

## SUPPLEMENTARY TABLES

**Supplementary Table 1. Odds ratios and 95% confidence intervals for the association between epigenetic age acceleration (using 3 different measures) and the risk of lung cancer in the CLUE II study, stratified by age and smoking status.**

	OR (95% CI)*	p-value	OR (95% CI)*	p-value
	Age < 65 years		Age ≥ 65 years	
AA_Hannum	0.63 (0.44, 0.90)	0.011	0.90 (0.53, 1.52)	0.69
AA_Horvath	0.62 (0.44, 0.88)	0.007	1.10 (0.69, 1.75)	0.70
AA_Pheno	0.76 (0.58, 1.00)	0.046	1.07 (0.75, 1.52)	0.72
IEAA_Hannum	0.69 (0.48, 1.00)	0.05	0.91 (0.52, 1.59)	0.74
IEAA_Horvath	0.73 (0.52, 1.04)	0.08	1.08 (0.67, 1.74)	0.74
IEAA_Pheno	0.74 (0.55, 0.98)	0.035	1.13 (0.77, 1.67)	0.52
Current smoker**		Former smoker**		
AA_Hannum	0.76 (0.49, 1.20)	0.24	0.69 (0.44, 1.07)	0.09
AA_Horvath	0.68 (0.45, 1.02)	0.06	0.82 (0.54, 1.27)	0.38
AA_Pheno	0.93 (0.68, 1.28)	0.66	0.84 (0.61, 1.16)	0.30
IEAA_Hannum	0.93 (0.58, 1.48)	0.76	0.71 (0.45, 1.12)	0.14
IEAA_Horvath	0.81 (0.53, 1.22)	0.31	0.91 (0.58, 1.43)	0.69
IEAA_Pheno	1.02 (0.73, 1.44)	0.90	0.85 (0.60, 1.20)	0.36

Abbreviation: IEAA: Intrinsic epigenetic age acceleration. \*Conditional logistic regression models, adjusting for batch effects, BMI, and smoking predicted packyears (using DNA methylation). \*\*Never smokers were not included in this analysis as there were too few.

**Supplementary Table 2. Correlations between epigenetic clocks and selected immune cell proportions (estimated from methylation data).**

	AA Hannum	IEAA Hannum	AA Horvath	IEAA Horvath	AA PhenoAge	IEAA PhenoAge
<b>CD4 naïve</b>	-0.3677	-0.1935	-0.1884	-0.0011	-0.2249	-0.1104
<b>p values</b>	<0.0001	0.0051	0.0066	0.9877	0.0011	0.1124
<b>CD8 naïve</b>	-0.4245	-0.4076	-0.2305	-0.1706	-0.32	-0.3196
<b>p values</b>	<0.0001	<0.0001	0.0008	0.014	<0.0001	<0.0001
<b>CD8 memory</b>	0.3316	0.1264	0.3202	-0.0026	-0.0203	0.098
<b>p values</b>	<0.0001	0.0689	<0.0001	0.9706	0.7713	0.1591
<b>B cell naïve</b>	-0.2507	-0.1485	-0.1786	-0.0609	-0.3272	-0.1856
<b>p values</b>	0.0003	0.0323	0.01	0.3831	<0.0001	0.0073

Correlations for CD4 memory and B cell memory are not shown as the correlations were statistically significant. Abbreviation: IEAA: Intrinsic epigenetic age acceleration.