Supplementary Table S5. Association between serum cytokine levels and lung cancer in WSU and PLCO studies, after adjusting for potential confounding

Cytokine	Quartile[a]	WSU African Americans (N = 567)		P_{trend}[c]	PLCO European Americans (N = 1127)		P_{trend}[c]
		Cases/ controls	OR (95% CI)[b]		Cases/ controls	OR (95% CI)[b]	
IL1-β	1	40/75	1.00 (reference)		73/97	1.00 (reference)	
	2	66/81	1.53 (0.86–2.72)		155/164	1.22 (0.79–1.88)	
	3	55/82	1.26 (0.70–2.25)		170/177	1.33 (0.86–2.04)	
	4	87/80	1.89 (1.08–3.32)	0.05	134/157	1.12 (0.72–1.74)	0.70
IL-6	1	22/78	1.00 (reference)		96/138	1.00 (reference)	
	2	37/81	1.04 (0.52–2.07)		131/158	1.09 (0.72–1.63)	
	3	82/77	2.94 (1.58–5.50)		139/149	1.13 (0.75–1.70)	
	4	107/82	3.36 (1.81–6.22)	<0.001	166/150	1.51 (1.01–2.24)	0.04
IL-8	1	43/79	1.00 (reference)		102/102	1.00 (reference)	
	2	65/80	1.65 (0.94–2.91)		108/151	.96 (0.63-1.46)	
	3	52/79	1.23 (0.69–2.20)		148/149	1.21 (0.81-1.82)	
	4	88/80	2.19 (1.27–3.79)	0.02	174/153	1.40 (0.95-2.08)	0.04
IL-10	1	36/72	1.00 (reference)		N.D.		
	2	55/77	1.40 (0.77–2.52)				
	3	47/77	1.20 (0.65–2.19)				
	4	98/77	2.30 (1.31–4.03)	0.005			
TNFα	1	41/79	1.00 (reference)		114/131	1.00 (reference)	
	2	41/80	1.05 (0.57–1.93)		123/160	0.91 (0.61–1.35)	
	3	72/79	1.70 (0.97–3.00)		128/154	0.92 (0.62–1.37)	
	4	94/80	2.29 (1.32–3.98)	0.001	167/150	1.28 (0.87–1.89)	0.17

Abbreviations: PLCO, Prostate, Lung, Colorectal, and Ovarian; WSU, Wayne State University; OR, odds ratio; CI, confidence interval; N.D., Not done.

[a]Quartiles were based on serum cytokine levels among controls in the WSU study (25th, 50th, and 75th percentile: IL-1β, 0.9, 3.4, 10.4 pg/mL; IL-6, 3.1, 6.9, 19.6 pg/mL; IL-8, 27.1, 155.5, 1061.3 pg/mL; IL-10, 4.8, 7.1, 10.6 pg/mL; TNFα 6.8, 10.4, 20.5 pg/mL) and PLCO study (IL-1β, 0.4, 0.7, 1.4 pg/mL; TNF-α, 7.4, 9.1, 11.5 pg/mL).

[b]Unconditional multivariate logistic regression was adjusted for age (continuous), gender, smoking pack-years (continuous), smoking status (never, former quit ≥ 15 years, former quit <15 years, current), WSU study adjusted additionally for education and COPD as categorized in Table 1, PLCO study adjusted additionally for year of randomization, number of years in the study, education, history of emphysema/bronchitis, history of heart disease, BMI, and regular use of ibuprofen or aspirin, as categorized in Table 1.

[c]P values were calculated using a two-sided Wald χ2 statistic.