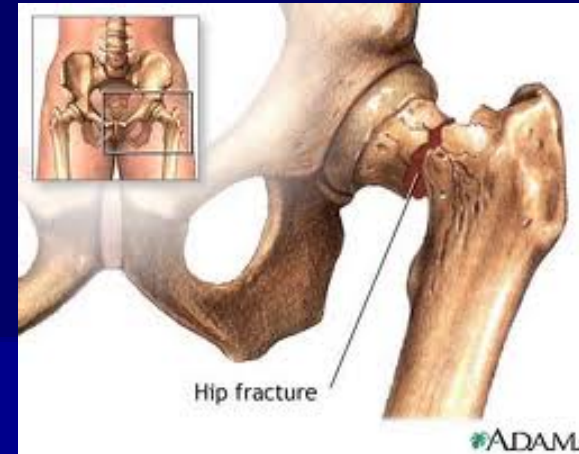




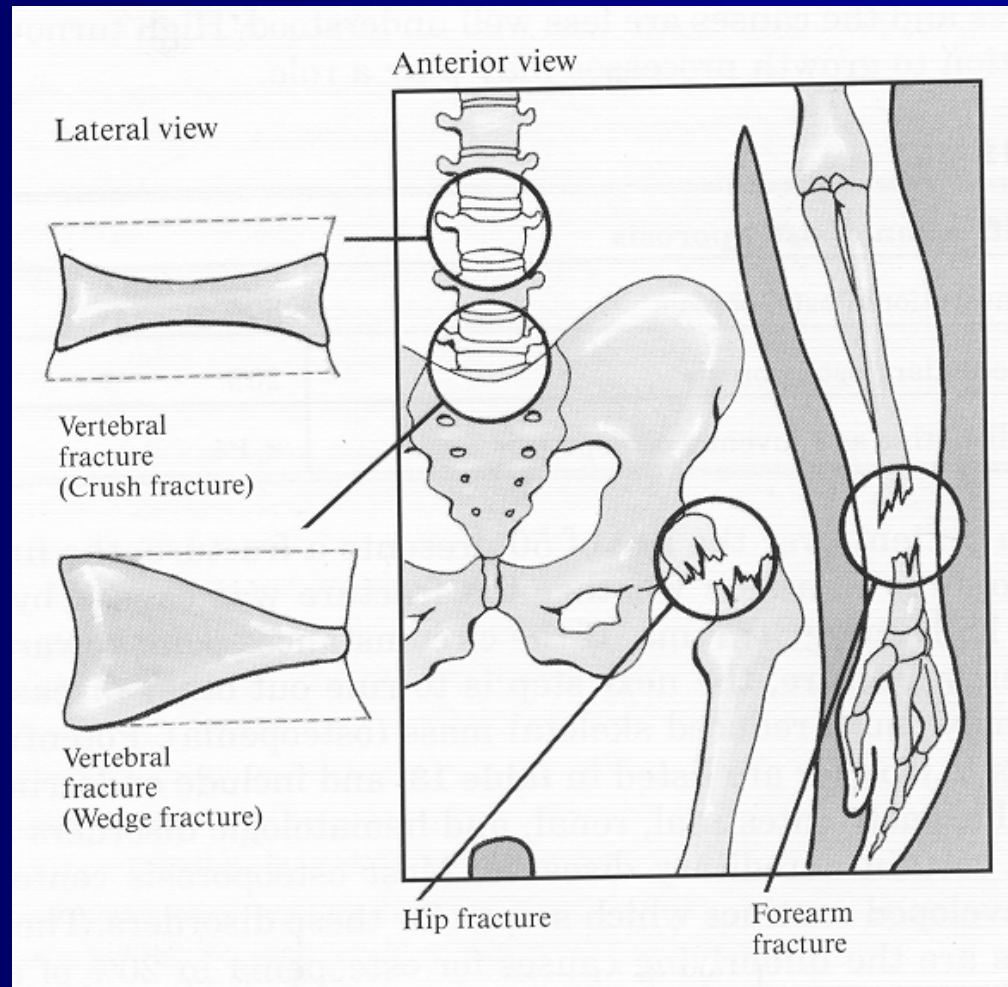
Åpne dager 2011  
**Osteoporose**

# Osteoporose

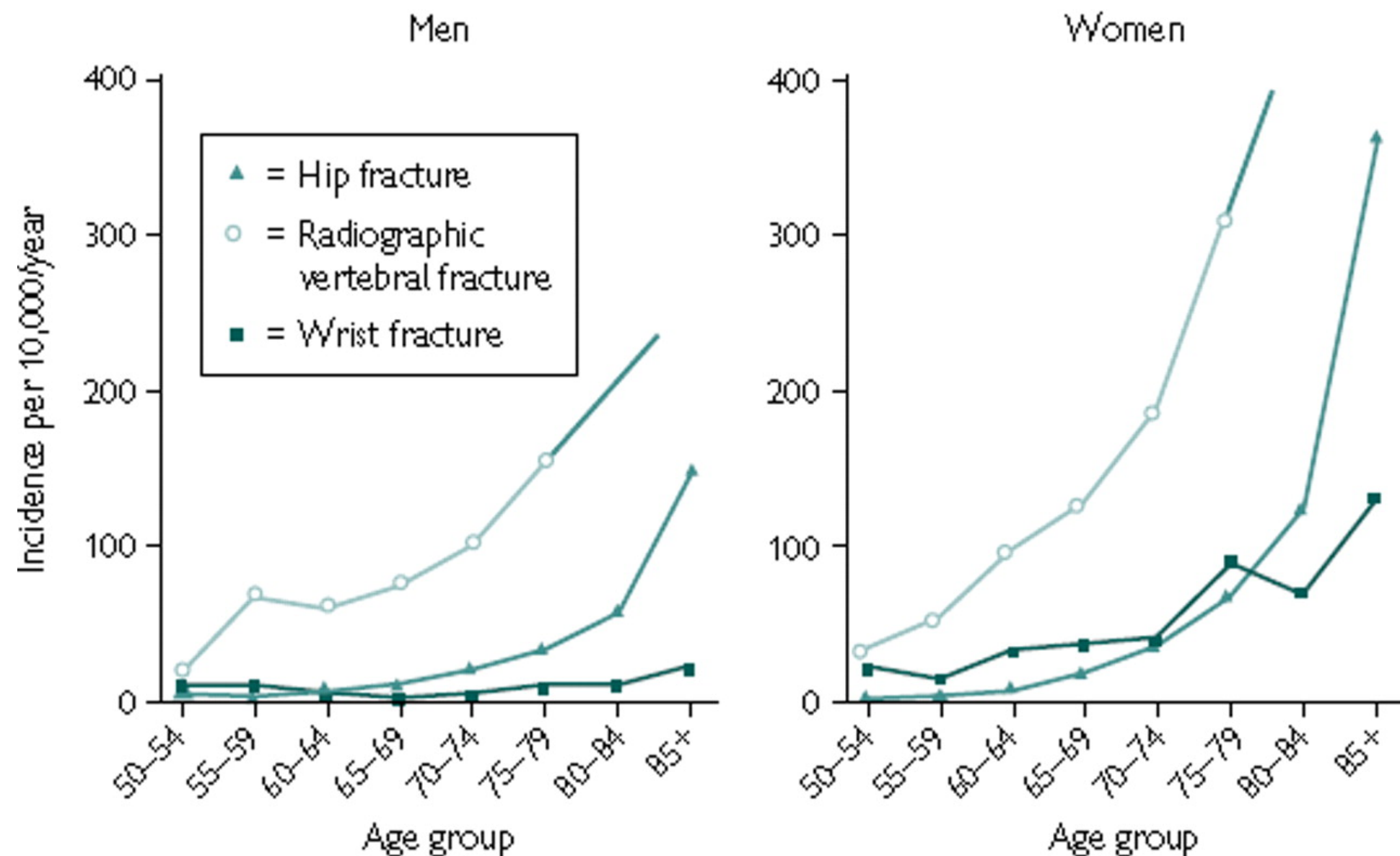


- Osteoporose er definert som en systemisk skjelettsykdom, karakterisert ved lav benmasse og forandret arkitektur
- Resultat kan bli brudd

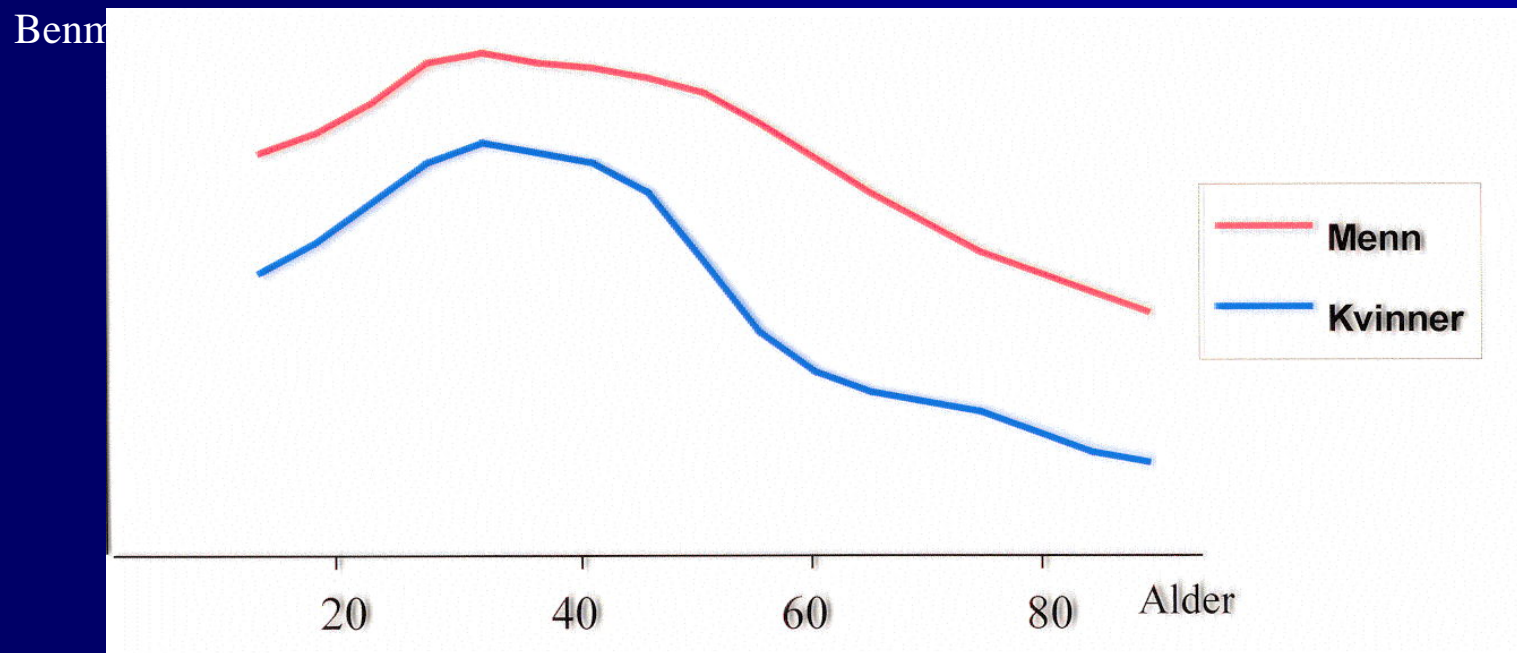
# Osteoporosens ansikter



## Incidence of osteoporotic fractures



# Hvorfor er kvinner mer utsatt enn menn?



Endringer i benmasse hos kvinner og menn i forhold til alder



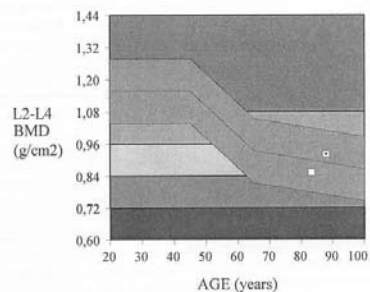
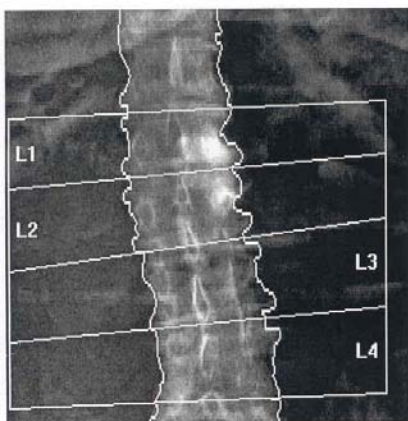
**Osteoporosepoliklinikk**



AP SPINE REGION DENSITY

Acquired: 21.03.07 09:59:52 (1,91)  
Analyzed: 21.03.07 10:13:34 (1,91)  
Printed: 16.07.07 14:19:35 (1,91)  
d:\archive\pas2000\larse101.s30

Female



Region	BMD <sup>1</sup> (g/cm <sup>2</sup> )	Young-Adult (%)	(T)	Age-Matched <sup>3</sup> (%)	(Z)
L1	0,997	88	-1,1	121	+1,5
L2	0,971	81	-1,9	109	+0,7
L3	0,901	75	-2,5	101	+0,1
L4	0,910	76	-2,4	102	+0,1
L2-L4	0,926	77	-2,3	104	+0,3

Patient Trend (L2-L4)

Scan Date	BMD <sup>1</sup> (g/cm <sup>2</sup> )	Change (%)	Change/ SD	Age (Yrs)
09.07.02	0,856	-	-	82,7
21.03.07*	0,926	8,2	0,6	87,4

Image not for diagnosis  
134:5,0-30,00:24x1 X2 -2,00:10,00 0,60x1,20 0,00 100%  
1,14:0,00 17,1:27,1 0,920:0,908 62,0:62,6

1-Statistically 68% of repeat scans fall within 1SD ( $\pm 0,010$ g/cm<sup>2</sup>) for L2-L4. See Appendix for more information.  
2-USA AP Spine Female Reference Population, Young adult Ages 20-40.  
3-Matched for age, weight (females 25-100kg) and ethnicity.

Comments:

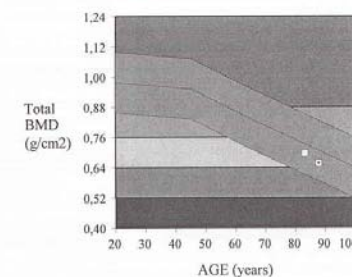
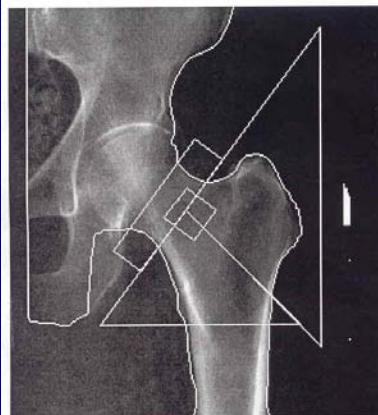
Internal Hydroxyapatite Standard = 0,908

LUNAR<sup>®</sup> Expert  
#1230

LEFT FEMUR BONE DENSITY

Acquired: 21.03.07 09:57:22 (1,91)  
Analyzed: 21.03.07 10:07:00 (1,91)  
Printed: 16.07.07 14:19:11 (1,91)  
d:\archive\pas2000\larse101.f30

Female



Region	BMD <sup>1</sup> (g/cm <sup>2</sup> )	Young-Adult (%)	(T)	Age-Matched <sup>3</sup> (%)	(Z)
Neck	0,726	74	-2,1	105	+0,3
Wards	0,567	62	-2,6	107	+0,3
Troch	0,510	65	-2,5	87	-0,7
Shaft	0,813	-	-	-	-
Total	0,662	66	-2,8	93	-0,4

Patient Trend (Total)

Scan Date	BMD <sup>1</sup> (g/cm <sup>2</sup> )	Change (%)	Change/ SD	Age (Yrs)
09.07.02	0,698	-	-	82,7
21.03.07*	0,662	-5,2	-0,3	87,4

Image not for diagnosis  
134:5,0-12,50:48x1 -2,00:10,00 0,60x0,60 0,00 85%  
1,10:0,00 13,8:31,9 0,920:0,908 62,0:62,6  
Neck Angle = 53

1-Statistically 68% of repeat scans fall within 1SD ( $\pm 0,010$ g/cm<sup>2</sup>) for Total. See Appendix for more information.  
2-USA Femur Female Reference Population, Young adult Ages 20-40.  
3-Matched for age, weight (females 25-100kg) and ethnicity.

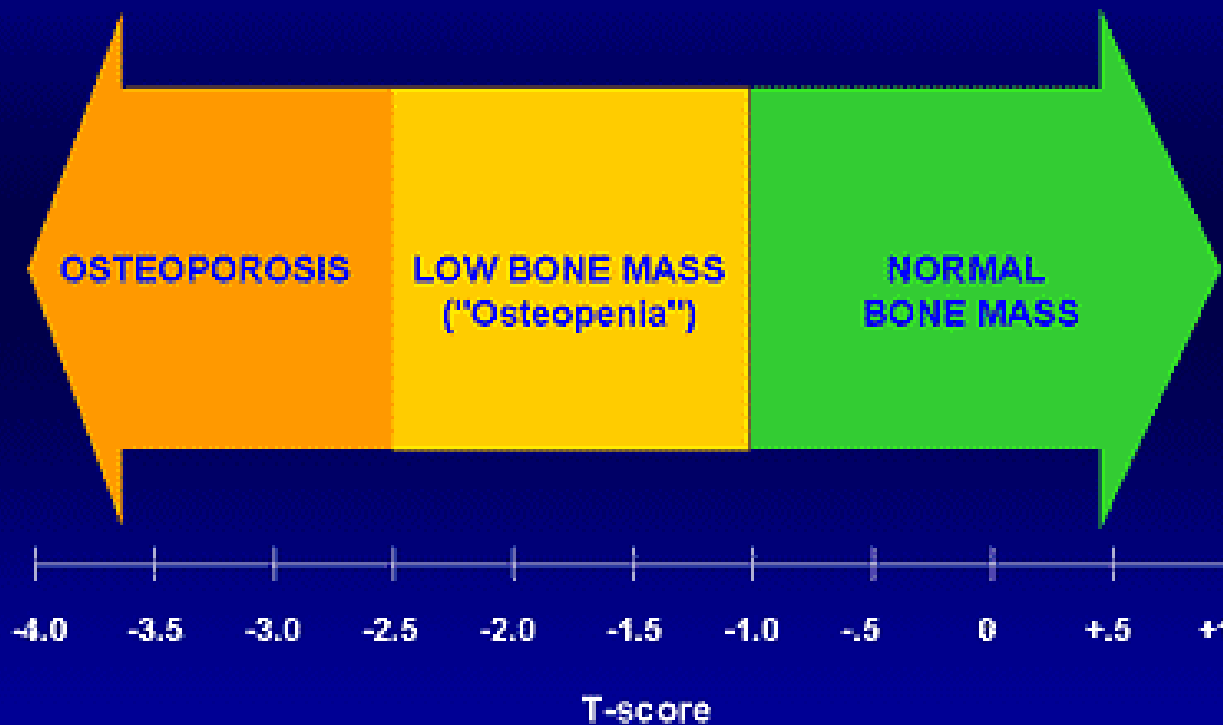
Comments:

Internal Hydroxyapatite Standard = 0,908

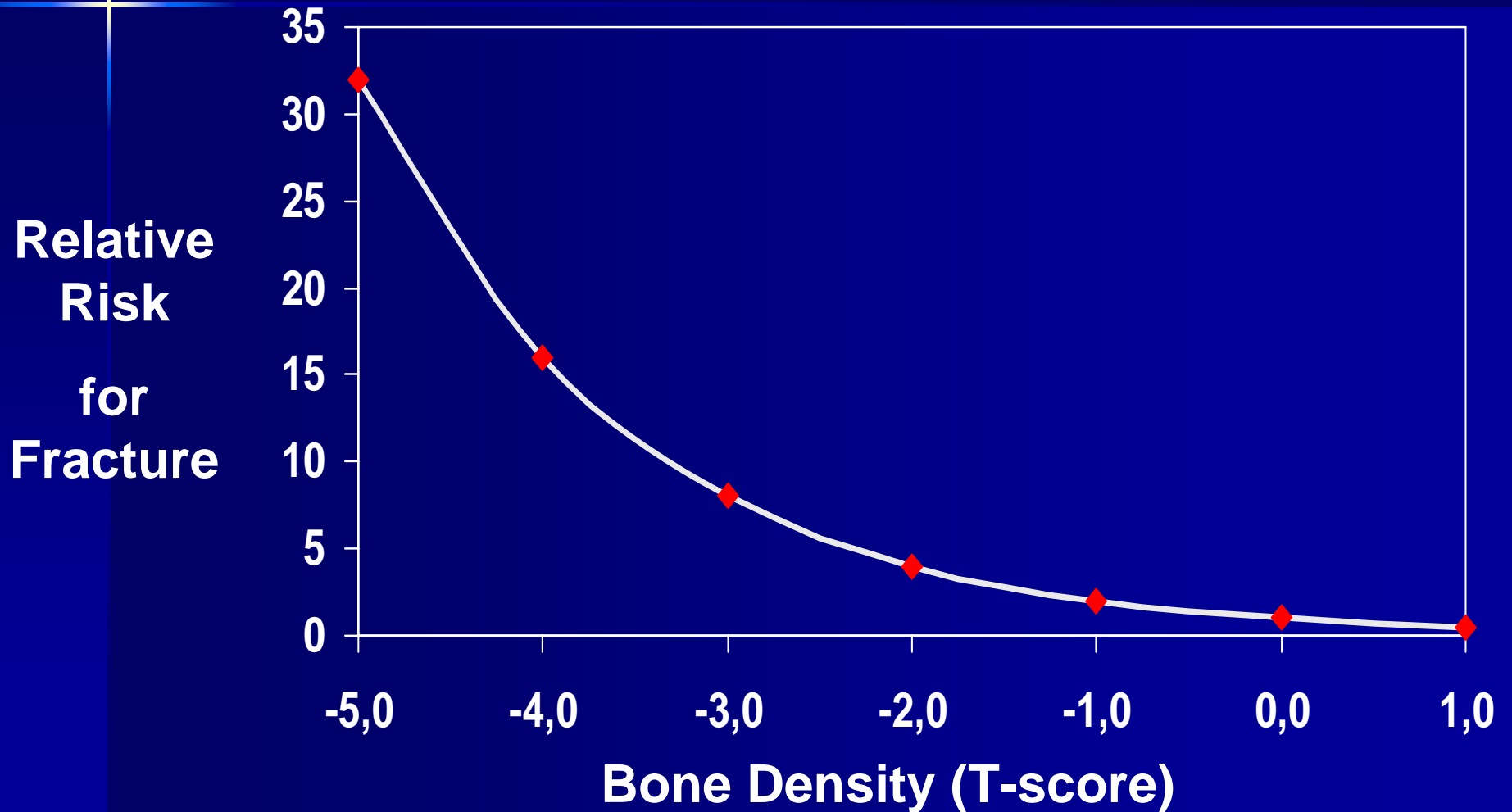
LUNAR<sup>®</sup> Expert  
#1230

## Interpreting T-Scores (WHO)

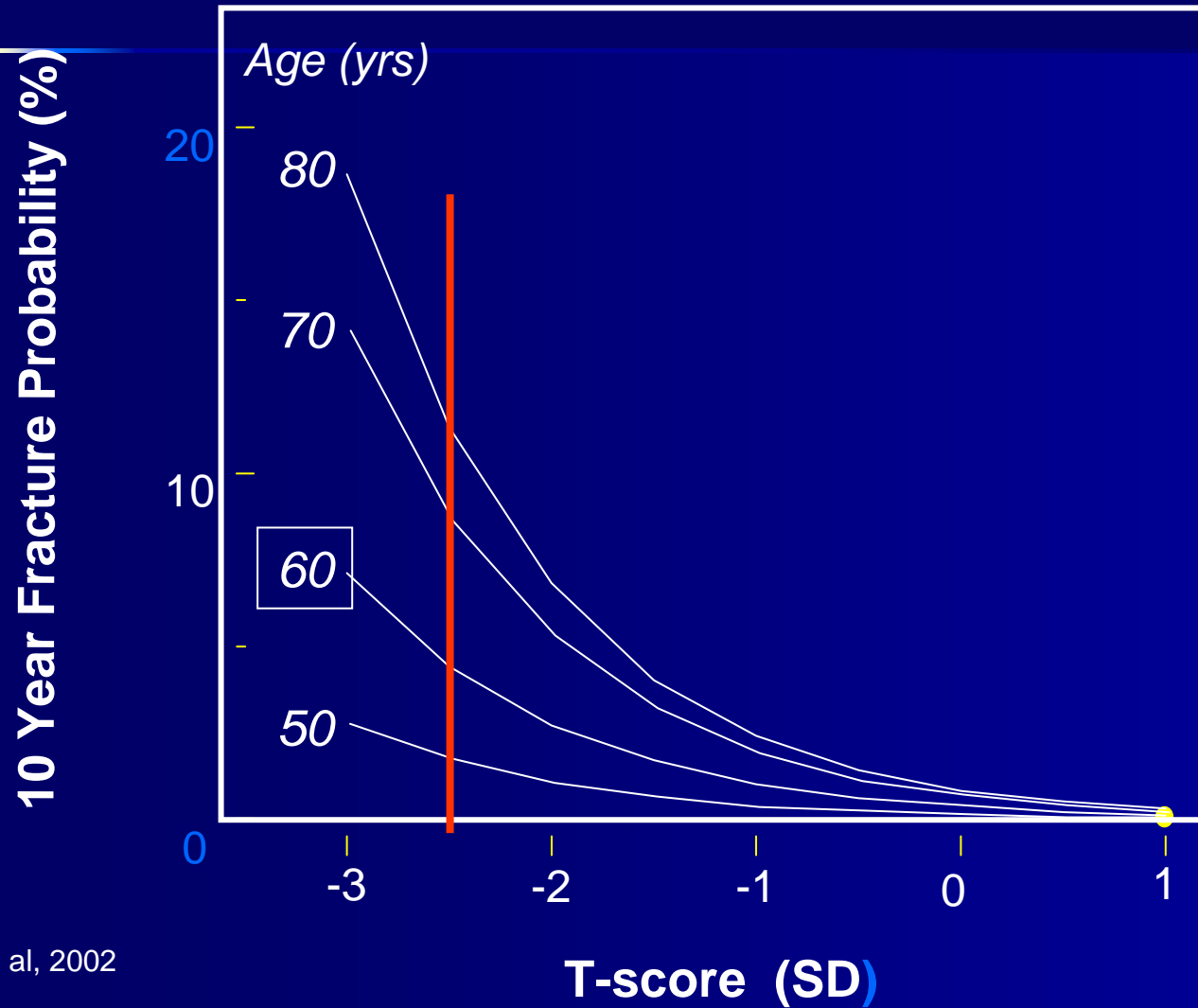
---



# Lav benmasse gir økt risiko 'for brudd



# Alder og benmasse





## Calculation Tool

Please answer the questions below to calculate the ten year probability of fracture with BMD.



### Weight Conversion:

pound:

[convert](#)

### Height Conversion:

inch:

[convert](#)

Country : **UK**

Name / ID :

[About the risk factors](#)

### Questionnaire:

1. Age (between 40-90 years) or Date of birth

Age:

Date of birth:

Y:

M:

D:

2. Sex

Male

Female

3. Weight (kg)

4. Height (cm)

5. Previous fracture

No

Yes

6. Parent fractured hip

No

Yes

7. Current smoking

No

Yes

8. Glucocorticoids

No

Yes

9. Rheumatoid arthritis

No

Yes

10. Secondary osteoporosis

No

Yes

11. Alcohol 3 or more units per day

No

Yes

12. Femoral neck BMD (g/cm<sup>2</sup>)

Select DXA



[Clear](#)

[Calculate](#)

# 59 år gammel kvinne osteoporose ingen tileggs risiki

BMI 24.2

The ten year probability of fracture (%)



with BMD

■ Major osteoporotic	12
■ Hip fracture	3.8

# Samme kvinne

## Ra, Prednisolon røyker

BMI 24.2

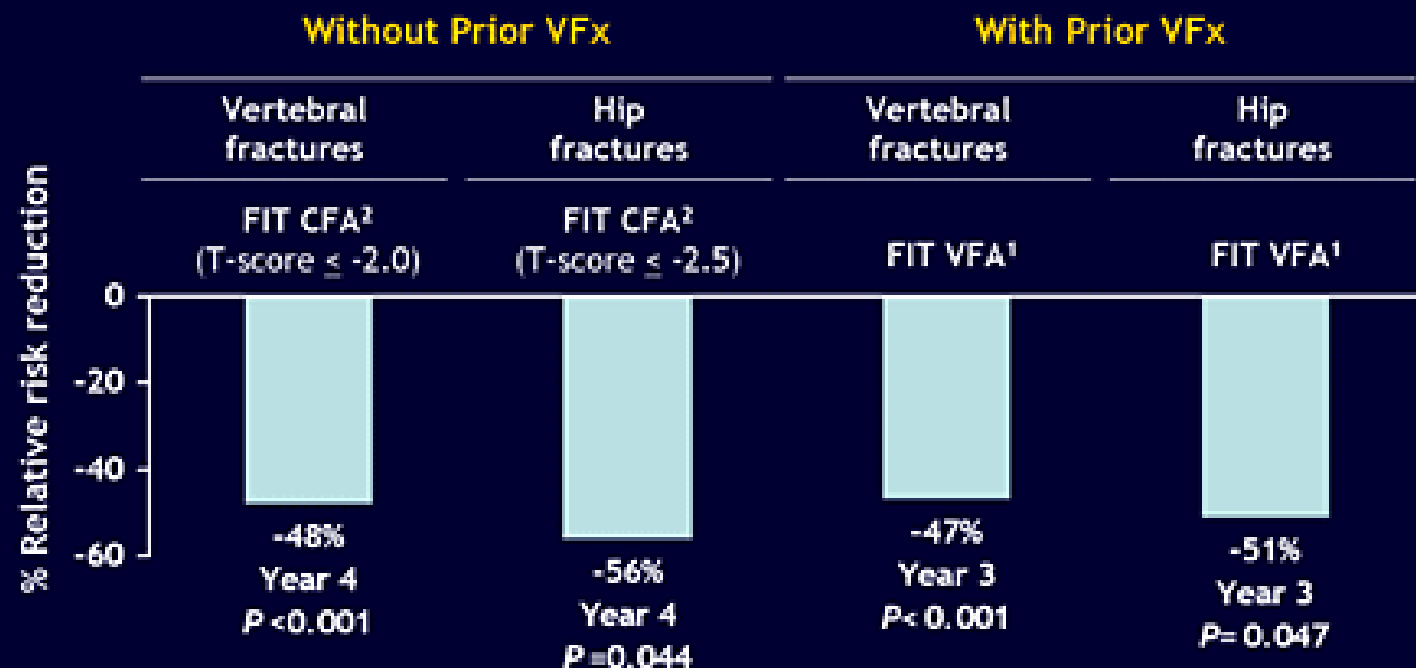
The ten year probability of fracture (%)



with BMD

■ Major osteoporotic	30
■ Hip fracture	16

# Alendronate



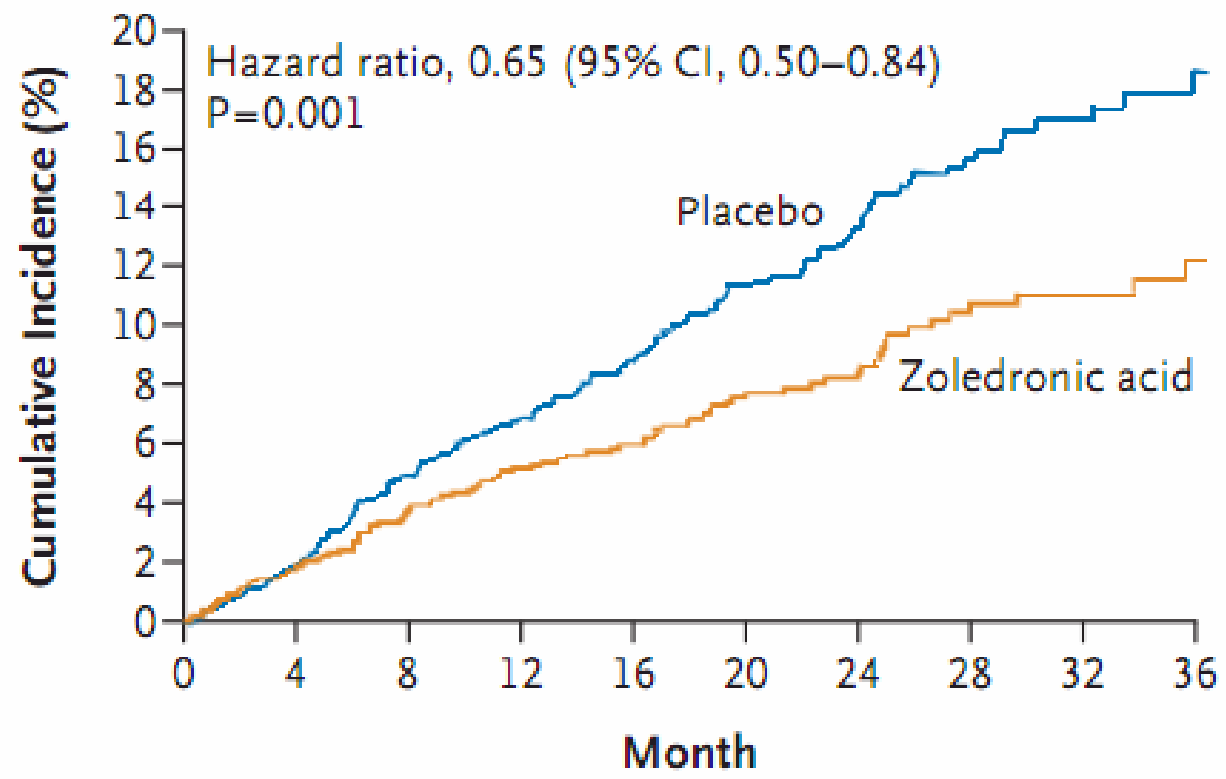
1. Black DM et al. *Lancet*. 1996;348:1535-1541.

2. Data available on request from Merck & Co., Inc. Please specify DA-FOS73(3).



# Aclasta

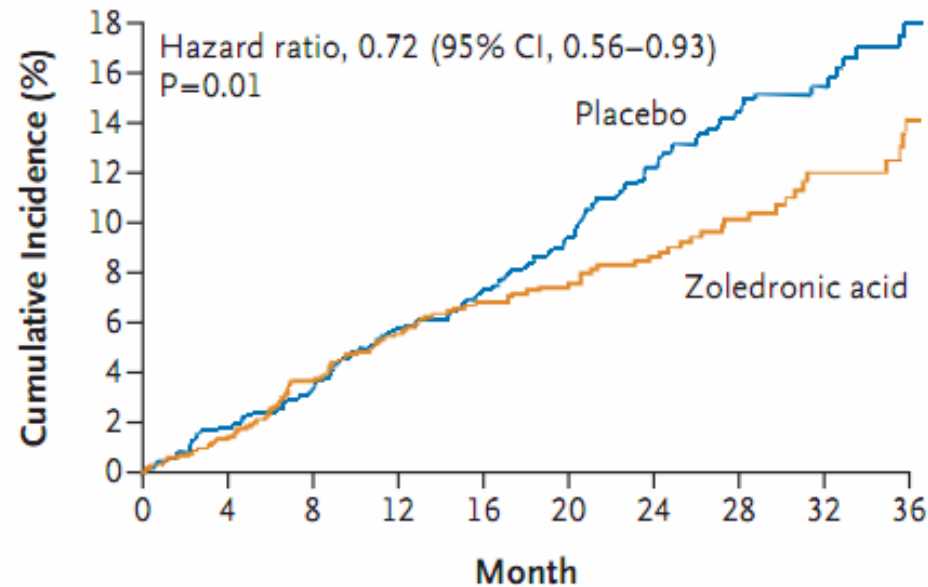
## A Any Clinical Fracture



### No. at Risk

Zoledronic acid	1065	1013	950	895	762	628	473	316	212	129
Placebo	1062	1010	947	884	742	611	443	305	190	119

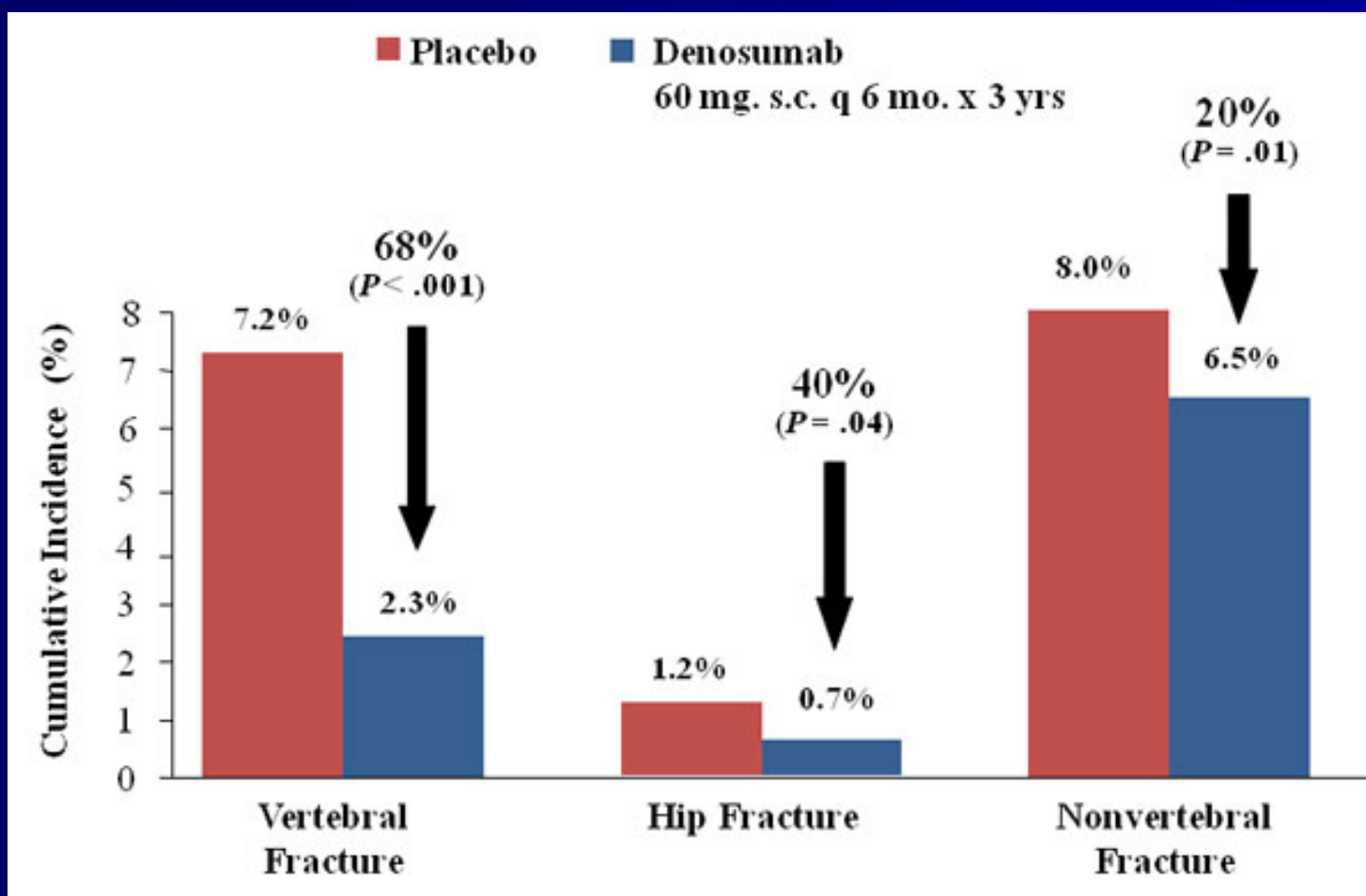
# Aclasta og dødlighet etter låhalsbrudd



## No. at Risk

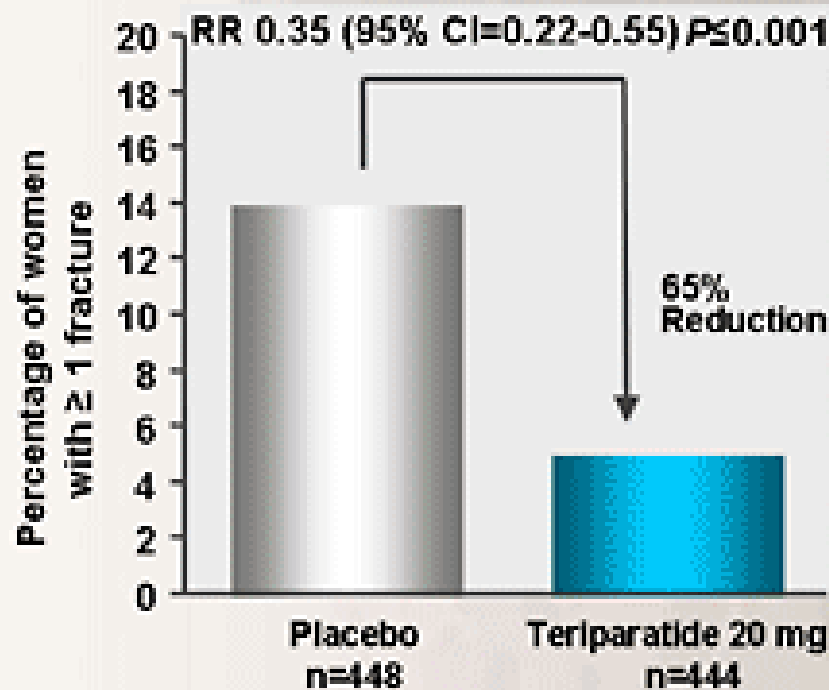
Zoledronic acid	1054	1029	987	943	806	674	507	348	237	144
Placebo	1057	1028	993	945	804	681	511	364	236	149

# Prolia og brudd

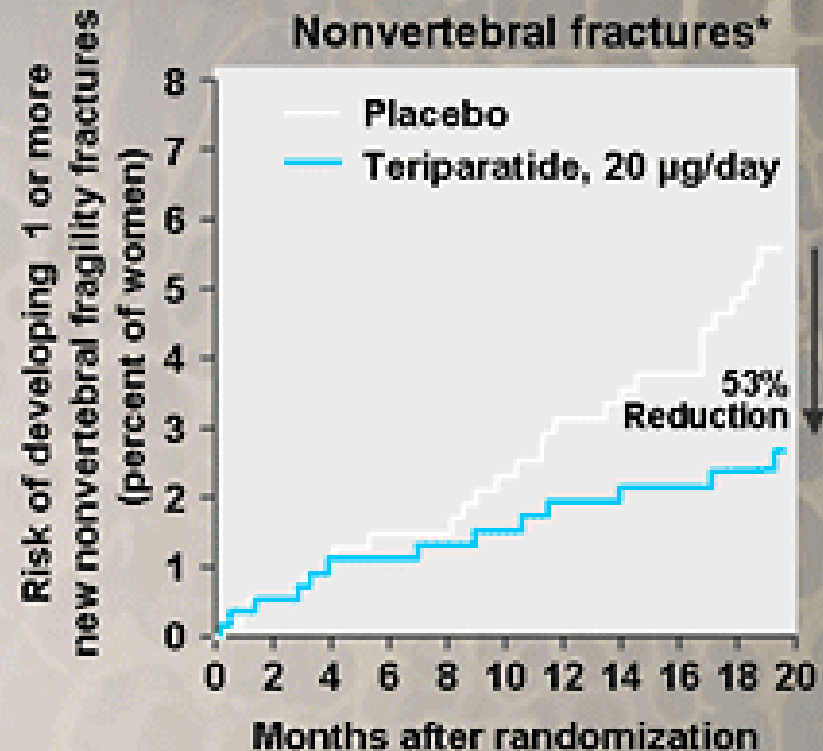


# Teriparatide: Effect on Fractures (Mean 18 Months)

Incidence of New  
Vertebral Fractures



Effect on  
Nonvertebral fractures\*



\* $P \leq 0.05$  for all pairwise comparisons with placebo, by log-rank test.  
Neer, RM et al. *N Engl J Med*. 2001;344:1434-1441.

