

Online appendix 5: Analysis of variance for exposure and outcome variables

Parameter	σ^2_{Tot}	σ^2_{BF}	σ^2_{BP}	σ^2_{WP}	$(\sigma^2_{\text{WP}})/(\sigma^2_{\text{BF}} + \sigma^2_{\text{BP}})$
log(HbA_{1c} [mmol/mol]) < LOQ excluded	0.053	0.000	0.028	0.025	0.870
log(HbA_{1c} [mmol/mol]) < LOQ imputed	0.065	0.009	0.028	0.028	0.736
log(FPG [mmol/L])	0.022	0.000	0.010	0.012	1.277
ACH_E [U/mL]	0.307	0.018	0.219	0.070	0.295
Hb [g/dL]	1.917	0.433	0.853	0.631	0.490
ACH_E/Hb [U/g]	15.818	0.000	12.923	2.894	0.224

For HbA_{1c} and FPG, variances have been calculated on the log scale, as the variables were lognormal.

Legend

- σ^2_{Tot} = total variance
- σ^2_{BF} = between-family variance
- σ^2_{BP} = between-person variance
- σ^2_{WP} = within-person variance
- $(\sigma^2_{\text{WP}})/(\sigma^2_{\text{BF}} + \sigma^2_{\text{BP}})$ = ratio between within-person variance and the sum of the between-family and between-person variances.