18)	12 (9.9-17)
6	76	70	63	54	45	37	30	25	21	18	16

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Singapore (Malay).

Age = 75 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	17	13	10	8.1	6.5	5.2	4.3	3.7	3.2	2.9	2.6
1	25 (19-41)	20 (15-32)	16 (12-25)	12 (9.0-20)	9.7 (7.0-15)	7.7 (5.5-11)	6.1 (4.4-8.7)	5.2 (3.7-7.0)	4.5 (3.2-5.7)	3.9 (2.7-4.7)	3.4 (2.4-4.0)
2	36 (25-51)	29 (20-43)	23 (15-35)	18 (12-28)	14 (9.4-22)	11 (7.3-17)	9.0 (5.8-13)	7.4 (4.8-11)	6.3 (4.0-8.7)	5.4 (3.5-7.2)	4.7 (3.0-6.1)
3	47 (33-61)	40 (26-53)	33 (21-45)	26 (16-37)	21 (13-30)	17 (9.8-24)	13 (7.7-19)	11 (6.4-15)	8.9 (5.3-13)	7.5 (4.6-11)	6.4 (3.9-9.1)
4	59 (42-69)	52 (35-62)	44 (28-54)	37 (23-46)	30 (18-38)	24 (14-31)	19 (11-25)	15 (9.3-20)	13 (7.8-17)	10 (6.7-14)	8.7 (5.8-12)
5	69 (52-75)	63 (44-69)	56 (37-63)	48 (30-55)	40 (25-47)	33 (20-39)	26 (16-32)	22 (14-26)	18 (12-22)	15 (10-18)	12 (8.8-15)
6	77	72	66	60	52	44	36	30	25	20	17

Age = 80 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	13	11	8.6	6.9	5.6	4.5	3.7	3.2	2.8	2.4	2.1
1	20 (15-34)	16 (12-27)	13 (9.5-22)	10 (7.6-17)	8.4 (6.0-14)	6.7 (4.8-11)	5.5 (3.9-8.5)	4.6 (3.3-6.9)	4.0 (2.8-5.7)	3.4 (2.4-4.7)	3.0 (2.1-3.9)
2	29 (20-43)	24 (16-36)	19 (13-30)	16 (10-24)	13 (8.1-20)	10 (6.4-16)	8.1 (5.2-12)	6.8 (4.3-10)	5.7 (3.6-8.4)	4.8 (3.1-7.0)	4.1 (2.6-5.8)
3	39 (26-52)	33 (21-46)	27 (17-39)	22 (14-32)	18 (11-26)	15 (8.7-21)	12 (7.0-17)	9.8 (5.8-14)	8.2 (4.9-12)	6.9 (4.1-9.7)	5.8 (3.5-8.2)
4	50 (33-60)	43 (27-54)	37 (23-47)	31 (18-40)	26 (15-34)	21 (12-28)	17 (9.7-22)	14 (8.1-19)	12 (6.9-15)	9.8 (5.9-13)	8.2 (5.1-11)
5	60 (41-67)	54 (35-61)	48 (30-55)	41 (25-48)	35 (20-41)	29 (16-34)	24 (14-29)	20 (11-24)	17 (9.8-20)	14 (8.4-17)	12 (7.3-14)
6	69	64	59	52	46	39	33	28	23	19	16

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Singapore (Malay).

Age = 85 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	9.9	8.1	6.7	5.5	4.5	3.7	3.1	2.7	2.4	2.1	1.8
1	15 (11-26)	12 (9.0-22)	10 (7.3-18)	8.4 (5.9-15)	6.9 (4.8-12)	5.6 (3.9-9.5)	4.7 (3.3-7.8)	4.0 (2.8-6.5)	3.5 (2.4-5.4)	3.0 (2.1-4.5)	2.6 (1.8-3.8)
2	22 (15-35)	19 (12-29)	15 (9.9-24)	13 (8.0-20)	10 (6.5-17)	8.5 (5.3-14)	7.1 (4.4-11)	6.0 (3.8-9.4)	5.1 (3.2-7.9)	4.4 (2.7-6.7)	3.7 (2.4-5.6)
3	31 (19-44)	26 (16-38)	22 (13-32)	19 (11-27)	15 (8.9-23)	13 (7.3-19)	11 (6.1-16)	8.9 (5.1-13)	7.5 (4.4-11)	6.4 (3.7-9.3)	5.4 (3.2-7.8)
4	41 (25-52)	36 (21-46)	31 (18-40)	26 (15-35)	22 (12-29)	18 (10-25)	15 (8.3-21)	13 (7.1-18)	11 (6.1-15)	9.3 (5.2-12)	7.9 (4.5-11)
5	52 (33-59)	47 (28-53)	41 (24-48)	36 (20-42)	31 (17-36)	26 (14-31)	22 (12-26)	19 (9.9-23)	16 (8.5-19)	14 (7.3-17)	11 (6.3-14)
6	63	58	52	47	41	35	31	26	23	19	16

Age = 90 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	7.1	6.0	5.0	4.3	3.6	3.0	2.6	2.3	2.1	1.8	1.6
1	11 (7.4-18)	9.0 (6.2-15)	7.6 (5.2-13)	6.4 (4.4-11)	5.4 (3.7-9.0)	4.5 (3.1-7.5)	3.9 (2.7-6.4)	3.4 (2.3-5.6)	3.0 (2.0-4.8)	2.7 (1.8-4.1)	2.4 (1.6-3.6)
2	16 (10-24)	13 (8.4-21)	11 (7.1-18)	9.5 (5.9-15)	8.0 (5.0-13)	6.7 (4.2-11)	5.8 (3.6-9.1)	5.1 (3.2-7.9)	4.5 (2.8-6.9)	3.9 (2.4-6.0)	3.4 (2.1-5.2)
3	22 (13-32)	19 (11-28)	16 (9.6-24)	14 (8.1-21)	12 (6.8-17)	10 (5.7-15)	8.6 (4.9-13)	7.5 (4.3-11)	6.5 (3.7-9.6)	5.7 (3.3-8.3)	5.0 (2.9-7.2)
4	31 (18-40)	27 (15-35)	23 (13-31)	20 (11-27)	17 (9.3-23)	15 (7.8-20)	13 (6.8-17)	11 (6.0-15)	9.6 (5.2-13)	8.3 (4.6-11)	7.2 (4.0-9.7)
5	41 (24-47)	36 (20-42)	32 (17-38)	28 (15-33)	24 (13-29)	21 (11-25)	18 (9.3-22)	16 (8.2-19)	14 (7.2-17)	12 (6.3-15)	11 (5.6-13)
6	51	47	42	38	33	29	26	23	20	17	15