

Additional file 6 - Supplementary Note 2. Associations between epigenetic measures of ageing and incidence of ICD-10-coded common diseases in a basic model adjusting for age and sex.

DNAm GrimAge

AgeAccelGrim was associated with incidence of COPD (Hazard Ratio (HR) per SD = 2.65, $P = 1.2 \times 10^{-58}$), diabetes (HR = 1.75, $P = 9.6 \times 10^{-15}$), ischemic heart disease (HR = 1.46, $P = 1.4 \times 10^{-13}$), stroke (HR = 1.43, $P = 1.8 \times 10^{-6}$) and lung cancer (HR = 1.46, $P = 6.5 \times 10^{-11}$). AgeAccelGrim also showed a nominally significant association with incidence of depression (HR = 1.42, $P = 0.01$), Alzheimer's disease (HR = 1.70, $P = 0.03$) and dorsalgia (HR = 1.22, $P = 0.04$).

DunedinPoAm

DunedinPoAm was associated with incidence of COPD (HR = 2.62, $P = 2.5 \times 10^{-40}$), diabetes (HR = 1.64, $P = 9.0 \times 10^{-10}$), stroke (HR = 1.52, $P = 8.1 \times 10^{-8}$), lung cancer (HR = 1.47, $P = 3.6 \times 10^{-8}$) and ischemic heart disease (HR = 1.31, $P = 2.9 \times 10^{-6}$). DunedinPoAm also showed a nominally significant association with incidence of depression (HR = 1.42, $P = 0.02$), Alzheimer's disease (HR = 1.67, $P = 0.03$) and dorsalgia (HR = 1.30, $P = 0.04$).

DNAm PhenoAge

AgeAccelPheno was associated with incidence of diabetes (HR = 1.73, $P = 8.0 \times 10^{-14}$), COPD (HR = 1.58, $P = 8.0 \times 10^{-11}$) and ischemic heart disease (HR = 1.29, $P = 9.6 \times 10^{-7}$). AgeAccelPheno showed nominally significant associations with incidence of depression (HR = 1.37, $P = 0.03$), stroke (HR = 1.18, $P = 0.02$) and breast cancer (HR = 1.36, $P = 0.01$).

HannumAge

Age-adjusted HannumAge (EEAA) was nominally associated with incidence of COPD (HR = 1.25, $P = 1.1 \times 10^{-3}$).

HorvathAge

Age-adjusted HorvathAge (IEAA) showed a nominally significant relationship with incidence of diabetes (HR = 1.18, P = 0.03).

DNAmTLadjAge

Age-adjusted DNAm Telomere Length was associated with incidence of COPD (HR = 0.64, P = 2.8×10^{-10}), ischemic heart disease (HR = 0.81, P = 7.5×10^{-5}), stroke (HR = 0.75, P = 1.3×10^{-4}) and diabetes (HR = 0.76, P = 8.0×10^{-4}), and also showed a nominally significant association with incidence of depression after 13 years since study baseline (HR = 0.71, P = 0.02).

Please refer to Additional File 3: Table S9 for full details of association models.