Appendix 3 (as supplied by the authors): The best predictive model for time to death, expressed as adjusted hazard ratios and 95% CI†

	Combined	Men	Women
Incident fractures			
No vertebral fracture	1	1	1
Vertebral fracture 1st year follow-up	**3.00 (1.10, 8.17)**	Not included	**3.60 (1.14, 11.30)**
Vertebral fracture 2nd year follow-up	**2.78 (1.23, 6.31)**	Not included	**3.15 (1.38, 7.22)**
Vertebral fracture 3rd year follow-up	0.58 (0.14, 2.38)	Not included	0.42 (0.10, 1.74)
Vertebral fracture 4th or 5th year follow-up	NA	Not included	NA
No hip fracture	1	1	1
Hip fracture 1st year follow-up	**3.52 (1.54, 8.03)**	Not included	Not included
Hip fracture 2nd year follow-up	1.16 (0.42, 3.22)	Not included	Not included
Hip fracture 3rd year follow-up	1.83 (0.58, 5.75)	Not included	Not included
Hip fracture 4th or 5th year follow-up	0.52 (0.21, 1.30)	Not included	Not included
No other fracture	1	1	1
Other fracture 1st year follow-up	0.40 (0.13, 1.24)	Not included	Not included
Other fracture 2nd year follow-up	1.48 (0.79, 2.80)	Not included	Not included
Other fracture 3rd year follow-up	1.20 (0.46, 2.72)	Not included	Not included
Other fracture 4th or 5th year follow-up	**0.13 (0.02, 0.90)**	Not included	Not included
Anthropometric/demographic			
Age	**0.90 (0.85, 0.95)**	**0.91 (0.82, 0.99)**	**0.89 (0.83, 0.96)**
Education (some university)	**0.65 (0.51, 0.82)**	Not included	**0.51 (0.36, 0.74)**
Sex (women)	**0.46 (0.39, 0.55)**	-	-
CaMos Centre			
Vancouver	1	1	1
Calgary	Not included	0.58 (0.32, 1.07)	Not included
Halifax	Not included	0.81 (0.47, 1.40)	Not included
Hamilton	Not included	1.00 (0.61, 1.62)	Not included
Kingston	Not included	0.66 (0.37, 1.16)	Not included
Quebec	Not included	1.12 (0.66, 1.90)	Not included
Saskatoon	Not included	**0.49 (0.26, 0.92)**	Not included
St. John's	Not included	1.32 (0.78, 2.24)	Not included
Toronto	Not included	0.67 (0.36, 1.25)	Not included
Number of diseases			
0	1	1	1
1	0.92 (0.70, 1.20)	0.89 (0.59, 1.33)	0.86 (0.60, 1.23)
2	1.13 (0.86, 1.48)	1.45 (0.97, 2.17)	0.86 (0.60, 1.24)
3	1.23 (0.91, 1.66)	**1.59 (1.00, 2.54)**	0.96 (0.64, 1.43)
4+	**1.73 (1.25, 2.38)**	**1.87 (1.11, 3.17)**	1.45 (0.97, 2.18)
Medications			
Bisphosphonate use	Not included	**12.4 (1.57, 98.49)**	Not included

continued

Number of surgeries			
0	1	1	1
1	0.82 (0.67, 1.01)	Not included	Not included
2+	1.27 (0.91, 1.76)	Not included	Not included
Health-related habits			
Caffeine intake 100mg/day	**0.96 (0.92, 0.99)**	Not included	Not included
Vitamin D intake 100IU/d	Not included	**1.03 (1.00, 1.06)**	Not included
Current smokers (Yes)	**2.30 (1.85, 2.86)**	**1.76 (1.25,2.47)**	**2.71 (2.07, 3.55)**
Regular activity (No)	**1.33 (1.11, 1.58)**	**1.49 (1.13, 1.96)**	**1.32 (1.05, 1.66)**
Quality-of-life measures			
Standardized Physical component SF-36 (10 points)	**0.73 (0.67, 0.80)**	**0.71 (0.62, 0.81)**	**0.71 (0.64, 0.79)**

† NA = not applicable due to the lack of fractures during this time period. Values that are bolded represent statistically significant results.
To determine this best predictive models all potential variables were included in the multivariable Cox proportional hazard analysis (variables included: hormone replacement therapy (not taking, taking), corticosteroid use (not taking, taking), bisphosphonate use (not taking, taking), age (years), sex (men, women), Canadian Multicentre Osteoporosis Study centre (St. John's, Halifax, Quebec City, Kingston, Toronto, Hamilton, Saskatoon, Calgary, Vancouver), height (analyzed for every 10 cm change), weight (kg), and educational status (no university, some university), clinically recognized minimal trauma fractures at or after age 50 years (no, yes), and radiographic identified vertebral fractures (no, yes), number of diseases (0, 1, 2, 3, or 4+), number of surgeries (0, 1, 2+), caffeine intake (analyzed for every 100 mg/day change in consumption), calcium intake (analyzed for every 100 mg/day change in consumption), vitamin D intake (analyzed for every 100 IU/day change in consumption), alcohol intake (analyzed for every 10 drinks/year change in consumption), regular activity (no/yes), and current smoking status (no/yes); Medical Outcomes Trust 36-item Health Survey standardized physical component summary score (analyzed for every 10 point change in the score) and the Medical Outcomes Trust 36-item Health Survey standardized mental component summary score (analyzed for every 10 point change in the score)). The sex and sex by age interaction was included in the combined analysis. The best predictive models were chosen using the forward selection procedure.