

THE LANCET

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

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Webtable 1: Characteristics of study participants at recruitment, by smoking status reported at recruitment*

NA: not applicable. Entries are % [number] of women, or mean (SD)

	Never smoker at recruitment n=619,774	Ex-smoker at recruitment n=328,417	Current smoker at recruitment, by cigarettes smoked per day			
			<10 n=58,957	10-19 n=116,122	≥20 n=57,382	All amounts n=232,461
Characteristics at recruitment:						
Age, years	56.2 (4.7)	56.0 (4.6)	55.6 (4.5)	55.3 (4.3)	54.7 (4.1)	55.2 (4.3)
Lowest socio-economic quintile (%)	14.7 [90,358]	18.2 [59,338]	24.6 [14,410]	31.9 [36,854]	35.6 [20,273]	31.0 [71,537]
Number of children	2.1 (1.2)	2.1 (1.2)	2.1 (1.3)	2.3 (1.3)	2.3 (1.4)	2.2 (1.3)
Ever used oral contraceptives (%)	56.1 [345,036]	64.5 [209,931]	63.6 [36,920]	64.4 [73,613]	67.5 [38,233]	65.0 [148,766]
Ever used menopausal hormone therapy (%)	46.9 [287,889]	55.1 [179,025]	52.9 [30,692]	53.6 [61,336]	57.8 [32,706]	54.5 [124,734]
Body mass index, kg/m ²	26.1 (4.6)	26.6 (4.7)	25.2 (4.2)	25.3 (4.3)	26.1 (4.8)	25.5 (4.4)
Any strenuous exercise (%)	55.7 [335,063]	54.5 [173,680]	49.2 [27,460]	40.1 [43,878]	34.6 [18,855]	41.0 [90,193]
More than 14 units of alcohol per week (%)	3.3 [20,305]	7.6 [24,811]	5.5 [3,201]	5.2 [5,963]	10.9 [6,174]	6.7 [15,338]
Currently treated for depression (%)	6.7 [41,366]	8.1 [26,646]	10.2 [6,030]	11.9 [13,817]	17.0 [9,764]	12.8 [29,611]
Follow-up from recruitment:						
Woman-years	11.9 (1.6)	11.8 (1.7)	11.7 (1.9)	11.5 (2.1)	11.3 (2.3)	11.5 (2.1)
Number of deaths	25,030	16,858	4,513	12,282	7,806	24,601
Percentage of current smokers when resurveyed:						
3.3 years after recruitment	<0.1 [223/424,277]	2.2 [4,756/217,248]	65.2 [19,417/29,773]	79.4 [44,401/55,953]	83.6 [23,229/27,795]	76.7 [87,047/113,521]
7.8 years after recruitment	<0.1 [124/343,647]	1.7 [3,017/174,709]	42.5 [9,926/23,370]	59.2 [24,454/41,320]	66.3 [13,636/20,566]	56.3 [48,016/85,256]
Measurements in a random sample 9 years after recruitment:						
Total cholesterol, mmol/L ‡	5.74 (1.11)	5.72 (1.12)	5.75 (1.11)	5.77 (1.19)	5.60 (1.10)	5.72 (1.13)
HDL cholesterol, mmol/L ‡	1.59 (0.40)	1.59 (0.41)	1.58 (0.39)	1.47 (0.40)	1.43 (0.42)	1.59 (0.41)
Apolipoprotein A1, g/L ‡	1.68 (0.27)	1.70 (0.27)	1.69 (0.27)	1.63 (0.27)	1.61 (0.30)	1.65 (0.28)
Apolipoprotein B, g/L ‡	1.06 (0.25)	1.06 (0.25)	1.07 (0.23)	1.10 (0.27)	1.09 (0.26)	1.09 (0.25)
Systolic blood pressure, mmHg †	134.6 (16.2)	135.1 (16.8)	129.9 (14.8)	134.1 (18.2)	133.5 (17.0)	132.6 (17.0)
Diastolic blood pressure, mmHg †	78.1 (9.3)	78.3 (9.9)	75.5 (8.6)	78.6 (9.9)	80.4 (11.0)	78.0 (9.9)
Body mass index, kg/m ² ‡	26.4 (4.5)	27.5 (5.0)	26.1 (3.9)	26.6 (4.4)	27.7 (5.4)	26.7 (4.5)

* Numbers do not always sum to totals due to missing values

‡ 9256 samples collected in 2006, 2007 & 2009; mean 9.0 (SD 1.4) years after recruitment

† 3656 women measured in 2007 & 2009; mean 9.4 (SD 1.4) years after recruitment

Web table 2: Characteristics of study participants, by age at stopping smoking reported at the 3-year postal resurvey*

NA: not applicable. Entries are % [number] of women, or mean (SD)

	Never smoker at the 3 year resurvey n=395,400	Current smoker at the 3 year resurvey n=84,735	Ex-smoker at recruitment and the 3 year resurvey, by age at stopping smoking (years)				
			<25 (mean 22) n=21,372	25-34 (mean 29) n=59,208	35-44 (mean 39) n=55,086	45-54 (mean 49) n=43,255	All ages (mean 36) n=178,921
Characteristics at recruitment:							
Age, years	56.2 (4.7)	55.1 (4.3)	54.0 (4.0)	55.0 (4.3)	55.9 (4.5)	57.0 (4.4)	55.7 (4.4)
Lowest socio-economic quintile (%)	16.9 [66,131]	34.0 [28,649]	16.2 [3,438]	17.3 [10,149]	21.2 [11,616]	24.7 [10,618]	20.2 [35,821]
Number of children	2.1 (1.2)	2.2 (1.3)	2.1 (1.1)	2.0 (1.1)	2.0 (1.2)	2.1 (1.2)	2.0 (1.2)
Ever used oral contraceptives (%)	57.1 [224,237]	67.8 [56,916]	70.5 [14,992]	69.1 [40,688]	66.5 [36,433]	63.5 [27,244]	67.1 [119,357]
Ever used menopausal hormone therapy (%)	47.4 [185,822]	56.1 [47,045]	52.4 [11,105]	54.5 [32,025]	58.0 [31,651]	59.1 [25,308]	56.4 [100,089]
Body mass index, kg/m ²	25.9 (4.5)	25.3 (4.3)	25.9 (4.6)	26.0 (4.5)	26.6 (4.7)	27.0 (4.7)	26.4 (4.7)
Any strenuous exercise (%)	58.8 [227,131]	44.3 [36,069]	63.6 [13,342]	61.8 [35,929]	57.9 [31,250]	53.1 [22,399]	58.7 [102,920]
More than 14 units of alcohol per week (%)	3.3 [12,912]	7.9 [6,620]	6.4 [1,365]	8.2 [4,840]	9.1 [4,992]	8.6 [3,683]	8.2 [16,307]
Currently treated for depression (%)	6.1 [24,084]	11.9 [10,061]	6.4 [1,358]	6.5 [3,838]	7.3 [4,039]	8.7 [3,761]	7.3 [12,996]
Follow-up from the 3 year resurvey:							
Woman-years	8.8 (1.6)	8.5 (1.9)	8.7 (1.6)	8.7 (1.6)	8.7 (1.7)	8.6 (1.8)	8.7 (1.7)
Number of deaths	11,594	6,759	481	1,523	1,814	2,095	5,913
Measurements in a random sample 9 years after recruitment:							
Total cholesterol, mmol/L ‡	5.74 (1.11)	5.72 (1.14)	5.71 (1.09)	5.80 (1.10)	5.65 (1.10)	5.72 (1.14)	5.73 (1.11)
HDL cholesterol, mmol/L ‡	1.59 (0.40)	1.48 (0.39)	1.59 (0.38)	1.64 (0.42)	1.60 (0.41)	1.55 (0.38)	1.60 (0.41)
Apolipoprotein A1, g/L ‡	1.68 (0.27)	1.64 (0.27)	1.68 (0.25)	1.72 (0.28)	1.70 (0.26)	1.67 (0.27)	1.70 (0.27)
Apolipoprotein B, g/L ‡	1.06 (0.25)	1.09 (0.26)	1.05 (0.24)	1.06 (0.25)	1.05 (0.25)	1.07 (0.25)	1.06 (0.25)
Systolic blood pressure, mmHg ‡	134.8 (16.5)	133.9 (16.7)	132.2 (16.7)	134.2 (17.5)	135.8 (17.0)	135.3 (15.5)	134.7 (16.9)
Diastolic blood pressure, mmHg ‡	78.1 (9.4)	78.7 (10.0)	77.7 (10.0)	78.3 (9.4)	79.0 (9.9)	77.1 (10.5)	78.2 (9.8)
Body mass index, kg/m ²	26.4 (4.5)	26.4 (4.5)	26.0 (3.9)	27.2 (5.2)	27.5 (5.0)	28.4 (5.7)	27.4 (5.1)

* Women who completed the first two study questionnaires and reported the same smoking status (never, ex, current) on each. Numbers do not always sum to totals due to missing values

‡ 7529 samples collected in 2006, 2007 & 2009; mean 5.7 (SD 1.7) years after the 3-year resurvey

‡ 1503 women measured in 2007 & 2009; mean 6.0 (SD 1.8) years after the 3-year resurvey

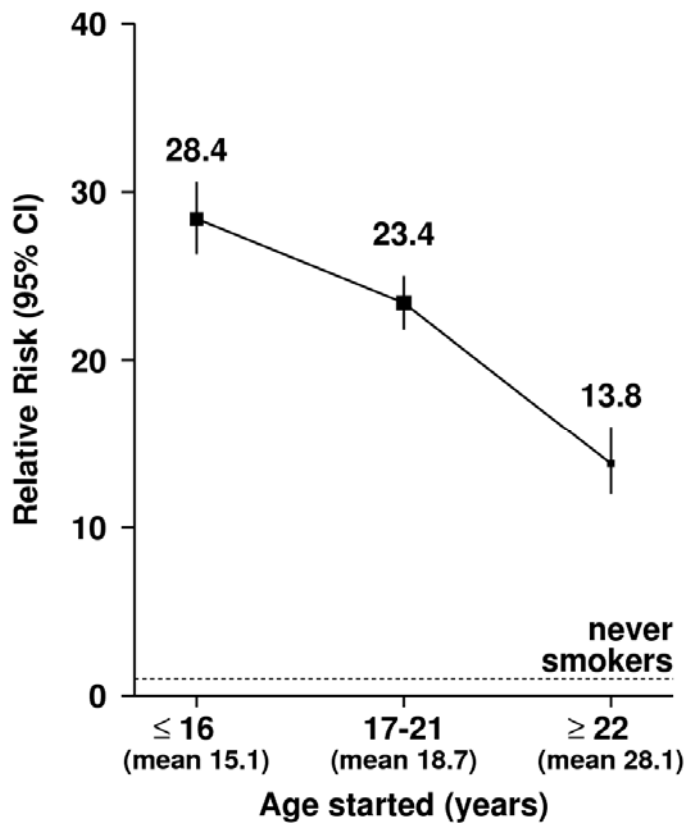
Web table 3: All-cause mortality: 12-year relative risk (95% confidence interval) for current and ex-smokers versus never-smokers, showing the effect of adjustment for additional variables*

	Number of deaths	Adjusted for:					
		age and region only	+ quintile of socioeconomic status	+ alcohol	+ body mass index	+ physical activity	+ OC use, height, menopausal status, and HRT use
Smoking status reported at baseline:							
Never smoked	25,030	1.00 (reference)	1.00 (reference)	1.00 (reference)	1.00 (reference)	1.00 (reference)	1.00 (reference)
Current smoker	24,601	3.06 (3.01-3.12)	2.90 (2.84-2.95)	2.84 (2.78-2.89)	2.83 (2.78-2.89)	2.76 (2.71-2.81)	2.76 (2.71-2.81)
<10 cigarettes/day	4,513	2.08 (2.01-2.14)	2.01 (1.95-2.07)	2.00 (1.94-2.06)	2.00 (1.94-2.07)	1.97 (1.91-2.04)	1.98 (1.91-2.04)
10-19 cigarettes/day	12,282	3.06 (3.00-3.13)	2.90 (2.84-2.97)	2.85 (2.79-2.91)	2.85 (2.78-2.91)	2.77 (2.71-2.83)	2.77 (2.71-2.83)
20+ cigarettes/day	7,806	4.29 (4.18-4.40)	4.03 (3.92-4.14)	3.91 (3.80-4.01)	3.86 (3.76-3.96)	3.73 (3.63-3.83)	3.74 (3.64-3.85)
Smoking status reported at 3-year resurvey:							
Never smoked	11,594	1.00 (reference)	1.00 (reference)	1.00 (reference)	1.00 (reference)	1.00 (reference)	1.00 (reference)
Ex-smoker, stopped aged <25 years	481	0.98 (0.89-1.07)	0.98 (0.89-1.07)	1.00 (0.92-1.10)	1.00 (0.91-1.10)	1.01 (0.92-1.11)	1.01 (0.92-1.11)
Ex-smoker, stopped aged 25-34 years	1,523	1.02 (0.96-1.07)	1.02 (0.96-1.07)	1.05 (0.99-1.11)	1.04 (0.99-1.10)	1.05 (1.00-1.11)	1.05 (1.00-1.11)
Ex-smoker, stopped aged 35-44 years	1,814	1.18 (1.12-1.24)	1.17 (1.11-1.23)	1.20 (1.14-1.26)	1.19 (1.13-1.25)	1.19 (1.13-1.25)	1.20 (1.14-1.26)
Ex-smoker, stopped aged 45-54 years	2,095	1.58 (1.51-1.66)	1.54 (1.47-1.62)	1.57 (1.50-1.65)	1.55 (1.48-1.63)	1.55 (1.48-1.62)	1.56 (1.49-1.64)

* HRT: Hormone therapy for the menopause; OC: oral contraceptives.

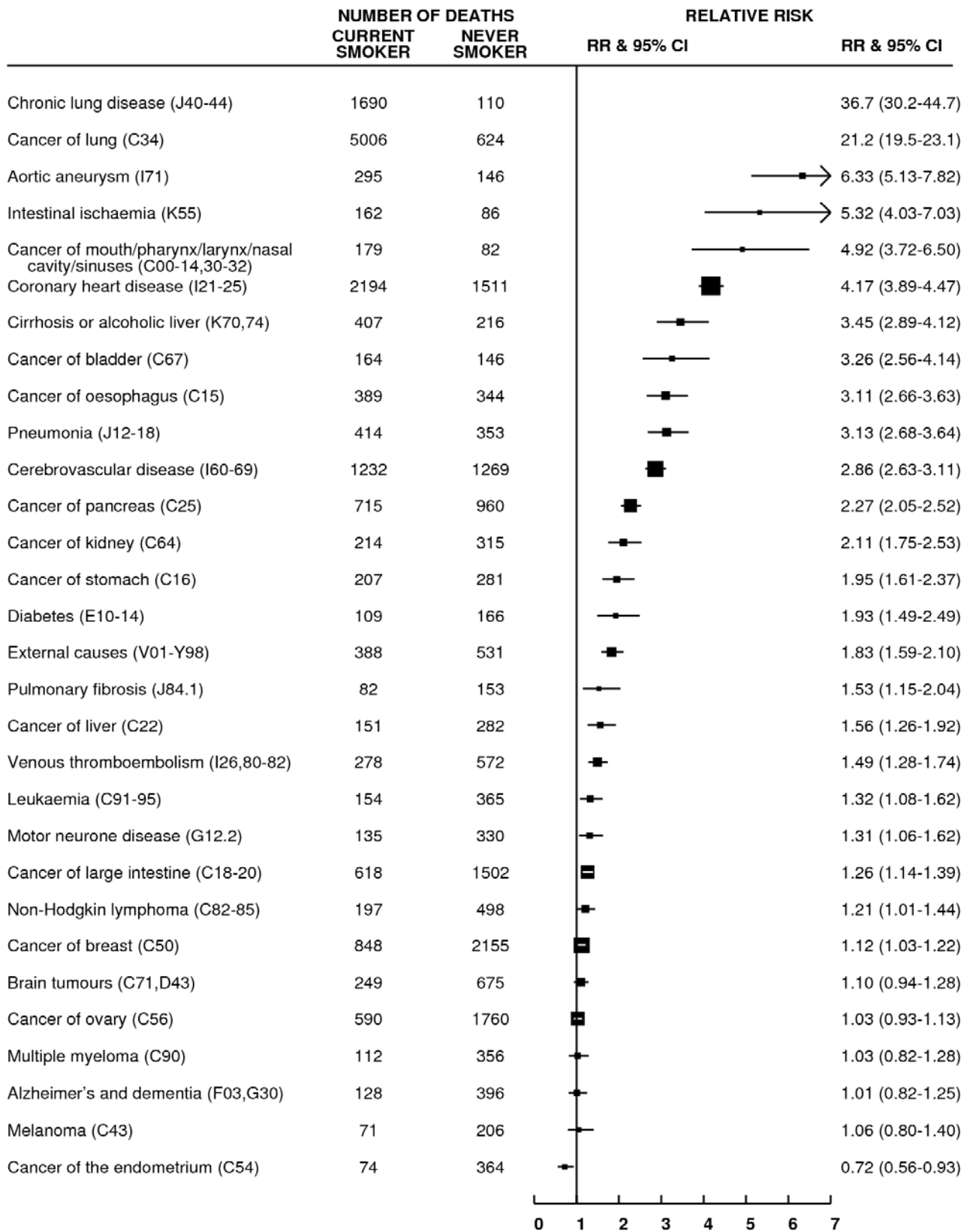
Web figure 1. Cancer of the lung: 9-year relative risk for current smokers versus never-smokers, by the age at which women first began smoking regularly (as reported at the 3-year postal resurvey)

For each category, the area of the square is inversely proportional to the variance of the category-specific log risk (which also determines the CI)



Web figure 2. Thirty most common specific causes of death: 12-year relative risk for current smokers versus never-smokers, excluding the first three years of follow-up

The area of each square is inversely proportional to the variance of the log relative risk (vs never-smokers), which also determines the CI



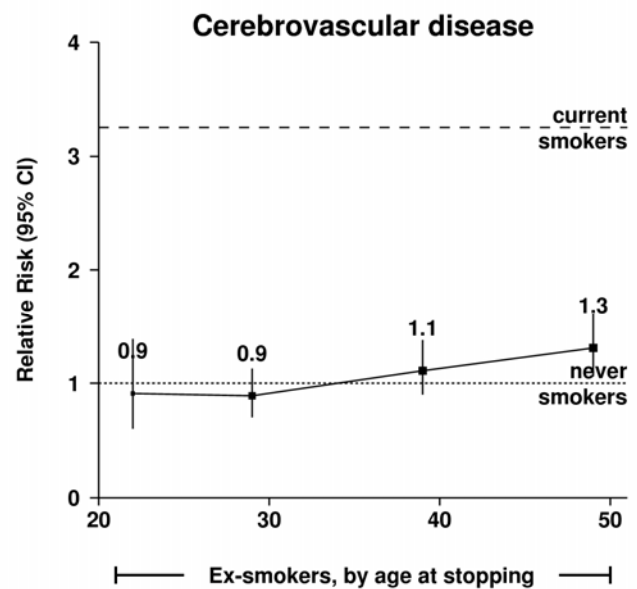
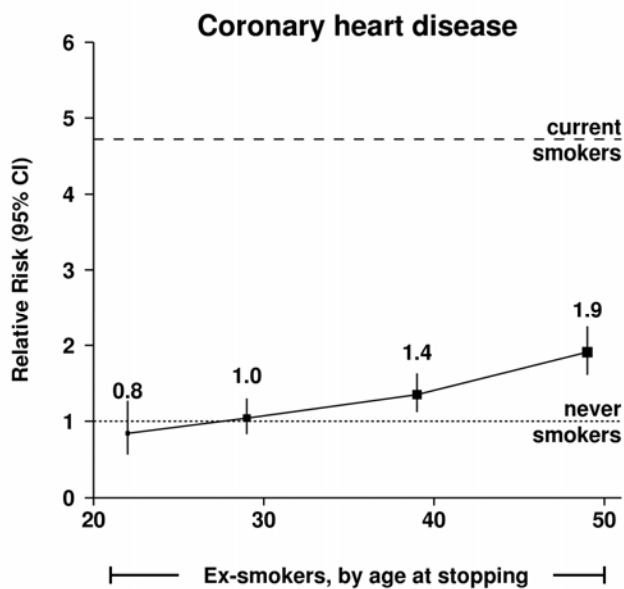
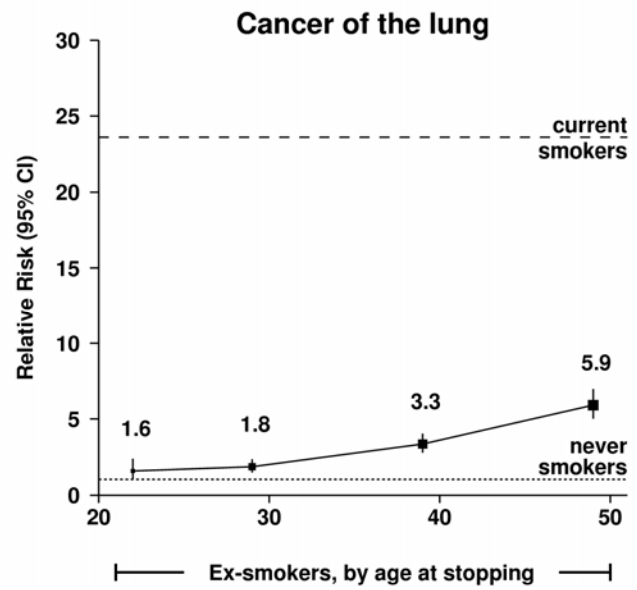
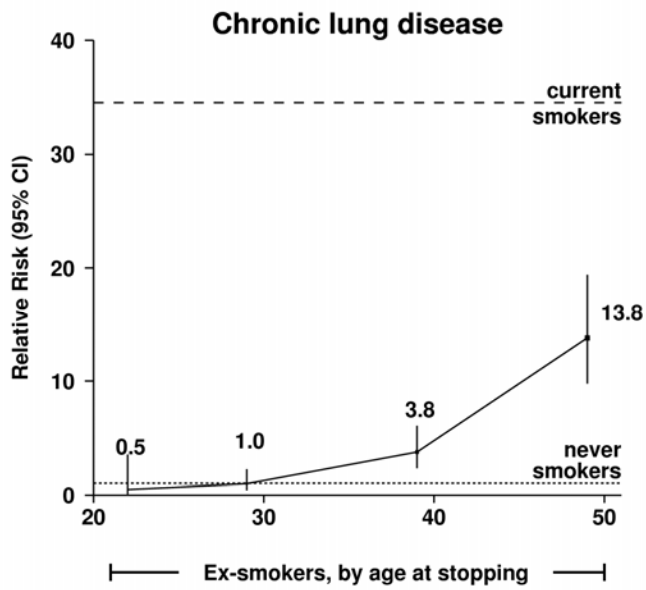
Web table 4: All-cause mortality and the thirty most common specific causes of death: 12-year relative risk (RR) for current smokers by amount smoked versus never-smokers
 For each category, the SE(log risk) is for the category-specific log risk, allowing valid comparisons to be made between any two categories¹

	Never smoker at recruitment			Current smoker at recruitment, by cigarettes smoked per day									p (trend) among current smokers
				<10			10-19			≥20			
	Deaths	RR	SE(log risk)*	Deaths	RR	SE(log risk)*	Deaths	RR	SE(log risk)*	Deaths	RR	SE(log risk)*	
All causes	25,030	1.0	0.007	4,513	1.98	0.015	12,282	2.77	0.009	7,806	3.74	0.012	<0.0001
Chronic lung disease (J40-44)	121	1.0	0.093	288	22.71	0.059	830	32.87	0.035	671	60.49	0.041	<0.0001
Cancer of lung (C34)	698	1.0	0.039	720	10.83	0.037	2,820	22.03	0.019	2,093	36.00	0.023	<0.0001
Aortic aneurysm (I71)	164	1.0	0.085	56	3.87	0.133	186	7.18	0.074	88	8.09	0.110	<0.0001
Intestinal ischaemia (K55)	91	1.0	0.114	33	3.93	0.174	87	5.32	0.108	63	8.42	0.131	<0.0001
Cancer of mouth, pharynx, larynx, nasal cavity or sinuses (C00-14,30-32)	91	1.0	0.114	29	2.85	0.185	101	4.91	0.100	74	7.20	0.122	<0.0001
Coronary heart disease (I21-25)	1,732	1.0	0.026	487	3.19	0.046	1,389	4.55	0.027	850	5.92	0.035	<0.0001
Cirrhosis or alcoholic liver (K70,74)	256	1.0	0.069	86	2.73	0.108	226	3.34	0.067	166	3.97	0.081	0.0004
Cancer of bladder (C67)	156	1.0	0.091	38	2.68	0.162	100	3.66	0.100	40	3.24	0.161	0.6
Cancer of oesophagus (C15)	353	1.0	0.057	81	2.17	0.111	216	2.99	0.068	153	4.62	0.084	<0.0001
Pneumonia (J12-18)	408	1.0	0.056	81	2.06	0.111	245	3.06	0.064	168	4.42	0.080	<0.0001
Cerebrovascular disease (I60-69)	1,458	1.0	0.030	301	2.29	0.058	796	3.20	0.036	431	3.81	0.050	<0.0001
Cancer of pancreas (C25)	1,082	1.0	0.035	179	1.89	0.075	415	2.37	0.049	215	2.66	0.070	0.003
Cancer of kidney (C64)	360	1.0	0.061	43	1.42	0.152	132	2.28	0.087	71	2.56	0.121	0.004
Cancer of stomach (C16)	329	1.0	0.064	54	1.75	0.136	129	2.04	0.088	64	2.20	0.127	0.2
Diabetes (E10-14)	192	1.0	0.082	21	1.35	0.218	63	1.86	0.126	38	2.17	0.165	0.08
External causes (V01-Y98)	677	1.0	0.045	101	1.47	0.099	224	1.65	0.067	162	2.34	0.081	0.0002
Pulmonary fibrosis (J84.1)	162	1.0	0.092	23	1.56	0.208	46	1.58	0.148	19	1.37	0.233	0.6
Cancer of liver (C22)	319	1.0	0.066	41	1.42	0.156	88	1.56	0.107	42	1.54	0.157	0.7
Venous thromboembolism (I26,80-82)	669	1.0	0.045	76	1.34	0.115	154	1.39	0.081	97	1.77	0.103	0.03
Leukaemia (C91-95)	416	1.0	0.058	50	1.42	0.141	87	1.32	0.107	39	1.28	0.162	0.7
Motor neurone disease (G12.2)	374	1.0	0.062	38	1.19	0.162	71	1.19	0.119	45	1.67	0.152	0.1
Cancer of large intestine (C18-20)	1,671	1.0	0.029	175	1.20	0.076	333	1.22	0.055	177	1.39	0.076	0.2
Non-Hodgkin lymphoma (C82-85)	561	1.0	0.050	44	0.90	0.151	118	1.27	0.092	52	1.23	0.140	0.3
Cancer of breast (C50)	2,295	1.0	0.025	204	0.97	0.070	462	1.15	0.047	246	1.25	0.065	0.006
Brain tumours (C71,D43)	787	1.0	0.043	61	0.89	0.128	153	1.17	0.081	70	1.13	0.121	0.3
Cancer of ovary (C56)	1,953	1.0	0.027	169	0.99	0.077	328	1.04	0.055	166	1.12	0.079	0.2
Multiple myeloma (C90)	385	1.0	0.061	30	0.95	0.182	58	0.99	0.131	32	1.17	0.179	0.5
Alzheimer's and dementia (F03,G30)	400	1.0	0.062	53	1.43	0.137	62	0.94	0.127	14	0.54	0.269	0.001
Melanoma (C43)	220	1.0	0.080	22	1.11	0.213	39	1.07	0.160	12	0.69	0.291	0.3
Cancer of endometrium (C54)	393	1.0	0.060	20	0.67	0.224	42	0.75	0.154	22	0.82	0.215	0.6

Web table 5: All-cause mortality and the four main causes of death among current smokers: Death rates per 100,000 women and 12-year relative risk (RR) for current smokers versus never-smokers by attained age.

	Never-smoker at recruitment		Current smoker at recruitment		Rate difference (/100,000)	RR (95% CI) current versus never smoker
	Number of deaths	Death rate (/100,000)	Number of deaths	Death rate (/100,000)		
All causes						
Age <60	3,777	71.0	4,779	221.1	150.1	2.60 (2.49-2.72)
Age 60-69	13,740	187.1	14,544	549.0	361.9	2.81 (2.74-2.88)
Age 70+	7,513	257.5	5,278	683.1	425.6	2.83 (2.73-2.94)
Cancer of the lung						
Age <60	103	1.9	1,015	47.0	45.1	19.9 (16.1-24.4)
Age 60-69	412	5.6	3,450	130.2	124.6	20.8 (18.7-23.1)
Age 70+	183	6.3	1,168	151.2	144.9	24.4 (20.8-28.7)
Chronic lung disease						
Age <60	7	0.1	163	7.5	7.4	38.3 (17.8-82.4)
Age 60-69	57	0.8	1,049	39.6	38.8	36.9 (28.1-48.3)
Age 70+	57	2.0	577	74.7	72.7	34.7 (26.2-45.8)
Coronary heart disease						
Age <60	180	3.4	579	26.8	23.4	6.66 (5.60-7.93)
Age 60-69	906	12.3	1,615	61.0	48.7	4.79 (4.40-5.22)
Age 70+	646	22.1	532	68.9	46.8	3.30 (2.92-3.73)
Cerebrovascular disease						
Age <60	192	3.6	355	16.4	12.8	3.90 (3.24-4.70)
Age 60-69	671	9.1	805	30.4	21.3	3.28 (2.94-3.65)
Age 70+	595	20.4	368	50.0	29.6	2.43 (2.11-2.79)

Web figure 3. Chronic lung disease, cancer of the lung, coronary heart disease, and cerebrovascular disease: 9-year relative risk for ex-smokers by age at stopping (as reported at the 3-year postal resurvey) versus never-smokers
 The area of each square is inversely proportional to the variance of the log relative risk (vs never-smokers), which also determines the CI



References

1. **Prospective Studies Collaboration. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. *The Lancet*. 2009; 373(9669): 1083-96.**