

Supplementary Table 1

	Never Smoker	Current smoker	Ex-smoker at baseline	Ex: < 1 year	Ex : 1-2 years	Ex: 2-3 years	Ex: 3-5 years	Ex > 5 years
All cancers								
Events	463	1047	219	155	77	61	82	79
Crude Incidence* (95% CI)	5.15 (4.71 – 4.65)	8.06 (7.58 – 8.56)	6.87 (6.02 – 7.84)	10.18 (8.70 – 11.92)	7.42 (5.94 – 9.28)	7.62 (5.93 – 9.79)	7.08 (5.70 – 8.79)	6.08 (4.88 – 7.58)
Adjusted+ IRR (95% CI)	1.00	1.28 (1.10,1.49)	1.09 (0.92, 1.28)	1.66 (1.37,2.02)	1.24 (0.97,1.60)	1.27 (0.97,1.68)	1.20 (0.94,1.52)	1.01 (0.80,1.29)
Lung cancers								
Events	7	163	26	27	11	9	16	12
Crude Incidence* (95% CI)	0.08 (0.04 – 1.16)	1.25 (1.08 – 1.46)	0.82 (0.56 – 1.20)	1.77 (1.22 – 2.59)	1.06 (0.59 – 1.91)	1.12 (0.58 – 2.16)	1.38 (0.85 – 2.26)	0.92 (0.52 – 1.63)
Adjusted+ IRR (95% CI)	1.00	13.13 (5.83,29.55)	7.79 (3.37,17.99)	19.08 (8.10,44.95)	11.37 (4.32,29.92)	11.66 (4.29,31.68)	13.85 (5.62,34.15)	8.69 (3.40,22.18)
Smoking related cancer excluding lung								
Events	104	296	78	51	22	14	28	29
Crude Incidence* (95% CI)	1.16 (0.96 – 1.40)	2.28 (2.03 – 2.55)	2.45 (1.96 – 3.05)	3.35 (2.55 – 4.41)	2.12 (1.40 – 3.22)	1.75 (1.04 – 2.95)	2.42 (1.67 – 3.50)	2.23 (1.55 – 3.21)
Adjusted+ IRR (95% CI)	1.00	1.32 (0.97,1.78)	1.58 (1.18, 2.14)	2.06 (1.42,2.99)	1.32 (0.82,2.12)	1.06 (0.60,1.88)	1.43 (0.92,2.22)	1.32 (0.87,2.01)
Smoking unrelated cancers								
Events	352	588	115	77	44	38	38	38
Crude Incidence* (95% CI)	3.92 (3.53 – 4.35)	4.53 (4.17 – 4.91)	3.61 (3.00 – 4.33)	5.06 (4.05 – 6.32)	4.24 (3.16 – 5.70)	4.74 (3.45 – 6.52)	3.28 (2.39 – 4.51)	2.93 (2.13 – 4.02)
Adjusted+ IRR (95% CI)	1.00	1.09 (0.91,1.32)	0.80 (0.65 – 1.00)	1.20 (0.93,1.55)	1.05 (0.76,1.45)	1.19 (0.84,1.68)	0.86 (0.61,1.21)	0.75 (0.54,1.06)

*per 1000 person-years of follow-up; CI confidence interval. + adjusted for baseline factors (gender, HIV transmission group, ethnicity, calendar year of baseline) and time varying factors (age [<40, 40-49, >50 year], body mass index (BMI); <18, 18-26, 27-30, >30 and unknown]), current CD4 cell count [<100, 100-199,200-299, 300-399, 400-499, ≥500, unknown), current HIV-Viral load (HIV-VL; <50, 50-1000, >1000, unknown copies/ml]), age, body mass index (BMI), current CD4 cell count, current HIV-Viral load (HIV-VL), hepatitis B (positive HBsAG surface antigen test or presence of detectable HBV DNA) and C virus co-infection (positive HCV surface antibody test), AIDS-diagnosis (excluding cancers), cardiovascular disease (CVD, including myocardial infarction, stroke and invasive cardiovascular procedures), diabetes (diagnosis, receiving diabetes medication), cART use (using ≥1 protease inhibitor [PI] or ≥1 non-nucleoside reverse transcriptase inhibitor [NNRTI]), and duration of smoking after enrolment in the D:A:D Study (years).