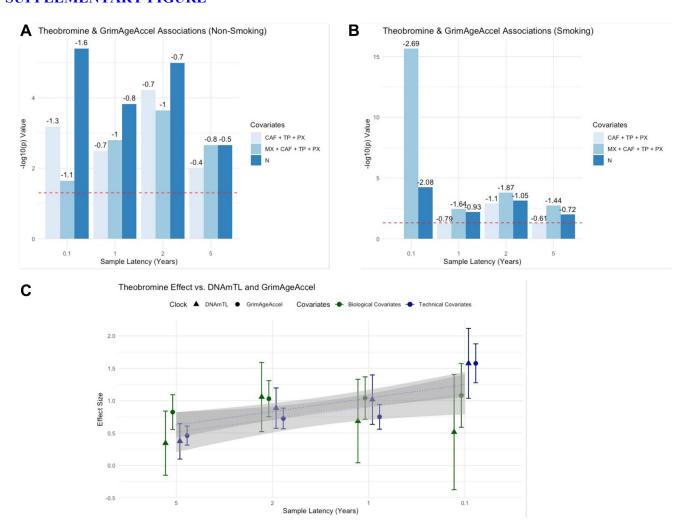
## **SUPPLEMENTARY FIGURE**



Supplementary Figure 1. Sensitivity analyses exploring the specificity of the theobromine association with epigenetic ageing measures in the TwinsUK sample. (A, B) Theobromine and GrimAge association significance in never smokers and current/ex-smokers. Covariates in the models included 'N' (BMI + Age + Cell Proportions), as well as 'N' and methylxathines CAF, TP, PX and MX, as labelled on the Figure. TB coefficient effect sizes are shown. (C) Magnitude of effect sizes of DNAmTL association with GrimAgeAccel. As the scales and direction differ (with negative GrimAgeAccel and positive DNAmTL both indicating a slower age) the regression coefficient values of GrimAgeAccel were converted to absolute values and maximum values of DNAmTL were scaled to GrimAgeAccel (scale factor: 43.43). Correlation lines between latency values are applied (linear model) and standard errors are shown.