Data supplement to White et al. Duration of depressive symptoms and mortality risk: the English Longitudinal Study of Ageing (ELSA). Br J Psychiatry doi: 10.1192/bjp.bp.114.155333

Table DS1 Hazard ratios (95% confidence intervals) for the association between all-cause mortality and the duration of depressive symptoms (2002–2003 to 2008–2009) in the complete case sample (*n*=5266)

Model	No. waves with depressive symptoms						
	None	1	2	3	4	Per 1 wave increase	*P* for trend
Age and sex (basic model)[a]	1 (ref)	1.36 (1.03, 1.78)	1.72 (1.26, 2.35)	2.22 (1.57, 3.14)	2.17 (1.48, 3.18)	1.25	<0.001
Basic model + socioeconomic position[b]	1	1.28 (0.97, 1.68)	1.60 (1.17, 2.19)	1.98 (1.39, 2.80)	1.80 (1.21, 2.66)	1.20	<0.001
Basic model + living alone	1	1.34 (1.02, 1.77)	1.64 (1.20, 2.24)	2.10 (1.48, 2.97)	1.97 (1.34, 2.90)	1.22	<0.001
Basic model + antidepressant medication[c]	1	1.34 (1.02, 1.76)	1.69 (1.24, 2.32)	2.16 (1.52, 3.06)	2.04 (1.38, 3.00)	1.23	<0.001
Basic model + health behaviours[d]	1	1.21 (0.91, 1.59)	1.46 (1.07, 2.01)	1.81 (1.27, 2.58)	1.50 (1.00, 2.25)	1.15	0.007
Basic model + any functional impairment[e]	1	1.24 (0.94, 1.64)	1.42 (1.03, 1.96)	1.76 (1.22, 2.52)	1.53 (1.02, 2.30)	1.15	0.02
Basic model + chronic conditions[f]	1	1.32 (1.00, 1.74)	1.66 (1.21, 2.28)	2.11 (1.48, 3.00)	1.98 (1.33, 2.94)	1.23	<0.001
Basic model + tests of cognitive function[g]	1	1.22 (0.93, 1.61)	1.55 (1.14, 2.13)	1.90 (1.34, 2.70)	1.77 (1.20, 2.61)	1.19	0.005
Basic model + circulatory disease and risk factors[h]	1	1.32 (1.00, 1.74)	1.66 (1.21, 2.28)	2.12 (1.49, 2.99)	2.00 (1.35, 2.94)	1.23	<0.001
Basic model + all diagnoses and conditions	1	1.30 (0.98, 1.72)	1.62 (1.18, 2.23)	2.04 (1.43, 2.90)	1.88 1.26, 2.81)	1.21	<0.001
All covariates without cognitive function	1	1.13 (0.85, 1.50)	1.23 (0.89, 1.70)	1.42 (0.98, 2.06)	1.07 (0.69, 1.64)	1.06	0.37
All covariates	1	1.07 (0.81, 1.42)	1.17 (0.85, 1.63)	1.33 (0.92, 1.93)	0.99 (0.65, 1.52)	1.04	0.55

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions.

Table DS2 Hazard ratios (95% confidence intervals) for all-cause mortality according to the total of depressive symptoms scores across four waves (2002–2003 to 2008–2009) (n=9560)

Model	Per one unit increase in the total of CES-D scores across four waves
Age and sex (basic model)[a]	1.05 (1.03, 1.06)
Basic model + socioeconomic position[b]	1.04 (1.03, 1.05)
Basic model + living alone	1.04 (1.03, 1.05)
Basic model + antidepressant medication[c]	1.04 (1.03, 1.05)
Basic model + health behaviours[d]	1.03 (1.02, 1.04)
Basic model + any functional impairment[e]	1.03 (1.02, 1.04)
Basic model + chronic conditions[f]	1.04 (1.03, 1.05)
Basic model + tests of cognitive function[g]	1.04 (1.02, 1.05)
Basic model + circulatory disease and risk factors[h]	1.04 (1.03, 1.05)
Basic model + all diagnoses and conditions	1.03 (1.02, 1.04)
All covariates without cognitive function	1.01 (1.00, 1.02)
All covariates	1.01 (1.00, 1.02)

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions.

Table DS3 Hazard ratios (95% confidence intervals) for the association between the duration of depressive symptoms and mortality (*n*=9560)

Model	No. waves with depressive symptoms					Per 1 wave increase	*P* for trend
	None	1	2	3	4		
Unadjusted	1 (ref)	1.49 (1.20, 1.86)	2.04 (1.64, 2.54)	2.29 (1.83, 2.88)	2.89 (2.26, 3.70)	1.31	<0.001
Adjusted for the following:							
Sex	1 (ref)	1.55 (1.24, 1.93)	2.15 (1.73, 2.68)	2.43 (1.94, 3.05)	3.09 (2.41, 3.95)	1.34	<0.001
Age	1 (ref)	1.35 (1.10, 1.67)	1.68 (1.34, 2.11)	1.81 (1.45, 2.26)	2.26 (1.75, 2.92)	1.23	<0.001
Social class[a]	1 (ref)	1.40 (1.13, 1.72)	1.77 (1.40, 2.22)	1.91 (1.51, 2.41)	2.38 (1.82, 3.12)	1.29	<0.001
Total wealth[b]	1 (ref)	1.37 (1.10, 1.69)	1.71 (1.35, 2.15)	1.84 (1.46, 2.31)	2.21 (1.68, 2.91)	1.25	<0.001
Living alone	1 (ref)	1.40 (1.14, 1.73)	1.75 (1.40, 2.20)	1.89 (1.51, 2.38)	2.34 (1.79, 3.07)	1.25	<0.001
Smoking status	1 (ref)	1.38 (1.12, 1.69)	1.72 (1.37, 2.17)	1.89 (1.50, 2.38)	2.30 (1.59, 3.01)	1.30	<0.001
Alcohol consumption	1 (ref)	1.38 (1.12, 1.71)	1.73 (1.38, 2.18)	1.89 (1.50, 2.37)	2.33 (1.79, 3.03)	1.27	<0.001
Low intensity physical activity	1 (ref)	1.36 (1.10, 1.67)	1.70 (1.35, 2.14)	1.83 (1.45, 2.30)	2.23 (1.72, 2.91)	1.25	<0.001
Moderate physical intensity activity	1 (ref)	1.33 (1.08, 1.65)	1.65 (1.31, 2.08)	1.72 (1.36, 2.17)	1.99 (1.51, 2.63)	1.20	<0.001
Vigorous physical intensity activity	1 (ref)	1.40 (1.13, 1.72)	1.76 (1.40, 2.21)	1.90 (1.51, 2.39)	2.36 (1.81, 3.09)	1.28	<0.001
Difficulty in any ADL	1 (ref)	1.33 (1.08, 1.65)	1.63 (1.30, 2.05)	1.70 (1.35, 2.15)	2.02 (1.53, 2.66)	1.20	<0.001
Difficulty in any IADL	1 (ref)	1.34 (1.08, 1.65)	1.59 (1.26, 2.01)	1.66 (1.31, 2.10)	1.94 (1.46, 2.57)	1.19	<0.001
Memory index	1 (ref)	1.33 (1.08, 1.65)	1.66 (1.32, 2.10)	1.77 (1.41, 2.21)	2.16 (1.65, 2.83)	1.20	<0.001
Executive function score	1 (ref)	1.32 (1.07, 1.63)	1.67 (1.33, 2.11)	1.76 (1.40, 2.21)	2.14 (1.64, 2.79)	1.20	<0.001
Hypertension	1 (ref)	1.40 (1.14, 1.73)	1.78 (1.42, 2.23)	1.95 (1.55, 2.45)	2.43 (1.86, 3.17)	1.30	<0.001
Angina	1 (ref)	1.39 (1.13, 1.71)	1.76 (1.41, 2.22)	1.91 (1.51, 2.40)	2.30 (1.76, 3.00)	1.28	<0.001
Heart attack	1 (ref)	1.40 (1.13, 1.72)	1.78 (1.41, 2.24)	1.93 (1.53, 2.43)	2.37 (1.81, 3.10)	1.30	<0.001
Heart conditions[c]	1 (ref)	1.41 (1.14, 1.74)	1.79 (1.42, 2.24)	1.94 (1.55, 2.44)	2.42 (1.86, 3.16)	1.30	<0.001
Stroke	1 (ref)	1.40 (1.14, 1.73)	1.76 (1.41, 2.22)	1.93 (1.53, 2.43)	2.38 (1.81, 3.11)	1.29	<0.001
Diabetes	1 (ref)	1.40 (1.14, 1.73)	1.78 (1.42, 2.23)	1.94 (1.54, 2.44)	2.44 (1.87, 3.18)	1.30	<0.001
COPD	1 (ref)	1.39 (1.12, 1.71)	1.75 (1.40, 2.20)	1.89 (1.50, 2.38)	2.29 (1.75, 3.01)	1.29	<0.001
Asthma	1 (ref)	1.41 (1.15, 1.74)	1.80 (1.43, 2.26)	1.96 (1.56, 2.47)	2.45 (1.87, 3.21)	1.28	<0.001

Model	No. waves with depressive symptoms						
	None	1	2	3	4	Per 1 wave increase	P for trend
Arthritis	1 (ref)	1.40 (1.13, 1.73)	1.77 (1.41, 2.22)	1.93 (1.53, 2.43)	2.40 (1.84, 3.15)	1.31	<0.001
Cancer	1 (ref)	1.41 (1.15, 1.74)	1.80 (1.43, 2.26)	1.95 (1.55, 2.46)	2.46 (1.89, 3.20)	1.31	<0.001
Antidepressant use[d]	1 (ref)	1.41 (1.14, 1.73)	1.78 (1.42, 2.24)	1.94 (1.54, 2.44)	2.41 (1.83, 3.16)	1.31	<0.001

Data are hazard ratio (95% confidence interval)

[a]Semi-routine and routine occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) classification system. [b]Total wealth excludes debt and regular pension payments; [c]Heart conditions were murmur, abnormal heart rhythm, congestive heart failure; [d]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants.

SD = Standard deviation; COPD: ADL = Activities of daily living; IADL = Instrumental activities of daily living; Chronic Obstructive Pulmonary Disorder.

Table DS4 Hazard ratios (95% confidence intervals) for the association between all-cause mortality and the duration of depressive symptoms using the CES-D score ≥4 cut-point (2002–2003 to 2008–2009) (*n*=9560)

Model	No. waves with depressive symptoms						
	None	**1**	**2**	**3**	**4**	**Per 1 wave increase**	***P* for trend**
	HR (95% CI)						
Age and sex (basic model)[a]	1 (ref)	1.50 (1.21, 1.87)	1.59 (1.24, 2.04)	1.82 (1.34, 2.47)	2.13 (1.52, 3.00)	1.22	<0.001
Basic model + socioeconomic position[b]	1	1.43 (1.15, 1.78)	1.48 (1.15, 1.93)	1.64 (1.21, 2.22)	1.90 (1.35, 2.67)	1.19	<0.001
Basic model + living alone	1	1.48 (1.19, 1.84)	1.54 (1.19, 1.99)	1.73 (1.28, 2.35)	1.99 (1.42, 2.79)	1.20	<0.001
Basic model + antidepressant medication[c]	1	1.49 (1.20, 1.85)	1.57 (1.22, 2.02)	1.78 (1.31, 2.42)	2.04 (1.43, 2.90)	1.21	<0.001
Basic model + health behaviours[d]	1	1.33 (1.07, 1.66)	1.30 (1.00, 1.69)	1.38 (1.01, 1.88)	1.48 (1.03, 2.11)	1.11	0.02
Basic model + any functional impairment[e]	1	1.34 (1.08, 1.68)	1.34 (1.04, 1.73)	1.41 (1.03, 1.93)	1.47 (1.02, 2.11)	1.12	0.01
Basic model + chronic conditions[f]	1	1.44 (1.16, 1.79)	1.49 (1.16, 1.91)	1.67 (1.23, 2.27)	1.83 (1.29, 2.58)	1.18	<0.001
Basic model + tests of cognitive function[g]	1	1.39 (1.12, 1.73)	1.43 (1.12, 1.84)	1.54 (1.13, 2.10)	1.79 (1.28, 2.50)	1.16	<0.001
Basic model + circulatory disease and risk factors[h]	1	1.45 (1.17, 1.81)	1.52 (1.19, 1.95)	1.64 (1.21, 2.24)	1.79 (1.25, 2.56)	1.18	<0.001
Basic model + all diagnoses and conditions	1	1.42 (1.14, 1.76)	1.44 (1.11, 1.85)	1.53 (1.13, 2.09)	1.61 (1.12, 2.29)	1.15	<0.001
All covariates without cognitive function	1	1.21 (0.97, 1.51)	1.12 (0.85, 1.46)	1.09 (0.79, 1.50)	1.01 (0.69, 1.48)	1.02	0.51
All covariates	1	1.18 (0.94, 1.47)	1.08 (0.83, 1.41)	1.03 (0.74, 1.43)	0.96 (0.66, 1.41)	1.00	0.64

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions.

Table DS5 Hazard ratios (95% confidence intervals) for all-cause mortality according to the total of depressive symptoms scores across four waves after removing items assessing somatic symptoms (2002–2003 to 2008–2009) (*n*=9560)

Model	Per one unit increase in the total of CES-D scores across four waves
Age and sex (basic model)[a]	1.06 (1.04, 1.07)
Basic model + socioeconomic position[b]	1.05 (1.03, 1.06)
Basic model + living alone	1.05 (1.03, 1.07)
Basic model + antidepressant medication[c]	1.05 (1.04, 1.07)
Basic model + health behaviours[d]	1.03 (1.02, 1.05)
Basic model + any functional impairment[e]	1.04 (1.02, 1.05)
Basic model + chronic conditions[f]	1.04 (1.03, 1.06)
Basic model + tests of cognitive function[g]	1.04 (1.02, 1.06)
Basic model + circulatory disease and risk factors[h]	1.05 (1.03, 1.06)
Basic model + all diagnoses and conditions	1.04 (1.03, 1.06)
All covariates without cognitive function	1.01 (1.00, 1.03)
All covariates	1.00 (0.98, 1.02)

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions.

Table DS6 Hazard ratios (95% confidence intervals) for the for all-cause mortality according to the duration of depressive symptoms (2002–2003 to 2008–2009) excluding those with depressive symptoms at wave one *(n=7387)*

Model	No. waves with depressive symptoms				Per 1 wave increase	*P* for trend
	None	1	2	3		
Age and sex (basic model)[a]	1 (ref)	1.49 (1.18, 1.89)	1.85 (1.39, 2.48)	2.17 (1.42, 3.34)	1.34	<0.001
Basic model + socioeconomic position[b]	1	1.43 (1.13, 1.81)	1.75 (1.31, 2.34)	2.05 (1.33, 3.16)	1.30	<0.001
Basic model + living alone	1	1.48 (1.17, 1.88)	1.81 (1.36, 2.41)	2.11 (1.37, 3.26)	1.32	<0.001
Basic model + antidepressant medication[c]	1	1.47 (1.16, 1.87)	1.83 (1.37, 2.44)	2.14 (1.39, 3.29)	1.33	<0.001
Basic model + health behaviours[d]	1	1.37 (1.08 1.75)	1.61 (1.19, 2.17)	1.74 (1.11, 2.72)	1.24	<0.001
Basic model + any functional impairment[e]	1	1.53 (1.24, 1.89)	1.42 (0.99, 2.02)	1.72 (1.14, 2.62)	1.24	0.002
Basic model + chronic conditions[f]	1	1.44 (1.14, 1.83)	1.78 (1.33, 2.39)	2.06 (1.33, 3.18)	1.31	<0.001
Basic model + tests of cognitive function[g]	1	1.37 (1.08, 1.73)	1.70 (1.26, 2.27)	1.87 (1.19, 2.93)	1.27	<0.001
Basic model + circulatory disease and risk factors[h]	1	1.44 (1.14, 1.82)	1.78 (1.33, 2.38)	2.05 (1.34, 3.14)	1.31	<0.001
Basic model + all diagnoses and conditions	1	1.41 (1.11, 1.78)	1.72 (1.28, 2.31)	1.93 (1.25, 2.97)	1.27	<0.001
All covariates without cognitive function	1	1.26 (1.00, 1.59)	1.40 (1.05, 1.87)	1.46 (0.93, 2.30)	1.16	0.04
All covariates	1	1.21 (0.96, 1.54)	1.35 (1.01, 1.81)	1.37 (0.87, 2.18)	1.14	0.11

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions.

Table DS7 Hazard ratios (95% confidence intervals) for all-cause mortality according to the duration of depressive symptoms (2002–2003 to 2008–2009) excluding participants with cognitive impairment[i] at baseline (*n*=6297)

Model	No. waves with depressive symptoms					Per 1 wave increase	*P* for trend
	None	1	2	3	4		
Age and sex (basic model)[a]	1 (ref)	1.37 (1.10, 1.70)	1.69 (1.32, 2.16)	1.81 (1.42, 2.30)	2.17 (1.64, 2.86)	1.22	<0.001
Basic model + socioeconomic position[b]	1	1.33 (1.07, 1.65)	1.61 (1.26, 2.07)	1.70 (1.33, 2.17)	1.99 (1.49, 2.65)	1.19	<0.001
Basic model + living alone	1	1.35 (1.09, 1.68)	1.64 (1.29, 2.09)	1.74 (1.37, 2.22)	2.05 (1.55, 2.72)	1.20	<0.001
Basic model + antidepressant medication[c]	1	1.36 (1.09, 1.68)	1.67 (1.31, 2.14)	1.77 (1.39, 2.26)	2.10 (1.58, 2.79)	1.21	<0.001
Basic model + health behaviours[d]	1	1.24 (1.00, 1.55)	1.43 (1.12, 1.84)	1.47 (1.14, 1.88)	1.58 (1.17, 2.11)	1.13	0.003
Basic model + any functional impairment[e]	1	1.26 (1.01, 1.58)	1.45 (1.13, 1.87)	1.46 (1.14, 1.88)	1.61 (1.20, 2.17)	1.13	0.002
Basic model + chronic conditions[f]	1	1.33 (1.07, 1.68)	1.61 (1.25, 2.07)	1.70 (1.34, 2.18)	1.97 (1.47, 2.64)	1.19	<0.001
Basic model + tests of cognitive function[g]	1	1.29 (1.03, 1.60)	1.59 (1.24, 2.04)	1.63 (1.28, 2.06)	1.63 (1.28, 2.06)	1.18	<0.001
Basic model + circulatory disease and risk factors[h]	1	1.33 (1.07, 1.65)	1.61 (1.26, 2.06)	1.70 (1.34, 2.17)	1.92 (1.45, 2.54)	1.18	<0.001
Basic model + all diagnoses and conditions	1	1.30 (1.05, 1.61)	1.57 (1.21, 2.01)	1.63 (1.27, 2.09)	1.79 (1.33, 2.41)	1.16	<0.001
All covariates without cognitive function	1	1.17 (0.94, 1.45)	1.26 (0.98, 1.63)	1.22 (0.93, 1.59)	1.18 (0.86, 1.62)	1.05	0.38
All covariates	1	1.13 (0.90, 1.41)	1.23 (0.95, 1.60)	1.16 (0.89, 1.51)	1.11 (0.81, 1.54)	1.04	0.54

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions; [i]Cognitive impairment was defined as scoring in the lowest quartile on tests of memory and executive functioning.

Table DS8 Hazard ratios (95% confidence intervals) for all-cause mortality according to the duration of depressive symptoms (2002–2003 to 2008–2009) including deaths between 2002–2003 and 2012 (*n*=9560)

Model	No. waves with depressive symptoms					Per 1 wave increase	*P* for trend
	None	1	2	3	4		
Age and sex (basic model)[a]	1 (ref)	1.42 (1.15, 1.75)	1.86 (1.52, 2.27)	1.98 (1.57, 2.52)	2.42 (1.91, 3.07)	1.25	<0.001
Basic model + socioeconomic position[b]	1	1.37 (1.11, 1.69)	1.75 (1.43, 2.14)	1.84 (1.44, 2.34)	2.15 (1.68, 2.74)	1.22	<0.001
Basic model + living alone	1	1.41 (1.15, 1.73)	1.80 (1.47, 2.20)	1.91 (1.51, 2.43)	2.29 (1.80, 2.91)	1.24	<0.001
Basic model + antidepressant medication[c]	1	1.41 (1.14, 1.74)	1.84 (1.51, 2.25)	1.95 (1.54, 2.48)	2.36 (1.85, 3.00)	1.25	<0.001
Basic model + health behaviours[d]	1	1.27 (1.02, 1.58)	1.56 (1.27, 1.91)	1.59 (1.25, 2.04)	1.72 (1.34, 2.21)	1.16	<0.001
Basic model + any functional impairment[e]	1	1.31 (1.06, 1.62)	1.59 (1.29, 1.95)	1.59 (1.24, 2.03)	1.78 (1.37, 2.31)	1.16	<0.001
Basic model + chronic conditions[f]	1	1.37 (1.11, 1.69)	1.77 (1.45, 2.16)	1.85 (1.46, 2.36)	2.15 (1.68, 2.75)	1.22	<0.001
Basic model + tests of cognitive function[g]	1	1.30 (1.06, 1.60)	1.66 (1.36, 2.03)	1.71 (1.35, 2.16)	2.00 (1.57, 2.55)	1.20	<0.001
Basic model + circulatory disease and risk factors[h]	1	1.37 (1.11, 1.69)	1.78 (1.46, 2.17)	1.87 (1.48, 2.37)	2.18 (1.71, 2.77)	1.22	<0.001
Basic model + all diagnoses and conditions	1	1.34 (1.09, 1.66)	1.71 (1.41, 2.10)	1.78 (1.40, 2.25)	2.00 (1.56, 2.57)	1.20	<0.001
All covariates without cognitive function	1	1.18 (0.95, 1.48)	1.36 (1.10, 1.68)	1.31 (1.01, 1.69)	1.29 (0.98, 1.70)	1.08	0.06
All covariates	1	1.14 (0.91, 1.42)	1.29 (1.04, 1.60)	1.23 (0.96, 1.58)	1.20 (0.91, 1.57)	1.06	0.21

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions.

Table DS9 Hazard ratios (95% confidence intervals) for all-cause mortality according to the duration of depressive symptoms (2002–2003 to 2008–2009) excluding deaths in first 12 months after wave 4 (*n*=9310)

Model	No. waves with depressive symptoms					Per 1 wave increase	*P* for trend
	None	1	2	3	4		
Age and sex (basic model)[a]	1 (ref)	1.36 (1.06, 1.74)	1.74 (1.35, 2.26)	1.86 (1.44, 2.42)	2.35 (1.73, 3.20)	1.24	<0.001
Basic model + socioeconomic position[b]	1	1.31 (1.01, 1.67)	1.64 (1.26, 2.14)	1.71 (1.31, 2.24)	2.06 (1.50, 2.84)	1.20	<0.001
Basic model + living alone	1	1.35 (1.05, 1.72)	1.69 (1.31, 2.19)	1.79 (1.38, 2.32)	2.22 (1.63, 3.03)	1.22	<0.001
Basic model + antidepressant medication[c]	1	1.36 (1.06, 1.74)	1.74 (1.33, 2.25)	1.85 (1.43, 2.40)	2.32 (1.70, 3.18)	1.24	<0.001
Basic model + health behaviours[d]	1	1.23 (0.95, 1.59)	1.48 (1.14, 1.94)	1.52 (1.17, 1.98)	1.69 (1.23, 2.33)	1.15	0.002
Basic model + any functional impairment[e]	1	1.25 (0.97, 1.60)	1.47 (1.13, 1.92)	1.47 (1.12, 1.92)	1.67 (1.21, 2.31)	1.14	0.003
Basic model + chronic conditions[f]	1	1.25 (0.98, 1.60)	1.58 (1.21, 2.06)	1.61 (1.24, 2.09)	1.96 (1.44, 2.67)	1.21	<0.001
Basic model + tests of cognitive function[g]	1	1.40 (1.14, 1.73)	1.46 (1.10, 1.94)	1.58 (1.14, 2.20)	1.77 (1.26, 2.48)	1.18	<0.001
Basic model + circulatory disease and risk factors[h]	1	1.32 (1.03, 1.69)	1.67 (1.28, 2.17)	1.75 (1.35, 2.27)	2.07 (1.35, 2.27)	1.21	<0.001
Basic model + all diagnoses and conditions	1	1.28 (1.00, 1.64)	1.61 (1.23, 2.09)	1.66 (1.27, 2.16)	1.92 (1.38, 2.65)	1.18	<0.001
All covariates without cognitive function	1	1.15 (0.89, 1.47)	1.28 (0.97, 1.69)	1.22 (0.93, 1.62)	1.22 (0.86, 1.73)	1.06	0.41
All covariates	1	1.10 (0.85, 1.42)	1.23 (0.93, 1.63)	1.15 (0.88, 1.52)	1.15 (0.81, 1.63)	1.04	0.64

[a]Basic model is adjusted for age and sex; [b]Socioeconomic position comprises occupational social class according to the National Statistics Socio-economic Classification (NS-SEC) and total wealth (excluding debt and regular pension payments); [c]Self-reported use of antidepressants in wave 0 comprising of selective serotonin reuptake inhibitor or tricyclic antidepressants; [d]Health behaviours comprise smoking status, alcohol intake (per year) and physical activity; [e]Functional impairments are any ADL or IADL; [f]Chronic conditions were COPD, asthma, diabetes (types 1 and 2) and arthritis; [g]Tests of cognitive function were on: memory and executive function; [h]Circulatory disease and risk factors comprise of hypertension, previous heart attack, stroke, angina, and heart conditions.

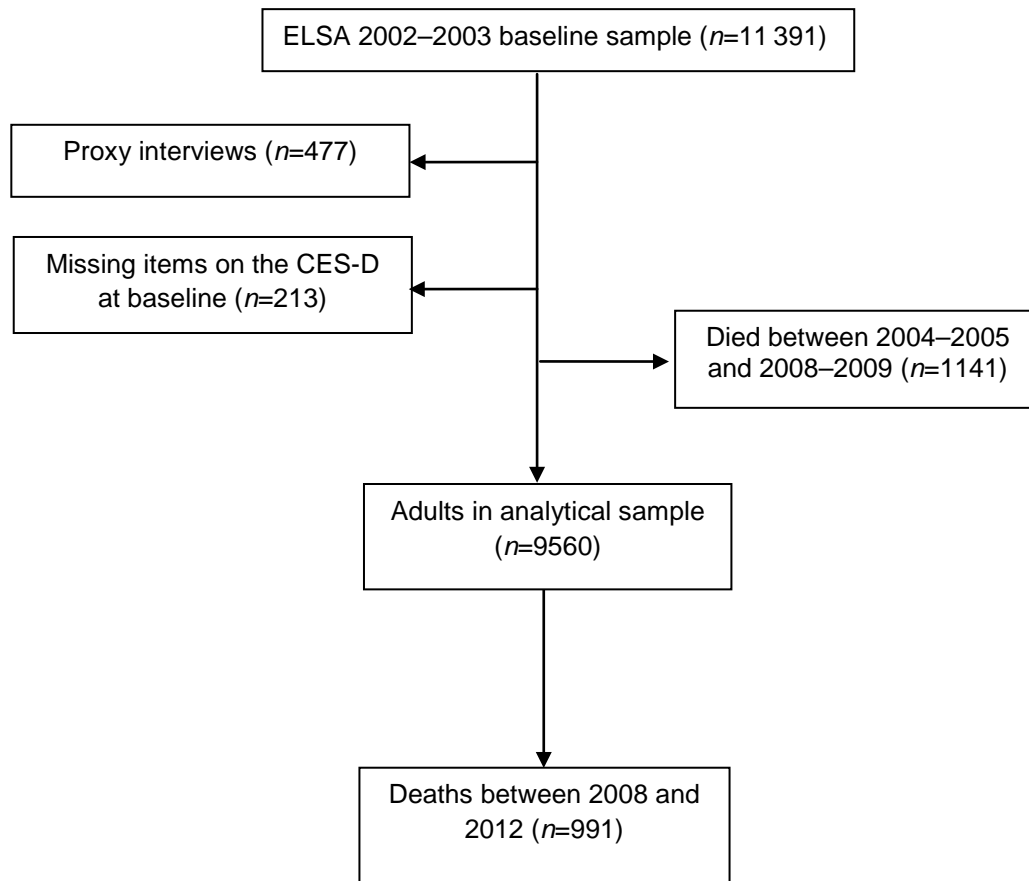**Figure DS1** Study participant flow through four waves of data collection and mortality ascertainment in the ELSA.
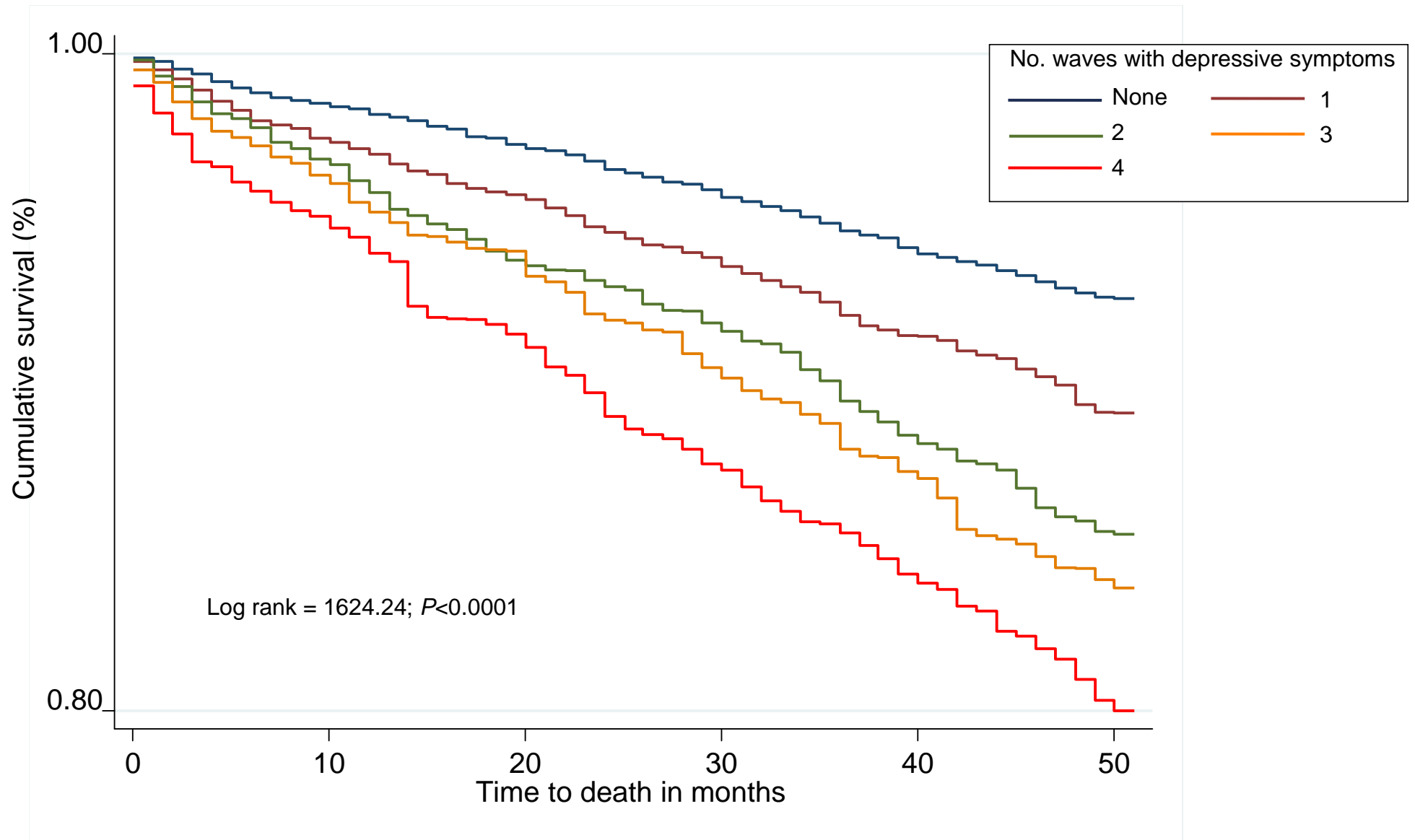

ELSA 2002–2003 baseline sample (*n*=11 391)

Proxy interviews (*n*=477)

Missing items on the CES-D at baseline (*n*=213)

Died between 2004–2005 and 2008–2009 (*n*=1141)

Adults in analytical sample (*n*=9560)

Deaths between 2008 and 2012 (*n*=991)

Figure DS2 Kaplan–Meier survival curve for all-cause mortality according to the number of waves with depressive symptoms ($n = 9560$)

Log rank = 1624.24; *P*<0.0001

Description of the assessment of cognitive function

Cognitive function was assessed using a battery of tests. For the purposes of the present analyses, we selected four measures comprising three cognitive domains: memory, processing speed, and executive function. Memory was measured using the word-list learning test in which ten words were presented orally to study participants who were then asked to recall as many as possible immediately after the reading, and then again after an approximately five minute delay during which they completed other survey questions. We computed an overall memory score using both the immediate and delayed recall. Processing speed was measured using a letter cancellation test. The participant was handed a page of randomly generated letters of the alphabet set out in rows and columns with the request that they cross out as many of the target letters ('P' and 'W') as possible within one minute. Executive function was ascertained using a word finding task (semantic verbal fluency), a test of how quickly participants can name as many different animals as possible in one minute. All scores are normally distributed with no evidence of floor and ceiling effects.