

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

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	8.3	5.2	3.4	2.4	1.9	1.5	1.3	1.1	1.1	1.0	1.0
1	13 (11-16)	8.0 (7.0-10)	5.3 (4.5-6.7)	3.7 (3.0-4.7)	2.8 (2.1-3.6)	2.3 (1.6-3.0)	1.9 (1.3-2.6)	1.7 (1.1-2.4)	1.6 (1.1-2.3)	1.5 (1.0-2.2)	1.5 (0.9-2.1)
2	20 (15-28)	12 (9.6-18)	8.1 (6.1-11)	5.7 (4.0-8.0)	4.3 (2.7-6.5)	3.4 (2.0-5.5)	2.8 (1.6-4.8)	2.6 (1.4-4.4)	2.4 (1.3-4.2)	2.3 (1.2-4.0)	2.2 (1.1-3.9)
3	29 (20-40)	18 (13-25)	12 (8.5-17)	8.4 (5.4-13)	6.3 (3.7-11)	5.0 (2.7-8.9)	4.2 (2.1-7.7)	3.7 (1.8-7.1)	3.5 (1.6-6.8)	3.3 (1.5-6.5)	3.2 (1.4-6.3)
4	40 (28-52)	26 (17-34)	18 (11-22)	12 (8.0-17)	9.2 (6.0-14)	7.3 (4.5-12)	6.0 (3.5-9.9)	5.4 (2.9-9.1)	5.1 (2.7-8.7)	4.8 (2.5-8.3)	4.6 (2.4-8.0)
5	54 (44-65)	37 (29-44)	25 (19-28)	18 (13-21)	13 (9.9-17)	10 (7.8-14)	8.6 (6.5-12)	7.6 (5.5-11)	7.1 (5.0-10)	6.8 (4.6-9.7)	6.5 (4.4-9.4)
6	69	50	35	25	18	15	12	11	9.9	9.4	9.0

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	13	8.3	5.7	4.2	3.2	2.6	2.2	2.0	1.8	1.7	1.6
1	19 (17-23)	13 (11-15)	8.7 (7.4-11)	6.3 (5.0-7.7)	4.9 (3.6-6.0)	3.9 (2.8-5.0)	3.2 (2.2-4.3)	3.0 (2.0-4.0)	2.7 (1.8-3.8)	2.6 (1.7-3.6)	2.4 (1.6-3.4)
2	28 (22-37)	19 (15-25)	13 (10-18)	9.4 (6.7-13)	7.2 (4.7-11)	5.8 (3.5-9.1)	4.8 (2.7-7.8)	4.3 (2.4-7.3)	4.0 (2.2-6.8)	3.8 (2.0-6.5)	3.6 (1.9-6.2)
3	39 (29-50)	27 (20-34)	19 (14-26)	14 (9.1-21)	11 (6.3-17)	8.4 (4.7-14)	6.9 (3.6-12)	6.3 (3.1-12)	5.8 (2.8-11)	5.5 (2.6-10)	5.2 (2.4-9.8)
4	52 (39-63)	37 (26-45)	27 (18-33)	20 (13-27)	15 (10-22)	12 (7.8-18)	9.9 (6.0-16)	8.9 (5.1-15)	8.3 (4.6-14)	7.8 (4.2-13)	7.4 (3.9-13)
5	66 (58-74)	50 (42-56)	37 (30-41)	27 (22-32)	21 (17-26)	17 (13-22)	14 (11-19)	12 (9.2-17)	12 (8.2-16)	11 (7.5-15)	10 (7.0-15)
6	79	63	49	37	29	23	19	17	16	15	14

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	9.3	6.9	5.3	4.3	3.6	3.3	3.0	2.8	2.6
1	27 (25-31)	19 (17-22)	14 (12-16)	10 (8.2-12)	7.9 (6.0-9.7)	6.3 (4.6-8.1)	5.3 (3.7-7.1)	4.8 (3.3-6.6)	4.4 (2.9-6.1)	4.1 (2.7-5.7)	3.8 (2.5-5.4)
2	38 (32-48)	27 (23-35)	20 (16-26)	15 (11-20)	11 (7.7-17)	9.2 (5.8-14)	7.8 (4.6-12)	7.0 (4.0-11)	6.4 (3.5-11)	5.9 (3.2-9.9)	5.5 (2.9-9.3)
3	51 (41-60)	38 (30-47)	28 (21-38)	21 (14-31)	16 (10-26)	13 (7.6-22)	11 (6.0-19)	10 (5.2-18)	9.1 (4.6-17)	8.5 (4.1-16)	7.9 (3.8-15)
4	64 (52-72)	50 (38-57)	38 (28-47)	29 (21-38)	23 (16-32)	18 (12-27)	15 (9.8-24)	14 (8.3-22)	13 (7.3-21)	12 (6.6-20)	11 (6.1-18)
5	76 (70-81)	63 (56-67)	49 (43-55)	39 (33-46)	31 (26-38)	25 (20-32)	21 (17-28)	19 (14-26)	17 (13-24)	16 (11-23)	15 (10-21)
6	85	75	62	50	40	33	28	26	23	22	20

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	25	18	13	9.9	7.8	6.2	5.4	4.8	4.4	4.0	3.7
1	34 (32-38)	25 (22-28)	19 (16-21)	14 (12-17)	11 (8.6-14)	9.0 (6.6-12)	7.9 (5.5-11)	7.0 (4.8-9.6)	6.4 (4.3-8.9)	5.8 (3.8-8.2)	5.4 (3.5-7.6)
2	46 (40-54)	35 (29-42)	26 (21-33)	20 (15-27)	16 (11-23)	13 (8.3-19)	11 (6.8-17)	10 (5.9-16)	9.1 (5.1-15)	8.4 (4.6-14)	7.7 (4.2-13)
3	58 (49-67)	46 (38-56)	36 (28-47)	28 (20-40)	22 (15-34)	18 (11-29)	16 (9.0-26)	14 (7.6-24)	13 (6.7-22)	12 (5.9-21)	11 (5.4-19)
4	70 (60-76)	58 (48-66)	47 (37-57)	37 (29-49)	30 (23-42)	25 (17-36)	22 (14-33)	19 (12-30)	18 (11-28)	16 (9.4-26)	15 (8.5-24)
5	80 (76-83)	69 (64-74)	58 (52-65)	48 (42-56)	39 (34-48)	33 (28-41)	29 (23-38)	26 (20-35)	24 (17-32)	22 (15-30)	20 (14-28)
6	86	79	69	59	50	42	37	34	31	29	27

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	27	20	15	12	9.2	7.5	6.5	5.8	5.2	4.7	4.2
1	37 (33-43)	28 (24-33)	21 (18-25)	16 (13-19)	13 (10-15)	10 (7.9-12)	9.0 (6.6-11)	7.9 (5.7-9.3)	7.1 (5.0-8.4)	6.4 (4.5-7.6)	5.7 (4.0-6.9)
2	50 (42-60)	39 (31-48)	30 (23-38)	23 (17-30)	18 (13-23)	14 (9.9-19)	12 (8.2-17)	11 (7.0-15)	9.6 (6.1-13)	8.6 (5.3-12)	7.8 (4.8-11)
3	63 (53-73)	51 (40-63)	40 (30-52)	32 (22-43)	25 (17-35)	20 (13-29)	17 (11-25)	15 (9.1-22)	13 (7.9-20)	12 (6.9-18)	10 (6.2-16)
4	75 (67-81)	64 (54-72)	53 (43-62)	42 (33-52)	33 (25-43)	27 (20-36)	23 (17-32)	20 (14-28)	17 (12-25)	15 (11-23)	14 (9.6-21)
5	83 (78-86)	76 (69-80)	65 (58-71)	54 (47-61)	44 (37-51)	36 (30-43)	30 (26-37)	26 (22-33)	23 (19-29)	20 (17-27)	18 (15-24)
6	88	83	76	67	56	46	39	34	29	26	23

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	26	19	15	12	9.0	7.6	6.5	5.7	5.0	4.4	3.9
1	37 (30-54)	29 (23-42)	22 (17-32)	17 (13-24)	13 (9.8-17)	11 (7.9-14)	9.0 (6.6-11)	7.7 (5.6-8.8)	6.7 (4.8-7.8)	5.8 (4.2-6.9)	5.1 (3.7-6.2)
2	51 (39-68)	41 (30-57)	32 (22-46)	24 (17-35)	19 (13-27)	15 (10-21)	12 (8.3-17)	10 (7.0-14)	8.9 (5.9-12)	7.7 (5.1-11)	6.7 (4.5-9.6)
3	64 (49-77)	54 (38-68)	44 (29-58)	35 (22-47)	27 (17-37)	21 (13-30)	17 (11-24)	14 (9.1-20)	12 (7.7-17)	10 (6.7-14)	8.8 (5.8-12)
4	75 (60-83)	67 (50-77)	57 (39-68)	47 (31-57)	37 (24-46)	30 (20-38)	24 (16-31)	20 (14-26)	16 (12-22)	14 (10-18)	12 (8.8-16)
5	82 (71-86)	77 (62-82)	70 (53-76)	60 (43-67)	50 (35-56)	41 (29-47)	33 (24-39)	27 (21-32)	22 (18-27)	18 (16-23)	15 (13-19)
6	87	84	80	73	63	54	45	37	30	24	20

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	23	17	13	10	8.3	6.9	5.8	5.0	4.3	3.7	3.2
1	33 (26-49)	26 (20-39)	20 (15-30)	15 (12-23)	12 (9.0-17)	9.9 (7.3-14)	8.2 (6.0-11)	6.9 (5.0-8.5)	5.8 (4.2-6.9)	5.0 (3.6-5.7)	4.3 (3.1-5.0)
2	45 (34-62)	36 (26-52)	29 (20-42)	22 (15-33)	17 (12-26)	14 (9.5-21)	12 (7.7-17)	9.5 (6.4-13)	8.0 (5.3-11)	6.7 (4.5-8.8)	5.7 (3.8-7.5)
3	57 (42-71)	48 (34-62)	39 (26-53)	31 (20-43)	25 (16-34)	20 (13-28)	16 (10-22)	13 (8.4-18)	11 (7.0-15)	9.1 (5.9-13)	7.7 (5.0-11)
4	68 (52-77)	60 (43-70)	52 (34-62)	43 (27-52)	34 (21-43)	28 (17-35)	23 (14-29)	19 (12-24)	15 (10-20)	12 (8.6-16)	10 (7.4-14)
5	76 (62-81)	71 (54-76)	63 (45-70)	55 (37-61)	46 (30-52)	38 (25-44)	32 (21-37)	26 (18-30)	21 (15-25)	17 (13-21)	14 (11-17)
6	82	79	73	66	58	50	42	35	29	23	19

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	19	15	11	8.9	7.4	6.2	5.2	4.4	3.8	3.2	2.8
1	27 (21-41)	21 (16-33)	17 (13-26)	13 (9.7-20)	11 (7.8-16)	8.9 (6.4-13)	7.4 (5.3-10)	6.2 (4.4-8.3)	5.2 (3.7-6.7)	4.4 (3.1-5.4)	3.8 (2.7-4.5)
2	37 (27-53)	30 (21-44)	24 (17-36)	19 (13-29)	16 (10-24)	13 (8.5-19)	11 (7.0-16)	8.7 (5.7-13)	7.3 (4.8-10)	6.1 (4.0-8.4)	5.1 (3.3-6.9)
3	48 (34-62)	41 (28-55)	34 (22-46)	27 (17-38)	22 (14-31)	18 (11-25)	15 (9.3-21)	12 (7.6-17)	10 (6.3-14)	8.4 (5.3-12)	7.0 (4.4-9.8)
4	60 (43-70)	52 (35-63)	45 (29-55)	37 (23-47)	31 (19-39)	26 (16-33)	21 (13-27)	17 (11-22)	14 (9.1-19)	12 (7.6-15)	9.7 (6.5-13)
5	70 (53-75)	64 (45-70)	56 (38-63)	49 (31-55)	42 (26-48)	35 (22-41)	30 (18-35)	24 (16-29)	20 (13-24)	16 (11-20)	13 (9.4-17)
6	77	73	67	60	54	47	40	33	28	23	19

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	15	12	9.6	7.8	6.7	5.7	4.9	4.2	3.6	3.1	2.6
1	21 (15-31)	17 (12-26)	14 (9.7-21)	11 (7.9-17)	9.4 (6.6-14)	8.0 (5.6-11)	6.8 (4.7-9.4)	5.8 (4.0-7.8)	4.9 (3.4-6.4)	4.2 (2.9-5.3)	3.5 (2.5-4.4)
2	29 (20-41)	24 (16-34)	19 (13-28)	16 (10-23)	13 (8.7-20)	11 (7.3-16)	9.5 (6.2-14)	8.0 (5.2-11)	6.8 (4.4-9.5)	5.7 (3.7-7.9)	4.8 (3.1-6.6)
3	38 (26-50)	32 (21-43)	27 (17-37)	22 (14-31)	19 (12-26)	16 (9.7-22)	13 (8.2-19)	11 (6.9-16)	9.4 (5.8-13)	7.9 (4.9-11)	6.7 (4.1-9.3)
4	48 (33-59)	42 (28-52)	36 (23-45)	30 (19-38)	26 (16-33)	22 (14-28)	19 (11-24)	16 (9.7-20)	13 (8.2-17)	11 (7.0-15)	9.3 (5.9-12)
5	59 (41-66)	53 (35-60)	46 (30-53)	40 (25-47)	35 (21-41)	30 (18-36)	26 (16-31)	22 (14-26)	18 (12-22)	15 (9.9-19)	13 (8.5-16)
6	69	64	58	51	46	40	35	30	25	21	18