ESM Table 4 Risk of developing diabetes associated with total and differential white-cell type counts

	Adjustment model	Lower tertile	Middle tertile	Upper tertile	p for trend
White-cell count					
Model 1	Demographics (age, sex, ethnicity, and clinic)	1.00	1.70 (1.06, 2.74)	1.80 (1.10, 2.92)	0.020
Model 2	Demographics + family history + fasting glucose	1.00	1.61 (0.96, 2.70)	1.52 (0.89, 2.59)	0.141
Model 3	Demographics + family history + fasting glucose + smoking	1.00	1.44 (0.86, 2.44)	1.15 (0.66, 2.02)	0.683
Model 4	Model 3 + BMI	1.00	1.34 (0.79, 2.28)	1.01 (0.57, 1.79)	0.950
Model 5	Model 3 + 2-h glucose	1.00	1.19 (0.69, 2.06)	0.80 (0.44, 1.44)	0.394
Model 6	Model 3 + $\log_e$ fasting insulin	1.00	1.36 (0.80, 2.32)	0.93 (0.52, 1.66)	0.728
Model 7	Model 3 + $\log_e$ HOMA-IR	1.00	1.36 (0.80, 2.32)	0.93 (0.52, 1.66)	0.726
Model 8	Model 3 + $\log_e$ S_I	1.00	1.08 (0.62, 1.89)	0.77 (0.42, 1.43)	0.363
Model 9	Model 3 + $\log_e$ AIR	1.00	1.40 (0.81, 2.42)	1.30 (0.73, 2.31)	0.411
Model 10	Model 3 + $\log_e$ S_I + $\log_e$ AIR	1.00	1.00 (0.56, 1.77)	0.77 (0.42, 1.44)	0.386
Model 11	Model 3 + $\log_e$ hsCRP	1.00	1.34 (0.78, 2.29)	0.96 (0.53, 1.71)	0.787
Neutrophil count					
Model 1	Demographics (age, sex, ethnicity, and clinic)	1.00	1.42 (0.87, 2.30)	1.67 (1.04, 2.71)	0.037
Model 2	Demographics + family history + fasting glucose	1.00	1.30 (0.76, 2.21)	1.51 (0.89, 2.56)	0.127
Model 3	Demographics + family history + fasting glucose + smoking	1.00	1.18 (0.69, 2.02)	1.17 (0.67, 2.03)	0.607
Model 4	Model 3 + BMI	1.00	1.11 (0.64, 1.91)	1.05 (0.60, 1.85)	0.885
Model 5	Model 3 + 2-h glucose	1.00	1.05 (0.60, 1.85)	0.89 (0.50, 1.60)	0.664
Model 6	Model 3 + $\log_e$ fasting insulin	1.00	1.12 (0.65, 1.94)	1.01 (0.58, 1.78)	0.997
Model 7	Model 3 + $\log_e$ HOMA-IR	1.00	1.12 (0.65, 1.94)	1.01 (0.58, 1.78)	0.999
Model 8	Model 3 + $\log_e$ S_I	1.00	0.98 (0.55, 1.73)	0.91 (0.50, 1.65)	0.744
Model 9	Model 3 + $\log_e$ AIR	1.00	1.16 (0.66, 2.02)	1.31 (0.74, 2.32)	0.357
Model 10	Model 3 + $\log_e$ S_I + $\log_e$ AIR	1.00	0.90 (0.50, 1.63)	0.87 (0.47, 1.60)	0.664

Model 11	Model 3 + $\log_e$ hsCRP	1.00	1.15 (0.66, 1.98)	1.04 (0.58, 1.84)	0.941
Lymphocyte count					
Model 1	Demographics (age, sex, ethnicity, and clinic)	1.00	1.73 (1.06, 2.83)	2.30 (1.41, 3.76)	<0.001
Model 2	Demographics + family history + fasting glucose	1.00	1.71 (1.00, 2.93)	2.20 (1.29, 3.76)	0.004
Model 3	Demographics + family history + fasting glucose + smoking	1.00	1.54 (0.89, 2.66)	1.96 (1.13, 3.37)	0.017
Model 4	Model 3 + BMI	1.00	1.59 (0.92, 2.75)	1.88 (1.08, 3.25)	0.028
Model 5	Model 3 + 2-h glucose	1.00	1.44 (0.81, 2.56)	1.64 (0.92, 2.91)	0.098
Model 6	Model 3 + $\log_e$ fasting insulin	1.00	1.54 (0.88, 2.67)	1.69 (0.97, 2.96)	0.074
Model 7	Model 3 + $\log_e$ HOMA-IR	1.00	1.54 (0.88, 2.67)	1.69 (0.97, 2.96)	0.074
Model 8	Model 3 + $\log_e S_I$	1.00	1.38 (0.78, 2.45)	1.44 (0.80, 2.58)	0.242
Model 9	Model 3 + $\log_e$ AIR	1.00	1.53 (0.88, 2.69)	2.02 (1.15, 3.56)	0.014
Model 10	Model 3 + $\log_e S_I$ + $\log_e$ AIR	1.00	1.31 (0.73, 2.35)	1.47 (0.81, 2.67)	0.214
Model 11	Model 3 + $\log_e$ hsCRP	1.00	1.62 (0.93, 2.82)	1.89 (1.08, 3.30)	0.028
Monocyte count					
Model 1	Demographics (age, sex, ethnicity, and clinic)	1.00	1.26 (0.79, 2.01)	1.18 (0.73, 1.90)	0.506
Model 2	Demographics + family history + fasting glucose	1.00	1.34 (0.80, 2.23)	1.27 (0.76, 2.12)	0.382
Model 3	Demographics + family history + fasting glucose + smoking	1.00	1.32 (0.79, 2.22)	1.13 (0.67, 1.92)	0.671
Model 4	Model 3 + BMI	1.00	1.28 (0.76, 2.16)	1.08 (0.64, 1.84)	0.800
Model 5	Model 3 + 2-h glucose	1.00	1.27 (0.74, 2.19)	0.96 (0.55, 1.68)	0.836
Model 6	Model 3 + $\log_e$ fasting insulin	1.00	1.24 (0.74, 2.10)	0.98 (0.58, 1.68)	0.910
Model 7	Model 3 + $\log_e$ HOMA-IR	1.00	1.24 (0.74, 2.10)	0.98 (0.58, 1.68)	0.907
Model 8	Model 3 + $\log_e S_I$	1.00	1.04 (0.60, 1.81)	0.94 (0.54, 1.64)	0.825
Model 9	Model 3 + $\log_e$ AIR	1.00	1.27 (0.74, 2.18)	1.18 (0.69, 2.03)	0.560
Model 10	Model 3 + $\log_e S_I$ + $\log_e$ AIR	1.00	1.17 (0.66, 2.06)	1.04 (0.59, 1.82)	0.925
Model 11	Model 3 + $\log_e$ hsCRP	1.00	1.23 (0.73, 2.09)	1.03 (0.61, 1.75)	0.952

Neutrophil-to-lymphocyte ratio					
Model 1	Demographics (age, sex, ethnicity, and clinic)	1.00	1.29 (0.81, 2.03)	0.89 (0.55, 1.45)	0.618
Model 2	Demographics + family history + fasting glucose	1.00	1.21 (0.74, 1.98)	0.85 (0.50, 1.45)	0.540
Model 3	Demographics + family history + fasting glucose + smoking	1.00	1.15 (0.70, 1.89)	0.74 (0.43, 1.27)	0.257
Model 4	Model 3 + BMI	1.00	1.16 (0.70, 1.92)	0.71 (0.41, 1.24)	0.221
Model 5	Model 3 + 2-h glucose	1.00	0.95 (0.56, 1.60)	0.60 (0.34, 1.07)	0.078
Model 6	Model 3 + $\log_e$ fasting insulin	1.00	1.14 (0.69, 1.88)	0.73 (0.42, 1.26)	0.248
Model 7	Model 3 + $\log_e$ HOMA-IR	1.00	1.14 (0.69, 1.88)	0.73 (0.42, 1.26)	0.247
Model 8	Model 3 + $\log_e$ S_I	1.00	1.06 (0.62, 1.82)	0.76 (0.43, 1.35)	0.330
Model 9	Model 3 + $\log_e$ AIR	1.00	1.13 (0.67, 1.90)	0.80 (0.46, 1.40)	0.401
Model 10	Model 3 + $\log_e$ S_I + $\log_e$ AIR	1.00	0.96 (0.55, 1.66)	0.73 (0.40, 1.31)	0.272
Model 11	Model 3 + $\log_e$ hsCRP	1.00	1.05 (0.63, 1.75)	0.67 (0.39, 1.17)	0.149

OR and 95% CI expressed per 1 SD unit increase

Range for total and differential white-cell count tertiles ($\times 10^9$/L): white-cell count lower 2.1 – 4.9, middle 5 – 6.2, and upper tertiles 6.3 – 15.4; neutrophil count lower 0.41 – 2.82, middle 2.83 – 3.80, and upper tertiles 3.81 – 11.5; lymphocyte count lower 0.55 – 1.47, middle 1.48 – 1.92, and upper tertiles 1.93 – 4.18; monocyte count lower 0 – 0.26, middle 0.27 – 0.36, and upper tertiles 0.37 – 1.13. Range for neutrophil-to-lymphocyte ratio tertiles: lower 0.78 – 1.06, middle 1.07 – 1.11, and upper tertiles 1.12 – 1.42.

Family history indicates family history of diabetes; smoking was expressed as $\log_e$ of the number of cigarettes currently smoked per day