

**Appendix 1.** Prevalence of the comorbidities used to calculate the CCI

	Total n = 24,691, n (%)	Males n = 10,853, n (%)	Females n = 13,838, n (%)
Acute myocardial infraction	130 (0.5)	91 (0.8)*	39 (0.3)
Congestive heart failure	972 (3.9)	448 (4.1)	524 (3.8)
Peripheral vascular disease	3,365 (13.6)	1,593 (14.7)*	1,772 (12.8)
Cerebral vascular disease	10,922 (44.2)	4,679 (43.1)*	6,243 (45.1)
Dementia	633 (2.6)	224 (2.1)*	409 (3.0)
Pulmonary disease	2,735 (11.1)	1,343 (12.4)*	1,392 (10.1)
Connective tissue disorder	1,672 (6.7)	711 (6.6)	961 (6.9)
Peptic ulcer	1,979 (8.0)	928 (8.6)*	1,051 (7.6)
Mild liver disease	1,725 (7.0)	912 (8.4)*	813 (5.9)
Diabetes without complications	1,273 (5.2)	724 (6.7)*	549 (4.0)
Diabetes with complications	1,013 (4.1)	583 (5.4)*	430 (3.1)
Paraplegia	715 (2.9)	376 (3.5)*	339 (2.5)
Renal disease	3,564 (14.4)	1,794 (16.5)*	1,770 (12.8)
Cancer	2,832 (11.5)	1,876 (17.1)*	972 (7.0)
Metastatic cancer	100 (0.4)	68 (0.6)*	32 (0.2)
Sever liver disease	13 (0.1)	8 (0.07)	5 (0.04)
HIV	0 (0)	0 (0)	0 (0)

CCI: Charlson comorbidity index, HIV: human immunodeficiency virus

\* Significantly different between males and females ( $P < .05$ ).

**Appendix. 2** Alive vs. death among participants

Parameters	Alive n = 19,282	Death n = 5,409
Age at examination (years old)	78.7 ± 3.6 (75–99)*	82.1 ± 5.3 (75–103)
Age categories, n (%)		
75–79	12,898 (66.9)*	2,034 (37.6)
80–84	4,820 (25.0)*	1,734 (32.1)
85≤	1,564 (8.1)*	1,641 (30.3)
Sex; male/female, n (%)	7,795 (40.4) / 11,487 (59.6)*	3,058 (56.5) / 2,351 (43.5)
BMI (kg/m <sup>2</sup> )	22.4 ± 3.0 (11.6–54.2)*	21.5 ± 3.2 (12.5–39.6)
BMI categories		
Underweight (BMI < 18.5)	1,761 (9.1)*	923 (17.1)
Normal weight (18.5 ≤ BMI < 25)	13,896 (72.1)	3,771 (69.7)
Overweight and Obese (25 ≤ BMI)	3,625 (18.8)	715 (13.2)
CCI	1.5 ± 1.6 (0–11)	2.3 ± 1.9 (0–10)
CCI categories, n (%)		
Low	4,134 (21.4)*	576 (10.7)
Medium	10,530 (54.6)	2,452 (45.3)
High	3,627 (18.8)	1,704 (31.5)
Very high	991 (5.1)	677 (12.5)
Smoking, n (%)	1,279 (6.6)*	612 (11.3)
Use of alcohol, n (%)	7,442 (38.6)*	2,002 (37.0)
Osteoporosis, n (%)	3,126 (16.2)	843 (15.6)
Follow-up duration (year)	7.5 ± 0.3 (0.1–8.0)*	4.5 ± 2.0 (0.1–7.9)

Continuous values are expressed as mean ± standard deviation (range). BMI: body mass index, CCI: Charlson comorbidity index

\* Significantly different between alive and death ( $P < .05$ ).