Supplementary Materials

"Associations of arterial thickness, stiffness and blood pressure with brain morphology in early adolescence: A prospective population-based study"

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Methods S1 | Imputation rationale and quality

Imputation strategy
Missing values in continuous variables were imputed by random forest imputation[1], as implemented by the mice package (version 3.13.0), while categorical variables (i.e., sex, ethnicity, and maternal education) were imputed using standard mice method (logistic regression). We used 10 trees and 40 iterations to construct 20 imputed datasets[2].

Random forest imputation is a machine learning technique, derived from classification and regression trees predictive models, which recursively subdivide the data based on values of the predictors. The technique does not rely on any distributional assumptions, and can conveniently accommodate nonlinearities and interactions, in the data, without need for them to be explicitly specified in the imputation model. While more computationally intensive compared to traditional regression-based imputation (i.e., full conditional specification), the technique is ideal for situations where, for example, multicollinearity issues, or the omission of important nonlinear terms may complicate model specification, potentially yielding biased parameter estimates and standard errors.

Records with missing values were imputed by random draws from independent normal distributions centered on conditional means predicted using random forest. The method fits each tree to a different bootstrap sample of the data (to prevent overfitting) and aggregates the results.

The auxiliary variables selected for the imputation model included: all available repeated measures of the key variables of interest, and an additional set of auxiliary variables that were selected because they are believed to be either related to missingness or to the variables of interest themselves.
These included: total brain and gray matter volumes, global fractional anisotropy and mean diffusivity, (at 10 years), total intracranial volume, cortical grey matter volume, subcortical gray matter volume, white matter volume, CSF volume, brainstem volume, cerebellum subcortical and cortical volumes (at 10 and 13 years); all individual subcortical brain region volumes and white matter tracts FA and MD (at 10 and 13 years); systolic and diastolic blood pressure (at 6 years); sex; ethnicity; age at MRI visit (both 10 and 13 years) and age at ultrasound/blood pressure measurement visit (10 years); height (at 6 and 10 years); BMI z-score (at 6 and 10 years); maternal age (at conception); maternal education (during pregnancy and when children were 3 and 6 years old); household income (at 6 years); maternal BMI (pre-pregnancy and at 6 years); gestational age and weight at birth; parity.

Theoretical rationale
There are two important potential consequences of missing data. The first is the decrease in *precision* (wider confidence intervals) and *power* caused by the reduction in data. The second, and more serious, is the potential for *bias* in the estimation of association parameters.

Primer: missing data mechanisms
The complexity of the missing data problem, i.e., obtaining accurate inferential estimates in the presence of missing data, depends on the nature of the mechanism by which data are missing. Little and Rubin[3] provided a popular framework to describe categories of missing data mechanisms given the relationship with observed and unobserved values.
The less problematic scenario occurs when the probability of an observable data point being missing does not depend on any observed or unobserved parameters: Missing Completely at Random (MCAR). More commonly, the missingness probability depends on observed variables, and hence it can be accounted for by the information contained in the dataset: Missing at Random (MAR). The most challenging missingness mechanism occurs when the missingness probability depends on unobserved values: Missing Not at Random (MNAR).

Unfortunately, it is not possible to distinguish between MAR and MNAR mechanisms without additional external data or prior knowledge. However, the MAR assumption is usually reasonable in the context of longitudinal observational studies.
It is important to realize that the term *missing at random* does not mean that the missing data are a simple random subsample of all the data points. That scenario is MCAR. Under MAR, missing data may be more frequent in some subgroups than in others, but information defining the subgroups is observed.

Among the various available approaches to handling missing data, multiple imputation (MI) has been widely adopted and accepted by methodologists as an appropriate framework for dealing with MAR (and MCAR) mechanisms.

Although simpler solutions for handling missing outcomes are still routinely used, these approaches have been amply shown to be inadequate and even misleading, as they do not preserve important characteristics of the whole

data set, such as key relationships among the variables and means. For instance, list-wise deletion (e.g., selecting on outcome availability prior to imputation) *requires MCAR data* in order to not introduce bias in the result, it makes strong assumptions about the covariance structure of the data (that it is compound symmetric), and it has been discouraged by statisticians.

In our study, we have strong reason to believe that dropout / missingness might depend at least partly on measured (or unmeasured) variables. For example, children who did have measured brain outcomes are more often female ($P<0.001$ for structural MRI; $P=0.042$ for DTI data), Dutch ($P<0.001$ in both subsamples), and first born ($P=0.028$; $P=0.029$), they come from families with higher income ($P<0.001$; $P=0.001$), they have higher gestational weight ($P=0.001$), and they have older ($P<0.001$) and more highly educated mothers ($P=0.001$).
Based on these statistics, one can speculate, for example, that families with higher socio-economic status may be more likely to bring their children to the follow-up visits. On the other end, children from low socio-economic status families would be underrepresented in the (complete-cases) sample. In other words, the MCAR assumption is likely violated.

Hence, although it is important to point out that our approach relies on MAR assumptions, and we cannot guarantee unbiased results under the situation where missingness depends on unobserved information (MNAR), these assumptions are not nearly as unrealistic as those required for a complete-case analysis. Additionally, it has been argued that MI can offer some protection against MNAR mechanisms, unlike MCAR methods.

Missing patterns and imputation quality results
Key variables' descriptives before (i.e., in the original sample) and after imputation (i.e., pooled across the 20 imputed datasets) together with the number and percentage of missing values are presented in *Table S1*. Note how differences between the pooled (i.e., after imputation) and the original metrics are very small. None of these differences resulted statistically significant.

The fraction of missing values per variable ranges from 0 to a maximum of 77% (i.e., structural MRI metrics). Although the level of missingness naturally affects MI performance, we decided to leverage all available data even when missingness was extensive, as recommended by several statisticians. In support of this approach, two simulation studies also suggested that, under the condition of a large enough sample size (<1000), such levels of missingness still allow for a reasonably low expected bias if any.

Convergence
Visual inspection of the convergence graphs showed no signs of unhealthy convergence. In some cases, the trace lines showed strong initial trends and slow mixing, but regardless of the proportion of missing data, results were stable after ~20 of the 40 iterations. Convergence plots are not presented here, but are available upon request to SD.

Imputed vs. observed values
Next, we inspected and compared the density of the incomplete and imputed data. These graphs are publicly available for the key variables of interest. The blue line marks the observed and red lines indicate imputed values.

Sensitivity analysis
A thorough and sensible sensitivity analysis is an important step in producing and reporting robust estimates. Hence, we also included a sensitivity analysis to assess the extent to which our analyses were robust to missing data assumptions. None of the main conclusions were impacted.

Methods S2 | Non-linear effects of each exposure
To assess potential non-linearities in the relationship between each arterial health marker (i.e., IMT, Distensibility, SBP and DBP) and the brain outcomes or interest (i.e., TBV, GMV, FA and MD), we tested a set of 8 non-linear models (i.e., one for each exposure – outcome pair).

More specifically, we first determined whether evidence of a non-linear association was present based on global F-test(s) comparing the linear models to four polynomial alternatives (i.e., 2nd- to 5th- degree polynomials). We considered non-linearity present if at least one of these comparisons was statistically significant ($P < 0.05$).

To then characterize the shape of these non-linear associations, we plotted natural spline terms using 4 knots. This approach allowed us to adequately represent the complexity of these relationships, without incurring overfitting problems due to unduly complex models.

Methods S3 | Linear mixed-effect model

To assess the relationship between arterial health and brain changes from 10 to 14 years (i.e., two timepoints), we ran a linear mixed-effect effect model using the lmer() function from the lme4 R package.[4]

Models included a random intercept and a fixed-effect part corresponding to the interaction between each exposure of interest (i.e., IMT, distensibility, SBP and DBP) and age at MRI measurement + the base and full set of covariates. When the interaction terms between each exposure and age resulted not statistically significant, they were removed from the models, to grant more interpretable main effects of each exposure. The optimization criterium was set to maximum likelihood (i.e., REML=FALSE).

Note that, outcomes were included in the model in their original scale (cm^3), rather than their standardized version, because centering dependent variables in mixed-effects models which include random effects per subject has been shown to result in incorrect estimated correlations, likelihood values and predictions.[4]

P-values for fixed effects were computed via the Satterthwaite's degrees of freedom approximation, as implemented by the R package lmerTest.

Methods S4 | Vertex wise cortical thickness

Exploratory vertex-wise cortical thickness analyses were performed in R using the QDECR package.

Cortical thickness was calculated as the closest distance from the grey-white matter boundary to the grey-cerebrospinal fluid boundary at each vertex on the tessellated surface. The labeling of clusters identified in the brain was performed using the technique of Klein & Tourville. The cluster-forming threshold was set to p=0.001, as it has shown to correspond closely to a false-positive rate of 0.05. Prior to analyses images were smoothed using a 10 mm full-width-at-half-maximum Gaussian kernel. Reconstructed images were visually inspected and images that were rated as poor were excluded.

Supplemental references

1. Shah AD, Bartlett JW, Carpenter J, Nicholas O, Hemingway H. Comparison of random forest and parametric imputation models for imputing missing data using MICE: a CALIBER study. *Am J Epidemiol*. Mar 15 2014;179(6):764-74. doi:10.1093/aje/kwt312
2. van Buuren S, Groothuis-Oudshoorn K. mice: Multivariate Imputation by Chained Equations in R. *Journal of Statistical Software*. 12/12 2011;45(3):1 - 67. doi:10.18637/jss.v045.i03
3. Rubin DB. Multiple imputation for survey nonresponse. New York: Wiley; 1987.
4. Bates D, Mächler M, Bolker B, Walker S. Fitting Linear Mixed-Effects Models Using lme4. *Journal of Statistical Software*. 10/07 2015;67(1):1 - 48. doi:10.18637/jss.v067.i01

Table S1 - Assessment of missing values and imputation quality

Measure	Timepoint	Full sample, singleton alive atbirth (N = 8912) Mean (range); n (%) before imputation	NAs (%)	Mean (range); n (%) after imputation	Main sample, focus at 9 visit (n = 5341) Mean (range); n (%) before imputation	NAs (%)	Mean (range); n (%) after imputation	Structural MRI at 14 years sample (n = 2054) Mean (range); n (%) before imputation	NAs (%)	Mean (range); n (%) after imputation	DTI at 14 years sample (n = 2308) Mean (range); n (%) before imputation	NAs (%)	Mean (range); n (%) after imputation
Sex, n (%)													
Male participants	Birth	4506 (50.6%)	3 (0%)	4507 (50.6%)	2646 (49.5%)	1 (<0.1%)	2647 (49.6%)	954 (46.4%)	0 (0%)	954 (46.4%)	1116 (48.4%)	0 (0%)	1116 (48.4%)
Female participants		4403 (49.4%)		4405 (49.4%)	2694 (50.4%)		2694 (50.4%)	1100 (53.6%)		1100 (53.6%)	1192 (51.6%)		1192 (51.6%)
Parental country of origin, n (%)													
Africa and Middle East	Birth	317 (3.6%)	581 (6.5%)	371 (4.2%)	160 (3.0%)	128 (2.4%)	172 (3.2%)	54 (2.6%)	44 (2.1%)	58 (2.8%)	60 (2.6%)	51 (2.2%)	65 (2.8%)
Asia and Oceania		250 (2.8%)		301 (3.4%)	153 (2.9%)		164 (3.1%)	50 (2.4%)		54 (2.6%)	55 (2.4%)		60 (2.6%)
Cape Verdean		250 (2.8%)		304 (3.4%)	166 (3.1%)		177 (3.3%)	57 (2.8%)		61 (3.0%)	75 (3.2%)		79 (3.4%)
Dutch		4322 (48.5%)		4374 (49.1%)	3032 (56.8%)		3044 (57.0%)	1196 (58.2%)		1200 (58.4%)	1341 (58.1%)		1345 (58.3%)
Dutch Antillean		356 (4.0%)		410 (4.6%)	154 (2.9%)		166 (3.1%)	75 (3.7%)		79 (3.8%)	88 (3.8%)		92 (4.0%)
Europe		650 (7.3%)		702 (7.9%)	392 (7.3%)		404 (7.6%)	160 (7.8%)		164 (8.0%)	177 (7.7%)		182 (7.9%)
Latin America		149 (1.7%)		202 (2.3%)	94 (1.8%)		106 (2.0%)	39 (1.9%)		43 (2.1%)	41 (1.8%)		45 (2.0%)
Moroccan		606 (6.8%)		659 (7.4%)	286 (5.4%)		298 (5.6%)	102 (5.0%)		107 (5.2%)	114 (4.9%)		119 (5.2%)
North America		51 (0.6%)		104 (1.2%)	30 (0.6%)		42 (0.8%)	16 (0.8%)		20 (1.0%)	18 (0.8%)		22 (1.0%)
Surinamese		679 (7.6%)		730 (8.2%)	385 (7.2%)		397 (7.4%)	157 (7.6%)		161 (7.9%)	171 (7.4%)		176 (7.6%)
Turkish		701 (7.9%)		754 (8.5%)	361 (6.8%)		372 (7.0%)	104 (5.1%)		108 (5.3%)	117 (5.1%)		122 (5.3%)
Gestational weight, grams, mean (SD)	Birth	3401.00 (564.68)	77 (0.9%)	3399.60 (566.40)	3425.00 (553.72)	10 (0.2%)	3424.95 (554.25)	3447.00 (561.58)	2 (0.1%)	3446.80 (561.48)	3449.00 (563.64)	3 (0.1%)	3448.40 (563.56)
Gestational age, weeks, median [range]	Birth	40.10 [20.86-43.71]	83 (0.9%)	40.10 [20.86-43.71]	40.14 [26.29-43.57]	35 (0.7%)	40.14 [26.29-43.57]	40.14 [26.71-43.57]	16 (0.8%)	40.14 [26.71-43.57]	40.14 [26.71-43.57]	15 (0.6%)	40.14 [26.71-43.57]
Parity, n (%)													
First-born	Birth	4839 (54.3%)	348 (3.9%)	5079 (57.0%)	3020 (56.5%)	178 (3.3%)	3143 (58.8%)	1129 (55.0%)	58 (2.8%)	1170 (56.9%)	1272 (55.1%)	69 (3%)	1319 (57.1%)
Second-born		2478 (27.8%)		2550 (28.6%)	1484 (27.8%)		1520 (28.5%)	613 (29.8%)		624 (30.4%)	680 (29.5%)		694 (30.1%)
≥ Third-born		1250 (14.0%)		1283 (14.3%)	660 (12.3%)		677 (12.8%)	254 (12.3%)		260 (12.6%)	287 (12.4%)		295 (12.7%)
Maternal age, years, mean (SD)	Birth	29.78 (5.42)	2 (0%)	29.78 (5.42)	30.86 (5.02)	1 (<0.1%)	30.86 (5.02)	31.07 (4.96)	0 (0%)	31.07 (4.96)	31.02 (5.01)	0 (0%)	31.02 (5.01)
Maternal BMI, kg/m², median [range]	pre-pregnancy	22.66 [14.38-50.21]	2397 (26.9%)	22.70 [14.38-50.21]	22.59 [14.38-50.21]	1315 (24.6%)	22.62 [14.38-50.21]	22.66 [15.62-50.21]	485 (23.6%)	22.67 [15.62-50.21]	22.60 [15.62-50.21]	566 (24.5%)	22.65 [15.62-50.21]
	6 years	24.76 [15.73-61.35]	2956 (33.2%)	24.90 [15.73-61.35]	24.55 [15.73-53.84]	492 (9.2%)	24.57 [15.73-53.84]	24.53 [16.31-61.35]	159 (7.7%)	24.54 [16.31-61.35]	24.56 [16.31-61.35]	182 (7.9%)	24.57 [16.31-61.35]
Parental education, n (%)													
Low	6 years	2561 (28.6%)	3247 (36.4%)	4715 (53.0%)	1912 (35.8%)	814 (15.2%)	2447 (45.9%)	707 (34.4%)	273 (13.3%)	887 (43.2%)	812 (35.2%)	308 (13.3%)	1016 (43.9%)
Medium		1523 (17.1%)		2070 (23.2%)	1284 (24.0%)		1424 (26.7%)	505 (24.6%)		553 (26.9%)	561 (24.3%)		614 (26.6%)
High		1581 (17.7%)		2128 (23.9%)	1331 (24.9%)		1470 (27.5%)	569 (27.7%)		615 (29.9%)	627 (27.2%)		679 (29.4%)
Family income, n (%)													
Low	6 years	925 (10.4%)	3571 (40.1%)	1897 (21.2%)	672 (12.6%)	1046 (19.6%)	959 (18.0%)	234 (11.4%)	372 (18.1%)	338 (16.4%)	278 (12.1%)	414 (17.9%)	394 (17.0%)
Medium		2659 (29.8%)		4280 (48.0%)	2145 (40.2%)		2613 (48.9%)	833 (40.6%)		999 (48.7%)	945 (40.9%)		1131 (48.9%)
High		1757 (19.7%)		2735 (30.7%)	1478 (27.6%)		1769 (33.1%)	615 (30.0%)		716 (34.8%)	671 (29.1%)		784 (34.0%)
Child age, years, median [range]	10 years	9.74 [8.53-12.72]	3574 (40.1%)	9.74 [8.53-12.72]	9.74 [8.53-12.72]	0 (0%)	9.74 [8.53-12.72]	9.71 [8.56-12.72]	133 (6.5%)	9.71 [8.56-12.72]	9.71 [8.56-12.72]	150 (6.5%)	9.71 [8.56-12.72]
Height, cm, mean (SD)	10 years	141.50 (6.71)	3716 (41.7%)	141.63 (6.65)	141.50 (6.71)	144 (2.7%)	141.51 (6.72)	141.50 (6.61)	146 (7.1%)	141.53 (6.64)	141.50 (6.62)	166 (7.2%)	141.59 (6.65)
BMI, median [range]	10 years	17.00 [12.02-35.41]	3716 (41.7%)	17.15 [12.02-35.41]	17.00 [12.02-35.41]	144 (2.7%)	17.01 [12.02-35.41]	16.99 [12.07-32.69]	146 (7.1%)	17.01 [12.07-32.69]	16.92 [12.07-32.69]	166 (7.2%)	16.98 [12.07-32.69]
Carotid intima-media thickness (IMT), mm, mean (SD)	10 years	0.46 (0.04)	4256 (47.8%)	0.46 (0.04)	0.46 (0.04)	687 (12.9%)	0.46 (0.04)	0.46 (0.04)	307 (14.9%)	0.46 (0.04)	0.46 (0.04)	343 (14.9%)	0.46 (0.04)
Carotid distensibility, $kPa^{-1} \times 10^{-3}$, mean (SD)	10 years	57.24 (12.39)	4423 (49.6%)	57.20 (12.35)	57.20 (12.39)	854 (16%)	57.24 (12.38)	57.83 (12.43)	373 (18.2%)	57.74 (12.40)	57.67 (12.42)	421 (18.2%)	57.61 (12.41)
Systolic blood pressure (SBP), mm Hg, mean (SD)	10 years	103.28 (7.97)	3910 (43.9%)	103.45 (7.86)	103.27 (7.97)	338 (6.3%)	103.28 (7.95)	103.01 (7.69)	207 (10.1%)	103.09 (7.71)	102.95 (7.72)	235 (10.2%)	103.03 (7.73)
Diastolic blood pressure (DBP), mm Hg, mean (SD)	10 years	58.70 (6.42)	3910 (43.9%)	58.77 (6.37)	58.67 (6.40)	338 (6.3%)	58.68 (6.40)	58.40 (6.34)	208 (10.1%)	58.46 (6.35)	58.36 (6.32)	234 (10.1%)	58.43 (6.32)
Child age at MRI	10 years	9.93 [8.55-13.00]	5033 (56.5%)	9.98 [8.55-13.00]	9.93 [8.55-13.00]	1468 (27.5%)	9.98 [8.55-13.00]	9.93 [8.72-13.00]	582 (28.3%)	9.99 [8.72-13.00]	9.93 [8.85-13.00]	645 (27.9%)	9.99 [8.85-13.00]
	14 years	13.82 [12.59-17.11]	5444 (61.1%)	13.83 [12.59-17.11]	13.80 [12.59-16.68]	2078 (38.9%)	13.82 [12.59-16.68]	13.84 [12.59-17.11]	0 (0%)	13.84 [12.59-17.11]	13.83 [12.59-17.11]	0 (0%)	13.83 [12.59-17.11]
Total brain volume (TBV), cm³, median [range]	10 years	1199.70 (115.54)	7495 (84.1%)	1196.35 (92.28)	1199.40 (115.04)	3925 (73.5%)	1196.76 (97.54)	1199.10 (115.25)	645 (31.4%)	1196.62 (114.28)	1200.10 (115.33)	935 (40.5%)	1197.40 (111.29)
	14 years	1223.00 (114.18)	6863 (77%)	1223.15 (90.00)	1225.00 (113.16)	3424 (64.1%)	1223.80 (95.45)	1223.00 (114.11)	0 (0%)	1223.00 (114.11)	1223.00 (114.01)	313 (13.6%)	1223.90 (110.80)
Grey matter volume (GMV), cm³, mean (SD)	10 years	752.80 (68.50)	7495 (84.1%)	750.28 (55.65)	752.70 (68.30)	3925 (73.5%)	750.72 (58.57)	752.40 (68.39)	645 (31.4%)	750.42 (67.88)	753.10 (68.52)	935 (40.5%)	750.97 (66.34)
	14 years	748.10 (66.58)	6863 (77%)	747.87 (53.34)	749.30 (66.00)	3424 (64.1%)	748.45 (56.34)	748.00 (66.50)	0 (0%)	748.00 (66.50)	748.20 (66.52)	313 (13.6%)	748.49 (64.72)
Global fractional anisotropy (FA), mean (SD)	10 years	0.53 (0.03)	7384 (82.9%)	0.54 (0.02)	0.53 (0.03)	3811 (71.4%)	0.54 (0.02)	0.53 (0.03)	727 (35.4%)	0.53 (0.03)	0.53 (0.03)	801 (34.7%)	0.53 (0.03)
	14 years	0.55 (0.02)	6609 (74.2%)	0.55 (0.01)	0.55 (0.02)	3186 (59.7%)	0.55 (0.01)	0.55 (0.02)	55 (2.7%)	0.55 (0.02)	0.55 (0.02)	0 (0%)	0.55 (0.02)
Global mean diffusivity (MD), mm²/sec × 10³, mean (SD)	10 years	0.82 (0.02)	7384 (82.9%)	0.82 (0.02)	0.82 (0.02)	3811 (71.4%)	0.82 (0.02)	0.82 (0.02)	727 (35.4%)	0.82 (0.02)	0.82 (0.02)	801 (34.7%)	0.82 (0.02)
	14 years	0.80 (0.02)	6609 (74.2%)	0.80 (0.02)	0.80 (0.02)	3186 (59.7%)	0.80 (0.02)	0.80 (0.02)	55 (2.7%)	0.80 (0.02)	0.80 (0.02)	0 (0%)	0.80 (0.02)
Total intracranial volume, cm³, mean (SD)	10 years	1502.20 (143.10)	7495 (84.1%)	1499.73 (118.23)	1501.70 (142.49)	3925 (73.5%)	1500.19 (123.94)	1501.30 (142.95)	645 (31.4%)	1499.31 (143.08)	1502.40 (143.18)	935 (40.5%)	1500.48 (139.65)
	14 years	1573.70 (153.40)	6863 (77%)	1574.22 (125.23)	1575.00 (151.80)	3424 (64.1%)	1574.53 (131.46)	1573.60 (153.23)	0 (0%)	1573.60 (153.23)	1574.00 (153.31)	313 (13.6%)	1574.73 (149.36)
Total cortical volume, cm³, mean (SD)	10 years	573.60 (58.06)	7495 (84.1%)	571.17 (47.79)	573.50 (57.89)	3925 (73.5%)	571.47 (49.99)	573.20 (57.92)	645 (31.4%)	571.32 (57.53)	573.80 (57.99)	935 (40.5%)	571.72 (56.15)
	14 years	565.40 (54.62)	6863 (77%)	565.08 (43.99)	566.30 (54.18)	3424 (64.1%)	565.50 (46.30)	565.20 (54.55)	0 (0%)	565.20 (54.55)	565.30 (54.53)	313 (13.6%)	565.45 (53.09)
Total subcortical volume, cm³, mean (SD)	10 years	60.38 (4.64)	7495 (84.1%)	60.33 (3.77)	60.36 (4.60)	3925 (73.5%)	60.34 (3.97)	60.34 (4.62)	645 (31.4%)	60.28 (4.61)	60.36 (4.64)	935 (40.5%)	60.31 (4.50)
	14 years	61.48 (4.83)	6863 (77%)	61.53 (3.93)	61.54 (4.80)	3424 (64.1%)	61.53 (4.14)	61.47 (4.82)	0 (0%)	61.47 (4.82)	61.47 (4.80)	313 (13.6%)	61.50 (4.69)
White matter volume, cm³, mean (SD)	10 years	419.70 (50.11)	7495 (84.1%)	419.17 (40.97)	419.50 (49.81)	3925 (73.5%)	419.27 (42.91)	419.50 (49.88)	645 (31.4%)	419.19 (49.67)	419.80 (49.89)	935 (40.5%)	419.55 (48.44)
	14 years	447.60 (51.34)	6863 (77%)	447.57 (42.35)	448.00 (50.85)	3424 (64.1%)	447.71 (44.33)	447.60 (51.35)	0 (0%)	447.60 (51.35)	447.60 (51.24)	313 (13.6%)	447.87 (50.06)
CSF volume, cm³, mean (SD)	10 years	0.91 (0.19)	5316 (59.6%)	0.91 (0.19)	0.90 (0.19)	1746 (32.7%)	0.91 (0.19)	0.90 (0.19)	645 (31.4%)	0.90 (0.19)	0.90 (0.19)	721 (31.2%)	0.91 (0.19)
	14 years	0.93 (0.21)	5607 (62.9%)	0.93 (0.21)	0.93 (0.21)	2229 (41.7%)	0.93 (0.21)	0.93 (0.18)	0 (0%)	0.93 (0.18)	0.93 (0.19)	16 (0.7%)	0.93 (0.19)
Brainstem volume, cm³, mean (SD)	10 years	18.64 (1.90)	5316 (59.6%)	18.66 (1.79)	18.64 (1.90)	1746 (32.7%)	18.66 (1.86)	18.62 (1.92)	645 (31.4%)	18.63 (1.93)	18.64 (1.93)	721 (31.2%)	18.65 (1.92)
	14 years	20.18 (2.30)	5607 (62.9%)	20.22 (2.14)	20.18 (2.30)	2229 (41.7%)	20.21 (2.22)	20.20 (2.09)	0 (0%)	20.20 (2.09)	20.20 (2.09)	16 (0.7%)	20.20 (2.09)
Cerebellum cortical volume, cm³, mean (SD)	10 years	58.86 (5.65)	5316 (59.6%)	58.86 (5.36)	58.85 (5.65)	1746 (32.7%)	58.87 (5.54)	58.85 (5.73)	645 (31.4%)	58.81 (5.73)	59.00 (5.75)	721 (31.2%)	58.91 (5.73)
	14 years	59.36 (7.78)	5607 (62.9%)	59.37 (7.47)	59.40 (7.83)	2229 (41.7%)	59.41 (7.66)	60.21 (5.96)	0 (0%)	60.21 (5.96)	60.34 (5.97)	16 (0.7%)	60.33 (5.99)
Cerebellum subcortical volume, cm³, mean (SD)	10 years	13.05 (1.46)	5316 (59.6%)	13.07 (1.39)	13.05 (1.46)	1746 (32.7%)	13.06 (1.43)	13.03 (1.47)	645 (31.4%)	13.04 (1.46)	13.06 (1.49)	721 (31.2%)	13.06 (1.47)
	14 years	13.26 (1.91)	5607 (62.9%)	13.30 (1.86)	13.26 (1.93)	2229 (41.7%)	13.28 (1.89)	13.31 (1.44)	0 (0%)	13.31 (1.44)	13.32 (1.45)	16 (0.7%)	13.32 (1.45)
Accumbens, cm³, mean (SD)	10 years	0.68 (0.10)	7495 (84.1%)	0.68 (0.09)	0.68 (0.10)	3925 (73.5%)	0.68 (0.09)	0.68 (0.10)	645 (31.4%)	0.67 (0.10)	0.68 (0.10)	935 (40.5%)	0.67 (0.10)
	14 years	0.67 (0.09)	6863 (77%)	0.67 (0.09)	0.67 (0.09)	3424 (64.1%)	0.67 (0.09)	0.67 (0.09)	0 (0%)	0.67 (0.09)	0.67 (0.09)	313 (13.6%)	0.67 (0.09)
Amygdala, cm³, mean (SD)	10 years	1.76 (0.20)	7495 (84.1%)	1.76 (0.18)	1.76 (0.20)	3925 (73.5%)	1.76 (0.18)	1.76 (0.20)	645 (31.4%)	1.76 (0.20)	1.76 (0.20)	935 (40.5%)	1.76 (0.19)
	14 years	1.79 (0.20)	6863 (77%)	1.80 (0.18)	1.80 (0.20)	3424 (64.1%)	1.80 (0.18)	1.80 (0.20)	0 (0%)	1.80 (0.20)	1.79 (0.20)	313 (13.6%)	1.80 (0.20)
Caudate, cm³, mean (SD)	10 years	4.05 (0.50)	7495 (84.1%)	4.04 (0.46)	4.05 (0.49)	3925 (73.5%)	4.04 (0.47)	4.04 (0.50)	645 (31.4%)	4.04 (0.50)	4.05 (0.50)	935 (40.5%)	4.04 (0.50)
	14 years	4.04 (0.48)	6863 (77%)	4.04 (0.43)	4.05 (0.47)	3424 (64.1%)	4.04 (0.44)	4.04 (0.48)	0 (0%)	4.04 (0.48)	4.04 (0.48)	313 (13.6%)	4.05 (0.47)
Hippocampus, cm³, mean (SD)	10 years	4.02 (0.37)	7495 (84.1%)	4.02 (0.32)	4.02 (0.37)	3925 (73.5%)	4.02 (0.33)	4.01 (0.37)	645 (31.4%)	4.01 (0.37)	4.02 (0.37)	935 (40.5%)	4.01 (0.36)
	14 years	4.16 (0.38)	6863 (77%)	4.16 (0.33)	4.17 (0.38)	3424 (64.1%)	4.17 (0.34)	4.16 (0.38)	0 (0%)	4.16 (0.38)	4.16 (0.37)	313 (13.6%)	4.16 (0.37)
Pallidum, cm³, mean (SD)	10 years	1.96 (0.20)	7495 (84.1%)	1.96 (0.18)	1.96 (0.20)	3925 (73.5%)	1.96 (0.19)	1.95 (0.20)	645 (31.4%)	1.95 (0.20)	1.96 (0.20)	935 (40.5%)	1.95 (0.20)
	14 years	2.04 (0.21)	6863 (77%)	2.04 (0.18)	2.04 (0.21)	3424 (64.1%)	2.04 (0.19)	2.04 (0.21)	0 (0%)	2.04 (0.21)	2.04 (0.20)	313 (13.6%)	2.04 (0.20)
Putamen, cm³, mean (SD)	10 years	5.35 (0.56)	7495 (84.1%)	5.35 (0.50)	5.35 (0.56)	3925 (73.5%)	5.35 (0.51)	5.35 (0.56)	645 (31.4%)	5.35 (0.56)	5.35 (0.56)	935 (40.5%)	5.35 (0.55)
	14 years	5.33 (0.55)	6863 (77%)	5.33 (0.50)	5.33 (0.56)	3424 (64.1%)	5.33 (0.51)	5.32 (0.55)	0 (0%)	5.32 (0.55)	5.33 (0.55)	313 (13.6%)	5.33 (0.54)
Thalamus, cm³, mean (SD)	10 years	7.45 (0.68)	7495 (84.1%)	7.44 (0.57)	7.45 (0.67)	3925 (73.5%)	7.44 (0.60)	7.45 (0.67)	645 (31.4%)	7.44 (0.67)	7.45 (0.68)	935 (40.5%)	7.44 (0.66)
	14 years	7.58 (0.72)	6863 (77%)	7.59 (0.61)	7.58 (0.72)	3424 (64.1%)	7.58 (0.64)	7.58 (0.72)	0 (0%)	7.58 (0.72)	7.58 (0.71)	313 (13.6%)	7.58 (0.71)
Cingulate gyrus FA, mean (SD)	10 years	0.52 (0.05)	7395 (83%)	0.52 (0.05)	0.52 (0.05)	3822 (71.6%)	0.52 (0.05)	0.52 (0.05)	737 (35.9%)	0.52 (0.05)	0.52 (0.05)	812 (35.2%)	0.52 (0.05)
	14 years	0.56 (0.03)	6609 (74.2%)	0.56 (0.03)	0.56 (0.03)	3186 (59.7%)	0.56 (0.03)	0.56 (0.03)	55 (2.7%)	0.56 (0.03)	0.56 (0.03)	0 (0%)	0.56 (0.03)
Cortico-spinal tract FA, mean (SD)	10 years	0.60 (0.02)	7395 (83%)	0.60 (0.02)	0.60 (0.02)	3822 (71.6%)	0.60 (0.02)	0.60 (0.02)	737 (35.9%)	0.60 (0.02)	0.60 (0.02)	812 (35.2%)	0.60 (0.02)
	14 years	0.60 (0.02)	6609 (74.2%)	0.60 (0.02)	0.60 (0.02)	3186 (59.7%)	0.60 (0.02)	0.60 (0.02)	55 (2.7%)	0.60 (0.02)	0.60 (0.02)	0 (0%)	0.60 (0.02)
Uncinate fasciculus FA, mean (SD)	10 years	0.47 (0.04)	7388 (82.9%)	0.47 (0.03)	0.47 (0.04)	3815 (71.4%)	0.47 (0.03)	0.47 (0.04)	731 (35.6%)	0.47 (0.04)	0.47 (0.04)	805 (34.9%)	0.47 (0.04)
	14 years	0.48 (0.03)	6609 (74.2%)	0.48 (0.02)	0.48 (0.02)	3186 (59.7%)	0.48 (0.02)	0.48 (0.02)	55 (2.7%)	0.48 (0.02)	0.48 (0.02)	0 (0%)	0.48 (0.02)
Inferior longitudinal fasciculus FA, mean (SD)	10 years	0.50 (0.03)	7388 (82.9%)	0.50 (0.03)	0.50 (0.03)	3815 (71.4%)	0.50 (0.03)	0.50 (0.03)	731 (35.6%)	0.50 (0.03)	0.50 (0.03)	805 (34.9%)	0.50 (0.03)
	14 years	0.52 (0.02)	6609 (74.2%)	0.52 (0.02)	0.52 (0.02)	3186 (59.7%)	0.52 (0.02)	0.52 (0.02)	55 (2.7%)	0.52 (0.02)	0.52 (0.02)	0 (0%)	0.52 (0.02)
Superior longitudinal fasciculus FA, mean (SD)	10 years	0.47 (0.03)	7387 (82.9%)	0.48 (0.03)	0.47 (0.03)	3814 (71.4%)	0.48 (0.03)	0.48 (0.03)	730 (35.5%)	0.48 (0.03)	0.47 (0.03)	804 (34.8%)	0.48 (0.03)
	14 years	0.48 (0.02)	6609 (74.2%)	0.48 (0.02)	0.48 (0.02)	3186 (59.7%)	0.48 (0.02)	0.48 (0.02)	55 (2.7%)	0.48 (0.02)	0.48 (0.02)	0 (0%)	0.48 (0.02)
Major forceps FA, mean (SD)	10 years	0.66 (0.04)	7389 (82.9%)	0.67 (0.04)	0.66 (0.04)	3816 (71.4%)	0.67 (0.04)	0.66 (0.04)	732 (35.6%)	0.66 (0.04)	0.66 (0.04)	806 (34.9%)	0.66 (0.04)
	14 years	0.68 (0.03)	6609 (74.2%)	0.68 (0.03)	0.68 (0.03)	3186 (59.7%)	0.68 (0.03)	0.68 (0.03)	55 (2.7%)	0.68 (0.03)	0.68 (0.03)	0 (0%)	0.68 (0.03)
Minor forceps FA, mean (SD)	10 years	0.65 (0.04)	7390 (82.9%)	0.65 (0.03)	0.65 (0.04)	3817 (71.5%)	0.65 (0.04)	0.65 (0.04)	733 (35.7%)	0.65 (0.04)	0.65 (0.04)	807 (35%)	0.65 (0.04)
	14 years	0.65 (0.03)	6609 (74.2%)	0.65 (0.03)	0.65 (0.03)	3186 (59.7%)	0.65 (0.03)	0.65 (0.03)	55 (2.7%)	0.65 (0.03)	0.65 (0.03)	0 (0%)	0.65 (0.03)
Cingulate gyrus MD, mm²/sec × 10³, mean (SD)	10 years	0.84 (0.03)	7395 (83%)	0.84 (0.03)	0.84 (0.03)	3822 (71.6%)	0.84 (0.03)	0.84 (0.03)	737 (35.9%)	0.84 (0.03)	0.84 (0.03)	812 (35.2%)	0.84 (0.03)
	14 years	0.82 (0.02)	6609 (74.2%)	0.82 (0.02)	0.82 (0.02)	3186 (59.7%)	0.82 (0.02)	0.82 (0.02)	55 (2.7%)	0.82 (0.02)	0.82 (0.02)	0 (0%)	0.82 (0.02)
Cortico-spinal tract MD, mm²/sec × 10³, mean (SD)	10 years	0.77 (0.02)	7395 (83%)	0.77 (0.02)	0.77 (0.02)	3822 (71.6%)	0.77 (0.02)	0.77 (0.02)	737 (35.9%)	0.77 (0.02)	0.77 (0.02)	812 (35.2%)	0.77 (0.02)
	14 years	0.76 (0.02)	6609 (74.2%)	0.76 (0.01)	0.76 (0.02)	3186 (59.7%)	0.76 (0.01)	0.76 (0.02)	55 (2.7%)	0.76 (0.02)	0.76 (0.02)	0 (0%)	0.76 (0.02)
Uncinate fasciculus MD, mm²/sec × 10³, mean (SD)	10 years	0.84 (0.03)	7388 (82.9%)	0.84 (0.03)	0.84 (0.03)	3815 (71.4%)	0.84 (0.03)	0.84 (0.03)	731 (35.6%)	0.84 (0.03)	0.84 (0.03)	805 (34.9%)	0.84 (0.03)
	14 years	0.82 (0.02)	6609 (74.2%)	0.82 (0.02)	0.82 (0.02)	3186 (59.7%)	0.82 (0.02)	0.82 (0.02)	55 (2.7%)	0.82 (0.02)	0.82 (0.02)	0 (0%)	0.82 (0.02)
Inferior longitudinal fasciculus MD, mm²/sec × 10³, mean (SD)	10 years	0.86 (0.03)	7388 (82.9%)	0.86 (0.02)	0.86 (0.03)	3815 (71.4%)	0.86 (0.03)	0.86 (0.03)	731 (35.6%)	0.86 (0.03)	0.86 (0.03)	805 (34.9%)	0.86 (0.03)
	14 years	0.84 (0.02)	6609 (74.2%)	0.84 (0.02)	0.84 (0.02)	3186 (59.7%)	0.84 (0.02)	0.84 (0.02)	55 (2.7%)	0.84 (0.02)	0.84 (0.02)	0 (0%)	0.84 (0.02)
Superior longitudinal fasciculus MD, mm²/sec × 10³, mean (SD)	10 years	0.79 (0.03)	7387 (82.9%)	0.79 (0.02)	0.79 (0.03)	3814 (71.4%)	0.79 (0.02)	0.79 (0.03)	730 (35.5%)	0.79 (0.03)	0.79 (0.03)	804 (34.8%)	0.79 (0.03)
	14 years	0.78 (0.02)	6609 (74.2%)	0.78 (0.02)	0.78 (0.02)	3186 (59.7%)	0.78 (0.02)	0.78 (0.02)	55 (2.7%)	0.78 (0.02)	0.78 (0.02)	0 (0%)	0.78 (0.02)
Major forceps MD, mm²/sec × 10³, mean (SD)	10 years	0.86 (0.07)	7389 (82.9%)	0.86 (0.06)	0.86 (0.07)	3816 (71.4%)	0.86 (0.06)	0.86 (0.07)	732 (35.6%)	0.86 (0.06)	0.86 (0.07)	806 (34.9%)	0.86 (0.06)
	14 years	0.84 (0.05)	6609 (74.2%)	0.84 (0.05)	0.84 (0.05)	3186 (59.7%)	0.84 (0.05)	0.84 (0.05)	55 (2.7%)	0.84 (0.05)	0.84 (0.05)	0 (0%)	0.84 (0.05)
Minor forceps MD, mm²/sec × 10³, mean (SD)	10 years	0.83 (0.04)	7390 (82.9%)	0.83 (0.03)	0.83 (0.04)	3817 (71.5%)	0.83 (0.04)	0.83 (0.04)	733 (35.7%)	0.83 (0.04)	0.83 (0.04)	807 (35%)	0.83 (0.04)
	14 years	0.81 (0.03)	6609 (74.2%)	0.81 (0.03)	0.81 (0.03)	3186 (59.7%)	0.81 (0.03)	0.81 (0.03)	55 (2.7%)	0.81 (0.03)	0.81 (0.03)	0 (0%)	0.81 (0.03)

* We report mean and standard deviation (SD) for normally distributed continuous variables; we report median and range for non-normally distributed continuous variables. Household income: low = < €1600 /month; medium = between €1600 and € 4000 /month; high = > € 4000.
Parental education: low = no / primary / secondary education; medium = higher, phase 1; high = higher, phase 2. /month. Other variable included in the imputation: height, BMI-z, SBP and DBP (at 6 years), Parental education (during pregnacy and at 3 years)

Legend
- Primary exposures
- Primary brain outcomes
- Secondary brain outcomes
- Covariates
- Auxiliary variables (imputation)

* **Full sample** = 9749 alive at birth - 243 twins = 9506 - 594 siblings = 8912;
* **Main sample** = 9506 non-twin alive births - 3800 not present at 10-year visit = 5706 - 365 siblings = 5341;
* **sMRI sample** = 9749 alive at birth - 6024 did not consent/not invited to 14-year MRI visit = 3725 - 1102 (had braces) 25 (incidental findings) 43 (technical errors) 390 (not passing QC) = 2165 - 54 twins = 2111 - 57 siblings = 2054;
* **DTI sample** = 9749 alive at birth - 6024 did not consent/not invited to 14-year MRI visit = 3725 - 1102 (had braces) 25 (incidental findings) 105 (technical errors) 38 (not passing QC) = 2455 - 63 twins = 2392 - 69 siblings = 2323;

Table S2 - Correlation matrix

Table S3 - Main results

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)								
Base model (R^2 = .17)								
(Intercept)	-1.78	0.53	-3.36	294.7	0.001	0.004	-2.82	-0.74
IMT (z-score)	0.02	0.02	1.25	77.1	0.216	0.432	-0.01	0.06
Female sex	-0.76	0.03	-24.87	172.2	0.000	0.000	-0.82	-0.70
Age at MRI	-0.09	0.05	-1.98	315.2	0.049	0.158	-0.18	-0.00
Age delta	0.09	0.04	2.22	230.5	0.027	0.108	0.01	0.18
Height	0.02	0.00	9.23	209.0	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .19)								
(Intercept)	-2.39	0.56	-4.27	209.1	0.000	0.000	-3.49	-1.29
IMT (z-score)	0.03	0.02	1.46	72.8	0.149	0.397	-0.01	0.06
Female sex	-0.76	0.03	-25.17	169.1	0.000	0.000	-0.82	-0.70
Age at MRI	-0.01	0.05	-0.13	284.8	0.894	0.894	-0.10	0.08
Age delta	0.02	0.04	0.58	224.0	0.561	0.784	-0.06	0.11
Height	0.02	0.00	7.36	259.4	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.25	0.03	-7.83	480.0	0.000	0.000	-0.31	-0.19
BMI (z-score)	0.05	0.02	3.02	202.4	0.003	0.012	0.02	0.07
Parental education	0.03	0.01	3.85	147.7	0.000	0.000	0.01	0.04
Maternal age	0.01	0.00	1.87	233.7	0.063	0.126	0.00	0.01
Grey matter volume (GMV)								
Base model (R^2 = .17)								
(Intercept)	-0.64	0.52	-1.23	354.2	0.221	0.221	-1.66	0.39
IMT (z-score)	0.03	0.02	1.48	92.7	0.143	0.397	-0.01	0.06
Female sex	-0.77	0.03	-24.86	157.7	0.000	0.000	-0.83	-0.71
Age at MRI	-0.16	0.05	-3.24	159.7	0.001	0.008	-0.25	-0.06
Age delta	0.11	0.05	2.25	101.1	0.027	0.108	0.01	0.20
Height	0.02	0.00	8.41	194.4	0.000	0.000	0.02	0.02
Fully adjusted model (R^2 = .20)								
(Intercept)	-1.45	0.56	-2.60	206.0	0.010	0.020	-2.55	-0.35
IMT (z-score)	0.03	0.02	1.75	87.4	0.083	0.397	0.00	0.06
Female sex	-0.77	0.03	-25.20	151.7	0.000	0.000	-0.83	-0.71
Age at MRI	-0.06	0.05	-1.27	131.8	0.207	0.276	-0.16	0.04
Age delta	0.03	0.05	0.59	91.5	0.554	0.784	-0.07	0.12
Height	0.02	0.00	6.45	180.3	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.27	0.03	-7.89	205.1	0.000	0.000	-0.33	-0.20
BMI (z-score)	0.03	0.02	2.10	164.5	0.037	0.074	0.00	0.06
Parental education	0.03	0.01	4.41	132.4	0.000	0.000	0.02	0.05
Maternal age	0.01	0.00	2.25	232.5	0.025	0.100	0.00	0.01
Global fractional anisotropy (FA)								
Base model (R^2 < .01)								
(Intercept)	-1.24	0.60	-2.07	200.5	0.040	0.046	-2.43	-0.06
IMT (z-score)	-0.01	0.02	-0.28	136.9	0.780	0.827	-0.04	0.03
Female sex	-0.02	0.03	-0.68	226.4	0.499	0.509	-0.09	0.04
Age at MRI	0.04	0.05	0.73	138.6	0.466	0.533	-0.07	0.15
Age delta	0.03	0.05	0.55	137.7	0.581	0.784	-0.07	0.12
Height	0.00	0.00	1.67	226.9	0.097	0.155	0.00	0.01
Fully adjusted model (R^2 = .01)								
(Intercept)	-1.68	0.62	-2.69	204.2	0.008	0.020	-2.90	-0.45
IMT (z-score)	0.00	0.02	-0.22	132.5	0.827	0.827	-0.04	0.03
Female sex	-0.02	0.03	-0.66	221.9	0.509	0.509	-0.09	0.04
Age at MRI	0.07	0.05	1.27	150.6	0.206	0.276	-0.04	0.18
Age delta	0.00	0.05	0.06	141.1	0.952	0.952	-0.09	0.10
Height	0.00	0.00	1.27	222.1	0.207	0.276	0.00	0.01
Non-European ethnicity	-0.05	0.04	-1.25	274.6	0.212	0.283	-0.12	0.03
BMI (z-score)	0.00	0.02	0.04	121.6	0.969	0.969	-0.03	0.04
Parental education	0.01	0.01	1.78	270.6	0.076	0.101	0.00	0.03
Maternal age	0.01	0.00	1.42	209.6	0.159	0.212	0.00	0.01
Global mean diffusivity (MD)								
Base model (R^2 = .01)								
(Intercept)	1.49	0.62	2.43	159.5	0.016	0.026	0.28	2.71
IMT (z-score)	0.01	0.02	0.75	187.6	0.453	0.604	-0.02	0.05
Female sex	-0.16	0.03	-5.14	300.4	0.000	0.000	-0.22	-0.10
Age at MRI	-0.09	0.05	-1.79	297.3	0.074	0.158	-0.19	0.01
Age delta	-0.02	0.05	-0.41	169.5	0.686	0.784	-0.11	0.07
Height	0.00	0.00	-0.27	131.1	0.791	0.904	-0.01	0.01
Fully adjusted model (R^2 = .01)								
(Intercept)	1.44	0.62	2.33	208.4	0.021	0.028	0.22	2.66
IMT (z-score)	0.01	0.02	0.80	193.0	0.427	0.604	-0.02	0.05
Female sex	-0.16	0.03	-5.15	283.8	0.000	0.000	-0.23	-0.10
Age at MRI	-0.09	0.05	-1.76	361.0	0.079	0.158	-0.18	0.01
Age delta	-0.02	0.05	-0.43	195.5	0.671	0.784	-0.11	0.07
Height	0.00	0.00	-0.02	152.8	0.981	0.981	-0.01	0.01
Non-European ethnicity	-0.01	0.04	-0.24	209.1	0.809	0.809	-0.08	0.07
BMI (z-score)	-0.02	0.02	-1.08	109.6	0.282	0.376	-0.06	0.02
Parental education	0.00	0.01	0.22	127.5	0.823	0.823	-0.02	0.02
Maternal age	0.00	0.00	-0.58	168.2	0.560	0.560	-0.01	0.01

CAROTID DISTENSIBILITY

Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)								
Base model (R^2 = .17)								
(Intercept)	-1.85	0.52	-3.54	334.6	0.000	0.000	-2.88	-0.82
Distensibility (z-score)	0.00	0.02	0.21	107.3	0.835	0.835	-0.03	0.04
Female sex	-0.77	0.03	-25.51	201.8	0.000	0.000	-0.82	-0.71
Age at MRI	-0.09	0.05	-1.97	331.7	0.050	0.164	-0.18	0.00
Age delta	0.09	0.04	2.22	236.4	0.028	0.112	0.01	0.17
Height	0.02	0.00	9.01	147.1	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .19)								
(Intercept)	-2.47	0.55	-4.47	233.3	0.000	0.000	-3.56	-1.38
Distensibility (z-score)	0.01	0.02	0.37	101.1	0.712	0.835	-0.03	0.04
Female sex	-0.77	0.03	-25.81	195.5	0.000	0.000	-0.82	-0.71
Age at MRI	-0.01	0.05	-0.13	291.9	0.897	0.897	-0.10	0.08
Age delta	0.02	0.04	0.58	228.4	0.564	0.795	-0.06	0.11
Height	0.02	0.00	7.35	186.9	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.25	0.03	-7.81	534.7	0.000	0.000	-0.31	-0.18
BMI (z-score)	0.05	0.02	3.10	206.2	0.002	0.008	0.02	0.08
Parental education	0.03	0.01	3.91	150.5	0.000	0.000	0.01	0.04
Maternal age	0.01	0.00	1.86	237.2	0.064	0.128	0.00	0.01
Grey matter volume (GMV)								
Base model (R^2 = .17)								
(Intercept)	-0.72	0.52	-1.38	360.1	0.167	0.167	-1.74	0.30
Distensibility (z-score)	0.00	0.02	0.21	130.7	0.835	0.835	-0.03	0.04
Female sex	-0.77	0.03	-24.82	148.0	0.000	0.000	-0.83	-0.71
Age at MRI	-0.16	0.05	-3.23	161.8	0.002	0.016	-0.25	-0.06
Age delta	0.11	0.05	2.24	100.8	0.028	0.112	0.01	0.20
Height	0.02	0.00	8.28	142.0	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .20)								
(Intercept)	-1.54	0.56	-2.78	215.5	0.006	0.012	-2.64	-0.45
Distensibility (z-score)	0.00	0.02	0.22	122.9	0.825	0.835	-0.03	0.04
Female sex	-0.77	0.03	-25.18	142.9	0.000	0.000	-0.84	-0.71
Age at MRI	-0.06	0.05	-1.26	131.8	0.209	0.279	-0.16	0.04
Age delta	0.03	0.05	0.59	91.1	0.556	0.795	-0.07	0.12
Height	0.02	0.00	6.48	140.9	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.26	0.03	-7.83	210.8	0.000	0.000	-0.33	-0.20
BMI (z-score)	0.03	0.02	2.18	170.3	0.031	0.062	0.00	0.06
Parental education	0.03	0.01	4.48	134.3	0.000	0.000	0.02	0.05
Maternal age	0.01	0.00	2.23	231.4	0.026	0.104	0.00	0.01
Global fractional anisotropy (FA)								
Base model (R^2 < .01)								
(Intercept)	-1.27	0.59	-2.14	227.6	0.033	0.038	-2.44	-0.10
Distensibility (z-score)	0.02	0.02	0.96	131.0	0.338	0.756	-0.02	0.05
Female sex	-0.02	0.03	-0.73	197.5	0.465	0.476	-0.09	0.04
Age at MRI	0.04	0.05	0.72	139.8	0.471	0.538	-0.07	0.15
Age delta	0.03	0.05	0.54	139.7	0.590	0.795	-0.07	0.12
Height	0.00	0.00	1.70	159.4	0.091	0.146	0.00	0.01
Fully adjusted model (R^2 = .01)								
(Intercept)	-1.69	0.62	-2.75	223.3	0.006	0.012	-2.90	-0.48
Distensibility (z-score)	0.02	0.02	0.89	142.7	0.378	0.756	-0.02	0.05
Female sex	-0.02	0.03	-0.71	197.8	0.476	0.476	-0.09	0.04
Age at MRI	0.07	0.05	1.26	150.9	0.209	0.279	-0.04	0.17
Age delta	0.00	0.05	0.05	141.9	0.962	0.962	-0.10	0.10
Height	0.00	0.00	1.29	167.3	0.198	0.264	0.00	0.01
Non-European ethnicity	-0.05	0.04	-1.28	274.3	0.200	0.267	-0.12	0.03
BMI (z-score)	0.00	0.02	0.15	129.0	0.878	0.878	-0.03	0.04
Parental education	0.01	0.01	1.77	278.6	0.078	0.104	0.00	0.03
Maternal age	0.01	0.00	1.41	210.2	0.159	0.212	0.00	0.01
Global mean diffusivity (MD)								
Base model (R^2 = .01)								
(Intercept)	1.50	0.62	2.42	150.6	0.017	0.027	0.27	2.72
Distensibility (z-score)	-0.02	0.02	-0.97	146.0	0.335	0.756	-0.05	0.02
Female sex	-0.16	0.03	-5.10	286.7	0.000	0.000	-0.22	-0.10
Age at MRI	-0.09	0.05	-1.78	290.5	0.077	0.164	-0.18	0.01
Age delta	-0.02	0.05	-0.39	166.8	0.696	0.795	-0.11	0.08
Height	0.00	0.00	-0.30	118.5	0.763	0.872	-0.01	0.01
Fully adjusted model (R^2 = .01)								
(Intercept)	1.44	0.62	2.30	194.7	0.022	0.029	0.21	2.66
Distensibility (z-score)	-0.02	0.02	-1.15	158.1	0.251	0.756	-0.05	0.01
Female sex	-0.16	0.03	-5.11	272.5	0.000	0.000	-0.22	-0.10
Age at MRI	-0.09	0.05	-1.75	351.6	0.082	0.164	-0.18	0.01
Age delta	-0.02	0.05	-0.41	192.2	0.686	0.795	-0.11	0.07
Height	0.00	0.00	-0.05	135.7	0.960	0.960	-0.01	0.01
Non-European ethnicity	-0.01	0.04	-0.18	211.6	0.858	0.858	-0.08	0.07
BMI (z-score)	-0.02	0.02	-1.22	117.4	0.226	0.301	-0.06	0.01
Parental education	0.00	0.01	0.26	127.9	0.797	0.797	-0.01	0.02
Maternal age	0.00	0.00	-0.59	167.4	0.559	0.559	-0.01	0.01

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S3 - Main results (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .17)	(Intercept)	-2.06	0.53	-3.87	303.4	0.000	0.000	-3.11	-1.01
	SBP (z-score)	-0.04	0.02	-2.45	167.9	0.015	0.030	-0.07	-0.01
	Female sex	-0.76	0.03	-25.18	186.3	0.000	0.000	-0.82	-0.70
	Age at MRI	-0.09	0.05	-1.90	307.1	0.059	0.162	-0.17	0.00
	Age delta	0.09	0.04	2.11	230.6	0.036	0.144	0.01	0.17
	Height	0.02	0.00	9.74	197.1	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .19)	(Intercept)	-2.61	0.56	-4.67	214.2	0.000	0.000	-3.72	-1.51
	SBP (z-score)	-0.04	0.02	-2.52	227.5	0.013	0.030	-0.07	-0.01
	Female sex	-0.76	0.03	-25.43	182.4	0.000	0.000	-0.82	-0.70
	Age at MRI	0.00	0.05	-0.10	275.7	0.924	0.924	-0.09	0.09
	Age delta	0.02	0.04	0.50	223.4	0.618	0.757	-0.06	0.10
	Height	0.02	0.00	7.86	231.3	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.25	0.03	-7.87	567.4	0.000	0.000	-0.31	-0.18
	BMI (z-score)	0.06	0.02	3.82	287.7	0.000	0.000	0.03	0.09
	Parental education	0.03	0.01	3.78	151.1	0.000	0.000	0.01	0.04
	Maternal age	0.01	0.00	1.87	234.8	0.063	0.126	0.00	0.01
Grey matter volume (GMV)									
Base model (R^2 = .17)	(Intercept)	-0.99	0.52	-1.91	387.5	0.058	0.058	-2.02	0.03
	SBP (z-score)	-0.05	0.02	-3.03	125.3	0.003	0.024	-0.08	-0.02
	Female sex	-0.77	0.03	-24.66	146.8	0.000	0.000	-0.83	-0.71
	Age at MRI	-0.15	0.05	-3.14	156.7	0.002	0.016	-0.25	-0.06
	Age delta	0.10	0.05	2.12	101.5	0.036	0.144	0.01	0.19
	Height	0.02	0.00	8.97	160.3	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .20)	(Intercept)	-1.70	0.56	-3.06	217.0	0.003	0.008	-2.80	-0.61
	SBP (z-score)	-0.05	0.02	-2.62	122.5	0.010	0.030	-0.08	-0.01
	Female sex	-0.77	0.03	-24.86	137.0	0.000	0.000	-0.83	-0.71
	Age at MRI	-0.06	0.05	-1.23	128.9	0.223	0.297	-0.16	0.04
	Age delta	0.02	0.05	0.51	91.5	0.611	0.757	-0.07	0.12
	Height	0.02	0.00	7.00	161.7	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.26	0.03	-7.89	216.8	0.000	0.000	-0.33	-0.20
	BMI (z-score)	0.05	0.02	2.87	152.0	0.005	0.010	0.01	0.08
	Parental education	0.03	0.01	4.37	142.1	0.000	0.000	0.02	0.05
	Maternal age	0.01	0.00	2.24	229.8	0.026	0.104	0.00	0.01
Global fractional anisotropy (FA)									
Base model (R^2 < .01)	(Intercept)	-1.25	0.60	-2.08	222.1	0.039	0.045	-2.43	-0.07
	SBP (z-score)	0.00	0.02	-0.22	131.4	0.828	0.876	-0.04	0.03
	Female sex	-0.02	0.03	-0.63	199.1	0.533	0.533	-0.09	0.04
	Age at MRI	0.04	0.05	0.73	140.5	0.464	0.530	-0.07	0.15
	Age delta	0.03	0.05	0.54	133.9	0.588	0.757	-0.07	0.12
	Height	0.00	0.00	1.65	219.2	0.101	0.162	0.00	0.01
Fully adjusted model (R^2 = .01)	(Intercept)	-1.66	0.62	-2.67	216.7	0.008	0.016	-2.88	-0.43
	SBP (z-score)	0.00	0.02	0.16	137.0	0.876	0.876	-0.03	0.04
	Female sex	-0.02	0.03	-0.64	193.3	0.522	0.533	-0.09	0.04
	Age at MRI	0.07	0.05	1.27	152.0	0.207	0.297	-0.04	0.17
	Age delta	0.00	0.05	0.07	137.0	0.947	0.947	-0.09	0.10
	Height	0.00	0.00	1.20	214.2	0.233	0.311	0.00	0.01
	Non-European ethnicity	-0.05	0.04	-1.26	278.9	0.208	0.277	-0.12	0.03
	BMI (z-score)	0.00	0.02	-0.02	119.5	0.987	0.987	-0.04	0.04
	Parental education	0.01	0.01	1.79	286.4	0.075	0.100	0.00	0.03
	Maternal age	0.01	0.00	1.42	211.7	0.157	0.209	0.00	0.01
Global mean diffusivity (MD)									
Base model (R^2 = .01)	(Intercept)	1.38	0.61	2.24	176.0	0.026	0.037	0.17	2.59
	SBP (z-score)	-0.01	0.02	-0.81	135.4	0.420	0.672	-0.05	0.02
	Female sex	-0.16	0.03	-5.18	305.1	0.000	0.000	-0.22	-0.10
	Age at MRI	-0.09	0.05	-1.77	296.2	0.079	0.162	-0.18	0.01
	Age delta	-0.02	0.05	-0.44	165.2	0.660	0.757	-0.11	0.07
	Height	0.00	0.00	0.02	146.7	0.988	0.988	-0.01	0.01
Fully adjusted model (R^2 = .01)	(Intercept)	1.37	0.62	2.21	212.9	0.028	0.037	0.15	2.59
	SBP (z-score)	-0.01	0.02	-0.44	134.0	0.662	0.876	-0.05	0.03
	Female sex	-0.16	0.03	-5.22	292.8	0.000	0.000	-0.23	-0.10
	Age at MRI	-0.09	0.05	-1.75	354.3	0.081	0.162	-0.18	0.01
	Age delta	-0.02	0.05	-0.44	188.9	0.662	0.757	-0.11	0.07
	Height	0.00	0.00	0.14	154.3	0.888	0.988	-0.01	0.01
	Non-European ethnicity	-0.01	0.04	-0.21	204.9	0.833	0.833	-0.08	0.07
	BMI (z-score)	-0.02	0.02	-0.88	110.7	0.382	0.509	-0.05	0.02
	Parental education	0.00	0.01	0.22	126.4	0.823	0.823	-0.02	0.02
	Maternal age	0.00	0.00	-0.59	169.0	0.556	0.556	-0.01	0.01

DIASTOLIC BLOOD PRESSURE (DBP)

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .17)	(Intercept)	-1.92	0.52	-3.70	348.4	0.000	0.000	-2.94	-0.90
	DBP (z-score)	-0.05	0.02	-3.32	276.5	0.001	0.004	-0.08	-0.02
	Female sex	-0.76	0.03	-25.17	191.6	0.000	0.000	-0.82	-0.70
	Age at MRI	-0.08	0.05	-1.88	321.8	0.061	0.162	-0.17	0.00
	Age delta	0.09	0.04	2.09	229.9	0.038	0.152	0.01	0.17
	Height	0.02	0.00	9.45	180.8	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .19)	(Intercept)	-2.48	0.55	-4.50	237.0	0.000	0.000	-3.57	-1.40
	DBP (z-score)	-0.04	0.02	-2.58	240.8	0.011	0.022	-0.07	-0.01
	Female sex	-0.76	0.03	-25.48	186.1	0.000	0.000	-0.82	-0.70
	Age at MRI	-0.01	0.05	-0.10	292.6	0.920	0.920	-0.09	0.08
	Age delta	0.02	0.04	0.52	225.8	0.602	0.753	-0.06	0.10
	Height	0.02	0.00	7.57	224.1	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.24	0.03	-7.78	571.5	0.000	0.000	-0.30	-0.18
	BMI (z-score)	0.05	0.02	3.30	201.5	0.001	0.004	0.02	0.08
	Parental education	0.03	0.01	3.73	143.3	0.000	0.000	0.01	0.04
	Maternal age	0.01	0.00	1.79	229.3	0.074	0.148	0.00	0.01
Grey matter volume (GMV)									
Base model (R^2 = .17)	(Intercept)	-0.80	0.51	-1.57	438.0	0.117	0.117	-1.81	0.20
	DBP (z-score)	-0.06	0.02	-3.48	132.6	0.001	0.004	-0.09	-0.02
	Female sex	-0.76	0.03	-24.41	139.5	0.000	0.000	-0.83	-0.70
	Age at MRI	-0.15	0.05	-3.15	164.4	0.002	0.016	-0.25	-0.06
	Age delta	0.10	0.05	2.13	104.1	0.036	0.152	0.01	0.19
	Height	0.02	0.00	8.65	164.6	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .20)	(Intercept)	-1.55	0.55	-2.82	228.3	0.005	0.013	-2.64	-0.47
	DBP (z-score)	-0.04	0.02	-2.59	127.4	0.011	0.022	-0.07	-0.01
	Female sex	-0.77	0.03	-24.68	130.9	0.000	0.000	-0.83	-0.71
	Age at MRI	-0.06	0.05	-1.24	133.6	0.218	0.291	-0.16	0.04
	Age delta	0.03	0.05	0.54	93.5	0.592	0.753	-0.07	0.12
	Height	0.02	0.00	6.66	155.3	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.26	0.03	-7.79	215.4	0.000	0.000	-0.33	-0.20
	BMI (z-score)	0.04	0.02	2.41	163.8	0.017	0.034	0.01	0.07
	Parental education	0.03	0.01	4.35	141.1	0.000	0.000	0.02	0.05
	Maternal age	0.01	0.00	2.16	226.5	0.031	0.124	0.00	0.01
Global fractional anisotropy (FA)									
Base model (R^2 < .01)	(Intercept)	-1.24	0.60	-2.08	216.8	0.039	0.045	-2.41	-0.07
	DBP (z-score)	-0.01	0.02	-0.32	114.7	0.754	0.862	-0.04	0.03
	Female sex	-0.02	0.03	-0.61	198.4	0.540	0.540	-0.09	0.05
	Age at MRI	0.04	0.05	0.74	139.4	0.461	0.527	-0.07	0.15
	Age delta	0.03	0.05	0.54	136.8	0.590	0.753	-0.07	0.12
	Height	0.00	0.00	1.63	197.7	0.104	0.166	0.00	0.01
Fully adjusted model (R^2 = .01)	(Intercept)	-1.67	0.62	-2.70	217.9	0.007	0.014	-2.88	-0.45
	DBP (z-score)	0.00	0.02	0.03	109.5	0.975	0.975	-0.04	0.04
	Female sex	-0.02	0.03	-0.63	194.3	0.527	0.540	-0.09	0.04
	Age at MRI	0.07	0.05	1.27	150.9	0.206	0.291	-0.04	0.18
	Age delta	0.00	0.05	0.06	140.1	0.952	0.952	-0.09	0.10
	Height	0.00	0.00	1.23	197.4	0.220	0.293	0.00	0.01
	Non-European ethnicity	-0.05	0.04	-1.26	271.9	0.208	0.277	-0.12	0.03
	BMI (z-score)	0.00	0.02	0.03	113.7	0.978	0.978	-0.04	0.04
	Parental education	0.01	0.01	1.77	273.1	0.078	0.104	0.00	0.03
	Maternal age	0.01	0.00	1.43	220.2	0.156	0.208	0.00	0.01
Global mean diffusivity (MD)									
Base model (R^2 = .01)	(Intercept)	1.43	0.62	2.32	151.7	0.022	0.035	0.21	2.65
	DBP (z-score)	-0.02	0.02	-0.97	176.0	0.334	0.534	-0.05	0.02
	Female sex	-0.16	0.03	-5.11	276.8	0.000	0.000	-0.22	-0.10
	Age at MRI	-0.09	0.05	-1.76	295.3	0.079	0.162	-0.18	0.01
	Age delta	-0.02	0.05	-0.44	170.3	0.659	0.753	-0.11	0.07
	Height	0.00	0.00	-0.14	122.4	0.891	0.932	-0.01	0.01
Fully adjusted model (R^2 = .01)	(Intercept)	1.40	0.62	2.25	195.3	0.026	0.035	0.17	2.62
	DBP (z-score)	-0.01	0.02	-0.81	161.4	0.417	0.556	-0.05	0.02
	Female sex	-0.16	0.03	-5.14	263.9	0.000	0.000	-0.23	-0.10
	Age at MRI	-0.09	0.05	-1.75	354.0	0.081	0.162	-0.18	0.01
	Age delta	-0.02	0.05	-0.44	195.0	0.659	0.753	-0.11	0.07
	Height	0.00	0.00	0.09	144.1	0.932	0.932	-0.01	0.01
	Non-European ethnicity	-0.01	0.04	-0.19	202.4	0.852	0.852	-0.08	0.07
	BMI (z-score)	-0.02	0.02	-0.97	105.1	0.333	0.444	-0.05	0.02
	Parental education	0.00	0.01	0.20	128.4	0.842	0.842	-0.02	0.02
	Maternal age	0.00	0.00	-0.61	168.8	0.543	0.543	-0.01	0.01

SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S4 - Linear mixed model results (with age interaction)

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Total brain volume (TBV) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	885.71	29.63	29.89	193.70	827.27	944.14	0.000	0.000	AIC 121038.4
Age	7.01	0.34	20.75	48.90	6.34	7.69	0.000	0.000	Random effect SD 79.0
IMT (z-score)	3.94	4.16	0.95	60.81	-4.38	12.25	0.347	0.780	
Female sex	-68.61	2.72	-25.20	238.20	-73.97	-63.25	0.000	0.000	
Height	1.94	0.21	9.45	222.31	1.53	2.34	0.000	0.000	
Age * IMT (z-score)	-0.13	0.30	-0.44	71.82	-0.72	0.46	0.662	0.874	

Total brain volume (TBV) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	896.42	31.45	28.50	185.41	834.38	958.47	0.000	0.000	AIC 120871.2
Age	7.03	0.34	20.85	49.22	6.35	7.71	0.000	0.000	Random effect SD 77.5
IMT (z-score)	4.31	4.15	1.04	60.71	-3.98	12.60	0.303	0.780	
Female sex	-68.75	2.68	-25.63	236.75	-74.03	-63.46	0.000	0.000	
Height	1.63	0.21	7.94	263.79	1.22	2.03	0.000	0.000	
Non-European ethnicity	-23.38	3.14	-7.44	185.47	-29.58	-17.18	0.000	0.000	
BMI (z-score)	4.16	1.35	3.08	236.21	1.50	6.82	0.002	0.005	
Parental education	2.74	0.69	3.96	131.91	1.37	4.11	0.000	0.000	
Maternal age	0.50	0.27	1.85	336.24	-0.03	1.03	0.066	0.231	
Age * IMT (z-score)	-0.13	0.30	-0.44	72.11	-0.72	0.46	0.661	0.874	

Grey matter volume (GMV) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	625.25	17.70	35.32	173.65	590.31	660.19	0.000	0.000	AIC 110967.6
Age	-0.61	0.20	-3.04	68.24	-1.01	-0.21	0.003	0.004	Random effect SD 45.7
IMT (z-score)	2.91	2.33	1.25	113.06	-1.71	7.53	0.215	0.780	
Female sex	-40.49	1.66	-24.35	172.02	-43.77	-37.21	0.000	0.000	
Height	1.08	0.12	8.64	169.55	0.83	1.32	0.000	0.000	
Age * IMT (z-score)	-0.11	0.18	-0.60	113.68	-0.46	0.25	0.551	0.874	

Grey matter volume (GMV) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	626.37	19.01	32.95	148.63	588.80	663.94	0.000	0.000	AIC 110762.1
Age	-0.59	0.20	-2.98	68.66	-0.99	-0.20	0.004	0.005	Random effect SD 44.6
IMT (z-score)	3.19	2.34	1.36	109.91	-1.45	7.82	0.176	0.780	
Female sex	-40.61	1.64	-24.76	164.33	-43.85	-37.37	0.000	0.000	
Height	0.91	0.13	7.07	147.89	0.65	1.16	0.000	0.000	
Non-European ethnicity	-14.88	1.89	-7.87	152.89	-18.62	-11.15	0.000	0.000	
BMI (z-score)	1.78	0.81	2.21	198.09	0.19	3.37	0.028	0.044	
Parental education	1.78	0.42	4.28	113.79	0.96	2.60	0.000	0.000	
Maternal age	0.36	0.17	2.21	210.92	0.04	0.69	0.028	0.203	
Age * IMT (z-score)	-0.11	0.18	-0.60	111.61	-0.46	0.25	0.550	0.874	

Global fractional anisotropy (FA) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.50	0.01	85.37	167.08	0.49	0.51	0.000	0.000	AIC -54498.0
Age	0.00	0.00	21.68	52.60	0.00	0.00	0.000	0.000	Random effect SD 0.0
IMT (z-score)	0.00	0.00	-0.32	152.87	0.00	0.00	0.752	0.856	
Female sex	0.00	0.00	-0.35	218.65	0.00	0.00	0.727	0.727	
Height	0.00	0.00	1.92	173.91	0.00	0.00	0.057	0.064	
Age * IMT (z-score)	0.00	0.00	0.22	169.13	0.00	0.00	0.829	0.874	

Global fractional anisotropy (FA) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.50	0.01	77.93	144.20	0.48	0.51	0.000	0.000	AIC -54512.7
Age	0.00	0.00	21.72	52.65	0.00	0.00	0.000	0.000	Random effect SD 0.0
IMT (z-score)	0.00	0.00	-0.29	154.31	0.00	0.00	0.769	0.856	
Female sex	0.00	0.00	-0.37	221.04	0.00	0.00	0.714	0.727	
Height	0.00	0.00	1.58	170.24	0.00	0.00	0.116	0.125	
Non-European ethnicity	0.00	0.00	-1.88	198.56	0.00	0.00	0.062	0.067	
BMI (z-score)	0.00	0.00	0.16	234.30	0.00	0.00	0.872	0.872	
Parental education	0.00	0.00	1.74	168.22	0.00	0.00	0.083	0.097	
Maternal age	0.00	0.00	1.11	151.18	0.00	0.00	0.268	0.451	
Age * IMT (z-score)	0.00	0.00	0.21	170.62	0.00	0.00	0.831	0.874	

Global mean diffusivity (MD) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.87	0.01	124.96	66.76	0.85	0.88	0.000	0.000	AIC -57225.0
Age	-0.01	0.00	-53.00	71.89	-0.01	0.00	0.000	0.000	Random effect SD 0.0
IMT (z-score)	0.00	0.00	0.67	68.44	0.00	0.00	0.506	0.780	
Female sex	0.00	0.00	-6.94	610.34	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.12	73.33	0.00	0.00	0.902	0.902	
Age * IMT (z-score)	0.00	0.00	-0.46	75.80	0.00	0.00	0.646	0.874	

Global mean diffusivity (MD) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.87	0.01	125.28	89.66	0.85	0.88	0.000	0.000	AIC -57221.4
Age	-0.01	0.00	-53.04	72.08	-0.01	0.00	0.000	0.000	Random effect SD 0.0
IMT (z-score)	0.00	0.00	0.68	69.35	0.00	0.00	0.500	0.780	
Female sex	0.00	0.00	-6.98	604.48	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.36	84.83	0.00	0.00	0.721	0.748	
Non-European ethnicity	0.00	0.00	0.23	278.57	0.00	0.00	0.815	0.815	
BMI (z-score)	0.00	0.00	-0.90	99.17	0.00	0.00	0.372	0.434	
Parental education	0.00	0.00	0.05	194.61	0.00	0.00	0.958	0.958	
Maternal age	0.00	0.00	-1.00	325.24	0.00	0.00	0.320	0.451	
Age * IMT (z-score)	0.00	0.00	-0.47	75.92	0.00	0.00	0.642	0.874	

CAROTID DISTENSIBILITY

Total brain volume (TBV) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	878.84	30.93	28.41	141.45	817.70	939.99	0.000	0.000	AIC 121043.1
Age	7.02	0.34	20.76	48.93	6.34	7.70	0.000	0.000	Random effect SD 79.0
Distensibility (z-score)	1.59	3.84	0.41	83.38	-6.06	9.23	0.681	1.000	
Female sex	-69.12	2.69	-25.67	267.76	-74.43	-63.82	0.000	0.000	
Height	1.99	0.22	9.24	152.27	1.56	2.41	0.000	0.000	
Age * Distens. (z-score)	-0.11	0.28	-0.38	97.46	-0.66	0.45	0.708	0.985	

Total brain volume (TBV) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	888.26	32.19	27.59	152.57	824.66	951.86	0.000	0.000	AIC 120877.2
Age	7.03	0.34	20.86	49.25	6.35	7.71	0.000	0.000	Random effect SD 77.6
Distensibility (z-score)	1.84	3.86	0.48	81.39	-5.84	9.52	0.634	1.000	
Female sex	-69.37	2.66	-26.11	261.26	-74.60	-64.13	0.000	0.000	
Height	1.69	0.21	7.94	187.34	1.27	2.10	0.000	0.000	
Non-European ethnicity	-23.13	3.12	-7.42	198.65	-29.28	-16.98	0.000	0.000	
BMI (z-score)	4.31	1.36	3.17	236.46	1.63	7.00	0.002	0.005	
Parental education	2.77	0.69	4.02	132.76	1.41	4.14	0.000	0.000	
Maternal age	0.49	0.27	1.84	343.01	-0.04	1.02	0.067	0.235	
Age * Distens. (z-score)	-0.11	0.28	-0.38	98.69	-0.66	0.45	0.704	0.985	

Grey matter volume (GMV) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	620.47	18.84	32.93	115.07	583.14	657.79	0.000	0.000	AIC 110973.6
Age	-0.61	0.20	-3.03	67.83	-1.00	-0.21	0.003	0.004	Random effect SD 45.7
Distensibility (z-score)	0.80	2.33	0.34	116.83	-3.82	5.42	0.732	1.000	
Female sex	-40.85	1.67	-24.44	165.40	-44.15	-37.55	0.000	0.000	
Height	1.11	0.13	8.35	111.05	0.85	1.37	0.000	0.000	
Age * Distens. (z-score)	-0.05	0.27	-0.27	116.77	-0.40	0.31	0.791	0.985	

Grey matter volume (GMV) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	620.99	19.86	31.27	111.48	581.64	660.35	0.000	0.000	AIC 110770.4
Age	-0.59	0.20	-2.96	68.27	-0.99	-0.19	0.004	0.005	Random effect SD 44.7
Distensibility (z-score)	0.83	2.33	0.35	115.65	-3.80	5.45	0.724	1.000	
Female sex	-41.02	1.65	-24.89	159.27	-44.27	-37.76	0.000	0.000	
Height	0.95	0.14	6.99	106.49	0.68	1.21	0.000	0.000	
Non-European ethnicity	-14.70	1.88	-7.81	158.42	-18.41	-10.98	0.000	0.000	
BMI (z-score)	1.87	0.81	2.32	218.25	0.28	3.46	0.021	0.037	
Parental education	1.80	0.42	4.34	114.61	0.98	2.63	0.000	0.000	
Maternal age	0.36	0.17	2.19	210.39	0.04	0.69	0.029	0.210	
Age * Distens. (z-score)	-0.05	0.18	-0.27	118.45	-0.40	0.30	0.789	0.985	

Global fractional anisotropy (FA) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.50	0.01	83.74	146.98	0.49	0.51	0.000	0.000	AIC -54499.1
Age	0.00	0.00	21.61	52.24	0.00	0.00	0.000	0.000	Random effect SD 0.0
Distensibility (z-score)	0.00	0.00	-0.27	86.71	0.00	0.00	0.792	1.000	
Female sex	0.00	0.00	-0.37	232.71	0.00	0.00	0.712	0.712	
Height	0.00	0.00	1.90	140.96	0.00	0.00	0.059	0.066	
Age * Distens. (z-score)	0.00	0.00	0.44	106.99	0.00	0.00	0.665	0.985	

Global fractional anisotropy (FA) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.50	0.01	77.13	132.73	0.48	0.51	0.000	0.000	AIC -54513.7
Age	0.00	0.00	21.66	52.31	0.00	0.00	0.000	0.000	Random effect SD 0.0
Distensibility (z-score)	0.00	0.00	-0.28	87.52	0.00	0.00	0.778	1.000	
Female sex	0.00	0.00	-0.39	236.06	0.00	0.00	0.699	0.712	
Height	0.00	0.00	1.57	144.85	0.00	0.00	0.118	0.127	
Non-European ethnicity	0.00	0.00	-1.91	197.47	0.00	0.00	0.057	0.061	
BMI (z-score)	0.00	0.00	0.24	258.43	0.00	0.00	0.813	0.813	
Parental education	0.00	0.00	1.74	176.06	0.00	0.00	0.085	0.092	
Maternal age	0.00	0.00	1.11	150.87	0.00	0.00	0.268	0.459	
Age * Distens. (z-score)	0.00	0.00	0.44	107.57	0.00	0.00	0.663	0.985	

Global mean diffusivity (MD) — Base model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.87	0.01	122.63	63.02	0.85	0.88	0.000	0.000	AIC -57225.0
Age	-0.01	0.00	-53.03	72.14	-0.01	0.00	0.000	0.000	Random effect SD 0.0
Distensibility (z-score)	0.00	0.00	-0.65	71.81	0.00	0.00	0.520	1.000	
Female sex	0.00	0.00	-6.95	620.08	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.11	67.91	0.00	0.00	0.913	0.913	
Age * Distens. (z-score)	0.00	0.00	0.43	78.10	0.00	0.00	0.666	0.985	

Global mean diffusivity (MD) — Fully adjusted model

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
(Intercept)	0.87	0.01	123.35	82.84	0.85	0.88	0.000	0.000	AIC -57221.7
Age	-0.01	0.00	-53.06	72.30	-0.01	0.00	0.000	0.000	Random effect SD 0.0
Distensibility (z-score)	0.00	0.00	-0.69	74.08	0.00	0.00	0.494	1.000	
Female sex	0.00	0.00	-6.98	611.22	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.35	77.58	0.00	0.00	0.725	0.752	
Non-European ethnicity	0.00	0.00	0.31	257.44	0.00	0.00	0.759	0.759	
BMI (z-score)	0.00	0.00	-1.01	103.62	0.00	0.00	0.314	0.400	
Parental education	0.00	0.00	0.09	193.42	0.00	0.00	0.928	0.928	
Maternal age	0.00	0.00	-1.00	321.06	0.00	0.00	0.320	0.459	
Age * Distens. (z-score)	0.00	0.00	0.44	78.37	0.00	0.00	0.665	0.985	

* SE= standard error; Df = degrees of freedom; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; AIC = Akaike information criterion; Rand. effect SD = random effect standard deviation;

Table S4 - Linear mixed model results (with age interaction) (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Total brain volume (TBV)

Base model — AIC 121034.1

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	860.52	30.56	28.16	184.11	800.22	920.82	0.000	0.000	
Age	7.01	0.34	20.75	48.88	6.34	7.69	0.000	0.000	78.9
SBP (z-score)	-1.47	3.61	-0.41	115.50	-8.62	5.68	0.685	0.967	
Female sex	-68.63	2.70	-25.46	255.38	-73.94	-63.33	0.000	0.000	
Height	2.11	0.21	9.95	197.56	1.70	2.53	0.000	0.000	
Age * SBP (z-score)	-0.17	0.28	-0.62	91.32	-0.73	0.38	0.538	0.958	

Fully adjusted model — AIC 120869.2

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	875.91	32.02	27.36	172.61	812.71	939.11	0.000	0.000	
Age	7.03	0.34	20.84	49.17	6.35	7.71	0.000	0.000	77.5
SBP (z-score)	-1.53	3.65	-0.42	113.31	-8.76	5.70	0.676	0.967	
Female sex	-68.77	2.66	-25.83	250.30	-74.02	-63.53	0.000	0.000	
Height	1.77	0.21	8.42	223.21	1.36	2.19	0.000	0.000	
Non-European ethnicity	-23.17	3.11	-7.46	204.64	-29.29	-17.05	0.000	0.000	
BMI (z-score)	5.31	1.37	3.86	339.95	2.61	8.01	0.000	0.000	
Parental education	2.69	0.69	3.89	131.89	1.32	4.06	0.000	0.000	
Maternal age	0.49	0.27	1.84	336.05	-0.04	1.02	0.067	0.235	
Age * SBP (z-score)	-0.17	0.28	-0.60	91.13	-0.73	0.39	0.548	0.958	

Grey matter volume (GMV)

Base model — AIC 110957.4

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	606.67	18.87	32.15	130.56	569.34	644.01	0.000	0.000	
Age	-0.61	0.20	-3.04	68.15	-1.01	-0.21	0.003	0.004	45.7
SBP (z-score)	-0.40	2.29	-0.17	129.80	-4.94	4.14	0.862	0.967	
Female sex	-40.48	1.65	-24.54	178.45	-43.74	-37.23	0.000	0.000	
Height	1.21	0.13	9.06	124.45	0.94	1.47	0.000	0.000	
Age * SBP (z-score)	-0.19	0.18	-1.03	96.63	-0.55	0.18	0.306	0.958	

Fully adjusted model — AIC 110758.3

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	612.52	19.76	31.00	122.20	573.41	651.64	0.000	0.000	
Age	-0.59	0.20	-2.98	68.59	-0.99	-0.20	0.004	0.005	44.6
SBP (z-score)	-0.13	2.33	-0.06	122.95	-4.73	4.48	0.956	0.967	
Female sex	-40.65	1.64	-24.85	165.66	-43.88	-37.42	0.000	0.000	
Height	1.01	0.13	7.51	119.97	0.74	1.27	0.000	0.000	
Non-European ethnicity	-14.73	1.87	-7.87	163.82	-18.43	-11.04	0.000	0.000	
BMI (z-score)	2.55	0.83	3.06	237.37	0.91	4.19	0.002	0.004	
Parental education	1.75	0.41	4.24	119.50	0.93	2.56	0.000	0.000	
Maternal age	0.36	0.17	2.19	206.94	0.04	0.69	0.029	0.210	
Age * SBP (z-score)	-0.19	0.18	-1.01	97.02	-0.55	0.18	0.313	0.958	

Global fractional anisotropy (FA)

Base model — AIC -54499.3

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.50	0.01	85.47	206.09	0.49	0.51	0.000	0.000	
Age	0.00	0.00	21.68	52.61	0.00	0.00	0.000	0.000	0.0
SBP (z-score)	0.00	0.00	0.99	145.20	0.00	0.00	0.323	0.967	
Female sex	0.00	0.00	-0.31	208.96	0.00	0.00	0.758	0.758	
Height	0.00	0.00	1.82	195.50	0.00	0.00	0.071	0.080	
Age * SBP (z-score)	0.00	0.00	-1.03	182.36	0.00	0.00	0.307	0.958	

Fully adjusted model — AIC -54514.5

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.50	0.01	78.68	163.06	0.48	0.51	0.000	0.000	
Age	0.00	0.00	21.72	52.64	0.00	0.00	0.000	0.000	0.0
SBP (z-score)	0.00	0.00	1.09	140.92	0.00	0.00	0.279	0.967	
Female sex	0.00	0.00	-0.37	212.23	0.00	0.00	0.712	0.738	
Height	0.00	0.00	1.44	185.21	0.00	0.00	0.153	0.165	
Non-European ethnicity	0.00	0.00	-1.89	199.22	0.00	0.00	0.060	0.065	
BMI (z-score)	0.00	0.00	-0.04	260.00	0.00	0.00	0.970	0.970	
Parental education	0.00	0.00	1.77	180.97	0.00	0.00	0.078	0.091	
Maternal age	0.00	0.00	1.11	153.45	0.00	0.00	0.267	0.459	
Age * SBP (z-score)	0.00	0.00	-1.02	181.19	0.00	0.00	0.310	0.958	

Global mean diffusivity (MD)

Base model — AIC -57224.2

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.86	0.01	123.64	70.95	0.85	0.88	0.000	0.000	
Age	-0.01	0.00	-53.06	72.20	-0.01	0.00	0.000	0.000	0.0
SBP (z-score)	0.00	0.00	-0.15	68.63	0.00	0.00	0.885	0.967	
Female sex	0.00	0.00	-6.98	561.42	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.40	78.46	0.00	0.00	0.690	0.690	
Age * SBP (z-score)	0.00	0.00	-0.05	68.97	0.00	0.00	0.958	0.958	

Fully adjusted model — AIC -57220.1

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.86	0.01	123.70	88.90	0.85	0.88	0.000	0.000	
Age	-0.01	0.00	-53.10	72.43	-0.01	0.00	0.000	0.000	0.0
SBP (z-score)	0.00	0.00	-0.10	72.84	0.00	0.00	0.925	0.967	
Female sex	0.00	0.00	-7.03	577.49	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.55	83.55	0.00	0.00	0.585	0.607	
Non-European ethnicity	0.00	0.00	0.28	260.20	0.00	0.00	0.784	0.784	
BMI (z-score)	0.00	0.00	-0.68	106.53	0.00	0.00	0.498	0.581	
Parental education	0.00	0.00	0.05	185.92	0.00	0.00	0.958	0.958	
Maternal age	0.00	0.00	-1.00	323.69	0.00	0.00	0.317	0.459	
Age * SBP (z-score)	0.00	0.00	-0.06	69.08	0.00	0.00	0.956	0.958	

DIASTOLIC BLOOD PRESSURE (DBP)

Total brain volume (TBV)

Base model — AIC 121028.0

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	874.31	29.84	29.30	172.59	815.42	933.21	0.000	0.000	
Age	7.02	0.34	20.77	48.99	6.34	7.69	0.000	0.000	78.9
DBP (z-score)	-2.35	3.74	-0.63	93.49	-9.77	5.06	0.530	0.978	
Female sex	-68.41	2.69	-25.45	264.20	-73.70	-63.11	0.000	0.000	
Height	2.02	0.21	9.75	190.98	1.61	2.42	0.000	0.000	
Age * DBP (z-score)	-0.18	0.27	-0.64	104.57	-0.72	0.37	0.524	0.949	

Fully adjusted model — AIC 120868.7

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	887.89	31.58	28.12	169.86	825.55	950.22	0.000	0.000	
Age	7.03	0.34	20.87	49.29	6.35	7.71	0.000	0.000	77.5
DBP (z-score)	-1.36	3.71	-0.37	95.63	-8.73	6.02	0.716	0.978	
Female sex	-68.74	2.66	-25.89	257.70	-73.97	-63.51	0.000	0.000	
Height	1.69	0.21	8.20	227.11	1.29	2.10	0.000	0.000	
Non-European ethnicity	-22.91	3.11	-7.38	204.04	-29.04	-16.79	0.000	0.000	
BMI (z-score)	4.57	1.35	3.38	239.81	1.90	7.24	0.001	0.002	
Parental education	2.68	0.69	3.86	130.08	1.31	4.05	0.000	0.000	
Maternal age	0.48	0.27	1.76	330.71	-0.06	1.00	0.079	0.276	
Age * DBP (z-score)	-0.17	0.28	-0.62	103.30	-0.71	0.38	0.539	0.949	

Grey matter volume (GMV)

Base model — AIC 110953.5

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	617.50	18.04	34.24	143.26	581.85	653.15	0.000	0.000	
Age	-0.61	0.20	-3.04	68.21	-1.00	-0.21	0.003	0.004	45.6
DBP (z-score)	-1.30	2.29	-0.57	128.07	-5.83	3.24	0.572	0.978	
Female sex	-40.36	1.66	-24.36	172.69	-43.63	-37.09	0.000	0.000	
Height	1.13	0.13	8.89	137.55	0.88	1.38	0.000	0.000	
Age * DBP (z-score)	-0.14	0.19	-0.76	95.39	-0.51	0.23	0.448	0.949	

Fully adjusted model — AIC 110759.4

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	620.53	19.38	32.02	125.11	582.18	658.88	0.000	0.000	
Age	-0.59	0.20	-2.97	68.53	-0.99	-0.20	0.004	0.005	44.6
DBP (z-score)	-0.54	2.28	-0.24	131.12	-5.05	3.96	0.811	0.978	
Female sex	-40.64	1.64	-24.72	159.67	-43.88	-37.39	0.000	0.000	
Height	0.95	0.13	7.26	122.58	0.69	1.21	0.000	0.000	
Non-European ethnicity	-14.57	1.88	-7.77	161.17	-18.27	-10.86	0.000	0.000	
BMI (z-score)	2.05	0.81	2.54	209.16	0.46	3.64	0.012	0.019	
Parental education	1.74	0.41	4.23	120.60	0.93	2.56	0.000	0.000	
Maternal age	0.35	0.17	2.12	200.23	0.02	0.68	0.036	0.252	
Age * DBP (z-score)	-0.14	0.19	-0.73	94.48	-0.50	0.23	0.465	0.949	

Global fractional anisotropy (FA)

Base model — AIC -54498.3

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.50	0.01	86.75	180.81	0.49	0.51	0.000	0.000	
Age	0.00	0.00	21.68	52.62	0.00	0.00	0.000	0.000	0.0
DBP (z-score)	0.00	0.00	0.22	97.83	0.00	0.00	0.830	0.978	
Female sex	0.00	0.00	-0.28	209.22	0.00	0.00	0.780	0.780	
Height	0.00	0.00	1.90	183.75	0.00	0.00	0.059	0.066	
Age * DBP (z-score)	0.00	0.00	-0.29	112.34	0.00	0.00	0.773	0.949	

Fully adjusted model — AIC -54513.0

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.50	0.01	79.04	151.93	0.48	0.51	0.000	0.000	
Age	0.00	0.00	21.72	52.62	0.00	0.00	0.000	0.000	0.0
DBP (z-score)	0.00	0.00	0.29	96.51	0.00	0.00	0.776	0.978	
Female sex	0.00	0.00	-0.34	211.36	0.00	0.00	0.735	0.762	
Height	0.00	0.00	1.55	176.40	0.00	0.00	0.124	0.134	
Non-European ethnicity	0.00	0.00	-1.89	190.97	0.00	0.00	0.060	0.065	
BMI (z-score)	0.00	0.00	0.14	215.40	0.00	0.00	0.893	0.893	
Parental education	0.00	0.00	1.75	179.46	0.00	0.00	0.082	0.092	
Maternal age	0.00	0.00	1.12	153.77	0.00	0.00	0.266	0.490	
Age * DBP (z-score)	0.00	0.00	-0.27	113.17	0.00	0.00	0.785	0.949	

Global mean diffusivity (MD)

Base model — AIC -57224.6

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.86	0.01	124.72	65.27	0.85	0.88	0.000	0.000	
Age	-0.01	0.00	-53.11	72.47	-0.01	0.00	0.000	0.000	0.0
DBP (z-score)	0.00	0.00	-0.23	69.24	0.00	0.00	0.817	0.978	
Female sex	0.00	0.00	-6.95	567.36	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.27	70.83	0.00	0.00	0.787	0.787	
Age * DBP (z-score)	0.00	0.00	0.01	83.81	0.00	0.00	0.994	0.996	

Fully adjusted model — AIC -57220.8

Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Random effect SD
(Intercept)	0.86	0.01	124.94	86.35	0.85	0.88	0.000	0.000	
Age	-0.01	0.00	-53.14	72.65	-0.01	0.00	0.000	0.000	0.0
DBP (z-score)	0.00	0.00	-0.22	69.30	0.00	0.00	0.824	0.978	
Female sex	0.00	0.00	-7.00	578.34	0.00	0.00	0.000	0.000	
Height	0.00	0.00	0.49	81.67	0.00	0.00	0.628	0.651	
Non-European ethnicity	0.00	0.00	0.30	251.80	0.00	0.00	0.763	0.763	
BMI (z-score)	0.00	0.00	-0.79	98.05	0.00	0.00	0.434	0.506	
Parental education	0.00	0.00	0.03	192.22	0.00	0.00	0.979	0.979	
Maternal age	0.00	0.00	-1.02	315.30	0.00	0.00	0.307	0.490	
Age * DBP (z-score)	0.00	0.00	0.01	83.84	0.00	0.00	0.996	0.996	

* SE= standard error; Df = degrees of freedom; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; AIC = Akaike information criterion; Rand. effect SD = random effect standard deviation;

Table S5 - Linear mixed model results (without age interaction)

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Total brain volume (TBV)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	885.70	29.63	29.89	193.63	827.26	944.14	0.000	0.000	AIC 121037.8
	Age	7.02	0.34	20.77	49.00	6.34	7.69	0.000	0.000	Random effect SD 79.0
	IMT (z-score)	2.36	1.69	1.39	67.80	-1.02	5.74	0.169	0.249	
	Female sex	-68.61	2.72	-25.20	237.99	-73.98	-63.25	0.000	0.000	
	Height	1.94	0.21	9.45	222.05	1.53	2.34	0.000	0.000	
Fully adjusted model	(Intercept)	896.42	31.45	28.50	185.40	834.37	958.47	0.000	0.000	AIC 120870.5
	Age	7.03	0.34	20.87	49.31	6.35	7.71	0.000	0.000	Random effect SD 77.5
	IMT (z-score)	2.73	1.70	1.61	63.88	-0.66	6.12	0.113	0.222	
	Female sex	-68.75	2.68	-25.63	236.53	-74.03	-63.47	0.000	0.000	
	Height	1.63	0.21	7.94	263.46	1.22	2.03	0.000	0.000	
	Non-European ethnicity	-23.38	3.14	-7.44	185.98	-29.58	-17.18	0.000	0.000	
	BMI (z-score)	4.16	1.35	3.08	236.28	1.50	6.82	0.002	0.005	
	Parental education	2.74	0.69	3.96	132.02	1.37	4.11	0.000	0.000	
	Maternal age	0.50	0.27	1.85	335.70	-0.03	1.03	0.066	0.231	

Grey matter volume (GMV)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	625.24	17.70	35.32	173.73	590.30	660.17	0.000	0.000	AIC 110967.6
	Age	-0.61	0.20	-3.03	68.00	-1.01	-0.21	0.003	0.004	Random effect SD 45.7
	IMT (z-score)	1.62	0.90	1.80	105.88	-0.17	3.41	0.075	0.175	
	Female sex	-40.49	1.66	-24.35	172.13	-43.78	-37.21	0.000	0.000	
	Height	1.08	0.12	8.64	169.56	0.83	1.32	0.000	0.000	
Fully adjusted model	(Intercept)	626.37	19.01	32.94	148.59	588.80	663.94	0.000	0.000	AIC 110761.3
	Age	-0.59	0.20	-2.97	68.40	-0.99	-0.19	0.004	0.005	Random effect SD 44.6
	IMT (z-score)	1.89	0.90	2.10	97.68	0.10	3.67	0.038	0.164	
	Female sex	-40.62	1.64	-24.76	164.43	-43.86	-37.38	0.000	0.000	
	Height	0.91	0.13	7.07	147.87	0.65	1.16	0.000	0.000	
	Non-European ethnicity	-14.88	1.89	-7.87	152.99	-18.62	-11.15	0.000	0.000	
	BMI (z-score)	1.78	0.81	2.21	198.55	0.19	3.38	0.028	0.044	
	Parental education	1.78	0.42	4.28	113.97	0.96	2.60	0.000	0.000	
	Maternal age	0.37	0.17	2.21	210.76	0.04	0.69	0.028	0.203	

Global fractional anisotropy (FA)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	0.50	0.01	85.38	167.17	0.49	0.51	0.000	0.000	AIC -54499.5
	Age	0.00	0.00	21.67	52.58	0.00	0.00	0.000	0.000	Random effect SD 0.0
	IMT (z-score)	0.00	0.00	-0.51	307.96	0.00	0.00	0.607	0.629	
	Female sex	0.00	0.00	-0.35	219.17	0.00	0.00	0.728	0.728	
	Height	0.00	0.00	1.92	173.94	0.00	0.00	0.057	0.064	
Fully adjusted model	(Intercept)	0.50	0.01	77.93	144.23	0.48	0.51	0.000	0.000	AIC -54514.2
	Age	0.00	0.00	21.72	52.64	0.00	0.00	0.000	0.000	Random effect SD 0.0
	IMT (z-score)	0.00	0.00	-0.42	289.53	0.00	0.00	0.677	0.677	
	Female sex	0.00	0.00	-0.37	221.56	0.00	0.00	0.714	0.728	
	Height	0.00	0.00	1.58	170.14	0.00	0.00	0.116	0.125	
	Non-European ethnicity	0.00	0.00	-1.88	198.23	0.00	0.00	0.062	0.067	
	BMI (z-score)	0.00	0.00	0.16	233.79	0.00	0.00	0.872	0.872	
	Parental education	0.00	0.00	1.74	168.00	0.00	0.00	0.083	0.097	
	Maternal age	0.00	0.00	1.11	151.06	0.00	0.00	0.269	0.449	

Global mean diffusivity (MD)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	0.87	0.01	125.00	66.84	0.85	0.88	0.000	0.000	AIC -57225.7
	Age	-0.01	0.00	-53.07	72.28	-0.01	0.00	0.000	0.000	Random effect SD 0.0
	IMT (z-score)	0.00	0.00	0.99	192.64	0.00	0.00	0.324	0.349	
	Female sex	0.00	0.00	-6.94	613.33	0.00	0.00	0.000	0.000	
	Height	0.00	0.00	0.12	73.33	0.00	0.00	0.902	0.902	
Fully adjusted model	(Intercept)	0.87	0.01	125.30	89.73	0.85	0.88	0.000	0.000	AIC -57222.0
	Age	-0.01	0.00	-53.11	72.47	-0.01	0.00	0.000	0.000	Random effect SD 0.0
	IMT (z-score)	0.00	0.00	1.01	212.25	0.00	0.00	0.315	0.349	
	Female sex	0.00	0.00	-6.98	607.39	0.00	0.00	0.000	0.000	
	Height	0.00	0.00	0.36	84.79	0.00	0.00	0.721	0.748	
	Non-European ethnicity	0.00	0.00	0.23	279.10	0.00	0.00	0.815	0.815	
	BMI (z-score)	0.00	0.00	-0.90	99.05	0.00	0.00	0.373	0.435	
	Parental education	0.00	0.00	0.05	194.58	0.00	0.00	0.959	0.959	
	Maternal age	0.00	0.00	-1.00	325.43	0.00	0.00	0.321	0.449	

CAROTID DISTENSIBILITY

Total brain volume (TBV)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	878.79	30.94	28.41	141.25	817.63	939.95	0.000	0.000	AIC 121042.0
	Age	7.02	0.34	20.76	48.97	6.34	7.70	0.000	0.000	Random effect SD 79.0
	Distensibility (z-score)	0.32	1.57	0.20	94.67	-2.80	3.43	0.841	0.987	
	Female sex	-69.12	2.69	-25.67	267.57	-74.43	-63.82	0.000	0.000	
	Height	1.99	0.22	9.24	152.11	1.56	2.41	0.000	0.000	
Fully adjusted model	(Intercept)	888.20	32.19	27.59	152.57	824.60	951.80	0.000	0.000	AIC 120876.2
	Age	7.03	0.34	20.87	49.29	6.35	7.71	0.000	0.000	Random effect SD 77.6
	Distensibility (z-score)	0.56	1.58	0.35	87.74	-2.59	3.71	0.725	0.987	
	Female sex	-69.37	2.66	-26.10	261.08	-74.60	-64.13	0.000	0.000	
	Height	1.69	0.21	7.94	187.09	1.27	2.10	0.000	0.000	
	Non-European ethnicity	-23.13	3.12	-7.42	198.45	-29.28	-16.98	0.000	0.000	
	BMI (z-score)	4.31	1.36	3.16	236.77	1.63	7.00	0.002	0.005	
	Parental education	2.77	0.69	4.02	132.76	1.41	4.14	0.000	0.000	
	Maternal age	0.49	0.27	1.83	342.56	-0.04	1.02	0.067	0.235	

Grey matter volume (GMV)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	620.45	18.83	32.94	115.42	583.14	657.75	0.000	0.000	AIC 110972.3
	Age	-0.61	0.20	-3.03	68.01	-1.00	-0.21	0.003	0.004	Random effect SD 45.7
	Distensibility (z-score)	0.23	0.88	0.26	120.70	-1.52	1.98	0.797	0.987	
	Female sex	-40.85	1.67	-24.44	165.26	-44.15	-37.55	0.000	0.000	
	Height	1.11	0.13	8.35	111.29	0.85	1.37	0.000	0.000	
Fully adjusted model	(Intercept)	620.97	19.85	31.29	111.88	581.64	660.30	0.000	0.000	AIC 110769.1
	Age	-0.59	0.20	-2.97	68.45	-0.99	-0.19	0.004	0.005	Random effect SD 44.7
	Distensibility (z-score)	0.25	0.88	0.28	116.24	-1.50	1.99	0.780	0.987	
	Female sex	-41.02	1.65	-24.89	159.15	-44.27	-37.76	0.000	0.000	
	Height	0.95	0.14	6.99	106.79	0.68	1.21	0.000	0.000	
	Non-European ethnicity	-14.70	1.88	-7.81	158.45	-18.42	-10.98	0.000	0.000	
	BMI (z-score)	1.87	0.81	2.32	218.62	0.28	3.46	0.022	0.038	
	Parental education	1.80	0.42	4.34	114.52	0.98	2.63	0.000	0.000	
	Maternal age	0.36	0.17	2.19	210.16	0.04	0.69	0.029	0.210	

Global fractional anisotropy (FA)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	0.50	0.01	83.66	146.01	0.49	0.51	0.000	0.000	AIC -54500.2
	Age	0.00	0.00	21.65	52.46	0.00	0.00	0.000	0.000	Random effect SD 0.0
	Distensibility (z-score)	0.00	0.00	0.66	125.93	0.00	0.00	0.508	0.987	
	Female sex	0.00	0.00	-0.37	232.79	0.00	0.00	0.713	0.713	
	Height	0.00	0.00	1.90	139.81	0.00	0.00	0.060	0.067	
Fully adjusted model	(Intercept)	0.50	0.01	77.07	132.03	0.48	0.51	0.000	0.000	AIC -54514.8
	Age	0.00	0.00	21.69	52.53	0.00	0.00	0.000	0.000	Random effect SD 0.0
	Distensibility (z-score)	0.00	0.00	0.59	133.14	0.00	0.00	0.555	0.987	
	Female sex	0.00	0.00	-0.39	236.11	0.00	0.00	0.699	0.713	
	Height	0.00	0.00	1.57	143.56	0.00	0.00	0.119	0.128	
	Non-European ethnicity	0.00	0.00	-1.91	197.73	0.00	0.00	0.057	0.061	
	BMI (z-score)	0.00	0.00	0.24	258.07	0.00	0.00	0.812	0.812	
	Parental education	0.00	0.00	1.74	175.69	0.00	0.00	0.084	0.090	
	Maternal age	0.00	0.00	1.11	150.96	0.00	0.00	0.269	0.461	

Global mean diffusivity (MD)

Model	Predictor	Beta	SE	Statistic	Df	LCI	UCI	$P_{unadjusted}$	P_{FDR}	Model info
Base model	(Intercept)	0.87	0.01	122.61	62.98	0.85	0.88	0.000	0.000	AIC -57225.8
	Age	-0.01	0.00	-53.03	72.14	-0.01	0.00	0.000	0.000	Random effect SD 0.0
	Distensibility (z-score)	0.00	0.00	-0.96	151.29	0.00	0.00	0.340	0.987	
	Female sex	0.00	0.00	-6.95	618.93	0.00	0.00	0.000	0.000	
	Height	0.00	0.00	0.11	67.86	0.00	0.00	0.915	0.915	
Fully adjusted model	(Intercept)	0.87	0.01	123.32	82.72	0.85	0.88	0.000	0.000	AIC -57222.5
	Age	-0.01	0.00	-53.06	72.30	-0.01	0.00	0.000	0.000	Random effect SD 0.0
	Distensibility (z-score)	0.00	0.00	-1.09	159.97	0.00	0.00	0.277	0.987	
	Female sex	0.00	0.00	-6.98	610.00	0.00	0.00	0.000	0.000	
	Height	0.00	0.00	0.35	77.48	0.00	0.00	0.727	0.754	
	Non-European ethnicity	0.00	0.00	0.31	257.37	0.00	0.00	0.759	0.759	
	BMI (z-score)	0.00	0.00	-1.01	103.42	0.00	0.00	0.314	0.400	
	Parental education	0.00	0.00	0.09	193.07	0.00	0.00	0.927	0.927	
	Maternal age	0.00	0.00	-1.00	321.07	0.00	0.00	0.319	0.461	

* SE= standard error; Df = degrees of freedom; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; AIC = Akaike information criterion; Rand. effect SD = random effect standard deviation;

Table S5 - Linear mixed model results (without age interaction) (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Total brain volume (TBV) — Base model (AIC 121033.5; Random effect SD 78.9)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	860.59	30.59	28.14	182.94	800.24	920.93	0.000	0.000
Age	7.01	0.34	20.75	48.94	6.34	7.69	0.000	0.000
SBP (z-score)	-3.58	1.39	-2.57	252.05	-6.32	-0.83	0.011	0.049
Female sex	-68.63	2.70	-25.46	255.05	-73.94	-63.32	0.000	0.000
Height	2.11	0.21	9.94	196.40	1.69	2.53	0.000	0.000

Total brain volume (TBV) — Fully adjusted model (AIC 120868.6; Random effect SD 77.5)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	875.98	32.04	27.34	171.72	812.74	939.22	0.000	0.000
Age	7.03	0.34	20.85	49.23	6.35	7.71	0.000	0.000
SBP (z-score)	-3.59	1.40	-2.55	384.04	-6.35	-0.83	0.011	0.049
Female sex	-68.77	2.66	-25.83	249.93	-74.02	-63.53	0.000	0.000
Height	1.77	0.21	8.41	221.80	1.36	2.19	0.000	0.000
Non-European ethnicity	-23.17	3.11	-7.46	204.90	-29.30	-17.05	0.000	0.000
BMI (z-score)	5.31	1.37	3.87	341.06	2.61	8.01	0.000	0.000
Parental education	2.69	0.69	3.89	131.94	1.32	4.06	0.000	0.000
Maternal age	0.49	0.27	1.84	336.28	-0.04	1.02	0.067	0.235

Grey matter volume (GMV) — Base model (AIC 110957.9; Random effect SD 45.7)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	606.74	18.88	32.14	130.28	569.39	644.09	0.000	0.000
Age	-0.61	0.20	-3.04	68.03	-1.01	-0.21	0.003	0.004
SBP (z-score)	-2.69	0.85	-3.17	184.06	-4.36	-1.01	0.002	0.028
Female sex	-40.48	1.65	-24.54	178.44	-43.74	-37.23	0.000	0.000
Height	1.21	0.13	9.05	124.21	0.94	1.47	0.000	0.000

Grey matter volume (GMV) — Fully adjusted model (AIC 110758.9; Random effect SD 44.6)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	612.60	19.76	31.00	122.13	573.48	651.72	0.000	0.000
Age	-0.59	0.20	-2.98	68.46	-0.99	-0.20	0.004	0.005
SBP (z-score)	-2.38	0.86	-2.76	225.79	-4.08	-0.68	0.006	0.042
Female sex	-40.64	1.64	-24.85	165.64	-43.87	-37.41	0.000	0.000
Height	1.01	0.13	7.50	119.79	0.74	1.27	0.000	0.000
Non-European ethnicity	-14.74	1.87	-7.87	163.45	-18.43	-11.04	0.000	0.000
BMI (z-score)	2.55	0.83	3.06	237.56	0.91	4.19	0.002	0.004
Parental education	1.75	0.41	4.24	119.29	0.93	2.56	0.000	0.000
Maternal age	0.36	0.17	2.20	207.03	0.04	0.68	0.029	0.203

Global fractional anisotropy (FA) — Base model (AIC -54499.3; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.50	0.01	85.43	205.30	0.49	0.51	0.000	0.000
Age	0.00	0.00	21.67	52.56	0.00	0.00	0.000	0.000
SBP (z-score)	0.00	0.00	0.11	179.83	0.00	0.00	0.912	0.946
Female sex	0.00	0.00	-0.31	209.05	0.00	0.00	0.759	0.759
Height	0.00	0.00	1.81	194.25	0.00	0.00	0.072	0.081

Global fractional anisotropy (FA) — Fully adjusted model (AIC -54514.5; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.50	0.01	78.66	162.87	0.48	0.51	0.000	0.000
Age	0.00	0.00	21.72	52.60	0.00	0.00	0.000	0.000
SBP (z-score)	0.00	0.00	0.56	199.84	0.00	0.00	0.575	0.654
Female sex	0.00	0.00	-0.37	212.34	0.00	0.00	0.712	0.738
Height	0.00	0.00	1.43	183.85	0.00	0.00	0.155	0.167
Non-European ethnicity	0.00	0.00	-1.90	199.94	0.00	0.00	0.059	0.064
BMI (z-score)	0.00	0.00	-0.03	259.89	0.00	0.00	0.973	0.973
Parental education	0.00	0.00	1.77	180.85	0.00	0.00	0.078	0.091
Maternal age	0.00	0.00	1.12	153.07	0.00	0.00	0.267	0.458

Global mean diffusivity (MD) — Base model (AIC -57225.2; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.86	0.01	123.69	71.05	0.85	0.88	0.000	0.000
Age	-0.01	0.00	-53.06	72.26	-0.01	0.00	0.000	0.000
SBP (z-score)	0.00	0.00	-0.80	203.54	0.00	0.00	0.424	0.594
Female sex	0.00	0.00	-6.98		0.00	0.00	0.000	0.000
Height	0.00	0.00	0.40	78.63	0.00	0.00	0.690	0.690

Global mean diffusivity (MD) — Fully adjusted model (AIC -57221.1; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.86	0.01	123.75	89.05	0.85	0.88	0.000	0.000
Age	-0.01	0.00	-53.11	72.49	-0.01	0.00	0.000	0.000
SBP (z-score)	0.00	0.00	-0.57	206.64	0.00	0.00	0.570	0.654
Female sex	0.00	0.00	-7.03	575.25	0.00	0.00	0.000	0.000
Height	0.00	0.00	0.55	83.69	0.00	0.00	0.585	0.607
Non-European ethnicity	0.00	0.00	0.27	260.04	0.00	0.00	0.784	0.784
BMI (z-score)	0.00	0.00	-0.68	106.31	0.00	0.00	0.499	0.582
Parental education	0.00	0.00	0.05	185.76	0.00	0.00	0.958	0.958
Maternal age	0.00	0.00	-1.00	323.22	0.00	0.00	0.317	0.458

DIASTOLIC BLOOD PRESSURE (DBP)

Total brain volume (TBV) — Base model (AIC 121027.4; Random effect SD 78.9)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	874.34	29.85	29.29	172.24	815.43	933.25	0.000	0.000
Age	7.02	0.34	20.76	48.96	6.34	7.69	0.000	0.000
DBP (z-score)	-4.48	1.37	-3.27	222.81	-7.17	-1.78	0.001	0.009
Female sex	-68.40	2.69	-25.44	263.37	-73.70	-63.11	0.000	0.000
Height	2.02	0.21	9.75	190.59	1.61	2.42	0.000	0.000

Total brain volume (TBV) — Fully adjusted model (AIC 120868.0; Random effect SD 77.5)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	887.91	31.59	28.11	169.43	825.55	950.27	0.000	0.000
Age	7.03	0.34	20.86	49.26	6.35	7.71	0.000	0.000
DBP (z-score)	-3.41	1.37	-2.50	217.89	-6.10	-0.72	0.013	0.040
Female sex	-68.74	2.66	-25.88	256.92	-73.97	-63.51	0.000	0.000
Height	1.69	0.21	8.20	226.58	1.29	2.10	0.000	0.000
Non-European ethnicity	-22.92	3.11	-7.38	203.93	-29.04	-16.79	0.000	0.000
BMI (z-score)	4.55	1.35	3.38	239.94	1.90	7.24	0.001	0.002
Parental education	2.68	0.69	3.86	130.05	1.31	4.05	0.000	0.000
Maternal age	0.48	0.27	1.77	330.66	-0.05	1.00	0.078	0.273

Grey matter volume (GMV) — Base model (AIC 110953.3; Random effect SD 45.6)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	617.52	18.04	34.24	143.25	581.86	653.17	0.000	0.000
Age	-0.61	0.20	-3.04	68.12	-1.01	-0.21	0.003	0.004
DBP (z-score)	-3.00	0.81	-3.73	225.25	-4.59	-1.41	0.000	0.000
Female sex	-40.36	1.66	-24.35	171.97	-43.63	-37.09	0.000	0.000
Height	1.13	0.13	8.89	137.48	0.88	1.38	0.000	0.000

Grey matter volume (GMV) — Fully adjusted model (AIC 110759.1; Random effect SD 44.6)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	620.54	19.38	32.02	125.05	582.19	658.90	0.000	0.000
Age	-0.59	0.20	-2.97	68.45	-0.99	-0.19	0.004	0.005
DBP (z-score)	-2.19	0.80	-2.74	230.90	-3.76	-0.61	0.007	0.039
Female sex	-40.64	1.65	-24.70	159.02	-43.88	-37.39	0.000	0.000
Height	0.95	0.13	7.26	122.57	0.69	1.21	0.000	0.000
Non-European ethnicity	-14.57	1.88	-7.77	161.14	-18.28	-10.87	0.000	0.000
BMI (z-score)	2.05	0.81	2.54	209.52	0.46	3.64	0.012	0.019
Parental education	1.74	0.41	4.23	120.42	0.93	2.56	0.000	0.000
Maternal age	0.35	0.17	2.12	199.99	0.02	0.68	0.036	0.252

Global fractional anisotropy (FA) — Base model (AIC -54499.5; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.50	0.01	86.76	181.15	0.49	0.51	0.000	0.000
Age	0.00	0.00	21.68	52.62	0.00	0.00	0.000	0.000
DBP (z-score)	0.00	0.00	-0.28	139.77	0.00	0.00	0.781	0.875
Female sex	0.00	0.00	-0.28	209.38	0.00	0.00	0.781	0.781
Height	0.00	0.00	1.90	183.93	0.00	0.00	0.059	0.066

Global fractional anisotropy (FA) — Fully adjusted model (AIC -54514.3; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.50	0.01	79.06	152.16	0.48	0.51	0.000	0.000
Age	0.00	0.00	21.72	52.63	0.00	0.00	0.000	0.000
DBP (z-score)	0.00	0.00	0.13	130.62	0.00	0.00	0.901	0.934
Female sex	0.00	0.00	-0.34	211.54	0.00	0.00	0.736	0.763
Height	0.00	0.00	1.55	176.56	0.00	0.00	0.124	0.134
Non-European ethnicity	0.00	0.00	-1.89	191.17	0.00	0.00	0.060	0.065
BMI (z-score)	0.00	0.00	0.13	215.97	0.00	0.00	0.893	0.893
Parental education	0.00	0.00	1.75	179.33	0.00	0.00	0.082	0.092
Maternal age	0.00	0.00	1.12	152.92	0.00	0.00	0.266	0.489

Global mean diffusivity (MD) — Base model (AIC -57225.8; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.86	0.01	124.76	65.35	0.85	0.88	0.000	0.000
Age	-0.01	0.00	-53.04	72.16	-0.01	0.00	0.000	0.000
DBP (z-score)	0.00	0.00	-0.89	120.88	0.00	0.00	0.378	0.504
Female sex	0.00	0.00	-6.95	565.32	0.00	0.00	0.000	0.000
Height	0.00	0.00	0.27	70.91	0.00	0.00	0.787	0.787

Global mean diffusivity (MD) — Fully adjusted model (AIC -57222.0; Random effect SD 0.0)

Predictor	Beta	SE	Statistic	Df	LCI	UCI	P_unadjusted	P_FDR
(Intercept)	0.86	0.01	124.97	86.47	0.85	0.88	0.000	0.000
Age	-0.01	0.00	-53.08	72.33	-0.01	0.00	0.000	0.000
DBP (z-score)	0.00	0.00	-0.84	113.80	0.00	0.00	0.403	0.513
Female sex	0.00	0.00	-6.99	576.22	0.00	0.00	0.000	0.000
Height	0.00	0.00	0.49	81.74	0.00	0.00	0.627	0.650
Non-European ethnicity	0.00	0.00	0.30	252.13	0.00	0.00	0.763	0.763
BMI (z-score)	0.00	0.00	-0.79	98.13	0.00	0.00	0.434	0.506
Parental education	0.00	0.00	0.03	192.00	0.00	0.00	0.979	0.979
Maternal age	0.00	0.00	-1.02	314.71	0.00	0.00	0.307	0.489

* SE= standard error; Df = degrees of freedom; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; AIC = Akaike information criterion; Rand. effect SD = random effect standard deviation;

Table S6 - Sex interaction

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R² = .17)	(Intercept)	-2.44	0.47	-5.23	196.3	0.000	0.000	-3.36	-1.52
	IMT (z-score)	0.04	0.02	1.60	128.3	0.111	0.222	-0.01	0.08
	Female sex	-0.76	0.03	-24.81	172.0	0.000	0.000	-0.82	-0.70
	Age	0.00	0.03	-0.06	80.3	0.955	0.955	-0.06	0.06
	Height	0.02	0.00	8.75	167.4	0.000	0.000	0.02	0.03
	IMT (z-score) * sex	-0.03	0.03	-0.99	278.8	0.325	0.535	-0.09	0.03
Fully adjusted model (R² = .19)	(Intercept)	-2.51	0.49	-5.15	164.0	0.000	0.000	-3.48	-1.55
	IMT (z-score)	0.04	0.02	1.70	124.4	0.092	0.222	-0.01	0.08
	Female sex	-0.76	0.03	-25.01	162.9	0.000	0.000	-0.82	-0.70
	Age	0.02	0.03	0.56	73.9	0.579	0.662	-0.04	0.08
	Height	0.02	0.00	7.25	175.7	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.27	0.03	-8.69	581.6	0.000	0.000	-0.33	-0.21
	BMI (z-score)	0.04	0.02	2.82	192.0	0.005	0.020	0.01	0.07
	Parental education	0.04	0.01	2.54	101.1	0.013	0.026	0.01	0.06
	Maternal age	0.01	0.00	2.21	223.8	0.028	0.056	0.00	0.01
	IMT (z-score) * sex	-0.02	0.03	-0.84	271.8	0.401	0.535	-0.08	0.03
Grey matter volume (GMV)									
Base model (R² = .17)	(Intercept)	-1.39	0.44	-3.17	400.1	0.003	0.003	-2.24	-0.53
	IMT (z-score)	0.04	0.02	1.81	130.4	0.073	0.222	0.00	0.09
	Female sex	-0.77	0.03	-24.77	156.8	0.000	0.000	-0.83	-0.71
	Age	-0.06	0.03	-2.15	128.5	0.034	0.054	-0.11	0.00
	Height	0.02	0.00	8.02	185.3	0.000	0.000	0.01	0.02
	IMT (z-score) * sex	-0.03	0.03	-1.11	322.0	0.270	0.535	-0.09	0.03
Fully adjusted model (R² = .20)	(Intercept)	-1.59	0.47	-3.36	206.3	0.001	0.002	-2.52	-0.66
	IMT (z-score)	0.04	0.02	1.94	126.7	0.055	0.222	0.00	0.09
	Female sex	-0.77	0.03	-24.98	145.0	0.000	0.000	-0.83	-0.71
	Age	-0.04	0.03	-1.33	99.0	0.186	0.248	-0.09	0.02
	Height	0.02	0.00	6.48	155.5	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.29	0.03	-8.88	246.1	0.000	0.000	-0.35	-0.23
	BMI (z-score)	0.03	0.02	1.87	154.0	0.063	0.126	0.00	0.06
	Parental education	0.04	0.01	3.08	144.1	0.002	0.008	0.01	0.07
	Maternal age	0.01	0.00	2.63	210.2	0.009	0.036	0.00	0.01
	IMT (z-score) * sex	-0.03	0.03	-0.94	315.8	0.349	0.535	-0.08	0.03
Global fractional anisotropy (FA)									
Base model (R² < .01)	(Intercept)	-1.45	0.49	-2.96	288.7	0.003	0.003	-2.42	-0.49
	IMT (z-score)	0.02	0.03	0.66	129.2	0.511	0.681	-0.03	0.07
	Female sex	-0.02	0.03	-0.66	231.1	0.511	0.515	-0.09	0.04
	Age	0.07	0.03	2.48	342.6	0.014	0.028	0.01	0.12
	Height	0.00	0.00	1.62	250.7	0.106	0.170	0.00	0.01
	IMT (z-score) * sex	-0.04	0.04	-1.20	123.2	0.234	0.535	-0.11	0.03
Fully adjusted model (R² = .01)	(Intercept)	-1.69	0.52	-3.26	231.1	0.001	0.002	-2.72	-0.67
	IMT (z-score)	0.02	0.03	0.67	130.1	0.503	0.681	-0.03	0.07
	Female sex	-0.02	0.03	-0.65	222.4	0.515	0.515	-0.09	0.04
	Age	0.07	0.03	2.75	377.0	0.006	0.016	0.02	0.12
	Height	0.00	0.00	1.36	230.9	0.174	0.232	0.00	0.01
	Non-European ethnicity	-0.05	0.04	-1.45	231.2	0.147	0.196	-0.13	0.02
	BMI (z-score)	0.00	0.02	-0.03	123.0	0.980	0.980	-0.04	0.03
	Parental education	0.02	0.02	1.20	119.1	0.232	0.309	-0.01	0.05
	Maternal age	0.01	0.00	1.51	185.0	0.133	0.177	0.00	0.01
	IMT (z-score) * sex	-0.04	0.04	-1.16	126.3	0.250	0.535	-0.11	0.03
Global mean diffusivity (MD)									
Base model (R² = .01)	(Intercept)	1.63	0.53	3.06	133.2	0.003	0.003	0.58	2.69
	IMT (z-score)	0.01	0.03	0.23	95.6	0.819	0.819	-0.05	0.06
	Female sex	-0.16	0.03	-5.15	297.0	0.000	0.000	-0.22	-0.10
	Age	-0.11	0.03	-3.92	227.6	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	-0.18	120.7	0.856	0.940	-0.01	0.01
	IMT (z-score) * sex	0.01	0.04	0.30	53.7	0.764	0.764	-0.07	0.10
Fully adjusted model (R² = .01)	(Intercept)	1.59	0.54	2.94	157.4	0.004	0.004	0.52	2.66
	IMT (z-score)	0.01	0.03	0.25	94.7	0.803	0.819	-0.05	0.06
	Female sex	-0.16	0.03	-5.17	280.7	0.000	0.000	-0.23	-0.10
	Age	-0.11	0.03	-3.89	228.6	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	0.08	135.2	0.940	0.940	-0.01	0.01
	Non-European ethnicity	-0.01	0.04	-0.24	279.2	0.809	0.809	-0.08	0.06
	BMI (z-score)	-0.02	0.02	-1.11	110.3	0.270	0.360	-0.06	0.02
	Parental education	0.00	0.02	0.14	108.7	0.887	0.887	-0.03	0.03
	Maternal age	0.00	0.00	-0.60	160.7	0.551	0.551	-0.01	0.01
	IMT (z-score) * sex	0.01	0.04	0.31	53.5	0.761	0.764	-0.07	0.10

CAROTID DISTENSIBILITY

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R² = .17)	(Intercept)	-2.49	0.46	-5.41	214.1	0.000	0.000	-3.40	-1.58
	Distensibility (z-score)	0.00	0.02	0.17	294.9	0.864	0.864	-0.04	0.05
	Female sex	-0.76	0.03	-25.45	202.1	0.000	0.000	-0.82	-0.70
	Age	0.00	0.03	-0.06	80.1	0.950	0.950	-0.06	0.06
	Height	0.02	0.00	8.55	124.4	0.000	0.000	0.02	0.03
	Distens. (z-score) * sex	0.00	0.03	0.03	133.4	0.980	0.985	-0.06	0.06
Fully adjusted model (R² = .19)	(Intercept)	-2.58	0.48	-5.37	178.9	0.000	0.000	-3.53	-1.63
	Distensibility (z-score)	0.01	0.02	0.27	274.4	0.791	0.864	-0.04	0.05
	Female sex	-0.77	0.03	-25.66	187.7	0.000	0.000	-0.82	-0.71
	Age	0.02	0.03	0.55	73.5	0.587	0.671	-0.04	0.08
	Height	0.02	0.00	7.25	139.2	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.26	0.03	-8.68	646.9	0.000	0.000	-0.32	-0.20
	BMI (z-score)	0.04	0.02	2.91	192.9	0.004	0.016	0.01	0.07
	Parental education	0.04	0.01	2.60	100.9	0.011	0.022	0.01	0.06
	Maternal age	0.01	0.00	2.20	225.0	0.029	0.058	0.00	0.01
	Distens. (z-score) * sex	0.00	0.03	0.09	123.1	0.932	0.985	-0.06	0.07
Grey matter volume (GMV)									
Base model (R² = .17)	(Intercept)	-1.45	0.43	-3.34	440.4	0.000	0.002	-2.30	-0.60
	Distensibility (z-score)	0.01	0.02	0.22	191.4	0.828	0.864	-0.04	0.05
	Female sex	-0.77	0.03	-24.74	147.5	0.000	0.000	-0.83	-0.71
	Age	-0.06	0.03	-2.15	129.8	0.033	0.053	-0.11	-0.01
	Height	0.02	0.00	7.87	134.1	0.000	0.000	0.01	0.02
	Distens. (z-score) * sex	0.00	0.03	-0.05	291.3	0.958	0.985	-0.06	0.06
Fully adjusted model (R² = .20)	(Intercept)	-1.67	0.47	-3.57	224.3	0.000	0.000	-2.59	-0.75
	Distensibility (z-score)	0.00	0.02	0.19	164.3	0.850	0.864	-0.04	0.05
	Female sex	-0.77	0.03	-24.97	136.7	0.000	0.000	-0.84	-0.71
	Age	-0.04	0.03	-1.34	99.5	0.185	0.247	-0.09	0.02
	Height	0.02	0.00	6.50	124.6	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.29	0.03	-8.83	252.8	0.000	0.000	-0.35	-0.22
	BMI (z-score)	0.03	0.02	1.95	157.3	0.053	0.106	0.00	0.06
	Parental education	0.04	0.01	3.16	147.8	0.002	0.008	0.02	0.07
	Maternal age	0.01	0.00	2.62	208.9	0.009	0.036	0.00	0.01
	Distens. (z-score) * sex	0.00	0.03	0.02	257.6	0.985	0.985	-0.06	0.06
Global fractional anisotropy (FA)									
Base model (R² < .01)	(Intercept)	-1.45	0.49	-2.95	277.1	0.003	0.003	-2.42	-0.48
	Distensibility (z-score)	0.01	0.03	0.26	111.3	0.794	0.864	-0.04	0.06
	Female sex	-0.02	0.03	-0.72	203.6	0.474	0.479	-0.09	0.04
	Age	0.06	0.03	2.39	309.4	0.017	0.034	0.01	0.12
	Height	0.00	0.00	1.64	185.4	0.102	0.163	0.00	0.01
	Distens. (z-score) * sex	0.02	0.04	0.52	82.6	0.605	0.985	-0.06	0.10
Fully adjusted model (R² = .01)	(Intercept)	-1.68	0.52	-3.24	222.8	0.001	0.002	-2.71	-0.66
	Distensibility (z-score)	0.01	0.03	0.20	116.0	0.841	0.864	-0.05	0.06
	Female sex	-0.02	0.03	-0.71	199.3	0.479	0.479	-0.09	0.04
	Age	0.07	0.03	2.66	338.4	0.008	0.021	0.02	0.12
	Height	0.00	0.00	1.37	186.7	0.171	0.228	0.00	0.01
	Non-European ethnicity	-0.05	0.04	-1.50	232.7	0.135	0.180	-0.13	0.02
	BMI (z-score)	0.00	0.02	0.09	129.4	0.927	0.927	-0.03	0.04
	Parental education	0.02	0.02	1.20	120.7	0.233	0.311	-0.01	0.05
	Maternal age	0.01	0.00	1.51	181.0	0.133	0.177	0.00	0.01
	Distens. (z-score) * sex	0.02	0.04	0.54	82.3	0.592	0.985	-0.06	0.10
Global mean diffusivity (MD)									
Base model (R² = .01)	(Intercept)	1.63	0.54	3.01	122.0	0.003	0.003	0.56	2.70
	Distensibility (z-score)	-0.01	0.03	-0.24	94.7	0.813	0.864	-0.06	0.05
	Female sex	-0.16	0.03	-5.11	283.8	0.000	0.000	-0.22	-0.10
	Age	-0.11	0.03	-3.84	213.4	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	-0.21	106.5	0.831	0.950	-0.01	0.01
	Distens. (z-score) * sex	-0.02	0.04	-0.56	103.6	0.579	0.985	-0.09	0.05
Fully adjusted model (R² = .01)	(Intercept)	1.58	0.55	2.88	141.0	0.005	0.005	0.49	2.66
	Distensibility (z-score)	-0.01	0.03	-0.35	97.1	0.724	0.864	-0.06	0.04
	Female sex	-0.16	0.03	-5.12	269.2	0.000	0.000	-0.23	-0.10
	Age	-0.10	0.03	-3.80	213.7	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	0.05	118.4	0.958	0.958	-0.01	0.01
	Non-European ethnicity	-0.01	0.04	-0.17	276.9	0.862	0.862	-0.08	0.06
	BMI (z-score)	-0.02	0.02	-1.25	118.7	0.215	0.287	-0.06	0.02
	Parental education	0.00	0.02	0.17	107.8	0.866	0.866	-0.03	0.03
	Maternal age	0.00	0.00	-0.60	162.3	0.551	0.551	-0.01	0.01
	Distens. (z-score) * sex	-0.02	0.04	-0.56	103.8	0.577	0.985	-0.09	0.05

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S6 - Sex interaction (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .17)	(Intercept)	-2.68	0.47	-5.73	205.9	0.000	0.000	-3.60	-1.76
	SBP (z-score)	-0.04	0.02	-1.80	317.7	0.073	0.146	-0.08	0.00
	Female sex	-0.76	0.03	-25.13	187.2	0.000	0.000	-0.82	-0.70
	Age	0.00	0.03	-0.11	82.5	0.916	0.916	-0.06	0.06
	Height	0.02	0.00	9.31	164.9	0.000	0.000	0.02	0.03
	SBP (z-score) * sex	-0.01	0.03	-0.15	153.1	0.879	0.987	-0.07	0.06
Fully adjusted model (R^2 = .19)	(Intercept)	-2.70	0.49	-5.57	172.4	0.000	0.000	-3.66	-1.75
	SBP (z-score)	-0.04	0.02	-1.88	471.9	0.061	0.146	-0.08	0.00
	Female sex	-0.76	0.03	-25.29	176.1	0.000	0.000	-0.82	-0.70
	Age	0.01	0.03	0.49	75.8	0.624	0.713	-0.04	0.07
	Height	0.02	0.00	7.78	167.5	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.26	0.03	-8.72	687.0	0.000	0.000	-0.32	-0.21
	BMI	0.06	0.02	3.64	270.9	0.000	0.000	0.03	0.09
	Parental education	0.03	0.01	2.47	100.7	0.015	0.030	0.01	0.06
	Maternal age	0.01	0.00	2.20	221.2	0.029	0.058	0.00	0.01
	SBP (z-score) * sex	-0.01	0.03	-0.16	140.6	0.873	0.987	-0.07	0.06
Grey matter volume (GMV)									
Base model (R^2 = .17)	(Intercept)	-1.69	0.44	-3.86	440.5	0.000	0.000	-2.55	-0.83
	SBP (z-score)	-0.05	0.02	-2.48	272.3	0.014	0.112	-0.09	-0.01
	Female sex	-0.76	0.03	-24.57	146.0	0.000	0.000	-0.83	-0.70
	Age	-0.06	0.03	-2.22	131.7	0.028	0.045	-0.11	-0.01
	Height	0.02	0.00	8.65	158.1	0.000	0.000	0.02	0.03
	SBP (z-score) * sex	0.00	0.03	0.08	151.0	0.937	0.987	-0.06	0.06
Fully adjusted model (R^2 = .20)	(Intercept)	-1.81	0.47	-3.84	222.3	0.000	0.000	-2.73	-0.88
	SBP (z-score)	-0.05	0.02	-2.20	269.1	0.029	0.116	-0.09	-0.01
	Female sex	-0.77	0.03	-24.67	131.9	0.000	0.000	-0.83	-0.71
	Age	-0.04	0.03	-1.42	101.4	0.160	0.213	-0.09	0.02
	Height	0.02	0.00	7.08	146.5	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.29	0.03	-8.87	260.1	0.000	0.000	-0.35	-0.22
	BMI (z-score)	0.04	0.02	2.68	143.8	0.008	0.016	0.01	0.08
	Parental education	0.04	0.01	3.02	153.0	0.003	0.012	0.01	0.06
	Maternal age	0.01	0.00	2.62	206.0	0.009	0.036	0.00	0.01
	SBP (z-score) * sex	0.00	0.03	0.05	139.7	0.961	0.987	-0.06	0.06
Global fractional anisotropy (FA)									
Base model (R^2 < .01)	(Intercept)	-1.44	0.49	-2.94	339.2	0.003	0.004	-2.40	-0.48
	SBP (z-score)	0.00	0.03	0.16	106.3	0.875	0.875	-0.05	0.06
	Female sex	-0.02	0.03	-0.61	206.4	0.540	0.540	-0.08	0.04
	Age	0.06	0.03	2.43	321.0	0.016	0.032	0.01	0.12
	Height	0.00	0.00	1.59	255.8	0.113	0.181	0.00	0.01
	SBP (z-score) * sex	-0.02	0.04	-0.46	116.9	0.644	0.987	-0.09	0.05
Fully adjusted model (R^2 = .01)	(Intercept)	-1.66	0.52	-3.20	246.8	0.002	0.003	-2.68	-0.64
	SBP (z-score)	0.01	0.03	0.43	97.7	0.672	0.870	-0.04	0.07
	Female sex	-0.02	0.03	-0.64	196.6	0.523	0.540	-0.09	0.04
	Age	0.07	0.03	2.70	347.9	0.007	0.019	0.02	0.12
	Height	0.00	0.00	1.28	244.6	0.201	0.268	0.00	0.01
	Non-European ethnicity	-0.05	0.04	-1.48	241.1	0.140	0.187	-0.13	0.02
	BMI (z-score)	0.00	0.02	-0.08	117.1	0.934	0.934	-0.04	0.04
	Parental education	0.02	0.02	1.22	125.5	0.226	0.301	-0.01	0.05
	Maternal age	0.01	0.00	1.52	183.5	0.130	0.173	0.00	0.01
	SBP (z-score) * sex	-0.02	0.04	-0.50	115.2	0.618	0.987	-0.09	0.05
Global mean diffusivity (MD)									
Base model (R^2 = .01)	(Intercept)	1.52	0.53	2.86	144.1	0.005	0.006	0.47	2.58
	SBP (z-score)	-0.01	0.02	-0.59	230.9	0.558	0.870	-0.06	0.03
	Female sex	-0.16	0.03	-5.18	299.0	0.000	0.000	-0.22	-0.10
	Age	-0.11	0.03	-3.90	215.0	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	0.12	134.0	0.906	0.906	-0.01	0.01
	SBP (z-score) * sex	0.00	0.04	-0.02	121.4	0.987	0.987	-0.07	0.07
Fully adjusted model (R^2 = .01)	(Intercept)	1.52	0.55	2.80	153.4	0.006	0.006	0.45	2.60
	SBP (z-score)	-0.01	0.02	-0.31	212.5	0.761	0.870	-0.06	0.04
	Female sex	-0.17	0.03	-5.23	287.5	0.000	0.000	-0.23	-0.10
	Age	-0.11	0.03	-3.87	216.3	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	0.26	135.3	0.799	0.906	-0.01	0.01
	Non-European ethnicity	-0.01	0.04	-0.20	272.4	0.840	0.840	-0.08	0.06
	BMI (z-score)	-0.02	0.02	-0.90	111.5	0.368	0.491	-0.05	0.02
	Parental education	0.00	0.02	0.15	109.3	0.883	0.883	-0.03	0.03
	Maternal age	0.00	0.00	-0.61	163.5	0.545	0.545	-0.01	0.01
	SBP (z-score) * sex	0.00	0.04	-0.03	125.6	0.974	0.987	-0.07	0.07

DIASTOLIC BLOOD PRESSURE (DBP)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .17)	(Intercept)	-2.53	0.46	-5.52	214.6	0.000	0.000	-3.44	-1.63
	DBP (z-score)	-0.07	0.02	-3.30	194.0	0.001	0.004	-0.11	-0.03
	Female sex	-0.76	0.03	-25.11	191.1	0.000	0.000	-0.81	-0.70
	Age	0.00	0.03	-0.07	81.9	0.947	0.947	-0.06	0.06
	Height	0.02	0.00	9.03	153.4	0.000	0.000	0.02	0.03
	DBP (z-score) * sex	0.04	0.03	1.23	98.5	0.221	0.589	-0.03	0.11
Fully adjusted model (R^2 = .19)	(Intercept)	-2.58	0.48	-5.36	176.5	0.000	0.000	-3.53	-1.63
	DBP (z-score)	-0.06	0.02	-2.60	158.2	0.010	0.022	-0.10	-0.01
	Female sex	-0.76	0.03	-25.32	178.7	0.000	0.000	-0.82	-0.70
	Age	0.02	0.03	0.54	75.2	0.594	0.679	-0.04	0.07
	Height	0.02	0.00	7.50	164.2	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.26	0.03	-8.61	665.7	0.000	0.000	-0.32	-0.20
	BMI	0.05	0.02	3.10	190.0	0.002	0.008	0.02	0.08
	Parental education	0.03	0.01	2.39	96.6	0.019	0.038	0.01	0.06
	Maternal age	0.01	0.00	2.13	217.3	0.035	0.070	0.00	0.01
	DBP (z-score) * sex	0.03	0.03	1.03	91.4	0.304	0.608	-0.03	0.10
Grey matter volume (GMV)									
Base model (R^2 = .17)	(Intercept)	-1.50	0.43	-3.49	483.1	0.001	0.002	-2.34	-0.66
	DBP (z-score)	-0.08	0.02	-3.38	92.4	0.001	0.004	-0.13	-0.03
	Female sex	-0.76	0.03	-24.30	137.5	0.000	0.000	-0.82	-0.70
	Age	-0.06	0.03	-2.17	133.3	0.031	0.050	-0.11	-0.01
	Height	0.02	0.00	8.31	162.2	0.000	0.000	0.01	0.02
	DBP (z-score) * sex	0.05	0.03	1.48	115.6	0.142	0.589	-0.02	0.11
Fully adjusted model (R^2 = .20)	(Intercept)	-1.67	0.47	-3.58	228.2	0.000	0.000	-2.58	-0.75
	DBP (z-score)	-0.06	0.02	-2.62	86.1	0.011	0.022	-0.11	-0.02
	Female sex	-0.77	0.03	-24.48	125.5	0.000	0.000	-0.83	-0.71
	Age	-0.04	0.03	-1.37	101.3	0.175	0.233	-0.09	0.02
	Height	0.02	0.00	6.72	139.9	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.28	0.03	-8.76	255.7	0.000	0.000	-0.35	-0.22
	BMI (z-score)	0.03	0.02	2.18	154.7	0.031	0.062	0.00	0.06
	Parental education	0.04	0.01	2.95	148.9	0.004	0.016	0.01	0.06
	Maternal age	0.01	0.00	2.54	203.5	0.012	0.048	0.00	0.01
	DBP (z-score) * sex	0.04	0.03	1.25	107.1	0.213	0.589	-0.02	0.10
Global fractional anisotropy (FA)									
Base model (R^2 < .01)	(Intercept)	-1.42	0.49	-2.89	273.4	0.004	0.005	-2.39	-0.45
	DBP (z-score)	-0.01	0.02	-0.23	146.9	0.815	0.931	-0.05	0.04
	Female sex	-0.02	0.03	-0.60	206.1	0.548	0.548	-0.08	0.05
	Age	0.06	0.03	2.44	322.7	0.015	0.030	0.01	0.12
	Height	0.00	0.00	1.57	243.7	0.117	0.187	0.00	0.01
	DBP (z-score) * sex	0.00	0.03	-0.02	161.8	0.985	0.985	-0.07	0.07
Fully adjusted model (R^2 = .01)	(Intercept)	-1.66	0.52	-3.20	224.1	0.002	0.003	-2.68	-0.64
	DBP (z-score)	0.00	0.02	0.07	138.7	0.941	0.941	-0.05	0.05
	Female sex	-0.02	0.03	-0.63	198.1	0.529	0.548	-0.09	0.04
	Age	0.07	0.03	2.71	350.8	0.007	0.019	0.02	0.12
	Height	0.00	0.00	1.31	230.5	0.192	0.256	0.00	0.01
	Non-European ethnicity	-0.05	0.04	-1.49	236.3	0.139	0.185	-0.13	0.02
	BMI (z-score)	0.00	0.02	-0.04	114.2	0.970	0.970	-0.04	0.04
	Parental education	0.02	0.02	1.19	119.7	0.236	0.315	-0.01	0.05
	Maternal age	0.01	0.00	1.53	191.1	0.129	0.172	0.00	0.01
	DBP (z-score) * sex	0.00	0.03	-0.09	164.5	0.925	0.985	-0.07	0.06
Global mean diffusivity (MD)									
Base model (R^2 = .01)	(Intercept)	1.58	0.54	2.91	118.4	0.004	0.005	0.50	2.65
	DBP (z-score)	-0.02	0.02	-0.72	172.2	0.472	0.720	-0.06	0.03
	Female sex	-0.16	0.03	-5.12	272.4	0.000	0.000	-0.22	-0.10
	Age	-0.11	0.03	-3.90	216.3	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	-0.03	111.6	0.973	0.973	-0.01	0.01
	DBP (z-score) * sex	0.00	0.04	0.06	102.3	0.955	0.985	-0.07	0.07
Fully adjusted model (R^2 = .01)	(Intercept)	1.55	0.55	2.82	138.8	0.006	0.006	0.46	2.63
	DBP (z-score)	-0.02	0.02	-0.62	153.4	0.540	0.720	-0.06	0.03
	Female sex	-0.16	0.03	-5.14	260.1	0.000	0.000	-0.23	-0.10
	Age	-0.11	0.03	-3.87	218.7	0.000	0.000	-0.16	-0.05
	Height	0.00	0.00	0.20	126.1	0.841	0.961	-0.01	0.01
	Non-European ethnicity	-0.01	0.04	-0.18	265.0	0.860	0.860	-0.08	0.06
	BMI (z-score)	-0.02	0.02	-1.00	107.0	0.320	0.427	-0.05	0.02
	Parental education	0.00	0.02	0.12	107.6	0.907	0.907	-0.03	0.03
	Maternal age	0.00	0.00	-0.63	164.7	0.531	0.531	-0.01	0.01
	DBP (z-score) * sex	0.00	0.04	0.06	103.7	0.956	0.985	-0.07	0.07

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S7- Global vs. regional volumes

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Total intracranial volume (TIV)								
Base model (R² = .15)								
(Intercept)	-3.11	0.58	-5.37	141.1	0.000	0.000	-4.25	-1.96
IMT (z-score)	0.03	0.02	1.76	69.9	0.082	0.246	0.00	0.07
Female sex	-0.70	0.03	-23.38	211.8	0.000	0.000	-0.76	-0.64
Age at MRI	-0.02	0.05	-0.34	87.0	0.732	0.952	-0.13	0.09
Age delta	0.09	0.04	1.93	147.5	0.055	0.175	0.00	0.17
Height	0.02	0.00	8.94	87.6	0.000	0.000	0.02	0.03
Fully adjusted model (R² = .17)								
(Intercept)	-3.49	0.61	-5.71	118.5	0.000	0.000	-4.70	-2.28
IMT (z-score)	0.04	0.02	1.93	69.2	0.058	0.232	0.00	0.07
Female sex	-0.70	0.03	-23.48	202.3	0.000	0.000	-0.76	-0.64
Age at MRI	0.05	0.06	0.90	79.6	0.372	0.638	-0.06	0.16
Age delta	0.03	0.05	0.65	130.7	0.519	0.566	-0.06	0.12
Height	0.02	0.00	7.03	79.8	0.000	0.000	0.01	0.03
Non-European ethnicity	-0.22	0.03	-6.40	235.9	0.000	0.000	-0.28	-0.15
BMI (z-score)	0.05	0.02	3.45	143.4	0.001	0.003	0.02	0.09
Parental education	0.02	0.01	2.96	94.1	0.004	0.008	0.01	0.04
Maternal age	0.00	0.00	1.16	202.0	0.247	0.485	0.00	0.01
Cortical grey matter volume								
Base model (R² = .15)								
(Intercept)	-0.29	0.50	-0.58	866.2	0.562	0.562	-1.27	0.69
IMT (z-score)	0.02	0.02	1.23	89.8	0.223	0.446	-0.01	0.06
Female sex	-0.71	0.03	-21.59	109.5	0.000	0.000	-0.78	-0.65
Age at MRI	-0.17	0.05	-3.62	258.5	0.000	0.000	-0.26	-0.08
Age delta	0.10	0.04	2.35	152.4	0.020	0.175	0.02	0.19
Height	0.02	0.00	7.39	147.5	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .17)								
(Intercept)	-1.07	0.52	-2.05	566.3	0.041	0.062	-2.10	-0.04
IMT (z-score)	0.03	0.02	1.48	85.0	0.142	0.341	-0.01	0.06
Female sex	-0.72	0.03	-21.88	107.7	0.000	0.000	-0.78	-0.65
Age at MRI	-0.08	0.05	-1.68	234.5	0.095	0.416	-0.17	0.01
Age delta	0.03	0.04	0.69	150.3	0.489	0.566	-0.06	0.12
Height	0.01	0.00	5.74	173.8	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.25	0.04	-7.27	182.7	0.000	0.000	-0.32	-0.18
BMI (z-score)	0.03	0.02	2.15	174.0	0.033	0.040	0.00	0.06
Parental education	0.03	0.01	4.29	209.8	0.000	0.000	0.02	0.05
Maternal age	0.01	0.00	2.23	149.2	0.027	0.162	0.00	0.01
Sub-cortical grey matter volume								
Base model (R² = .13)								
(Intercept)	-1.90	0.56	-3.39	206.5	0.001	0.002	-3.00	-0.79
IMT (z-score)	0.03	0.02	1.95	139.3	0.053	0.232	0.00	0.06
Female sex	-0.66	0.03	-21.44	196.4	0.000	0.000	-0.72	-0.60
Age at MRI	-0.07	0.05	-1.39	125.3	0.167	0.416	-0.17	0.03
Age delta	0.09	0.05	1.89	123.7	0.061	0.175	0.00	0.18
Height	0.02	0.00	7.58	92.8	0.000	0.000	0.02	0.03
Fully adjusted model (R² = .15)								
(Intercept)	-2.31	0.58	-3.98	193.0	0.000	0.000	-3.46	-1.17
IMT (z-score)	0.03	0.02	2.08	134.5	0.040	0.232	0.00	0.07
Female sex	-0.66	0.03	-21.62	197.6	0.000	0.000	-0.72	-0.60
Age at MRI	-0.01	0.05	-0.11	115.2	0.909	0.952	-0.11	0.10
Age delta	0.03	0.05	0.72	116.5	0.474	0.566	-0.06	0.13
Height	0.02	0.00	5.80	87.0	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.19	0.04	-5.17	150.9	0.000	0.000	-0.26	-0.12
BMI (z-score)	0.05	0.02	3.44	149.5	0.001	0.003	0.02	0.09
Parental education	0.03	0.01	3.47	112.2	0.001	0.003	0.01	0.04
Maternal age	0.00	0.00	1.05	100.2	0.295	0.485	0.00	0.01
White matter volume								
Base model (R² = .13)								
(Intercept)	-2.99	0.55	-5.45	250.8	0.000	0.000	-4.07	-1.91
IMT (z-score)	0.02	0.02	0.96	80.0	0.340	0.510	-0.02	0.05
Female sex	-0.65	0.03	-21.25	197.4	0.000	0.000	-0.71	-0.59
Age at MRI	0.02	0.05	0.37	119.1	0.716	0.952	-0.08	0.12
Age delta	0.06	0.05	1.27	110.3	0.206	0.378	-0.03	0.15
Height	0.02	0.00	7.80	119.5	0.000	0.000	0.02	0.03
Fully adjusted model (R² = .14)								
(Intercept)	-3.27	0.57	-5.73	230.3	0.000	0.000	-4.40	-2.15
IMT (z-score)	0.02	0.02	1.10	79.3	0.276	0.473	-0.02	0.06
Female sex	-0.65	0.03	-21.30	190.4	0.000	0.000	-0.71	-0.59
Age at MRI	0.08	0.05	1.47	116.2	0.144	0.416	-0.03	0.18
Age delta	0.01	0.05	0.25	112.2	0.804	0.804	-0.08	0.11
Height	0.02	0.00	6.43	163.7	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.19	0.03	-5.85	373.2	0.000	0.000	-0.26	-0.13
BMI (z-score)	0.05	0.02	3.22	155.2	0.002	0.004	0.02	0.08
Parental education	0.02	0.01	2.30	119.9	0.023	0.034	0.00	0.03
Maternal age	0.00	0.00	0.97	141.6	0.332	0.485	0.00	0.01
Ventricles volume								
Base model (R² = .01)								
(Intercept)	-1.42	0.64	-2.21	120.0	0.029	0.050	-2.69	-0.15
IMT (z-score)	0.01	0.02	0.29	80.0	0.774	0.774	-0.03	0.04
Female sex	-0.15	0.03	-4.38	135.6	0.000	0.000	-0.22	-0.08
Age	-0.01	0.06	-0.12	74.5	0.909	0.952	-0.13	0.11
	0.06	0.05	1.22	107.3	0.224	0.378	-0.04	0.16
Height	0.01	0.00	3.63	163.5	0.000	0.000	0.00	0.01
Fully adjusted model (R² = .01)								
(Intercept)	-1.37	0.69	-1.98	98.9	0.050	0.067	-2.74	0.00
IMT (z-score)	0.01	0.02	0.29	79.7	0.771	0.774	-0.03	0.04
Female sex	-0.15	0.03	-4.36	136.5	0.000	0.000	-0.22	-0.08
Age at MRI	0.00	0.06	-0.06	74.4	0.952	0.952	-0.13	0.12
Age delta	0.06	0.05	1.15	106.8	0.252	0.378	-0.04	0.16
Height	0.01	0.00	3.28	167.2	0.001	0.001	0.00	0.01
Non-European ethnicity	-0.02	0.04	-0.51	202.5	0.613	0.732	-0.09	0.06
BMI (z-score)	0.01	0.02	0.77	102.5	0.441	0.441	-0.02	0.05
Parental education	0.00	0.01	-0.10	104.7	0.925	0.925	-0.02	0.02
Maternal age	0.00	0.00	0.13	63.2	0.897	0.897	-0.01	0.01
Cerebro-spinal fluid (CSF)								
Base model (R² = .01)								
(Intercept)	-1.07	0.63	-1.70	133.7	0.092	0.110	-2.32	0.18
IMT (z-score)	0.02	0.02	0.82	92.4	0.412	0.549	-0.02	0.05
Female sex	-0.14	0.04	-3.87	117.2	0.000	0.000	-0.21	-0.07
Age at MRI	-0.07	0.06	-1.30	111.9	0.196	0.416	-0.18	0.04
Age delta	0.09	0.05	1.85	116.2	0.067	0.175	-0.01	0.19
Height	0.01	0.00	5.01	233.8	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .01)								
(Intercept)	-0.93	0.66	-1.42	130.0	0.158	0.172	-2.23	0.37
IMT (z-score)	0.01	0.02	0.72	90.8	0.475	0.570	-0.02	0.05
Female sex	-0.13	0.04	-3.84	119.5	0.000	0.000	-0.20	-0.07
Age at MRI	-0.07	0.06	-1.27	111.6	0.208	0.416	-0.18	0.04
Age delta	0.09	0.05	1.81	116.3	0.073	0.175	-0.01	0.19
Height	0.01	0.00	4.36	273.8	0.000	0.000	0.01	0.02
Non-European ethnicity	0.01	0.04	0.34	264.9	0.732	0.732	-0.06	0.08
BMI (z-score)	0.04	0.02	2.40	361.9	0.017	0.026	0.01	0.07
Parental education	0.01	0.01	1.50	112.8	0.136	0.163	0.00	0.03
Maternal age	0.00	0.00	-0.84	553.1	0.404	0.485	-0.01	0.00

CAROTID DISTENSIBILITY

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Total intracranial volume (TIV)								
Base model (R² = .15)								
(Intercept)	-3.17	0.57	-5.61	166.3	0.000	0.000	-4.29	-2.05
Distensibility (z-score)	-0.01	0.02	-0.72	134.2	0.476	0.968	-0.04	0.02
Female sex	-0.71	0.03	-23.56	216.6	0.000	0.000	-0.77	-0.65
Age at MRI	-0.02	0.05	-0.33	90.1	0.745	0.958	-0.12	0.09
Age delta	0.09	0.04	1.95	154.9	0.053	0.175	0.00	0.17
Height	0.02	0.00	8.65	72.1	0.000	0.000	0.02	0.03
Fully adjusted model (R² = .17)								
(Intercept)	-3.58	0.60	-5.99	136.7	0.000	0.000	-4.76	-2.40
Distensibility (z-score)	-0.01	0.02	-0.43	135.8	0.667	0.968	-0.04	0.03
Female sex	-0.71	0.03	-23.67	203.8	0.000	0.000	-0.77	-0.65
Age at MRI	0.05	0.06	0.91	81.5	0.364	0.624	-0.06	0.16
Age delta	0.03	0.05	0.66	135.8	0.510	0.556	-0.06	0.12
Height	0.02	0.00	6.95	68.7	0.000	0.000	0.01	0.03
Non-European ethnicity	-0.21	0.03	-6.29	240.2	0.000	0.000	-0.28	-0.15
BMI (z-score)	0.05	0.02	3.43	149.0	0.001	0.002	0.02	0.09
Parental education	0.02	0.01	3.04	96.1	0.003	0.006	0.01	0.04
Maternal age	0.00	0.00	1.15	206.4	0.252	0.479	0.00	0.01
Cortical grey matter volume								
Base model (R² = .15)								
(Intercept)	-0.35	0.50	-0.71	1010.2	0.478	0.478	-1.33	0.62
Distensibility (z-score)	0.00	0.02	0.04	137.0	0.968	0.968	-0.03	0.03
Female sex	-0.72	0.03	-21.48	103.1	0.000	0.000	-0.79	-0.65
Age at MRI	-0.17	0.05	-3.61	264.1	0.000	0.000	-0.26	-0.08
Age delta	0.10	0.04	2.35	154.3	0.020	0.175	0.02	0.19
Height	0.02	0.00	7.11	102.5	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .17)								
(Intercept)	-1.14	0.52	-2.21	659.8	0.028	0.048	-2.16	-0.13
Distensibility (z-score)	0.00	0.02	0.07	124.1	0.943	0.968	-0.03	0.03
Female sex	-0.72	0.03	-21.76	100.7	0.000	0.000	-0.79	-0.65
Age at MRI	-0.08	0.05	-1.67	235.5	0.096	0.418	-0.17	0.01
Age delta	0.03	0.04	0.70	151.9	0.488	0.556	-0.06	0.12
Height	0.01	0.00	5.66	122.0	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.25	0.03	-7.25	193.3	0.000	0.000	-0.32	-0.18
BMI (z-score)	0.03	0.02	2.16	162.7	0.032	0.038	0.00	0.07
Parental education	0.03	0.01	4.36	218.4	0.000	0.000	0.02	0.05
Maternal age	0.01	0.00	2.23	152.1	0.028	0.168	0.00	0.01
Sub-cortical grey matter volume								
Base model (R² = .13)								
(Intercept)	-1.99	0.56	-3.59	217.6	0.000	0.000	-3.09	-0.90
Distensibility (z-score)	0.00	0.02	0.18	122.4	0.854	0.968	-0.03	0.04
Female sex	-0.67	0.03	-21.50	185.0	0.000	0.000	-0.73	-0.60
Age at MRI	-0.07	0.05	-1.38	128.4	0.170	0.418	-0.17	0.03
Age delta	0.09	0.05	1.89	126.5	0.061	0.175	0.00	0.18
Height	0.02	0.00	7.68	86.3	0.000	0.000	0.02	0.03
Fully adjusted model (R² = .15)								
(Intercept)	-2.42	0.58	-4.20	207.9	0.000	0.000	-3.55	-1.28
Distensibility (z-score)	0.01	0.02	0.47	107.8	0.642	0.968	-0.03	0.04
Female sex	-0.67	0.03	-21.73	187.0	0.000	0.000	-0.73	-0.61
Age at MRI	-0.01	0.05	-0.11	116.8	0.912	0.958	-0.11	0.10
Age delta	0.03	0.05	0.72	118.4	0.475	0.556	-0.06	0.13
Height	0.02	0.00	5.97	80.8	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.18	0.04	-5.07	148.1	0.000	0.000	-0.26	-0.11
BMI (z-score)	0.06	0.02	3.51	144.1	0.001	0.002	0.03	0.09
Parental education	0.03	0.01	3.53	113.7	0.001	0.003	0.01	0.04
Maternal age	0.00	0.00	1.04	100.3	0.302	0.479	0.00	0.01
White matter volume								
Base model (R² = .13)								
(Intercept)	-3.05	0.54	-5.64	291.8	0.000	0.000	-4.12	-1.99
Distensibility (z-score)	0.01	0.02	0.27	94.4	0.787	0.968	-0.03	0.04
Female sex	-0.66	0.03	-21.29	189.5	0.000	0.000	-0.72	-0.60
Age at MRI	0.02	0.05	0.38	120.9	0.708	0.958	-0.08	0.12
Age delta	0.06	0.05	1.26	110.6	0.210	0.368	-0.03	0.15
Height	0.02	0.00	7.74	102.6	0.000	0.000	0.02	0.03
Fully adjusted model (R² = .14)								
(Intercept)	-3.34	0.56	-5.96	274.5	0.000	0.000	-4.44	-2.24
Distensibility (z-score)	0.01	0.02	0.55	86.2	0.586	0.968	-0.03	0.05
Female sex	-0.66	0.03	-21.34	180.4	0.000	0.000	-0.72	-0.60
Age at MRI	0.08	0.05	1.48	116.7	0.143	0.418	-0.03	0.18
Age delta	0.01	0.05	0.24	112.1	0.813	0.813	-0.08	0.11
Height	0.02	0.00	6.48	137.4	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.19	0.03	-5.82	390.8	0.000	0.000	-0.26	-0.13
BMI (z-score)	0.05	0.02	3.29	149.1	0.001	0.002	0.02	0.09
Parental education	0.02	0.01	2.33	122.1	0.021	0.032	0.00	0.03
Maternal age	0.00	0.00	0.96	141.7	0.338	0.479	0.00	0.01
Ventricles volume								
Base model (R² = .01)								
(Intercept)	-1.38	0.64	-2.16	121.4	0.033	0.050	-2.65	-0.12
Distensibility (z-score)	-0.02	0.02	-1.31	388.2	0.191	0.968	-0.05	0.01
Female sex	-0.15	0.03	-4.30	135.9	0.000	0.000	-0.22	-0.08
Age at MRI	-0.01	0.06	-0.11	74.2	0.915	0.958	-0.13	0.11
Age delta	0.06	0.05	1.24	107.7	0.217	0.368	-0.04	0.16
Height	0.01	0.00	3.47	153.6	0.001	0.001	0.00	0.01
Fully adjusted model (R² = .01)								
(Intercept)	-1.35	0.69	-1.96	97.4	0.053	0.071	-2.73	0.02
Distensibility (z-score)	-0.02	0.02	-1.23	561.9	0.221	0.968	-0.05	0.01
Female sex	-0.15	0.03	-4.29	135.1	0.000	0.000	-0.22	-0.08
Age at MRI	0.00	0.06	-0.05	74.1	0.958	0.958	-0.13	0.12
Age delta	0.06	0.05	1.17	107.0	0.245	0.368	-0.04	0.16
Height	0.01	0.00	3.19	160.3	0.002	0.002	0.00	0.01
Non-European ethnicity	-0.02	0.04	-0.47	208.7	0.641	0.709	-0.09	0.06
BMI (z-score)	0.01	0.02	0.64	109.6	0.524	0.524	-0.02	0.05
Parental education	0.00	0.01	-0.08	100.3	0.938	0.938	-0.02	0.02
Maternal age	0.00	0.00	0.13	63.2	0.896	0.896	-0.01	0.01
Cerebro-spinal fluid (CSF)								
Base model (R² = .01)								
(Intercept)	-1.11	0.63	-1.78	140.8	0.077	0.092	-2.35	0.12
Distensibility (z-score)	0.00	0.02	-0.04	87.2	0.966	0.968	-0.04	0.04
Female sex	-0.14	0.04	-3.99	124.9	0.000	0.000	-0.21	-0.07
Age at MRI	-0.07	0.06	-1.29	111.4	0.199	0.418	-0.18	0.04
Age delta	0.09	0.05	1.85	117.7	0.067	0.175	-0.01	0.19
Height	0.01	0.00	5.05	212.1	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .01)								
(Intercept)	-0.98	0.65	-1.50	136.2	0.136	0.148	-2.27	0.31
Distensibility (z-score)	0.00	0.02	0.22	80.8	0.827	0.968	-0.03	0.04
Female sex	-0.14	0.04	-3.97	127.0	0.000	0.000	-0.21	-0.07
Age at MRI	-0.07	0.06	-1.26	111.0	0.209	0.418	-0.18	0.04
Age delta	0.09	0.05	1.81	117.5	0.073	0.175	-0.01	0.19
Height	0.01	0.00	4.45	250.5	0.000	0.000	0.01	0.02
Non-European ethnicity	0.01	0.04	0.37	251.4	0.709	0.709	-0.06	0.09
BMI (z-score)	0.04	0.02	2.38	281.5	0.018	0.027	0.01	0.07
Parental education	0.01	0.01	1.36	116.3	0.128	0.154	0.00	0.03
Maternal age	0.00	0.00	-0.84	563.4	0.399	0.479	-0.01	0.00

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S7 - Global vs. regional volumes (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Total intracranial volume (TIV)									
Base model (R²=.15)	(Intercept)	-3.32	0.58	-5.70	145.8	0.000	0.000	-4.47	-2.17
	SBP (z-score)	-0.02	0.02	-1.23	111.6	0.221	0.379	-0.05	0.01
	Female sex	-0.71	0.03	-23.71	225.9	0.000	0.000	-0.77	-0.65
	Age at MRI	-0.02	0.05	-0.30	87.7	0.766	0.944	-0.12	0.09
	Age delta	0.08	0.04	1.87	150.1	0.063	0.170	-0.01	0.17
	Height	0.03	0.00	9.08	80.6	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.17)	(Intercept)	-3.69	0.61	-6.08	127.0	0.000	0.000	-4.89	-2.49
	SBP (z-score)	-0.03	0.02	-1.58	134.3	0.117	0.324	-0.06	0.01
	Female sex	-0.71	0.03	-23.68	208.5	0.000	0.000	-0.76	-0.65
	Age at MRI	0.05	0.06	0.92	79.3	0.360	0.617	-0.06	0.16
	Age delta	0.03	0.05	0.59	130.2	0.553	0.603	-0.06	0.12
	Height	0.02	0.00	7.32	74.6	0.000	0.000	0.02	0.03
	Non-European ethnicity	-0.21	0.03	-6.31	234.5	0.000	0.000	-0.28	-0.15
	BMI (z-score)	0.06	0.02	4.02	213.0	0.000	0.000	0.03	0.09
	Parental education	0.02	0.01	2.94	93.8	0.004	0.008	0.01	0.04
	Maternal age	0.00	0.00	1.15	208.2	0.250	0.479	0.00	0.01
Cortical grey matter volume									
Base model (R²=.15)	(Intercept)	-0.63	0.50	-1.25	1031.1	0.212	0.212	-1.61	0.36
	SBP (z-score)	-0.05	0.02	-3.03	170.7	0.003	0.036	-0.08	-0.02
	Female sex	-0.71	0.03	-21.35	102.2	0.000	0.000	-0.78	-0.65
	Age at MRI	-0.16	0.05	-3.51	239.5	0.001	0.012	-0.25	-0.07
	Age delta	0.10	0.05	2.21	148.7	0.028	0.170	0.01	0.19
	Height	0.02	0.00	7.94	129.0	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.17)	(Intercept)	-1.31	0.52	-2.51	615.7	0.012	0.021	-2.33	-0.28
	SBP (z-score)	-0.05	0.02	-2.76	209.3	0.006	0.036	-0.08	-0.01
	Female sex	-0.71	0.03	-21.65	101.7	0.000	0.000	-0.78	-0.65
	Age at MRI	-0.08	0.05	-1.63	219.0	0.105	0.414	-0.17	0.02
	Age delta	0.03	0.04	0.60	146.9	0.547	0.603	-0.06	0.12
	Height	0.02	0.00	6.21	145.2	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.25	0.03	-7.31	198.5	0.000	0.000	-0.32	-0.18
	BMI (z-score)	0.05	0.02	2.95	188.6	0.004	0.006	0.02	0.08
	Parental education	0.03	0.01	4.22	225.7	0.000	0.000	0.02	0.04
	Maternal age	0.01	0.00	2.24	152.8	0.027	0.162	0.00	0.01
Sub-cortical grey matter volume									
Base model (R²=.13)	(Intercept)	-2.08	0.57	-3.67	202.9	0.000	0.000	-3.20	-0.96
	SBP (z-score)	-0.02	0.02	-0.98	141.0	0.329	0.409	-0.05	0.02
	Female sex	-0.66	0.03	-21.40	180.2	0.000	0.000	-0.72	-0.60
	Age at MRI	-0.07	0.05	-1.35	125.7	0.180	0.414	-0.17	0.03
	Age delta	0.09	0.05	1.85	126.7	0.066	0.170	-0.01	0.18
	Height	0.02	0.00	7.81	91.1	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.15)	(Intercept)	-2.49	0.58	-4.26	187.7	0.000	0.000	-3.64	-1.33
	SBP (z-score)	-0.02	0.02	-1.26	130.1	0.209	0.379	-0.06	0.01
	Female sex	-0.66	0.03	-21.50	179.2	0.000	0.000	-0.72	-0.60
	Age at MRI	-0.01	0.05	-0.09	113.7	0.927	0.944	-0.11	0.10
	Age delta	0.03	0.05	0.68	117.0	0.498	0.603	-0.06	0.13
	Height	0.02	0.00	6.14	85.1	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.18	0.04	-5.09	151.1	0.000	0.000	-0.26	-0.11
	BMI (z-score)	0.06	0.02	3.69	140.8	0.000	0.000	0.03	0.10
	Parental education	0.03	0.01	3.49	118.8	0.001	0.003	0.01	0.04
	Maternal age	0.00	0.00	1.04	100.5	0.299	0.479	0.00	0.01
White matter volume									
Base model (R²=.13)	(Intercept)	-3.18	0.55	-5.75	256.4	0.000	0.000	-4.27	-2.09
	SBP (z-score)	-0.03	0.02	-1.50	155.3	0.135	0.324	-0.06	0.01
	Female sex	-0.65	0.03	-21.29	194.7	0.000	0.000	-0.71	-0.59
	Age at MRI	0.02	0.05	0.41	115.1	0.683	0.944	-0.08	0.12
	Age delta	0.06	0.05	1.20	107.1	0.233	0.360	-0.04	0.15
	Height	0.02	0.00	8.25	134.8	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.14)	(Intercept)	-3.45	0.57	-6.05	240.5	0.000	0.000	-4.57	-2.33
	SBP (z-score)	-0.03	0.02	-1.96	189.3	0.051	0.204	-0.07	0.00
	Female sex	-0.65	0.03	-21.32	191.5	0.000	0.000	-0.71	-0.59
	Age at MRI	0.08	0.05	1.49	112.1	0.139	0.414	-0.03	0.18
	Age delta	0.01	0.05	0.19	108.9	0.853	0.853	-0.09	0.10
	Height	0.02	0.00	6.84	162.0	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.19	0.03	-5.85	401.3	0.000	0.000	-0.26	-0.13
	BMI (z-score)	0.06	0.02	3.80	194.4	0.000	0.000	0.03	0.09
	Parental education	0.02	0.01	2.23	120.1	0.028	0.042	0.00	0.03
	Maternal age	0.00	0.00	0.97	141.2	0.334	0.479	0.00	0.01
Ventricles volume									
Base model (R²=.01)	(Intercept)	-1.31	0.65	-2.03	119.9	0.045	0.068	-2.60	-0.03
	SBP (z-score)	0.02	0.02	1.10	95.6	0.274	0.409	-0.02	0.06
	Female sex	-0.15	0.04	-4.45	126.1	0.000	0.000	-0.22	-0.09
	Age at MRI	-0.01	0.06	-0.14	74.3	0.891	0.944	-0.13	0.11
	Age delta	0.06	0.05	1.27	104.8	0.209	0.360	-0.04	0.17
	Height	0.01	0.00	3.38	191.1	0.001	0.001	0.00	0.01
Fully adjusted model (R²=.01)	(Intercept)	-1.32	0.69	-1.89	97.3	0.061	0.081	-2.69	0.06
	SBP (z-score)	0.02	0.02	0.95	108.4	0.347	0.409	-0.02	0.06
	Female sex	-0.15	0.04	-4.45	130.4	0.000	0.000	-0.22	-0.09
	Age at MRI	0.00	0.06	-0.07	74.3	0.944	0.944	-0.13	0.12
	Age delta	0.06	0.05	1.18	104.8	0.240	0.360	-0.04	0.16
	Height	0.01	0.00	3.16	188.4	0.002	0.002	0.00	0.01
	Non-European ethnicity	-0.02	0.04	-0.48	214.9	0.632	0.702	-0.09	0.06
	BMI (z-score)	0.01	0.02	0.46	110.3	0.647	0.647	-0.03	0.05
	Parental education	0.00	0.01	-0.04	104.4	0.972	0.972	-0.02	0.02
	Maternal age	0.00	0.00	0.13	63.1	0.901	0.901	-0.01	0.01
Cerebro-spinal fluid (CSF)									
Base model (R²=.01)	(Intercept)	-1.03	0.63	-1.63	140.9	0.106	0.127	-2.28	0.22
	SBP (z-score)	0.02	0.02	0.89	186.6	0.375	0.409	-0.02	0.05
	Female sex	-0.14	0.04	-4.06	126.4	0.000	0.000	-0.21	-0.07
	Age at MRI	-0.07	0.06	-1.32	114.0	0.191	0.414	-0.18	0.04
	Age delta	0.09	0.05	1.88	118.6	0.062	0.170	-0.01	0.19
	Height	0.01	0.00	4.76	215.2	0.000	0.000	0.01	0.02
Fully adjusted model (R²=.01)	(Intercept)	-0.95	0.65	-1.46	137.3	0.148	0.161	-2.25	0.34
	SBP (z-score)	0.01	0.02	0.28	229.3	0.781	0.781	-0.03	0.04
	Female sex	-0.14	0.04	-3.98	128.2	0.000	0.000	-0.21	-0.07
	Age at MRI	-0.07	0.06	-1.27	112.7	0.207	0.414	-0.18	0.04
	Age delta	0.09	0.05	1.82	118.0	0.071	0.170	-0.01	0.19
	Height	0.01	0.00	4.28	226.4	0.000	0.000	0.01	0.02
	Non-European ethnicity	0.01	0.04	0.38	255.2	0.702	0.702	-0.06	0.09
	BMI (z-score)	0.04	0.02	2.28	585.4	0.023	0.028	0.01	0.07
	Parental education	0.01	0.01	1.54	114.5	0.126	0.151	0.00	0.03
	Maternal age	0.00	0.00	-0.84	563.8	0.399	0.479	-0.01	0.00

DIASTOLIC BLOOD PRESSURE (DBP)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Total intracranial volume (TIV)									
Base model (R²=.15)	(Intercept)	-3.26	0.57	-5.73	157.1	0.000	0.000	-4.38	-2.14
	DBP (z-score)	-0.04	0.02	-2.34	196.9	0.020	0.058	-0.07	-0.01
	Female sex	-0.70	0.03	-23.61	225.7	0.000	0.000	-0.76	-0.65
	Age at MRI	-0.02	0.05	-0.27	87.5	0.786	0.945	-0.12	0.09
	Age delta	0.08	0.04	1.84	150.3	0.067	0.173	-0.01	0.17
	Height	0.03	0.00	9.03	76.4	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.17)	(Intercept)	-3.60	0.60	-6.02	133.6	0.000	0.000	-4.79	-2.42
	DBP (z-score)	-0.03	0.02	-1.89	188.9	0.060	0.098	-0.06	0.00
	Female sex	-0.70	0.03	-23.67	209.2	0.000	0.000	-0.76	-0.65
	Age at MRI	0.05	0.06	0.92	80.4	0.358	0.614	-0.06	0.16
	Age delta	0.03	0.05	0.61	133.1	0.546	0.596	-0.06	0.12
	Height	0.02	0.00	7.15	71.8	0.000	0.000	0.02	0.03
	Non-European ethnicity	-0.21	0.03	-6.27	245.6	0.000	0.000	-0.28	-0.15
	BMI (z-score)	0.06	0.02	3.70	149.6	0.000	0.000	0.03	0.09
	Parental education	0.02	0.01	2.92	94.8	0.004	0.008	0.01	0.04
	Maternal age	0.00	0.00	1.10	204.1	0.273	0.504	0.00	0.01
Cortical grey matter volume									
Base model (R²=.15)	(Intercept)	-0.44	0.49	-0.90	1126.0	0.370	0.370	-1.41	0.53
	DBP (z-score)	-0.05	0.02	-3.49	178.3	0.001	0.012	-0.08	-0.02
	Female sex	-0.71	0.03	-21.26	101.9	0.000	0.000	-0.78	-0.64
	Age at MRI	-0.16	0.05	-3.51	258.5	0.001	0.012	-0.25	-0.07
	Age delta	0.10	0.04	2.21	151.9	0.028	0.173	0.01	0.19
	Height	0.02	0.00	7.56	123.6	0.000	0.000	0.01	0.02
Fully adjusted model (R²=.17)	(Intercept)	-1.16	0.52	-2.25	679.2	0.025	0.043	-2.17	-0.15
	DBP (z-score)	-0.04	0.02	-2.63	165.1	0.009	0.054	-0.07	-0.01
	Female sex	-0.71	0.03	-21.58	100.1	0.000	0.000	-0.78	-0.65
	Age at MRI	-0.08	0.05	-1.65	236.0	0.101	0.408	-0.17	0.02
	Age delta	0.03	0.04	0.63	150.2	0.529	0.596	-0.06	0.12
	Height	0.02	0.00	5.89	143.1	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.25	0.03	-7.20	194.4	0.000	0.000	-0.32	-0.18
	BMI (z-score)	0.04	0.02	2.44	168.0	0.016	0.024	0.01	0.07
	Parental education	0.03	0.01	4.20	224.0	0.000	0.000	0.02	0.04
	Maternal age	0.01	0.00	2.16	150.9	0.032	0.192	0.00	0.01
Sub-cortical grey matter volume									
Base model (R²=.13)	(Intercept)	-2.04	0.55	-3.71	233.5	0.000	0.000	-3.13	-0.96
	DBP (z-score)	-0.03	0.02	-2.26	269.7	0.024	0.058	-0.06	0.00
	Female sex	-0.66	0.03	-21.28	178.7	0.000	0.000	-0.72	-0.60
	Age at MRI	-0.07	0.05	-1.32	126.4	0.189	0.408	-0.17	0.03
	Age delta	0.08	0.05	1.81	125.6	0.072	0.173	-0.01	0.18
	Height	0.02	0.00	7.89	90.4	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.15)	(Intercept)	-2.42	0.57	-4.22	211.8	0.000	0.000	-3.55	-1.29
	DBP (z-score)	-0.03	0.02	-1.86	321.9	0.065	0.098	-0.06	0.00
	Female sex	-0.66	0.03	-21.47	179.6	0.000	0.000	-0.72	-0.60
	Age at MRI	-0.01	0.05	-0.09	116.3	0.927	0.945	-0.11	0.10
	Age delta	0.03	0.05	0.68	118.1	0.496	0.596	-0.06	0.12
	Height	0.02	0.00	6.03	82.8	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.18	0.04	-5.04	150.9	0.000	0.000	-0.25	-0.11
	BMI (z-score)	0.06	0.02	3.67	156.9	0.000	0.000	0.03	0.09
	Parental education	0.03	0.01	3.45	117.8	0.001	0.003	0.01	0.04
	Maternal age	0.00	0.00	1.00	100.4	0.319	0.504	0.00	0.01
White matter volume									
Base model (R²=.13)	(Intercept)	-3.10	0.54	-5.78	315.4	0.000	0.000	-4.16	-2.04
	DBP (z-score)	-0.04	0.02	-2.36	233.4	0.019	0.058	-0.07	-0.01
	Female sex	-0.65	0.03	-21.14	189.4	0.000	0.000	-0.71	-0.59
	Age at MRI	0.02	0.05	0.43	120.4	0.665	0.945	-0.08	0.12
	Age delta	0.06	0.05	1.19	110.6	0.239	0.364	-0.04	0.15
	Height	0.02	0.00	7.97	110.6	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.14)	(Intercept)	-3.34	0.56	-5.98	279.0	0.000	0.000	-4.44	-2.24
	DBP (z-score)	-0.03	0.02	-2.03	225.9	0.044	0.088	-0.06	0.00
	Female sex	-0.65	0.03	-21.20	183.1	0.000	0.000	-0.71	-0.59
	Age at MRI	0.08	0.05	1.50	116.6	0.137	0.408	-0.03	0.18
	Age delta	0.01	0.05	0.20	111.9	0.840	0.840	-0.08	0.10
	Height	0.02	0.00	6.59	151.3	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.19	0.03	-5.78	406.3	0.000	0.000	-0.25	-0.13
	BMI (z-score)	0.06	0.02	3.44	158.7	0.001	0.002	0.02	0.09
	Parental education	0.02	0.01	2.21	117.6	0.029	0.044	0.00	0.03
	Maternal age	0.00	0.00	0.92	142.4	0.359	0.504	0.00	0.01
Ventricles volume									
Base model (R²=.01)	(Intercept)	-1.40	0.64	-2.17	116.2	0.032	0.048	-2.67	-0.12
	DBP (z-score)	0.02	0.02	1.11	99.4	0.269	0.284	-0.02	0.06
	Female sex	-0.16	0.03	-4.49	132.5	0.000	0.000	-0.22	-0.09
	Age at MRI	-0.01	0.06	-0.14	73.8	0.890	0.945	-0.13	0.11
	Age delta	0.06	0.05	1.26	103.5	0.212	0.364	-0.04	0.17
	Height	0.01	0.00	3.65	163.6	0.000	0.000	0.00	0.01
Fully adjusted model (R²=.01)	(Intercept)	-1.38	0.69	-1.99	97.9	0.049	0.065	-2.74	-0.01
	DBP (z-score)	0.02	0.02	1.08	108.8	0.284	0.284	-0.02	0.06
	Female sex	-0.15	0.04	-4.49	135.9	0.000	0.000	-0.22	-0.09
	Age at MRI	0.00	0.06	-0.07	74.4	0.945	0.945	-0.13	0.12
	Age delta	0.06	0.05	1.17	104.1	0.243	0.364	-0.04	0.16
	Height	0.01	0.00	3.30	167.1	0.001	0.001	0.00	0.01
	Non-European ethnicity	-0.02	0.04	-0.52	208.3	0.607	0.728	-0.09	0.05
	BMI (z-score)	0.01	0.02	0.68	106.3	0.499	0.499	-0.02	0.05
	Parental education	0.00	0.01	-0.02	105.3	0.984	0.984	-0.02	0.02
	Maternal age	0.00	0.00	0.15	63.0	0.882	0.882	-0.01	0.01
Cerebro-spinal fluid (CSF)									
Base model (R²=.01)	(Intercept)	-1.07	0.63	-1.71	140.1	0.089	0.107	-2.31	0.16
	DBP (z-score)	0.03	0.02	1.49	128.7	0.138	0.184	-0.01	0.06
	Female sex	-0.14	0.04	-4.10	122.1	0.000	0.000	-0.21	-0.07
	Age at MRI	-0.07	0.06	-1.33	113.0	0.185	0.408	-0.18	0.04
	Age delta	0.10	0.05	1.91	118.6	0.059	0.173	-0.01	0.19
	Height	0.01	0.00	5.08	230.3	0.000	0.000	0.01	0.02
Fully adjusted model (R²=.01)	(Intercept)	-0.96	0.65	-1.47	134.1	0.144	0.157	-2.25	0.33
	DBP (z-score)	0.02	0.02	1.33	127.2	0.186	0.223	-0.01	0.06
	Female sex	-0.14	0.04	-4.04	124.0	0.000	0.000	-0.21	-0.07
	Age at MRI	-0.07	0.06	-1.28	111.5	0.204	0.408	-0.18	0.04
	Age delta	0.09	0.05	1.84	117.4	0.068	0.173	-0.01	0.19
	Height	0.01	0.00	4.42	256.8	0.000	0.000	0.01	0.02
	Non-European ethnicity	0.01	0.04	0.35	251.8	0.728	0.728	-0.06	0.09
	BMI (z-score)	0.04	0.02	2.27	391.1	0.024	0.029	0.01	0.07
	Parental education	0.01	0.01	1.61	117.2	0.110	0.132	0.00	0.03
	Maternal age	0.00	0.00	-0.81	575.7	0.420	0.504	-0.01	0.00

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S8 - Subcortical brain regions

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Accumbens

Base model (R² = .14)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-3.42	0.58	-5.88	189.4	0.000	0.000	-4.57	-2.27
IMT (z-score)	0.03	0.02	1.83	86.2	0.070	0.490	0.00	0.07
Female sex	-0.08	0.03	-2.37	158.2	0.019	0.022	-0.15	-0.01
Age at MRI	-0.06	0.05	-1.23	104.5	0.223	0.588	-0.17	0.04
Age delta	0.00	0.05	0.08	96.4	0.933	0.997	-0.09	0.10
Height	0.00	0.00	0.50	84.0	0.617	0.785	0.00	0.01
TIV	0.00	0.00	21.71	288.2	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .14)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-3.49	0.61	-5.75	177.1	0.000	0.000	-4.69	-2.29
IMT (z-score)	0.03	0.02	1.88	89.7	0.064	0.490	0.00	0.07
Female sex	-0.08	0.03	-2.40	155.4	0.017	0.022	-0.15	-0.01
Age at MRI	-0.06	0.05	-1.10	101.4	0.274	0.588	-0.17	0.05
Age delta	0.00	0.05	0.00	90.7	0.997	0.997	-0.10	0.10
Height	0.00	0.00	0.55	91.5	0.584	0.785	0.00	0.01
TIV	0.00	0.00	21.17	257.3	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.02	0.04	-0.37	100.4	0.709	0.926	-0.09	0.06
BMI (z-score)	-0.01	0.02	-0.47	84.6	0.638	0.744	-0.04	0.03
Parental education	0.00	0.01	0.43	107.4	0.669	0.669	-0.01	0.02
Maternal age	0.00	0.00	-0.19	173.2	0.849	0.991	-0.01	0.01

Amygdala

Base model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.87	0.56	-8.64	140.8	0.000	0.000	-5.99	-3.76
IMT (z-score)	0.01	0.02	0.67	91.4	0.502	0.879	-0.02	0.04
Female sex	-0.19	0.03	-5.57	104.3	0.000	0.000	-0.25	-0.12
Age at MRI	-0.03	0.05	-0.61	144.7	0.542	0.876	-0.13	0.07
Age delta	-0.01	0.04	-0.26	130.0	0.793	0.958	-0.10	0.07
Height	0.00	0.00	-0.15	60.9	0.882	0.882	-0.01	0.01
TIV	0.00	0.00	28.74	152.0	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.92	0.59	-8.36	130.6	0.000	0.000	-6.09	-3.76
IMT (z-score)	0.01	0.02	0.72	92.6	0.474	0.879	-0.02	0.04
Female sex	-0.19	0.03	-5.68	104.2	0.000	0.000	-0.26	-0.12
Age at MRI	-0.01	0.05	-0.20	94.8	0.845	0.919	-0.11	0.09
Age delta	-0.03	0.04	-0.63	123.0	0.528	0.958	-0.11	0.06
Height	0.00	0.00	-0.61	60.8	0.546	0.785	-0.01	0.01
TIV	0.00	0.00	28.43	168.4	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.06	0.04	-1.69	126.9	0.093	0.326	-0.13	0.01
BMI (z-score)	0.02	0.02	1.40	85.8	0.164	0.383	-0.01	0.06
Parental education	0.01	0.01	1.07	127.2	0.288	0.449	-0.01	0.02
Maternal age	0.00	0.00	0.53	107.2	0.598	0.958	-0.01	0.01

Caudate

Base model (R² = .19)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.33	0.57	-7.54	166.4	0.000	0.000	-5.46	-3.19
IMT (z-score)	0.00	0.02	0.25	70.4	0.802	0.936	-0.03	0.04
Female sex	-0.06	0.03	-1.75	110.3	0.083	0.083	-0.13	0.01
Age at MRI	-0.07	0.05	-1.30	109.9	0.197	0.588	-0.17	0.03
Age delta	0.04	0.04	0.89	129.5	0.375	0.958	-0.05	0.13
Height	0.00	0.00	0.21	161.5	0.836	0.882	0.00	0.01
TIV	0.00	0.00	25.70	170.8	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .19)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.41	0.59	-7.44	165.0	0.000	0.000	-5.59	-3.24
IMT (z-score)	0.01	0.02	0.28	72.3	0.778	0.936	-0.03	0.04
Female sex	-0.06	0.04	-1.86	109.4	0.066	0.071	-0.13	0.00
Age at MRI	-0.06	0.05	-1.06	100.5	0.294	0.588	-0.16	0.05
Age delta	0.03	0.05	0.70	120.9	0.488	0.958	-0.06	0.12
Height	0.00	0.00	0.23	129.1	0.816	0.882	0.00	0.01
TIV	0.00	0.00	24.98	157.5	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.02	0.04	-0.59	121.1	0.556	0.926	-0.09	0.05
BMI (z-score)	-0.01	0.02	-0.63	98.0	0.533	0.744	-0.04	0.02
Parental education	0.01	0.01	1.75	135.6	0.083	0.278	0.00	0.03
Maternal age	0.00	0.00	-1.08	181.1	0.282	0.952	-0.01	0.00

Hippocampus

Base model (R² = .26)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-5.87	0.55	-10.63	156.0	0.000	0.000	-6.96	-4.78
IMT (z-score)	0.01	0.02	0.35	60.3	0.726	0.936	-0.03	0.04
Female sex	-0.14	0.03	-4.70	183.6	0.000	0.000	-0.20	-0.08
Age at MRI	-0.02	0.04	-0.48	198.5	0.630	0.882	-0.11	0.07
Age delta	0.01	0.04	0.25	151.4	0.804	0.958	-0.07	0.09
Height	0.00	0.00	1.50	92.9	0.138	0.454	0.00	0.01
TIV	0.00	0.00	27.32	90.0	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .26)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-6.05	0.58	-10.48	143.5	0.000	0.000	-7.19	-4.91
IMT (z-score)	0.01	0.02	0.36	60.6	0.720	0.936	-0.03	0.04
Female sex	-0.15	0.03	-4.83	190.6	0.000	0.000	-0.21	-0.09
Age at MRI	0.01	0.05	0.11	185.0	0.912	0.919	-0.08	0.09
Age delta	-0.01	0.04	-0.27	152.2	0.785	0.958	-0.09	0.07
Height	0.00	0.00	0.70	91.7	0.486	0.785	0.00	0.01
TIV	0.00	0.00	27.12	98.5	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.05	0.04	-1.32	114.6	0.190	0.443	-0.12	0.02
BMI (z-score)	0.04	0.02	2.45	140.0	0.015	0.105	0.01	0.07
Parental education	0.01	0.01	1.79	160.3	0.076	0.278	0.00	0.03
Maternal age	0.01	0.00	1.65	109.5	0.103	0.721	0.00	0.01

Pallidum

Base model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-6.37	0.57	-11.16	129.5	0.000	0.000	-7.50	-5.24
IMT (z-score)	0.02	0.02	1.37	126.4	0.174	0.679	-0.01	0.05
Female sex	-0.17	0.03	-5.01	99.2	0.000	0.000	-0.24	-0.10
Age	-0.01	0.05	-0.19	178.0	0.851	0.919	-0.10	0.08
	0.03	0.04	0.62	156.0	0.533	0.958	-0.06	0.11
Height	0.01	0.00	3.05	89.6	0.003	0.035	0.00	0.01
TIV	0.00	0.00	27.56	131.2	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-6.39	0.59	-10.86	133.1	0.000	0.000	-7.55	-5.22
IMT (z-score)	0.02	0.02	1.31	125.6	0.194	0.679	-0.01	0.05
Female sex	-0.17	0.03	-4.95	95.0	0.000	0.000	-0.24	-0.10
Age at MRI	-0.01	0.05	-0.10	164.2	0.919	0.919	-0.10	0.09
Age delta	0.02	0.04	0.53	146.3	0.595	0.958	-0.06	0.11
Height	0.01	0.00	2.86	142.9	0.005	0.035	0.00	0.01
TIV	0.00	0.00	26.69	117.3	0.000	0.000	0.00	0.00
Non-European ethnicity	0.01	0.04	0.26	126.9	0.794	0.926	-0.06	0.08
BMI (z-score)	0.02	0.02	1.24	76.3	0.220	0.385	-0.01	0.06
Parental education	0.01	0.01	0.88	187.1	0.381	0.449	-0.01	0.02
Maternal age	0.00	0.00	0.40	79.3	0.684	0.958	-0.01	0.01

Putamen

Base model (R² = .21)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.45	0.70	-6.34	57.5	0.000	0.000	-5.86	-3.05
IMT (z-score)	0.01	0.02	0.74	52.2	0.463	0.879	-0.03	0.05
Female sex	-0.22	0.04	-5.52	60.7	0.000	0.000	-0.29	-0.14
Age at MRI	-0.06	0.05	-1.27	126.9	0.206	0.588	-0.16	0.03
Age delta	0.01	0.05	0.32	104.0	0.753	0.958	-0.08	0.10
Height	0.00	0.00	1.31	77.9	0.196	0.457	0.00	0.01
TIV	0.00	0.00	24.09	121.7	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .21)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.51	0.72	-6.29	59.9	0.000	0.000	-5.95	-3.08
IMT (z-score)	0.01	0.02	0.73	51.6	0.472	0.879	-0.03	0.05
Female sex	-0.22	0.04	-5.49	59.4	0.000	0.000	-0.30	-0.14
Age at MRI	-0.06	0.05	-1.15	122.6	0.254	0.588	-0.15	0.04
Age delta	0.01	0.05	0.23	101.6	0.821	0.958	-0.08	0.10
Height	0.00	0.00	1.21	88.9	0.230	0.460	0.00	0.01
TIV	0.00	0.00	23.05	102.8	0.000	0.000	0.00	0.00
Non-European ethnicity	0.00	0.04	0.03	155.5	0.973	0.973	-0.07	0.07
BMI (z-score)	0.00	0.02	0.23	67.1	0.822	0.822	-0.03	0.04
Parental education	0.01	0.01	0.87	121.4	0.385	0.449	-0.01	0.02
Maternal age	0.00	0.00	0.01	130.3	0.996	0.996	-0.01	0.01

Thalamus

Base model (R² = .40)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-7.11	0.57	-12.58	76.5	0.000	0.000	-8.23	-5.98
IMT (z-score)	0.00	0.02	0.06	82.2	0.951	0.951	-0.03	0.03
Female sex	-0.19	0.03	-5.52	63.1	0.000	0.000	-0.25	-0.12
Age at MRI	-0.05	0.04	-1.22	101.5	0.225	0.588	-0.14	0.03
Age delta	0.05	0.04	1.16	103.0	0.250	0.958	-0.03	0.12
Height	0.01	0.00	2.12	72.3	0.037	0.173	0.00	0.01
TIV	0.00	0.00	32.38	52.0	0.000	0.000	0.00	0.01

Fully adjusted model (R² = .40)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-7.22	0.56	-12.92	92.8	0.000	0.000	-8.33	-6.11
IMT (z-score)	0.00	0.02	0.13	84.2	0.894	0.951	-0.03	0.03
Female sex	-0.19	0.03	-5.73	65.1	0.000	0.000	-0.26	-0.13
Age at MRI	-0.03	0.04	-0.58	102.6	0.563	0.876	-0.11	0.06
Age delta	0.02	0.04	0.58	106.4	0.563	0.958	-0.06	0.10
Height	0.00	0.00	1.41	73.8	0.162	0.454	0.00	0.01
TIV	0.00	0.00	31.85	53.0	0.000	0.000	0.00	0.01
Non-European ethnicity	-0.08	0.03	-2.59	157.5	0.010	0.070	-0.14	-0.02
BMI (z-score)	0.03	0.02	1.82	118.0	0.072	0.252	0.00	0.05
Parental education	0.01	0.01	1.58	81.0	0.119	0.278	0.00	0.03
Maternal age	0.00	0.00	0.83	136.6	0.408	0.952	0.00	0.01

CAROTID DISTENSIBILITY

Accumbens

Base model (R² = .14)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-3.53	0.57	-6.18	219.7	0.000	0.000	-4.66	-2.41
Distensibility (z-score)	0.00	0.02	0.20	114.4	0.842	0.981	-0.03	0.04
Female sex	-0.09	0.03	-2.55	160.9	0.012	0.014	-0.15	-0.02
Age at MRI	-0.06	0.05	-1.21	103.9	0.229	0.588	-0.17	0.04
Age delta	0.00	0.05	0.07	95.6	0.941	0.998	-0.09	0.10
Height	0.00	0.00	0.74	88.4	0.460	0.644	0.00	0.01
TIV	0.00	0.00	21.83	295.7	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .14)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-3.60	0.60	-6.02	202.5	0.000	0.000	-4.77	-2.42
Distensibility (z-score)	0.00	0.02	0.11	105.2	0.911	0.981	-0.03	0.04
Female sex	-0.09	0.03	-2.57	158.1	0.011	0.014	-0.15	-0.02
Age at MRI	-0.06	0.05	-1.09	100.7	0.277	0.588	-0.17	0.05
Age delta	0.00	0.05	0.00	90.1	0.998	0.998	-0.10	0.10
Height	0.00	0.00	0.77	96.8	0.441	0.644	0.00	0.01
TIV	0.00	0.00	21.27	259.5	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.04	0.04	-0.28	94.8	0.778	0.908	-0.09	0.07
BMI (z-score)	-0.01	0.02	-0.40	80.2	0.687	0.747	-0.04	0.03
Parental education	0.00	0.01	0.48	109.7	0.630	0.630	-0.01	0.02
Maternal age	0.00	0.00	-0.21	172.0	0.836	0.975	-0.01	0.01

Amygdala

Base model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.94	0.57	-8.68	131.0	0.000	0.000	-6.06	-3.81
Distensibility (z-score)	0.01	0.02	0.78	92.6	0.435	0.981	-0.02	0.05
Female sex	-0.19	0.03	-5.57	93.5	0.000	0.000	-0.26	-0.12
Age at MRI	-0.03	0.05	-0.61	144.6	0.542	0.866	-0.13	0.07
Age delta	-0.01	0.04	-0.28	133.3	0.781	0.967	-0.10	0.07
Height	0.00	0.00	-0.15	55.5	0.880	0.989	-0.01	0.01
TIV	0.00	0.00	28.78	151.8	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.99	0.59	-8.42	124.8	0.000	0.000	-6.16	-3.81
Distensibility (z-score)	0.02	0.02	0.93	92.9	0.353	0.981	-0.02	0.05
Female sex	-0.20	0.03	-5.69	93.5	0.000	0.000	-0.26	-0.13
Age at MRI	-0.01	0.05	-0.20	95.1	0.841	0.915	-0.11	0.09
Age delta	-0.03	0.04	-0.65	126.0	0.518	0.967	-0.11	0.06
Height	0.00	0.00	-0.45	57.4	0.658	0.837	-0.01	0.01
TIV	0.00	0.00	28.52	169.8	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.06	0.04	-1.69	134.6	0.093	0.326	-0.13	0.01
BMI (z-score)	0.03	0.02	1.53	84.2	0.130	0.303	-0.01	0.06
Parental education	0.01	0.01	1.08	128.8	0.281	0.435	-0.01	0.02
Maternal age	0.00	0.00	0.52	108.0	0.604	0.972	-0.01	0.01

Caudate

Base model (R² = .19)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.35	0.57	-7.60	166.6	0.000	0.000	-5.48	-3.22
Distensibility (z-score)	0.01	0.02	0.29	118.4	0.774	0.981	-0.03	0.04
Female sex	-0.06	0.04	-1.78	104.2	0.078	0.078	-0.13	0.01
Age at MRI	-0.07	0.05	-1.30	110.1	0.198	0.588	-0.17	0.03
Age delta	0.04	0.04	0.88	130.5	0.379	0.967	-0.05	0.13
Height	0.00	0.00	0.28	162.8	0.778	0.838	0.00	0.01
TIV	0.00	0.00	25.67	167.7	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .19)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.44	0.59	-7.48	163.4	0.000	0.000	-5.61	-3.26
Distensibility (z-score)	0.00	0.02	0.15	112.8	0.883	0.981	-0.03	0.04
Female sex	-0.07	0.04	-1.87	103.9	0.064	0.069	-0.14	0.00
Age at MRI	-0.06	0.05	-1.06	100.7	0.294	0.588	-0.16	0.05
Age delta	0.03	0.05	0.69	121.0	0.490	0.967	-0.06	0.12
Height	0.00	0.00	0.29	133.7	0.775	0.838	0.00	0.01
TIV	0.00	0.00	24.94	154.2	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.02	0.04	-0.57	115.5	0.567	0.908	-0.09	0.05
BMI (z-score)	-0.01	0.02	-0.58	92.0	0.561	0.747	-0.04	0.02
Parental education	0.01	0.01	1.76	135.7	0.081	0.284	0.00	0.03
Maternal age	0.00	0.00	-1.08	182.3	0.281	0.957	-0.01	0.00

Hippocampus

Base model (R² = .26)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-5.89	0.55	-10.81	171.4	0.000	0.000	-6.97	-4.82
Distensibility (z-score)	0.00	0.02	0.00	80.5	0.998	0.998	-0.03	0.03
Female sex	-0.15	0.03	-4.74	184.3	0.000	0.000	-0.21	-0.09
Age at MRI	-0.02	0.04	-0.48	199.1	0.632	0.885	-0.11	0.07
Age delta	0.01	0.04	0.25	152.3	0.805	0.967	-0.07	0.09
Height	0.00	0.00	1.53	89.7	0.129	0.324	0.00	0.01
TIV	0.00	0.00	27.36	90.2	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .26)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-6.07	0.57	-10.68	156.7	0.000	0.000	-7.20	-4.95
Distensibility (z-score)	0.00	0.02	0.22	79.3	0.824	0.981	-0.03	0.04
Female sex	-0.15	0.03	-4.89	193.3	0.000	0.000	-0.21	-0.09
Age at MRI	0.01	0.05	0.11	184.0	0.912	0.915	-0.08	0.09
Age delta	-0.01	0.04	-0.28	151.1	0.782	0.967	-0.09	0.07
Height	0.00	0.00	0.77	92.2	0.444	0.644	0.00	0.01
TIV	0.00	0.00	27.16	98.8	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.05	0.04	-1.31	116.1	0.194	0.453	-0.12	0.02
BMI (z-score)	0.04	0.02	2.46	132.8	0.015	0.105	0.01	0.07
Parental education	0.01	0.01	1.81	164.3	0.073	0.284	0.00	0.03
Maternal age	0.01	0.00	1.65	110.0	0.103	0.721	0.00	0.01

Pallidum

Base model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-6.47	0.56	-11.47	140.1	0.000	0.000	-7.58	-5.35
Distensibility (z-score)	0.01	0.02	0.68	92.1	0.498	0.981	-0.02	0.04
Female sex	-0.18	0.03	-5.13	95.3	0.000	0.000	-0.24	-0.11
Age at MRI	-0.01	0.05	-0.18	176.9	0.856	0.915	-0.10	0.08
Age delta	0.03	0.04	0.61	162.1	0.541	0.967	-0.06	0.11
Height	0.01	0.00	3.28	89.7	0.001	0.014	0.00	0.01
TIV	0.00	0.00	27.66	132.2	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .25)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-6.47	0.58	-11.12	141.4	0.000	0.000	-7.62	-5.32
Distensibility (z-score)	0.01	0.02	0.84	85.6	0.405	0.981	-0.02	0.05
Female sex	-0.18	0.03	-5.06	90.9	0.000	0.000	-0.24	-0.11
Age at MRI	-0.01	0.05	-0.11	162.3	0.915	0.915	-0.10	0.09
Age delta	0.02	0.04	0.53	149.8	0.600	0.967	-0.06	0.11
Height	0.01	0.00	3.09	140.0	0.002	0.014	0.00	0.01
TIV	0.00	0.00	26.78	117.7	0.000	0.000	0.00	0.00
Non-European ethnicity	0.01	0.04	0.31	123.9	0.759	0.908	-0.06	0.08
BMI (z-score)	0.02	0.02	1.35	72.4	0.181	0.317	-0.01	0.06
Parental education	0.01	0.01	0.90	178.1	0.367	0.435	-0.01	0.02
Maternal age	0.00	0.00	0.40	79.1	0.694	0.972	-0.01	0.01

Putamen

Base model (R² = .21)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.52	0.70	-6.47	58.1	0.000	0.000	-5.92	-3.12
Distensibility (z-score)	0.01	0.02	0.58	99.5	0.566	0.981	-0.02	0.04
Female sex	-0.22	0.04	-5.67	62.5	0.000	0.000	-0.30	-0.14
Age at MRI	-0.06	0.05	-1.26	124.9	0.209	0.588	-0.16	0.04
Age delta	0.01	0.05	0.30	101.6	0.764	0.967	-0.08	0.10
Height	0.00	0.00	1.50	83.9	0.139	0.324	0.00	0.01
TIV	0.00	0.00	24.24	125.1	0.000	0.000	0.00	0.00

Fully adjusted model (R² = .21)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-4.57	0.72	-6.39	59.9	0.000	0.000	-6.01	-3.14
Distensibility (z-score)	0.01	0.02	0.60	105.6	0.552	0.981	-0.02	0.04
Female sex	-0.22	0.04	-5.64	61.0	0.000	0.000	-0.30	-0.14
Age at MRI	-0.06	0.05	-1.14	121.3	0.254	0.588	-0.15	0.04
Age delta	0.01	0.05	0.22	99.4	0.829	0.967	-0.08	0.10
Height	0.00	0.00	1.37	91.4	0.175	0.350	0.00	0.01
TIV	0.00	0.00	23.14	103.9	0.000	0.000	0.00	0.00
Non-European ethnicity	0.00	0.04	0.07	146.2	0.948	0.948	-0.07	0.07
BMI (z-score)	0.01	0.02	0.32	71.3	0.747	0.747	-0.03	0.04
Parental education	0.01	0.01	0.89	123.8	0.373	0.435	-0.01	0.02
Maternal age	0.00	0.00	0.00	130.2	0.997	0.997	-0.01	0.01

Thalamus

Base model (R² = .40)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-7.13	0.56	-12.67	77.2	0.000	0.000	-8.25	-6.01
Distensibility (z-score)	0.01	0.02	0.61	68.3	0.547	0.981	-0.02	0.04
Female sex	-0.19	0.03	-5.60	64.2	0.000	0.000	-0.25	-0.12
Age at MRI	-0.05	0.04	-1.23	101.7	0.225	0.588	-0.14	0.03
Age delta	0.05	0.04	1.15	100.8	0.255	0.967	-0.03	0.12
Height	0.01	0.00	2.21	73.2	0.030	0.140	0.00	0.01
TIV	0.00	0.00	32.46	52.2	0.000	0.000	0.00	0.01

Fully adjusted model (R² = .40)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
(Intercept)	-7.24	0.56	-13.03	94.0	0.000	0.000	-8.35	-6.14
Distensibility (z-score)	0.01	0.02	0.74	66.5	0.460	0.981	-0.02	0.04
Female sex	-0.19	0.03	-5.84	64.5	0.000	0.000	-0.26	-0.13
Age at MRI	-0.03	0.04	-0.59	102.5	0.557	0.866	-0.11	0.06
Age delta	0.02	0.04	0.57	104.3	0.569	0.967	-0.06	0.10
Height	0.00	0.00	1.51	74.9	0.135	0.324	0.00	0.01
TIV	0.00	0.00	31.93	53.0	0.000	0.000	0.00	0.01
Non-European ethnicity	-0.08	0.03	-2.62	161.2	0.010	0.070	-0.14	-0.02
BMI (z-score)	0.03	0.02	1.91	114.7	0.059	0.206	0.00	0.05
Parental education	0.01	0.01	1.56	79.0	0.122	0.285	0.00	0.03
Maternal age	0.00	0.00	0.83	138.2	0.410	0.957	0.00	0.01

* SE = standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S8 - Subcortical brain regions (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Region / Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Accumbens									
Base model (R²=14)	(Intercept)	-3.54	0.59	-6.00	182.6	0.000	0.000	-4.70	-2.38
	SBP (z-score)	0.00	0.02	-0.13	81.6	0.896	0.988	-0.04	0.03
	Female sex	-0.09	0.03	-2.53	164.8	0.012	0.014	-0.15	-0.02
	Age at MRI	-0.06	0.05	-1.21	103.5	0.231	0.580	-0.17	0.04
	Age delta	0.00	0.05	0.07	94.5	0.942	0.996	-0.09	0.10
	Height	0.00	0.00	0.73	83.9	0.470	0.658	0.00	0.01
	TIV	0.00	0.00	21.75	284.0	0.000	0.000	0.00	0.00
Fully adjusted model (R²=14)	(Intercept)	-3.58	0.61	-5.89	175.6	0.000	0.000	-4.79	-2.38
	SBP (z-score)	0.00	0.02	0.10	119.5	0.922	0.988	-0.03	0.04
	Female sex	-0.09	0.03	-2.58	163.7	0.011	0.014	-0.15	-0.02
	Age at MRI	-0.06	0.05	-1.09	100.3	0.276	0.580	-0.17	0.05
	Age delta	0.00	0.05	0.01	89.0	0.996	0.996	-0.10	0.10
	Height	0.00	0.00	0.73	90.5	0.468	0.658	0.00	0.01
	TIV	0.00	0.00	21.20	250.6	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.01	0.04	-0.28	98.4	0.783	0.914	-0.09	0.07
	BMI (z-score)	-0.01	0.02	-0.47	117.0	0.643	0.698	-0.04	0.03
	Parental education	0.00	0.01	0.49	110.9	0.626	0.626	-0.01	0.02
	Maternal age	0.00	0.00	-0.21	172.6	0.836	0.975	-0.01	0.01
Amygdala									
Base model (R²=25)	(Intercept)	-4.90	0.59	-8.26	106.8	0.000	0.000	-6.08	-3.73
	SBP (z-score)	0.00	0.02	0.03	70.3	0.973	0.988	-0.04	0.04
	Female sex	-0.19	0.03	-5.63	104.0	0.000	0.000	-0.26	-0.12
	Age at MRI	-0.03	0.05	-0.61	101.6	0.547	0.884	-0.13	0.07
	Age delta	-0.01	0.04	-0.26	124.0	0.795	0.971	-0.10	0.07
	Height	0.00	0.00	-0.09	59.3	0.933	0.933	-0.01	0.01
	TIV	0.00	0.00	28.79	152.7	0.000	0.000	0.00	0.00
Fully adjusted model (R²=25)	(Intercept)	-4.97	0.61	-8.16	108.2	0.000	0.000	-6.18	-3.76
	SBP (z-score)	0.00	0.02	-0.18	78.4	0.861	0.988	-0.04	0.03
	Female sex	-0.19	0.03	-5.73	104.2	0.000	0.000	-0.26	-0.13
	Age at MRI	-0.01	0.05	-0.19	93.1	0.848	0.925	-0.11	0.09
	Age delta	-0.03	0.04	-0.63	118.7	0.528	0.971	-0.11	0.06
	Height	0.00	0.00	-0.50	59.9	0.619	0.788	-0.01	0.01
	TIV	0.00	0.00	28.49	169.7	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.06	0.04	-1.67	130.0	0.098	0.343	-0.13	0.01
	BMI (z-score)	0.02	0.02	1.43	91.7	0.158	0.322	-0.01	0.06
	Parental education	0.01	0.01	1.07	125.2	0.285	0.448	-0.01	0.02
	Maternal age	0.00	0.00	0.53	108.2	0.601	0.967	-0.01	0.01
Caudate									
Base model (R²=19)	(Intercept)	-4.33	0.57	-7.60	188.6	0.000	0.000	-5.45	-3.20
	SBP (z-score)	0.00	0.02	0.18	188.9	0.859	0.988	-0.03	0.03
	Female sex	-0.06	0.03	-1.78	109.9	0.077	0.077	-0.13	0.01
	Age at MRI	-0.07	0.05	-1.30	111.7	0.196	0.580	-0.17	0.03
	Age delta	0.04	0.04	0.90	131.8	0.372	0.971	-0.05	0.13
	Height	0.00	0.00	0.19	157.4	0.847	0.933	0.00	0.01
	TIV	0.00	0.00	25.64	166.4	0.000	0.000	0.00	0.00
Fully adjusted model (R²=19)	(Intercept)	-4.39	0.59	-7.46	178.3	0.000	0.000	-5.55	-3.23
	SBP (z-score)	0.01	0.02	0.69	209.2	0.489	0.988	-0.02	0.04
	Female sex	-0.07	0.04	-1.92	108.4	0.058	0.062	-0.14	0.00
	Age at MRI	-0.06	0.05	-1.06	101.5	0.290	0.580	-0.16	0.05
	Age delta	0.03	0.05	0.72	122.7	0.474	0.971	-0.06	0.12
	Height	0.00	0.00	0.15	129.5	0.881	0.933	-0.01	0.01
	TIV	0.00	0.00	24.95	154.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.02	0.04	-0.56	118.0	0.574	0.914	-0.09	0.05
	BMI (z-score)	-0.01	0.02	-0.79	103.5	0.432	0.605	-0.05	0.02
	Parental education	0.01	0.01	1.80	139.0	0.075	0.276	0.00	0.03
	Maternal age	0.00	0.00	-1.09	183.0	0.279	0.950	-0.01	0.00
Hippocampus									
Base model (R²=26)	(Intercept)	-5.92	0.55	-10.86	183.2	0.000	0.000	-7.00	-4.85
	SBP (z-score)	-0.01	0.02	-0.39	140.4	0.697	0.988	-0.04	0.02
	Female sex	-0.14	0.03	-4.73	183.9	0.000	0.000	-0.21	-0.08
	Age at MRI	-0.02	0.04	-0.47	198.4	0.638	0.893	-0.11	0.07
	Age delta	0.01	0.04	0.23	152.2	0.817	0.971	-0.07	0.09
	Height	0.00	0.00	1.64	107.9	0.104	0.329	0.00	0.01
	TIV	0.00	0.00	27.39	90.8	0.000	0.000	0.00	0.00
Fully adjusted model (R²=26)	(Intercept)	-6.11	0.57	-10.75	161.9	0.000	0.000	-7.24	-4.99
	SBP (z-score)	-0.01	0.02	-0.88	160.0	0.381	0.988	-0.05	0.02
	Female sex	-0.15	0.03	-4.82	191.4	0.000	0.000	-0.21	-0.09
	Age at MRI	0.01	0.05	0.12	183.0	0.903	0.925	-0.08	0.10
	Age delta	-0.01	0.04	-0.30	150.3	0.764	0.971	-0.10	0.07
	Height	0.00	0.00	0.90	105.4	0.370	0.647	0.00	0.01
	TIV	0.00	0.00	27.12	98.5	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.05	0.04	-1.31	115.8	0.192	0.448	-0.12	0.02
	BMI (z-score)	0.04	0.02	2.61	141.0	0.010	0.070	0.01	0.07
	Parental education	0.01	0.01	1.76	168.9	0.079	0.276	0.00	0.03
	Maternal age	0.01	0.00	1.65	109.9	0.102	0.714	0.00	0.01
Pallidum									
Base model (R²=25)	(Intercept)	-6.44	0.55	-11.66	174.7	0.000	0.000	-7.53	-5.35
	SBP (z-score)	0.00	0.01	-0.02	257.6	0.988	0.988	-0.03	0.03
	Female sex	-0.17	0.03	-5.12	98.9	0.000	0.000	-0.24	-0.11
	Age at MRI	-0.01	0.05	-0.18	186.3	0.859	0.925	-0.10	0.08
	Age delta	0.03	0.04	0.63	169.1	0.532	0.971	-0.06	0.11
	Height	0.01	0.00	3.22	105.0	0.002	0.021	0.00	0.01
	TIV	0.00	0.00	27.66	133.0	0.000	0.000	0.00	0.00
Fully adjusted model (R²=25)	(Intercept)	-6.47	0.57	-11.27	160.0	0.000	0.000	-7.60	-5.34
	SBP (z-score)	-0.01	0.02	-0.45	239.2	0.657	0.988	-0.04	0.02
	Female sex	-0.17	0.03	-5.03	95.5	0.000	0.000	-0.24	-0.10
	Age at MRI	0.00	0.05	-0.10	168.6	0.925	0.925	-0.10	0.09
	Age delta	0.02	0.04	0.53	156.2	0.599	0.971	-0.06	0.11
	Height	0.01	0.00	3.06	148.1	0.003	0.021	0.00	0.01
	TIV	0.00	0.00	26.86	120.7	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.32	126.1	0.749	0.914	-0.06	0.08
	BMI (z-score)	0.02	0.02	1.34	81.7	0.184	0.322	-0.01	0.06
	Parental education	0.01	0.01	0.88	165.6	0.380	0.448	-0.01	0.02
	Maternal age	0.00	0.00	0.40	79.1	0.691	0.967	-0.01	0.01
Putamen									
Base model (R²=21)	(Intercept)	-4.54	0.69	-6.55	61.3	0.000	0.000	-5.93	-3.16
	SBP (z-score)	-0.01	0.02	-0.47	87.4	0.643	0.988	-0.04	0.03
	Female sex	-0.22	0.04	-5.69	65.1	0.000	0.000	-0.29	-0.14
	Age at MRI	-0.06	0.05	-1.25	126.1	0.212	0.580	-0.16	0.04
	Age delta	0.01	0.05	0.30	103.1	0.769	0.971	-0.08	0.10
	Height	0.00	0.00	1.49	80.5	0.141	0.329	0.00	0.01
	TIV	0.00	0.00	24.05	119.6	0.000	0.000	0.00	0.00
Fully adjusted model (R²=21)	(Intercept)	-4.59	0.71	-6.43	61.4	0.000	0.000	-6.01	-3.16
	SBP (z-score)	-0.01	0.02	-0.51	120.0	0.612	0.988	-0.04	0.03
	Female sex	-0.22	0.04	-5.65	63.7	0.000	0.000	-0.29	-0.14
	Age at MRI	-0.06	0.05	-1.14	121.6	0.258	0.580	-0.15	0.04
	Age delta	0.01	0.05	0.21	100.5	0.832	0.971	-0.08	0.10
	Height	0.00	0.00	1.37	88.3	0.174	0.348	0.00	0.01
	TIV	0.00	0.00	23.00	101.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.00	0.04	0.07	148.8	0.942	0.942	-0.07	0.07
	BMI (z-score)	0.01	0.02	0.39	80.2	0.698	0.698	-0.03	0.04
	Parental education	0.01	0.01	0.87	126.4	0.384	0.448	-0.01	0.02
	Maternal age	0.00	0.00	0.00	130.3	0.999	0.999	-0.01	0.01
Thalamus									
Base model (R²=40)	(Intercept)	-7.14	0.56	-12.80	83.3	0.000	0.000	-8.25	-6.03
	SBP (z-score)	-0.01	0.01	-0.44	133.0	0.664	0.988	-0.03	0.02
	Female sex	-0.19	0.03	-5.51	63.1	0.000	0.000	-0.25	-0.12
	Age at MRI	-0.05	0.04	-1.21	101.8	0.228	0.580	-0.14	0.03
	Age delta	0.05	0.04	1.14	103.3	0.256	0.971	-0.03	0.12
	Height	0.01	0.00	2.16	70.7	0.034	0.159	0.00	0.01
	TIV	0.00	0.00	32.35	51.8	0.000	0.000	0.00	0.01
Fully adjusted model (R²=40)	(Intercept)	-7.26	0.55	-13.15	99.7	0.000	0.000	-8.35	-6.16
	SBP (z-score)	-0.01	0.01	-0.65	161.9	0.516	0.988	-0.04	0.02
	Female sex	-0.19	0.03	-5.73	65.9	0.000	0.000	-0.26	-0.12
	Age at MRI	-0.03	0.04	-0.57	102.2	0.568	0.884	-0.11	0.06
	Age delta	0.04	0.04	0.56	106.7	0.574	0.971	-0.06	0.10
	Height	0.00	0.00	1.50	72.1	0.137	0.329	0.00	0.01
	TIV	0.00	0.00	31.80	52.7	0.000	0.000	0.00	0.01
	Non-European ethnicity	-0.08	0.03	-2.62	164.3	0.010	0.070	-0.14	-0.02
	BMI (z-score)	0.03	0.01	2.00	153.6	0.047	0.164	0.00	0.06
	Parental education	0.01	0.01	1.54	78.9	0.128	0.299	0.00	0.03
	Maternal age	0.00	0.00	0.83	137.7	0.407	0.950	0.00	0.01

DIASTOLIC BLOOD PRESSURE (DBP)

Region / Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Accumbens									
Base model (R²=14)	(Intercept)	-3.52	0.58	-6.10	201.3	0.000	0.000	-4.66	-2.38
	DBP (z-score)	0.00	0.02	0.21	70.1	0.832	0.832	-0.03	0.04
	Female sex	-0.09	0.03	-2.54	156.8	0.012	0.014	-0.15	-0.02
	Age at MRI	-0.06	0.05	-1.22	104.1	0.227	0.580	-0.17	0.04
	Age delta	0.00	0.05	0.09	95.4	0.931	0.993	-0.09	0.10
	Height	0.00	0.00	0.71	87.5	0.480	0.672	0.00	0.01
	TIV	0.00	0.00	21.68	273.8	0.000	0.000	0.00	0.00
Fully adjusted model (R²=14)	(Intercept)	-3.59	0.60	-5.98	191.1	0.000	0.000	-4.77	-2.41
	DBP (z-score)	0.01	0.02	0.34	82.5	0.734	0.832	-0.03	0.04
	Female sex	-0.09	0.03	-2.58	154.2	0.011	0.014	-0.15	-0.02
	Age at MRI	-0.06	0.05	-1.10	101.1	0.275	0.580	-0.17	0.05
	Age delta	0.00	0.05	0.01	89.8	0.993	0.993	-0.10	0.10
	Height	0.00	0.00	0.75	94.6	0.454	0.672	0.00	0.01
	TIV	0.00	0.00	21.17	246.9	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.01	0.04	-0.29	98.8	0.776	0.905	-0.09	0.07
	BMI (z-score)	-0.01	0.02	-0.47	97.0	0.636	0.742	-0.04	0.03
	Parental education	0.00	0.01	0.50	109.9	0.615	0.615	-0.01	0.02
	Maternal age	0.00	0.00	-0.20	172.7	0.843	0.984	-0.01	0.01
Amygdala									
Base model (R²=25)	(Intercept)	-4.92	0.57	-8.61	125.6	0.000	0.000	-6.05	-3.79
	DBP (z-score)	-0.01	0.02	-0.75	88.2	0.455	0.759	-0.04	0.02
	Female sex	-0.19	0.03	-5.57	101.9	0.000	0.000	-0.25	-0.12
	Age at MRI	-0.03	0.05	-0.59	103.3	0.558	0.891	-0.13	0.07
	Age delta	-0.01	0.04	-0.29	128.4	0.772	0.992	-0.10	0.07
	Height	0.00	0.00	-0.05	59.6	0.963	0.963	-0.01	0.01
	TIV	0.00	0.00	28.90	159.0	0.000	0.000	0.00	0.00
Fully adjusted model (R²=25)	(Intercept)	-4.96	0.59	-8.37	123.0	0.000	0.000	-6.13	-3.79
	DBP (z-score)	-0.01	0.02	-0.70	97.2	0.486	0.759	-0.04	0.02
	Female sex	-0.19	0.03	-5.67	101.7	0.000	0.000	-0.26	-0.12
	Age at MRI	-0.01	0.05	-0.19	94.7	0.850	0.928	-0.11	0.09
	Age delta	-0.03	0.04	-0.65	122.6	0.520	0.992	-0.11	0.06
	Height	0.00	0.00	-0.52	60.7	0.606	0.771	-0.01	0.01
	TIV	0.00	0.00	28.62	177.0	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.06	0.04	-1.66	134.2	0.100	0.350	-0.13	0.01
	BMI (z-score)	0.02	0.02	1.50	90.0	0.138	0.312	-0.01	0.06
	Parental education	0.01	0.01	1.04	123.1	0.302	0.466	-0.01	0.02
	Maternal age	0.00	0.00	0.51	106.8	0.614	0.984	-0.01	0.01
Caudate									
Base model (R²=19)	(Intercept)	-4.33	0.57	-7.58	167.5	0.000	0.000	-5.46	-3.20
	DBP (z-score)	0.01	0.02	0.45	90.3	0.656	0.832	-0.03	0.04
	Female sex	-0.06	0.04	-1.79	107.0	0.076	0.076	-0.13	0.01
	Age at MRI	-0.07	0.05	-1.31	110.6	0.194	0.580	-0.17	0.03
	Age delta	0.04	0.04	0.91	129.8	0.367	0.992	-0.05	0.13
	Height	0.00	0.00	0.22	167.8	0.827	0.891	0.00	0.01
	TIV	0.00	0.00	25.58	163.3	0.000	0.000	0.00	0.00
Fully adjusted model (R²=19)	(Intercept)	-4.43	0.59	-7.47	162.6	0.000	0.000	-5.60	-3.26
	DBP (z-score)	0.01	0.02	0.70	89.1	0.488	0.759	-0.02	0.05
	Female sex	-0.07	0.04	-1.91	105.2	0.058	0.062	-0.14	0.00
	Age at MRI	-0.06	0.05	-1.06	101.6	0.290	0.580	-0.16	0.05
	Age delta	0.03	0.05	0.72	122.2	0.476	0.992	-0.06	0.12
	Height	0.00	0.00	0.25	129.4	0.806	0.891	-0.01	0.01
	TIV	0.00	0.00	24.93	153.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.02	0.04	-0.58	114.3	0.561	0.905	-0.10	0.05
	BMI (z-score)	-0.01	0.02	-0.70	106.4	0.487	0.682	-0.04	0.02
	Parental education	0.01	0.01	1.80	135.5	0.074	0.312	0.00	0.03
	Maternal age	0.00	0.00	-1.06	179.1	0.289	0.984	-0.01	0.00
Hippocampus									
Base model (R²=26)	(Intercept)	-5.92	0.54	-10.91	173.9	0.000	0.000	-6.99	-4.85
	DBP (z-score)	-0.02	0.02	-1.46	93.5	0.149	0.556	-0.06	0.01
	Female sex	-0.14	0.03	-4.71	202.5	0.000	0.000	-0.20	-0.08
	Age at MRI	-0.02	0.04	-0.44	202.0	0.662	0.927	-0.11	0.07
	Age delta	0.01	0.04	0.19	152.5	0.850	0.992	-0.07	0.09
	Height	0.00	0.00	1.65	99.9	0.103	0.348	0.00	0.01
	TIV	0.00	0.00	27.30	90.2	0.000	0.000	0.00	0.00
Fully adjusted model (R²=26)	(Intercept)	-6.07	0.57	-10.70	157.7	0.000	0.000	-7.19	-4.95
	DBP (z-score)	-0.02	0.02	-1.42	99.3	0.159	0.556	-0.05	0.01
	Female sex	-0.15	0.03	-4.84	214.6	0.000	0.000	-0.20	-0.09
	Age at MRI	0.01	0.05	0.13	188.9	0.898	0.928	-0.08	0.10
	Age delta	-0.01	0.04	-0.31	153.4	0.758	0.992	-0.10	0.07
	Height	0.00	0.00	0.80	98.0	0.425	0.672	0.00	0.01
	TIV	0.00	0.00	27.12	99.0	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.05	0.04	-1.27	113.7	0.207	0.483	-0.12	0.03
	BMI (z-score)	0.04	0.02	2.65	157.7	0.009	0.063	0.01	0.07
	Parental education	0.01	0.01	1.71	162.8	0.089	0.312	0.00	0.03
	Maternal age	0.01	0.00	1.61	109.9	0.110	0.770	0.00	0.01
Pallidum									
Base model (R²=25)	(Intercept)	-6.45	0.57	-11.43	137.0	0.000	0.000	-7.57	-5.34
	DBP (z-score)	-0.01	0.02	-0.74	90.2	0.461	0.759	-0.04	0.02
	Female sex	-0.17	0.03	-5.07	97.9	0.000	0.000	-0.24	-0.10
	Age at MRI	-0.01	0.05	-0.16	179.2	0.876	0.928	-0.10	0.08
	Age delta	0.03	0.04	0.59	157.8	0.554	0.992	-0.06	0.11
	Height	0.01	0.00	3.25	89.6	0.002	0.021	0.00	0.01
	TIV	0.00	0.00	27.70	135.3	0.000	0.000	0.00	0.00
Fully adjusted model (R²=25)	(Intercept)	-6.45	0.58	-11.06	137.9	0.000	0.000	-7.60	-5.30
	DBP (z-score)	-0.01	0.02	-0.83	86.7	0.411	0.759	-0.05	0.02
	Female sex	-0.17	0.03	-4.98	93.8	0.000	0.000	-0.24	-0.10
	Age at MRI	0.00	0.05	-0.09	163.6	0.928	0.928	-0.10	0.09
	Age delta	0.02	0.04	0.52	147.6	0.606	0.992	-0.06	0.11
	Height	0.01	0.00	3.04	138.0	0.003	0.021	0.00	0.01
	TIV	0.00	0.00	26.90	122.5	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.34	125.9	0.732	0.905	-0.06	0.08
	BMI (z-score)	0.02	0.02	1.36	81.1	0.178	0.312	-0.01	0.06
	Parental education	0.01	0.01	0.85	162.4	0.399	0.466	-0.01	0.02
	Maternal age	0.00	0.00	0.38	78.7	0.707	0.984	-0.01	0.01
Putamen									
Base model (R²=21)	(Intercept)	-4.51	0.70	-6.48	58.8	0.000	0.000	-5.90	-3.11
	DBP (z-score)	0.00	0.02	-0.28	113.9	0.780	0.832	-0.04	0.03
	Female sex	-0.22	0.04	-5.69	64.7	0.000	0.000	-0.29	-0.14
	Age at MRI	-0.06	0.05	-1.26	127.8	0.210	0.580	-0.16	0.04
	Age delta	0.01	0.05	0.30	105.2	0.762	0.992	-0.08	0.10
	Height	0.00	0.00	1.46	86.9	0.149	0.348	0.00	0.01
	TIV	0.00	0.00	24.01	119.0	0.000	0.000	0.00	0.00
Fully adjusted model (R²=21)	(Intercept)	-4.56	0.71	-6.38	60.1	0.000	0.000	-5.99	-3.13
	DBP (z-score)	0.00	0.02	-0.24	141.2	0.814	0.832	-0.03	0.03
	Female sex	-0.22	0.04	-5.65	63.1	0.000	0.000	-0.30	-0.14
	Age at MRI	-0.06	0.05	-1.14	122.2	0.256	0.580	-0.15	0.04
	Age delta	0.01	0.05	0.22	102.0	0.825	0.992	-0.08	0.10
	Height	0.00	0.00	1.33	94.9	0.186	0.372	0.00	0.01
	TIV	0.00	0.00	23.03	101.7	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.00	0.04	0.08	147.6	0.933	0.933	-0.07	0.07
	BMI (z-score)	0.01	0.02	0.27	72.0	0.789	0.789	-0.03	0.04
	Parental education	0.01	0.01	0.89	127.8	0.377	0.466	-0.01	0.02
	Maternal age	0.00	0.00	-0.01	131.1	0.994	0.994	-0.01	0.01
Thalamus									
Base model (R²=40)	(Intercept)	-7.14	0.56	-12.76	78.6	0.000	0.000	-8.26	-6.03
	DBP (z-score)	-0.02	0.01	-1.80	140.7	0.075	0.556	-0.05	0.00
	Female sex	-0.18	0.03	-5.44	63.0	0.000	0.000	-0.25	-0.12
	Age at MRI	-0.05	0.04	-1.18	100.1	0.243	0.580	-0.14	0.04
	Age delta	0.04	0.04	1.09	100.7	0.277	0.992	-0.04	0.12
	Height	0.01	0.00	2.20	69.9	0.031	0.145	0.00	0.01
	TIV	0.00	0.00	32.26	51.7	0.000	0.000	0.00	0.01
Fully adjusted model (R²=40)	(Intercept)	-7.23	0.55	-13.04	94.9	0.000	0.000	-8.33	-6.13
	DBP (z-score)	-0.02	0.01	-1.63	140.5	0.106	0.556	-0.05	0.00
	Female sex	-0.19	0.03	-5.67	65.5	0.000	0.000	-0.26	-0.12
	Age at MRI	-0.03	0.04	-0.57	101.3	0.573	0.891	-0.11	0.06
	Age delta	0.04	0.04	0.55	104.2	0.586	0.992	-0.06	0.10
	Height	0.00	0.00	1.48	72.6	0.145	0.348	0.00	0.01
	TIV	0.00	0.00	31.81	52.9	0.000	0.000	0.00	0.01
	Non-European ethnicity	-0.08	0.03	-2.57	162.9	0.011	0.077	-0.14	-0.02
	BMI (z-score)	0.03	0.01	1.97	119.0	0.051	0.178	0.00	0.06
	Parental education	0.01	0.01	1.48	77.8	0.143	0.334	0.00	0.03
	Maternal age	0.00	0.00	0.79	138.8	0.429	0.984	0.00	0.01

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S9 - White matter tracts (FA)

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Cingulate gyrus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-1.90	0.78	-2.45	59.9	0.017	0.034	-3.45	-0.35
	IMT (z-score)	-0.01	0.02	-0.32	75.0	0.750	0.980	-0.05	0.03
	Female sex	-0.12	0.04	-2.94	81.7	0.004	0.014	-0.20	-0.04
	Age at MRI	0.09	0.06	1.56	75.8	0.123	0.482	-0.03	0.21
	Age delta	0.00	0.05	0.01	179.1	0.989	0.989	-0.09	0.09
	Height	0.00	0.00	-0.19	105.8	0.854	0.992	-0.01	0.01
	TIV	0.00	0.00	3.44	209.5	0.001	0.001	0.00	0.00
Fully adjusted model (R²= .02)	(Intercept)	-1.66	0.81	-2.04	58.0	0.046	0.080	-3.28	-0.03
	IMT (z-score)	-0.01	0.02	-0.37	75.8	0.710	0.980	-0.05	0.03
	Female sex	-0.12	0.04	-2.93	80.8	0.004	0.014	-0.20	-0.04
	Age at MRI	0.08	0.06	1.38	74.1	0.172	0.482	-0.04	0.21
	Age delta	0.01	0.05	0.18	162.1	0.860	0.989	-0.09	0.10
	Height	0.00	0.00	-0.23	133.9	0.821	0.992	-0.01	0.01
	TIV	0.00	0.00	3.46	215.3	0.001	0.001	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.27	172.9	0.788	0.788	-0.07	0.09
	BMI (z-score)	0.01	0.02	0.48	93.8	0.636	0.750	-0.03	0.05
	Parental education	0.01	0.01	0.61	102.6	0.541	0.820	-0.01	0.02
	Maternal age	-0.01	0.00	-1.71	102.0	0.090	0.315	-0.01	0.00

Cortico-spinal tract (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-2.23	0.66	-3.36	119.3	0.001	0.003	-3.54	-0.91
	IMT (z-score)	0.01	0.02	0.49	126.3	0.625	0.980	-0.03	0.04
	Female sex	0.01	0.04	0.31	74.9	0.756	0.800	-0.07	0.10
	Age at MRI	0.02	0.06	0.37	80.4	0.713	0.903	-0.10	0.14
	Age delta	-0.02	0.06	-0.30	65.6	0.769	0.989	-0.13	0.10
	Height	0.01	0.00	2.05	139.5	0.043	0.602	0.00	0.01
	TIV	0.00	0.00	5.78	218.8	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-2.27	0.70	-3.26	110.5	0.001	0.003	-3.64	-0.89
	IMT (z-score)	0.01	0.02	0.53	119.4	0.600	0.980	-0.03	0.04
	Female sex	0.01	0.04	0.25	74.7	0.800	0.800	-0.07	0.09
	Age at MRI	0.03	0.06	0.56	77.2	0.576	0.871	-0.09	0.16
	Age delta	-0.03	0.06	-0.47	65.6	0.642	0.989	-0.14	0.09
	Height	0.01	0.00	1.66	111.1	0.100	0.700	0.00	0.01
	TIV	0.00	0.00	5.50	219.6	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.06	140.6	0.292	0.628	-0.12	0.04
	BMI (z-score)	0.01	0.02	0.54	58.7	0.594	0.750	-0.03	0.05
	Parental education	0.00	0.01	0.23	149.5	0.820	0.820	-0.01	0.02
	Maternal age	0.00	0.00	0.46	140.5	0.645	0.753	-0.01	0.01

Uncinate fasciculus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .04)	(Intercept)	-2.28	0.67	-3.42	108.1	0.001	0.003	-3.60	-0.96
	IMT (z-score)	0.00	0.02	-0.22	98.0	0.825	0.980	-0.04	0.03
	Female sex	-0.07	0.04	-1.86	91.4	0.066	0.116	-0.15	0.01
	Age at MRI	0.00	0.06	0.04	107.8	0.970	0.970	-0.11	0.11
	Age delta	0.00	0.05	-0.03	116.1	0.980	0.989	-0.10	0.10
	Height	0.00	0.00	0.63	117.6	0.529	0.992	0.00	0.01
	TIV	0.00	0.00	8.61	87.3	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .04)	(Intercept)	-2.46	0.68	-3.64	121.0	0.000	0.000	-3.80	-1.12
	IMT (z-score)	0.00	0.02	-0.18	99.5	0.861	0.980	-0.04	0.03
	Female sex	-0.08	0.04	-1.92	92.0	0.058	0.116	-0.15	0.00
	Age at MRI	0.02	0.06	0.29	112.0	0.774	0.903	-0.09	0.13
	Age delta	-0.01	0.05	-0.25	120.5	0.803	0.989	-0.11	0.09
	Height	0.00	0.00	0.54	114.1	0.591	0.992	0.00	0.01
	TIV	0.00	0.00	8.28	83.6	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.74	264.3	0.462	0.647	-0.10	0.05
	BMI (z-score)	0.00	0.02	-0.22	107.2	0.825	0.825	-0.04	0.03
	Parental education	0.01	0.01	0.64	118.7	0.527	0.820	-0.01	0.02
	Maternal age	0.00	0.00	0.58	115.3	0.566	0.753	-0.01	0.01

Inferior longitudinal fasciculus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-0.57	0.63	-0.91	182.1	0.364	0.510	-1.81	0.67
	IMT (z-score)	-0.02	0.02	-0.88	102.8	0.382	0.980	-0.05	0.02
	Female sex	0.14	0.04	3.62	111.7	0.000	0.000	0.06	0.21
	Age at MRI	0.01	0.05	0.11	142.5	0.915	0.970	-0.10	0.11
	Age delta	0.05	0.05	0.95	128.5	0.344	0.989	-0.05	0.14
	Height	0.00	0.00	-0.38	119.9	0.708	0.992	-0.01	0.00
	TIV	0.00	0.00	1.66	134.1	0.100	0.108	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.86	0.65	-1.32	177.3	0.189	0.294	-2.14	0.43
	IMT (z-score)	-0.02	0.02	-0.81	103.6	0.418	0.980	-0.05	0.02
	Female sex	0.13	0.04	3.53	114.1	0.001	0.007	0.06	0.21
	Age at MRI	0.03	0.05	0.49	167.6	0.622	0.871	-0.08	0.13
	Age delta	0.03	0.05	0.62	142.9	0.537	0.989	-0.07	0.13
	Height	0.00	0.00	-0.45	141.7	0.655	0.992	-0.01	0.00
	TIV	0.00	0.00	1.35	113.2	0.180	0.180	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-0.92	214.5	0.359	0.628	-0.11	0.04
	BMI (z-score)	-0.01	0.02	-0.47	165.2	0.643	0.750	-0.04	0.03
	Parental education	0.01	0.01	1.14	250.7	0.255	0.820	-0.01	0.02
	Maternal age	0.00	0.00	0.89	166.9	0.377	0.753	0.00	0.01

Superior longitudinal fasciculus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-2.10	0.66	-3.18	122.0	0.002	0.005	-3.41	-0.79
	IMT (z-score)	-0.01	0.02	-0.58	184.7	0.566	0.980	-0.04	0.02
	Female sex	0.05	0.04	1.11	71.8	0.271	0.422	-0.04	0.13
	Age at MRI	0.06	0.06	1.11	106.5	0.269	0.535	-0.05	0.17
	Age delta	0.01	0.05	0.28	110.6	0.779	0.989	-0.09	0.11
	Height	0.00	0.00	0.19	96.0	0.852	0.992	-0.01	0.01
	TIV	0.00	0.00	4.68	112.0	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-2.62	0.68	-3.85	123.7	0.000	0.000	-3.97	-1.27
	IMT (z-score)	-0.01	0.02	-0.47	185.2	0.642	0.980	-0.04	0.03
	Female sex	0.04	0.04	1.01	72.8	0.315	0.441	-0.04	0.13
	Age at MRI	0.09	0.06	1.64	102.5	0.105	0.482	-0.02	0.21
	Age delta	-0.01	0.05	-0.22	108.7	0.827	0.989	-0.11	0.09
	Height	0.00	0.00	0.10	104.2	0.921	0.992	-0.01	0.01
	TIV	0.00	0.00	4.29	110.8	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.09	197.8	0.276	0.628	-0.12	0.03
	BMI (z-score)	-0.01	0.02	-0.74	97.3	0.462	0.750	-0.05	0.02
	Parental education	0.01	0.01	1.13	76.3	0.264	0.820	-0.01	0.03
	Maternal age	0.01	0.00	2.14	146.4	0.034	0.238	0.00	0.01

Major forceps (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-0.10	0.74	-0.14	72.5	0.891	0.891	-1.57	1.37
	IMT (z-score)	0.00	0.02	-0.03	84.0	0.980	0.980	-0.04	0.04
	Female sex	0.08	0.04	2.11	154.5	0.036	0.084	0.01	0.15
	Age at MRI	0.08	0.06	1.41	93.4	0.162	0.482	-0.03	0.20
	Age delta	-0.05	0.06	-0.99	74.3	0.326	0.989	-0.16	0.06
	Height	0.00	0.00	-0.94	121.1	0.348	0.992	-0.01	0.00
	TIV	0.00	0.00	-2.34	307.0	0.020	0.025	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.15	0.75	-0.20	77.5	0.841	0.891	-1.65	1.34
	IMT (z-score)	0.00	0.02	-0.07	85.0	0.943	0.980	-0.04	0.04
	Female sex	0.08	0.04	2.14	148.6	0.034	0.084	0.01	0.15
	Age at MRI	0.08	0.06	1.42	102.2	0.159	0.482	-0.03	0.20
	Age delta	-0.06	0.05	-1.01	82.5	0.314	0.989	-0.16	0.05
	Height	0.00	0.00	-1.10	135.1	0.274	0.992	-0.01	0.00
	TIV	0.00	0.00	-2.26	237.2	0.025	0.029	0.00	0.00
	Non-European ethnicity	0.03	0.04	0.57	88.2	0.568	0.663	-0.06	0.11
	BMI (z-score)	0.01	0.02	0.76	94.0	0.450	0.750	-0.02	0.05
	Parental education	0.00	0.01	0.38	169.6	0.707	0.820	-0.01	0.02
	Maternal age	0.00	0.00	0.63	93.4	0.531	0.753	-0.01	0.01

Minor forceps (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-0.13	0.67	-0.19	116.6	0.849	0.891	-1.45	1.20
	IMT (z-score)	-0.01	0.02	-0.47	95.0	0.640	0.980	-0.05	0.03
	Female sex	-0.04	0.04	-0.87	68.7	0.389	0.466	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.03	123.1	0.306	0.535	-0.16	0.05
	Age delta	0.01	0.06	0.18	74.8	0.855	0.989	-0.10	0.12
	Height	0.00	0.00	0.05	104.1	0.999	0.999	-0.01	0.01
	TIV	0.00	0.00	3.96	132.1	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.33	0.68	-0.49	94.9	0.623	0.793	-1.67	1.01
	IMT (z-score)	-0.01	0.02	-0.48	94.9	0.633	0.980	-0.05	0.03
	Female sex	-0.04	0.04	-0.85	70.5	0.399	0.466	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.04	125.2	0.299	0.535	-0.17	0.05
	Age delta	0.01	0.06	0.20	77.1	0.836	0.989	-0.10	0.12
	Height	0.00	0.00	0.31	106.6	0.759	0.992	-0.01	0.01
	TIV	0.00	0.00	3.95	119.7	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.04	0.04	1.04	184.0	0.301	0.628	-0.04	0.12
	BMI (z-score)	-0.02	0.02	-1.20	85.8	0.234	0.750	-0.06	0.02
	Parental education	0.00	0.01	0.47	83.5	0.638	0.820	-0.01	0.02
	Maternal age	0.00	0.00	0.27	208.6	0.790	0.790	-0.01	0.01

CAROTID DISTENSIBILITY

Cingulate gyrus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-1.92	0.77	-2.49	60.9	0.016	0.032	-3.46	-0.38
	Distensibility (z-score)	0.02	0.02	0.86	129.1	0.390	0.591	-0.02	0.05
	Female sex	-0.12	0.04	-2.98	81.5	0.004	0.014	-0.20	-0.04
	Age at MRI	0.09	0.06	1.55	75.9	0.125	0.487	-0.03	0.21
	Age delta	0.00	0.05	0.00	181.9	0.999	0.999	-0.09	0.09
	Height	0.00	0.00	-0.11	107.9	0.909	0.961	-0.01	0.01
	TIV	0.00	0.00	3.44	208.2	0.001	0.001	0.00	0.00
Fully adjusted model (R²= .02)	(Intercept)	-1.66	0.81	-2.07	58.9	0.043	0.075	-3.28	-0.05
	Distensibility (z-score)	0.02	0.02	0.96	123.7	0.339	0.591	-0.02	0.05
	Female sex	-0.12	0.04	-2.98	80.8	0.004	0.014	-0.20	-0.04
	Age at MRI	0.08	0.06	1.37	74.3	0.174	0.487	-0.04	0.21
	Age delta	0.01	0.05	0.16	166.7	0.873	0.999	-0.09	0.10
	Height	0.00	0.00	-0.18	135.8	0.860	0.961	-0.01	0.01
	TIV	0.00	0.00	3.46	213.0	0.001	0.001	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.23	164.0	0.821	0.821	-0.07	0.09
	BMI (z-score)	0.01	0.02	0.59	93.2	0.559	0.804	-0.03	0.05
	Parental education	0.01	0.01	0.59	100.3	0.555	0.809	-0.01	0.02
	Maternal age	-0.01	0.00	-1.71	101.8	0.090	0.315	-0.01	0.00

Cortico-spinal tract (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-2.26	0.66	-3.43	123.8	0.001	0.002	-3.56	-0.95
	Distensibility (z-score)	0.00	0.02	0.04	125.6	0.968	0.968	-0.03	0.04
	Female sex	0.01	0.04	0.27	75.9	0.785	0.834	-0.07	0.09
	Age at MRI	0.02	0.06	0.37	80.3	0.712	0.906	-0.10	0.14
	Age delta	-0.02	0.06	-0.30	65.6	0.769	0.999	-0.13	0.10
	Height	0.01	0.00	2.07	126.6	0.040	0.560	0.00	0.01
	TIV	0.00	0.00	5.79	214.9	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-2.30	0.70	-3.33	113.4	0.001	0.002	-3.67	-0.93
	Distensibility (z-score)	0.00	0.02	0.11	158.9	0.916	0.968	-0.03	0.04
	Female sex	0.01	0.04	0.21	75.5	0.834	0.834	-0.07	0.09
	Age at MRI	0.03	0.06	0.56	77.1	0.576	0.881	-0.09	0.16
	Age delta	-0.03	0.06	-0.47	65.5	0.643	0.999	-0.14	0.09
	Height	0.01	0.00	1.71	102.4	0.091	0.637	0.00	0.01
	TIV	0.00	0.00	5.52	216.7	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.03	141.3	0.303	0.574	-0.12	0.04
	BMI (z-score)	0.01	0.02	0.57	58.4	0.574	0.804	-0.03	0.05
	Parental education	0.00	0.01	0.24	152.7	0.809	0.809	-0.01	0.02
	Maternal age	0.00	0.00	0.46	140.3	0.648	0.756	-0.01	0.01

Uncinate fasciculus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .04)	(Intercept)	-2.31	0.68	-3.43	100.7	0.001	0.003	-3.65	-0.97
	Distensibility (z-score)	0.02	0.02	0.94	95.3	0.352	0.591	-0.02	0.05
	Female sex	-0.08	0.04	-1.91	91.2	0.059	0.103	-0.15	0.00
	Age at MRI	0.00	0.06	0.03	108.4	0.977	0.977	-0.11	0.11
	Age delta	0.00	0.05	-0.04	113.9	0.969	0.999	-0.10	0.10
	Height	0.00	0.00	0.73	117.2	0.464	0.961	0.00	0.01
	TIV	0.00	0.00	8.62	86.9	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .04)	(Intercept)	-2.48	0.68	-3.66	119.0	0.000	0.000	-3.82	-1.14
	Distensibility (z-score)	0.02	0.02	0.87	96.0	0.387	0.591	-0.02	0.05
	Female sex	-0.08	0.04	-1.97	91.8	0.052	0.103	-0.15	0.00
	Age at MRI	0.02	0.06	0.28	112.5	0.781	0.911	-0.09	0.13
	Age delta	-0.01	0.05	-0.26	117.8	0.794	0.999	-0.11	0.09
	Height	0.00	0.00	0.61	114.1	0.542	0.961	0.00	0.01
	TIV	0.00	0.00	8.28	83.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.77	270.5	0.442	0.619	-0.10	0.04
	BMI (z-score)	0.00	0.02	-0.10	107.9	0.919	0.919	-0.04	0.03
	Parental education	0.01	0.01	0.63	119.4	0.533	0.809	-0.01	0.02
	Maternal age	0.00	0.00	0.57	113.0	0.570	0.756	-0.01	0.01

Inferior longitudinal fasciculus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-0.56	0.63	-0.90	185.7	0.371	0.519	-1.79	0.67
	Distensibility (z-score)	0.02	0.02	0.94	123.5	0.352	0.591	-0.02	0.05
	Female sex	0.14	0.04	3.64	117.3	0.000	0.000	0.06	0.21
	Age at MRI	0.01	0.05	0.09	142.1	0.927	0.977	-0.10	0.11
	Age delta	0.05	0.05	0.94	127.1	0.350	0.999	-0.05	0.14
	Height	0.00	0.00	-0.36	136.2	0.719	0.961	-0.01	0.00
	TIV	0.00	0.00	1.63	131.3	0.105	0.113	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.84	0.65	-1.29	182.9	0.198	0.308	-2.11	0.44
	Distensibility (z-score)	0.01	0.02	0.81	126.1	0.422	0.591	-0.02	0.05
	Female sex	0.13	0.04	3.56	119.6	0.001	0.007	0.06	0.21
	Age at MRI	0.03	0.05	0.48	167.0	0.629	0.881	-0.08	0.13
	Age delta	0.03	0.05	0.61	141.1	0.546	0.999	-0.07	0.13
	Height	0.00	0.00	-0.47	162.7	0.640	0.961	-0.01	0.00
	TIV	0.00	0.00	1.32	111.1	0.190	0.190	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-0.98	210.1	0.328	0.574	-0.11	0.04
	BMI (z-score)	-0.01	0.02	-0.37	164.7	0.715	0.834	-0.04	0.03
	Parental education	0.01	0.01	1.11	259.0	0.268	0.809	-0.01	0.02
	Maternal age	0.00	0.00	0.89	166.3	0.375	0.756	0.00	0.01

Superior longitudinal fasciculus (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-2.13	0.65	-3.29	139.6	0.001	0.001	-3.41	-0.85
	Distensibility (z-score)	0.02	0.02	1.32	132.1	0.190	0.591	-0.01	0.05
	Female sex	0.04	0.04	1.05	72.2	0.296	0.460	-0.04	0.13
	Age at MRI	0.06	0.06	1.10	106.6	0.273	0.528	-0.05	0.17
	Age delta	0.01	0.05	0.26	110.8	0.794	0.999	-0.09	0.11
	Height	0.00	0.00	0.29	95.0	0.770	0.961	-0.01	0.01
	TIV	0.00	0.00	4.67	111.6	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .02)	(Intercept)	-2.63	0.67	-3.93	136.8	0.000	0.000	-3.96	-1.31
	Distensibility (z-score)	0.02	0.02	1.13	145.8	0.261	0.591	-0.02	0.05
	Female sex	0.04	0.04	0.96	73.4	0.338	0.469	-0.04	0.12
	Age at MRI	0.09	0.06	1.63	101.8	0.107	0.487	-0.02	0.21
	Age delta	-0.01	0.05	-0.24	108.5	0.813	0.999	-0.11	0.09
	Height	0.00	0.00	0.16	101.2	0.874	0.961	-0.01	0.01
	TIV	0.00	0.00	4.28	110.5	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.14	200.5	0.255	0.574	-0.12	0.03
	BMI (z-score)	-0.01	0.02	-0.60	101.7	0.549	0.804	-0.05	0.03
	Parental education	0.01	0.01	1.10	75.6	0.273	0.809	-0.01	0.03
	Maternal age	0.01	0.00	2.13	144.9	0.035	0.245	0.00	0.01

Major forceps (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-0.13	0.73	-0.19	77.6	0.850	0.850	-1.58	1.31
	Distensibility (z-score)	0.02	0.02	0.90	181.7	0.369	0.591	-0.02	0.05
	Female sex	0.07	0.04	2.08	180.7	0.039	0.091	0.00	0.14
	Age at MRI	0.08	0.06	1.41	95.0	0.162	0.487	-0.03	0.19
	Age delta	-0.06	0.06	-1.00	74.6	0.320	0.999	-0.16	0.05
	Height	0.00	0.00	-0.84	129.3	0.403	0.961	-0.01	0.00
	TIV	0.00	0.00	-2.33	312.4	0.020	0.025	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.18	0.74	-0.24	83.4	0.813	0.850	-1.64	1.29
	Distensibility (z-score)	0.02	0.02	1.00	163.4	0.318	0.591	-0.02	0.05
	Female sex	0.08	0.04	2.11	171.8	0.037	0.091	0.01	0.15
	Age at MRI	0.08	0.06	1.41	103.4	0.160	0.487	-0.03	0.19
	Age delta	-0.06	0.05	-1.03	82.8	0.308	0.999	-0.16	0.05
	Height	0.00	0.00	-1.02	147.0	0.308	0.961	-0.01	0.00
	TIV	0.00	0.00	-2.26	242.3	0.025	0.029	0.00	0.00
	Non-European ethnicity	0.02	0.04	0.55	88.6	0.583	0.680	-0.06	0.11
	BMI (z-score)	0.01	0.02	0.87	88.6	0.389	0.804	-0.02	0.05
	Parental education	0.00	0.01	0.36	168.4	0.717	0.809	-0.01	0.02
	Maternal age	0.00	0.00	0.63	93.4	0.533	0.756	-0.01	0.01

Minor forceps (FA)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Base model (R²= .01)	(Intercept)	-0.14	0.67	-0.20	113.7	0.841	0.850	-1.46	1.19
	Distensibility (z-score)	0.01	0.02	0.69	67.0	0.493	0.627	-0.03	0.05
	Female sex	-0.04	0.04	-0.88	65.4	0.384	0.469	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.04	123.7	0.302	0.528	-0.16	0.05
	Age delta	0.01	0.06	0.18	75.2	0.862	0.999	-0.10	0.12
	Height	0.00	0.00	0.05	101.6	0.961	0.961	-0.01	0.01
	TIV	0.00	0.00	3.95	131.9	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.32	0.68	-0.48	131.5	0.633	0.806	-1.66	1.01
	Distensibility (z-score)	0.01	0.02	0.52	64.7	0.608	0.709	-0.03	0.05
	Female sex	-0.04	0.04	-0.84	67.0	0.402	0.469	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.05	126.5	0.296	0.528	-0.17	0.05
	Age delta	0.01	0.06	0.20	77.7	0.841	0.999	-0.10	0.12
	Height	0.00	0.00	0.32	109.7	0.753	0.961	-0.01	0.01
	TIV	0.00	0.00	3.94	119.7	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.04	0.04	1.01	194.4	0.316	0.574	-0.04	0.11
	BMI (z-score)	-0.02	0.02	-1.11	84.7	0.271	0.804	-0.06	0.02
	Parental education	0.00	0.01	0.45	84.2	0.652	0.809	-0.01	0.02
	Maternal age	0.00	0.00	0.27	203.9	0.788	0.788	-0.01	0.01

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S9 - White matter tracts (FA) (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Cingulate gyrus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-1.87	0.79	-2.37	58.4	0.021	0.042	-3.45	-0.29
	SBP (z-score)	0.00	0.02	0.12	77.6	0.908	0.949	-0.04	0.04
	Female sex	-0.12	0.04	-2.91	80.3	0.005	0.018	-0.20	-0.04
	Age at MRI	0.09	0.06	1.55	75.1	0.125	0.482	-0.03	0.21
	Age delta	0.00	0.05	0.02	174.8	0.986	0.988	-0.09	0.09
	Height	0.00	0.00	-0.25	119.9	0.800	0.932	-0.01	0.01
	TIV	0.00	0.00	3.44	212.6	0.001	0.001	0.00	0.00
Fully adjusted model (R² = .02)	(Intercept)	-1.64	0.82	-2.01	57.2	0.049	0.086	-3.28	-0.01
	SBP (z-score)	0.00	0.02	-0.06	88.8	0.949	0.949	-0.04	0.04
	Female sex	-0.12	0.04	-2.89	78.8	0.005	0.018	-0.20	-0.04
	Age at MRI	0.08	0.06	1.38	74.0	0.172	0.482	-0.04	0.21
	Age delta	0.01	0.05	0.17	162.9	0.865	0.988	-0.09	0.10
	Height	0.00	0.00	-0.26	137.9	0.796	0.932	-0.01	0.01
	TIV	0.00	0.00	3.45	219.2	0.001	0.001	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.25	166.1	0.806	0.806	-0.07	0.09
	BMI (z-score)	0.01	0.02	0.48	115.5	0.632	0.820	-0.03	0.05
	Parental education	0.01	0.01	0.60	99.3	0.553	0.763	-0.01	0.02
	Maternal age	-0.01	0.00	-1.71	101.8	0.091	0.318	-0.01	0.00

Cortico-spinal tract (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-2.14	0.67	-3.21	121.9	0.002	0.005	-3.45	-0.82
	SBP (z-score)	0.02	0.02	1.08	73.1	0.285	0.949	-0.02	0.06
	Female sex	0.01	0.04	0.22	70.3	0.828	0.882	-0.07	0.09
	Age at MRI	0.02	0.06	0.35	81.4	0.730	0.909	-0.10	0.14
	Age delta	-0.01	0.06	-0.25	66.1	0.802	0.988	-0.13	0.10
	Height	0.01	0.00	1.73	122.9	0.085	0.932	0.00	0.01
	TIV	0.00	0.00	5.84	225.8	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .02)	(Intercept)	-2.22	0.70	-3.18	110.0	0.002	0.005	-3.60	-0.84
	SBP (z-score)	0.02	0.02	1.09	82.4	0.278	0.949	-0.02	0.06
	Female sex	0.01	0.04	0.15	70.1	0.882	0.882	-0.08	0.09
	Age at MRI	0.03	0.06	0.55	77.3	0.583	0.886	-0.09	0.15
	Age delta	-0.03	0.06	-0.43	65.2	0.669	0.988	-0.14	0.09
	Height	0.00	0.00	1.48	106.2	0.141	0.932	0.00	0.01
	TIV	0.00	0.00	5.57	225.4	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.02	141.2	0.311	0.602	-0.12	0.04
	BMI (z-score)	0.01	0.02	0.22	63.1	0.831	0.831	-0.04	0.05
	Parental education	0.00	0.01	0.30	146.0	0.763	0.763	-0.01	0.02
	Maternal age	0.00	0.00	0.45	139.8	0.650	0.758	-0.01	0.01

Uncinate fasciculus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .04)	(Intercept)	-2.25	0.67	-3.33	105.9	0.001	0.004	-3.58	-0.91
	SBP (z-score)	0.01	0.02	0.24	83.9	0.813	0.949	-0.03	0.04
	Female sex	-0.07	0.04	-1.82	84.2	0.072	0.126	-0.15	0.01
	Age at MRI	0.00	0.06	0.03	105.9	0.975	0.975	-0.11	0.11
	Age delta	0.00	0.05	-0.02	112.5	0.988	0.988	-0.10	0.10
	Height	0.00	0.00	0.54	134.4	0.588	0.932	0.00	0.01
	TIV	0.00	0.00	8.65	89.0	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .04)	(Intercept)	-2.42	0.68	-3.58	123.5	0.000	0.000	-3.76	-1.08
	SBP (z-score)	0.01	0.02	0.51	93.9	0.614	0.949	-0.03	0.05
	Female sex	-0.08	0.04	-1.90	85.1	0.060	0.120	-0.15	0.00
	Age at MRI	0.02	0.06	0.28	110.2	0.779	0.909	-0.09	0.13
	Age delta	-0.01	0.05	-0.23	116.8	0.816	0.988	-0.11	0.09
	Height	0.00	0.00	0.43	123.8	0.670	0.932	0.00	0.01
	TIV	0.00	0.00	8.32	84.8	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.74	269.3	0.459	0.643	-0.10	0.04
	BMI (z-score)	-0.01	0.02	-0.38	119.4	0.703	0.820	-0.04	0.03
	Parental education	0.01	0.01	0.66	122.5	0.509	0.763	-0.01	0.02
	Maternal age	0.00	0.00	0.57	113.7	0.568	0.758	-0.01	0.01

Inferior longitudinal fasciculus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-0.47	0.63	-0.75	187.2	0.454	0.636	-1.72	0.77
	SBP (z-score)	0.01	0.02	0.44	85.5	0.663	0.949	-0.03	0.05
	Female sex	0.14	0.04	3.69	116.0	0.000	0.000	0.07	0.21
	Age at MRI	0.01	0.05	0.09	140.8	0.930	0.975	-0.10	0.11
	Age delta	0.05	0.05	0.97	123.3	0.336	0.988	-0.05	0.15
	Height	0.00	0.00	-0.59	142.7	0.555	0.932	-0.01	0.00
	TIV	0.00	0.00	1.63	130.0	0.106	0.114	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-0.75	0.65	-1.16	187.5	0.249	0.387	-2.03	0.53
	SBP (z-score)	0.02	0.02	0.90	100.1	0.373	0.949	-0.02	0.06
	Female sex	0.13	0.04	3.57	120.2	0.001	0.007	0.06	0.21
	Age at MRI	0.03	0.05	0.48	166.4	0.633	0.886	-0.08	0.13
	Age delta	0.03	0.05	0.65	136.7	0.520	0.988	-0.07	0.13
	Height	0.00	0.00	-0.72	170.4	0.473	0.932	-0.01	0.00
	TIV	0.00	0.00	1.33	110.4	0.185	0.185	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-0.95	212.1	0.344	0.602	-0.11	0.04
	BMI (z-score)	-0.01	0.02	-0.78	190.7	0.438	0.820	-0.05	0.02
	Parental education	0.01	0.01	1.18	274.5	0.240	0.763	-0.01	0.02
	Maternal age	0.00	0.00	0.89	169.7	0.374	0.758	0.00	0.01

Superior longitudinal fasciculus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-2.19	0.66	-3.33	131.5	0.001	0.004	-3.50	-0.89
	SBP (z-score)	-0.02	0.02	-1.24	140.9	0.219	0.949	-0.06	0.01
	Female sex	0.05	0.04	1.20	70.9	0.234	0.364	-0.03	0.13
	Age at MRI	0.06	0.06	1.14	106.9	0.258	0.532	-0.05	0.17
	Age delta	0.01	0.05	0.23	109.2	0.816	0.988	-0.09	0.11
	Height	0.00	0.00	0.41	105.3	0.686	0.932	-0.01	0.01
	TIV	0.00	0.00	4.63	111.9	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-2.64	0.68	-3.89	128.7	0.000	0.000	-3.99	-1.30
	SBP (z-score)	-0.01	0.02	-0.65	144.9	0.515	0.949	-0.05	0.03
	Female sex	0.05	0.04	1.08	71.9	0.286	0.400	-0.04	0.13
	Age at MRI	0.09	0.06	1.65	102.7	0.103	0.482	-0.02	0.21
	Age delta	-0.01	0.05	-0.24	107.7	0.809	0.988	-0.11	0.09
	Height	0.00	0.00	0.16	105.0	0.872	0.932	-0.01	0.01
	TIV	0.00	0.00	4.26	110.9	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.13	203.9	0.260	0.602	-0.12	0.03
	BMI (z-score)	-0.01	0.02	-0.52	99.5	0.602	0.820	-0.05	0.03
	Parental education	0.01	0.01	1.09	77.0	0.281	0.763	-0.01	0.03
	Maternal age	0.00	0.00	2.14	145.4	0.034	0.238	0.00	0.02

Major forceps (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-0.13	0.73	-0.17	76.6	0.865	0.896	-1.59	1.34
	SBP (z-score)	-0.01	0.02	-0.24	75.9	0.811	0.949	-0.04	0.04
	Female sex	0.08	0.04	2.20	197.8	0.029	0.068	0.01	0.15
	Age at MRI	0.08	0.06	1.42	93.7	0.161	0.482	-0.03	0.20
	Age delta	-0.06	0.06	-1.00	74.4	0.322	0.988	-0.16	0.06
	Height	0.00	0.00	-0.88	135.7	0.382	0.932	-0.01	0.00
	TIV	0.00	0.00	-2.34	304.6	0.020	0.025	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-0.18	0.74	-0.24	81.6	0.808	0.896	-1.66	1.30
	SBP (z-score)	-0.01	0.02	-0.50	83.7	0.617	0.949	-0.05	0.03
	Female sex	0.08	0.04	2.25	187.6	0.026	0.068	0.01	0.15
	Age at MRI	0.08	0.06	1.42	102.4	0.158	0.482	-0.03	0.20
	Age delta	-0.06	0.05	-1.03	82.6	0.307	0.988	-0.16	0.05
	Height	0.00	0.00	-0.84	142.7	0.316	0.932	-0.01	0.00
	TIV	0.00	0.00	-2.28	235.5	0.024	0.028	0.00	0.00
	Non-European ethnicity	0.02	0.04	0.56	87.9	0.575	0.671	-0.06	0.11
	BMI (z-score)	0.02	0.02	0.90	105.0	0.371	0.820	-0.02	0.06
	Parental education	0.00	0.01	0.34	165.5	0.733	0.763	-0.01	0.02
	Maternal age	0.00	0.00	0.63	94.1	0.529	0.758	-0.01	0.01

Minor forceps (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-0.09	0.67	-0.13	119.5	0.896	0.896	-1.41	1.24
	SBP (z-score)	0.00	0.02	0.12	110.8	0.902	0.949	-0.03	0.04
	Female sex	-0.04	0.04	-0.84	67.4	0.407	0.475	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.03	122.9	0.304	0.532	-0.16	0.05
	Age delta	0.01	0.06	0.19	74.7	0.851	0.988	-0.10	0.12
	Height	0.00	0.00	-0.06	141.9	0.932	0.932	-0.01	0.01
	TIV	0.00	0.00	3.94	131.6	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-0.27	0.68	-0.40	135.2	0.694	0.883	-1.60	1.07
	SBP (z-score)	0.01	0.02	0.59	117.1	0.554	0.949	-0.03	0.05
	Female sex	-0.04	0.04	-0.84	69.3	0.402	0.475	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.05	124.9	0.296	0.532	-0.17	0.05
	Age delta	0.01	0.06	0.22	76.7	0.823	0.988	-0.10	0.12
	Height	0.00	0.00	0.16	142.2	0.876	0.932	-0.01	0.01
	TIV	0.00	0.00	3.96	121.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.04	0.04	1.03	191.5	0.306	0.602	-0.04	0.11
	BMI (z-score)	-0.03	0.02	-1.34	90.4	0.184	0.820	-0.07	0.01
	Parental education	0.00	0.01	0.49	81.2	0.629	0.763	-0.01	0.02
	Maternal age	0.00	0.00	0.27	206.4	0.787	0.787	-0.01	0.01

DIASTOLIC BLOOD PRESSURE (DBP)

Cingulate gyrus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-1.90	0.77	-2.47	61.1	0.016	0.032	-3.43	-0.36
	DBP (z-score)	-0.01	0.02	-0.55	102.1	0.585	0.927	-0.05	0.03
	Female sex	-0.12	0.04	-2.88	80.6	0.005	0.018	-0.20	-0.04
	Age at MRI	0.09	0.06	1.57	75.9	0.120	0.476	-0.03	0.21
	Age delta	0.00	0.05	-0.01	181.5	0.992	0.994	-0.09	0.09
	Height	0.00	0.00	-0.21	123.6	0.838	0.961	-0.01	0.01
	TIV	0.00	0.00	3.42	215.6	0.001	0.001	0.00	0.00
Fully adjusted model (R² = .02)	(Intercept)	-1.64	0.81	-2.03	58.2	0.047	0.082	-3.26	-0.02
	DBP (z-score)	-0.01	0.02	-0.68	115.9	0.496	0.927	-0.05	0.02
	Female sex	-0.12	0.04	-2.86	79.6	0.005	0.018	-0.20	-0.04
	Age at MRI	0.09	0.06	1.39	74.1	0.170	0.476	-0.04	0.21
	Age delta	0.01	0.05	0.16	164.6	0.876	0.994	-0.09	0.10
	Height	0.00	0.00	-0.26	154.8	0.797	0.961	-0.01	0.01
	TIV	0.00	0.00	3.43	217.3	0.001	0.001	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.26	164.0	0.795	0.795	-0.07	0.09
	BMI (z-score)	0.01	0.02	0.53	97.5	0.596	0.741	-0.03	0.05
	Parental education	0.01	0.01	0.57	106.1	0.572	0.760	-0.01	0.02
	Maternal age	-0.01	0.00	-1.72	102.0	0.088	0.308	-0.01	0.00

Cortico-spinal tract (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-2.22	0.65	-3.40	127.2	0.001	0.003	-3.52	-0.93
	DBP (z-score)	0.02	0.02	1.52	312.0	0.130	0.910	-0.01	0.06
	Female sex	0.01	0.04	0.20	70.3	0.839	0.893	-0.08	0.09
	Age at MRI	0.02	0.06	0.34	81.6	0.734	0.914	-0.10	0.14
	Age delta	-0.01	0.06	-0.25	66.1	0.802	0.994	-0.13	0.10
	Height	0.01	0.00	2.05	140.6	0.042	0.588	0.00	0.01
	TIV	0.00	0.00	5.84	214.2	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .02)	(Intercept)	-2.29	0.69	-3.33	116.2	0.001	0.003	-3.65	-0.93
	DBP (z-score)	0.03	0.02	1.62	408.2	0.107	0.910	-0.01	0.06
	Female sex	0.01	0.04	0.14	70.1	0.893	0.893	-0.08	0.09
	Age at MRI	0.03	0.06	0.55	78.0	0.583	0.878	-0.09	0.15
	Age delta	-0.03	0.06	-0.44	65.6	0.664	0.994	-0.14	0.09
	Height	0.01	0.00	1.68	109.0	0.096	0.672	0.00	0.01
	TIV	0.00	0.00	5.56	214.0	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.06	140.4	0.291	0.579	-0.12	0.04
	BMI (z-score)	0.01	0.02	0.43	59.9	0.672	0.741	-0.03	0.05
	Parental education	0.00	0.01	0.33	160.8	0.742	0.760	-0.01	0.02
	Maternal age	0.00	0.00	0.49	144.2	0.623	0.727	-0.01	0.01

Uncinate fasciculus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .04)	(Intercept)	-2.25	0.66	-3.41	112.4	0.001	0.003	-3.56	-0.94
	DBP (z-score)	0.02	0.02	0.82	95.0	0.414	0.927	-0.02	0.05
	Female sex	-0.07	0.04	-1.86	84.4	0.067	0.117	-0.15	0.01
	Age at MRI	0.00	0.06	0.01	107.0	0.989	0.989	-0.11	0.11
	Age delta	0.00	0.05	0.01	114.9	0.994	0.994	-0.10	0.10
	Height	0.00	0.00	0.57	119.8	0.571	0.961	0.00	0.01
	TIV	0.00	0.00	8.64	87.2	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .04)	(Intercept)	-2.45	0.67	-3.67	128.1	0.000	0.000	-3.77	-1.13
	DBP (z-score)	0.02	0.02	1.02	101.3	0.310	0.927	-0.02	0.05
	Female sex	-0.08	0.04	-1.94	85.2	0.056	0.112	-0.16	0.00
	Age at MRI	0.02	0.06	0.28	111.5	0.783	0.914	-0.10	0.13
	Age delta	-0.01	0.05	-0.23	119.6	0.823	0.994	-0.11	0.09
	Height	0.00	0.00	0.49	116.0	0.624	0.961	0.00	0.01
	TIV	0.00	0.00	8.31	83.6	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.77	269.1	0.442	0.619	-0.10	0.04
	BMI (z-score)	-0.01	0.02	-0.33	112.9	0.741	0.741	-0.04	0.03
	Parental education	0.01	0.01	0.69	120.7	0.489	0.760	-0.01	0.02
	Maternal age	0.00	0.00	0.60	113.2	0.551	0.727	-0.01	0.01

Inferior longitudinal fasciculus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-0.52	0.62	-0.83	191.1	0.407	0.570	-1.74	0.71
	DBP (z-score)	0.00	0.02	0.11	77.7	0.912	0.927	-0.04	0.04
	Female sex	0.14	0.04	3.72	117.4	0.000	0.000	0.07	0.22
	Age at MRI	0.01	0.05	0.10	143.9	0.923	0.989	-0.10	0.11
	Age delta	0.05	0.05	0.96	129.7	0.340	0.994	-0.05	0.14
	Height	0.00	0.00	-0.49	129.5	0.624	0.961	-0.01	0.00
	TIV	0.00	0.00	1.61	125.2	0.110	0.118	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-0.81	0.65	-1.25	179.6	0.213	0.331	-2.09	0.47
	DBP (z-score)	0.01	0.02	0.39	83.5	0.699	0.927	-0.03	0.05
	Female sex	0.14	0.04	3.61	121.7	0.000	0.000	0.06	0.21
	Age at MRI	0.03	0.05	0.49	166.1	0.627	0.878	-0.08	0.13
	Age delta	0.03	0.05	0.63	143.0	0.532	0.994	-0.07	0.13
	Height	0.00	0.00	-0.56	156.5	0.574	0.961	-0.01	0.00
	TIV	0.00	0.00	1.31	107.5	0.192	0.192	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-0.98	218.3	0.331	0.579	-0.11	0.04
	BMI (z-score)	-0.01	0.02	-0.53	180.6	0.598	0.741	-0.04	0.03
	Parental education	0.01	0.01	1.15	271.0	0.251	0.760	-0.01	0.02
	Maternal age	0.00	0.00	0.90	167.1	0.368	0.727	0.00	0.01

Superior longitudinal fasciculus (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-2.08	0.65	-3.19	132.5	0.002	0.005	-3.37	-0.79
	DBP (z-score)	-0.01	0.02	-0.32	150.5	0.746	0.927	-0.04	0.03
	Female sex	0.05	0.04	1.16	71.4	0.248	0.386	-0.04	0.13
	Age at MRI	0.06	0.06	1.12	107.5	0.266	0.532	-0.05	0.17
	Age delta	0.01	0.05	0.27	112.2	0.787	0.994	-0.09	0.11
	Height	0.00	0.00	0.14	90.6	0.888	0.961	-0.01	0.01
	TIV	0.00	0.00	4.65	112.1	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-2.60	0.67	-3.87	133.7	0.000	0.000	-3.93	-1.27
	DBP (z-score)	0.00	0.02	0.12	129.9	0.902	0.927	-0.03	0.04
	Female sex	0.04	0.04	1.04	72.3	0.304	0.426	-0.04	0.13
	Age at MRI	0.09	0.06	1.64	102.5	0.105	0.476	-0.02	0.21
	Age delta	-0.01	0.05	-0.22	109.4	0.827	0.994	-0.11	0.09
	Height	0.00	0.00	0.05	99.4	0.961	0.961	-0.01	0.01
	TIV	0.00	0.00	4.28	110.9	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.04	0.04	-1.12	195.7	0.265	0.579	-0.12	0.03
	BMI (z-score)	-0.01	0.02	-0.75	91.2	0.457	0.741	-0.05	0.02
	Parental education	0.01	0.01	1.12	76.4	0.266	0.760	-0.01	0.03
	Maternal age	0.00	0.00	2.14	145.9	0.034	0.238	0.00	0.02

Major forceps (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-0.12	0.73	-0.17	75.4	0.866	0.884	-1.58	1.33
	DBP (z-score)	-0.02	0.02	-0.91	79.8	0.367	0.927	-0.06	0.02
	Female sex	0.08	0.04	2.24	192.6	0.026	0.061	0.01	0.15
	Age at MRI	0.08	0.06	1.43	92.5	0.155	0.476	-0.03	0.20
	Age delta	-0.06	0.06	-1.03	75.1	0.308	0.994	-0.17	0.05
	Height	0.00	0.00	-0.90	121.8	0.368	0.961	-0.01	0.00
	TIV	0.00	0.00	-2.36	282.2	0.019	0.024	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-0.15	0.74	-0.20	81.1	0.839	0.884	-1.63	1.32
	DBP (z-score)	-0.02	0.02	-0.99	82.4	0.323	0.927	-0.06	0.02
	Female sex	0.08	0.04	2.28	183.5	0.024	0.061	0.01	0.15
	Age at MRI	0.08	0.06	1.43	100.2	0.157	0.476	-0.03	0.20
	Age delta	-0.06	0.05	-1.04	82.3	0.303	0.994	-0.16	0.05
	Height	0.00	0.00	-1.08	141.1	0.282	0.961	-0.01	0.00
	TIV	0.00	0.00	-2.29	221.8	0.023	0.027	0.00	0.00
	Non-European ethnicity	0.03	0.04	0.59	91.1	0.555	0.648	-0.06	0.11
	BMI (z-score)	0.02	0.02	0.85	90.3	0.398	0.741	-0.02	0.05
	Parental education	0.00	0.01	0.31	76.4	0.760	0.760	-0.01	0.02
	Maternal age	0.00	0.00	0.60	92.4	0.547	0.727	-0.01	0.01

Minor forceps (FA)

Model	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Base model (R² = .01)	(Intercept)	-0.10	0.67	-0.15	116.2	0.884	0.884	-1.42	1.22
	DBP (z-score)	0.00	0.02	0.09	82.6	0.927	0.927	-0.04	0.04
	Female sex	-0.04	0.04	-0.83	66.0	0.410	0.485	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.03	122.7	0.303	0.532	-0.16	0.05
	Age delta	0.01	0.06	0.19	74.0	0.852	0.994	-0.10	0.12
	Height	0.00	0.00	-0.06	111.4	0.953	0.961	-0.01	0.01
	TIV	0.00	0.00	3.95	134.4	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .01)	(Intercept)	-0.31	0.67	-0.45	133.9	0.655	0.829	-1.64	1.03
	DBP (z-score)	0.01	0.02	0.25	85.3	0.804	0.927	-0.03	0.04
	Female sex	-0.04	0.04	-0.82	67.7	0.416	0.485	-0.12	0.05
	Age at MRI	-0.06	0.06	-1.05	126.0	0.298	0.532	-0.17	0.05
	Age delta	0.01	0.06	0.21	76.8	0.833	0.994	-0.10	0.12
	Height	0.00	0.00	0.25	115.8	0.802	0.961	-0.01	0.01
	TIV	0.00	0.00	3.95	122.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.04	0.04	1.02	203.2	0.309	0.579	-0.04	0.11
	BMI (z-score)	-0.02	0.02	-1.24	89.9	0.219	0.741	-0.06	0.01
	Parental education	0.00	0.01	0.47	80.5	0.640	0.760	-0.01	0.02
	Maternal age	0.00	0.00	0.28	204.5	0.781	0.781	-0.01	0.01

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S10 - White matter tracts (MD)

CAROTID INTIMA-MEDIA THICKNESS (IMT)

	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Cingulate gyrus (MD)									
Base model (R²= .02)	(Intercept)	-0.59	0.65	-0.91	137.0	0.366	0.512	-1.87	0.69
	IMT (z-score)	0.00	0.02	-0.11	126.9	0.910	0.963	-0.04	0.03
	Female sex	0.05	0.04	1.23	144.5	0.221	0.309	-0.03	0.12
	Age at MRI	-0.05	0.06	-0.85	118.9	0.397	0.514	-0.15	0.06
	Age delta	-0.01	0.05	-0.19	90.4	0.852	0.956	-0.11	0.09
	Height	0.00	0.00	-0.97	124.2	0.335	0.985	-0.01	0.00
	TIV	0.00	0.00	7.12	113.8	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .02)	(Intercept)	-0.86	0.67	-1.29	139.7	0.200	0.406	-2.18	0.46
	IMT (z-score)	0.00	0.02	-0.05	124.6	0.961	0.963	-0.04	0.03
	Female sex	0.05	0.04	1.23	144.0	0.221	0.309	-0.03	0.12
	Age at MRI	-0.04	0.06	-0.77	124.5	0.446	0.520	-0.15	0.07
	Age delta	-0.01	0.05	-0.25	86.8	0.807	0.956	-0.12	0.09
	Height	0.00	0.00	-0.59	130.5	0.560	0.985	-0.01	0.00
	TIV	0.00	0.00	7.00	105.6	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.16	138.5	0.875	0.932	-0.07	0.08
	BMI (z-score)	-0.03	0.02	-1.67	100.5	0.099	0.173	-0.07	0.01
	Parental education	0.00	0.01	-0.42	317.6	0.677	0.919	-0.02	0.01
	Maternal age	0.00	0.00	0.98	132.8	0.329	0.769	0.00	0.01
Cortico-spinal tract (MD)									
Base model (R²= .01)	(Intercept)	1.27	0.70	1.80	88.8	0.075	0.399	-0.13	2.67
	IMT (z-score)	0.00	0.02	-0.07	286.7	0.945	0.963	-0.03	0.03
	Female sex	0.02	0.04	0.49	107.4	0.624	0.672	-0.06	0.10
	Age at MRI	-0.09	0.06	-1.62	116.8	0.108	0.352	-0.20	0.02
	Age delta	0.09	0.05	1.19	119.0	0.997	0.997	-0.10	0.10
	Height	-0.01	0.00	-1.56	86.5	0.123	0.574	-0.01	0.00
	TIV	0.00	0.00	2.60	97.5	0.011	0.015	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	0.88	0.72	1.21	91.5	0.228	0.406	-0.56	2.31
	IMT (z-score)	0.00	0.02	0.13	279.6	0.901	0.963	-0.03	0.03
	Female sex	0.02	0.04	0.41	110.2	0.686	0.686	-0.06	0.09
	Age at MRI	-0.08	0.06	-1.46	131.6	0.147	0.352	-0.19	0.03
	Age delta	-0.01	0.05	-0.14	138.0	0.888	0.956	-0.10	0.09
	Height	0.00	0.00	-0.71	73.1	0.479	0.985	-0.01	0.00
	TIV	0.00	0.00	2.61	96.0	0.010	0.015	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.75	251.3	0.452	0.764	-0.10	0.05
	BMI (z-score)	-0.07	0.02	-3.74	77.5	0.000	0.000	-0.11	-0.03
	Parental education	0.00	0.01	-0.50	163.2	0.618	0.919	-0.02	0.01
	Maternal age	0.00	0.00	0.20	157.0	0.842	0.842	-0.01	0.01
Uncinate fasciculus (MD)									
Base model (R²= .01)	(Intercept)	-1.02	0.64	-1.60	162.1	0.112	0.399	-2.27	0.24
	IMT (z-score)	0.02	0.02	0.95	150.3	0.345	0.963	-0.02	0.05
	Female sex	0.17	0.04	4.81	218.0	0.000	0.000	0.10	0.24
	Age at MRI	0.06	0.05	1.09	126.5	0.277	0.431	-0.05	0.17
	Age delta	-0.05	0.05	-1.00	125.7	0.317	0.843	-0.15	0.05
	Height	0.00	0.00	0.54	100.2	0.591	0.985	0.00	0.01
	TIV	0.00	0.00	0.47	304.7	0.642	0.661	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.73	0.65	-1.13	185.1	0.261	0.406	-2.00	0.55
	IMT (z-score)	0.01	0.02	0.79	153.6	0.428	0.963	-0.02	0.05
	Female sex	0.17	0.04	5.00	212.7	0.000	0.000	0.11	0.24
	Age at MRI	0.03	0.05	0.56	149.1	0.585	0.585	-0.08	0.14
	Age delta	-0.03	0.05	-0.52	134.2	0.602	0.843	-0.12	0.07
	Height	0.00	0.00	0.59	95.5	0.559	0.985	0.00	0.01
	TIV	0.00	0.00	0.90	265.6	0.372	0.473	0.00	0.00
	Non-European ethnicity	0.09	0.04	2.35	217.7	0.020	0.140	0.01	0.16
	BMI (z-score)	0.02	0.02	0.85	97.1	0.400	0.457	-0.02	0.05
	Parental education	-0.01	0.01	-1.02	168.6	0.310	0.919	-0.02	0.01
	Maternal age	0.00	0.00	-0.55	181.0	0.585	0.769	-0.01	0.01
Inferior longitudinal fasciculus (MD)									
Base model (R²= .03)	(Intercept)	-1.09	0.66	-1.65	116.4	0.102	0.399	-2.40	0.22
	IMT (z-score)	0.00	0.02	-0.05	122.8	0.963	0.963	-0.04	0.03
	Female sex	-0.10	0.04	-2.60	96.5	0.011	0.022	-0.18	-0.02
	Age at MRI	-0.04	0.05	-0.67	158.7	0.504	0.543	-0.14	0.07
	Age delta	-0.04	0.05	-0.87	143.6	0.386	0.843	-0.14	0.05
	Height	0.00	0.00	0.26	117.3	0.792	0.985	-0.01	0.01
	TIV	0.00	0.00	8.72	479.4	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .03)	(Intercept)	-0.80	0.67	-1.19	130.3	0.235	0.406	-2.13	0.53
	IMT (z-score)	0.00	0.02	-0.11	122.0	0.911	0.963	-0.04	0.03
	Female sex	-0.10	0.04	-2.54	93.7	0.013	0.023	-0.18	-0.02
	Age at MRI	-0.04	0.05	-0.84	155.4	0.404	0.514	-0.15	0.06
	Age delta	-0.03	0.05	-0.71	142.6	0.480	0.843	-0.13	0.06
	Height	0.00	0.00	-0.03	151.0	0.975	0.985	-0.01	0.01
	TIV	0.00	0.00	8.63	438.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.00	0.04	0.09	133.3	0.932	0.932	-0.08	0.08
	BMI (z-score)	0.03	0.02	1.69	150.2	0.092	0.173	-0.01	0.06
	Parental education	0.00	0.01	-0.45	129.4	0.652	0.919	-0.02	0.01
	Maternal age	0.00	0.00	-0.57	140.5	0.571	0.769	-0.01	0.01
Superior longitudinal fasciculus (MD)									
Base model (R²= .02)	(Intercept)	1.08	0.68	1.60	101.4	0.114	0.399	-0.26	2.43
	IMT (z-score)	0.01	0.02	0.59	92.7	0.560	0.963	-0.03	0.05
	Female sex	-0.09	0.04	-2.68	209.6	0.008	0.022	-0.16	-0.03
	Age at MRI	-0.08	0.06	-1.39	94.1	0.167	0.352	-0.19	0.03
	Age delta	-0.05	0.05	-1.09	118.7	0.277	0.843	-0.15	0.04
	Height	-0.01	0.00	-2.31	86.8	0.023	0.322	-0.01	0.00
	TIV	0.00	0.00	5.35	102.0	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .03)	(Intercept)	0.99	0.69	1.45	116.2	0.150	0.406	-0.36	2.35
	IMT (z-score)	0.01	0.02	0.56	92.6	0.575	0.963	-0.03	0.05
	Female sex	-0.09	0.04	-2.59	188.2	0.010	0.022	-0.16	-0.02
	Age at MRI	-0.09	0.06	-1.67	114.3	0.098	0.352	-0.20	0.02
	Age delta	-0.04	0.05	-0.86	139.3	0.389	0.843	-0.14	0.06
	Height	-0.01	0.00	-1.72	104.1	0.089	0.574	-0.01	0.00
	TIV	0.00	0.00	5.41	88.6	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.06	0.04	1.63	246.4	0.104	0.278	-0.01	0.13
	BMI (z-score)	-0.04	0.02	-2.18	112.2	0.031	0.108	-0.07	0.00
	Parental education	0.00	0.01	0.30	445.3	0.763	0.919	-0.01	0.02
	Maternal age	0.00	0.00	-1.03	209.0	0.303	0.769	-0.01	0.00
Major forceps (MD)									
Base model (R²= .01)	(Intercept)	0.32	0.64	0.51	152.3	0.614	0.661	-0.94	1.59
	IMT (z-score)	-0.01	0.02	-0.35	86.5	0.731	0.963	-0.04	0.03
	Female sex	-0.11	0.04	-3.05	205.4	0.003	0.011	-0.18	-0.04
	Age at MRI	-0.09	0.05	-1.76	233.3	0.080	0.352	-0.19	0.01
	Age delta	0.03	0.05	0.68	181.9	0.495	0.843	-0.06	0.12
	Height	0.00	0.00	-0.39	63.1	0.699	0.985	-0.01	0.01
	TIV	0.00	0.00	4.33	106.1	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .02)	(Intercept)	0.19	0.66	0.28	157.0	0.778	0.778	-1.11	1.49
	IMT (z-score)	-0.01	0.02	-0.27	88.2	0.787	0.963	-0.04	0.03
	Female sex	-0.11	0.04	-3.13	205.2	0.002	0.009	-0.18	-0.04
	Age at MRI	-0.08	0.05	-1.56	194.7	0.120	0.352	-0.18	0.02
	Age delta	0.03	0.05	0.56	170.1	0.574	0.843	-0.07	0.12
	Height	0.00	0.00	-0.12	63.9	0.907	0.985	-0.01	0.01
	TIV	0.00	0.00	4.29	116.1	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.61	94.9	0.546	0.764	-0.11	0.06
	BMI (z-score)	-0.03	0.02	-1.44	67.0	0.154	0.216	-0.07	0.01
	Parental education	0.00	0.01	0.27	68.2	0.789	0.919	-0.02	0.02
	Maternal age	0.00	0.00	-0.44	111.1	0.659	0.769	-0.01	0.01
Minor forceps (MD)									
Base model (R²< .01)	(Intercept)	-0.42	0.61	-0.68	248.3	0.495	0.588	-1.61	0.78
	IMT (z-score)	0.02	0.02	1.04	144.4	0.302	0.963	-0.02	0.05
	Female sex	0.03	0.04	0.82	97.1	0.413	0.526	-0.05	0.11
	Age at MRI	0.06	0.05	1.11	154.4	0.269	0.431	-0.05	0.16
	Age delta	-0.08	0.05	-1.57	148.7	0.118	0.826	-0.17	0.02
	Height	0.00	0.00	-0.02	124.5	0.985	0.985	-0.01	0.01
	TIV	0.00	0.00	-0.44	156.1	0.661	0.661	0.00	0.00
Fully adjusted model (R²< .01)	(Intercept)	-0.42	0.63	-0.67	241.0	0.504	0.588	-1.66	0.82
	IMT (z-score)	0.02	0.02	1.09	133.1	0.280	0.963	-0.02	0.05
	Female sex	0.03	0.04	0.75	96.0	0.457	0.533	-0.05	0.11
	Age at MRI	0.07	0.05	1.36	159.5	0.176	0.352	-0.03	0.18
	Age delta	-0.09	0.05	-1.79	146.3	0.076	0.826	-0.18	0.01
	Height	0.00	0.00	-0.32	115.5	0.748	0.985	-0.01	0.01
	TIV	0.00	0.00	0.57	147.9	0.503	0.587	0.00	0.00
	Non-European ethnicity	-0.06	0.04	-1.57	217.2	0.119	0.278	-0.13	0.02
	BMI (z-score)	0.01	0.02	0.75	93.5	0.457	0.457	-0.02	0.05
	Parental education	0.00	0.01	-0.05	78.9	0.957	0.957	-0.02	0.02
	Maternal age	0.00	0.00	0.47	79.7	0.638	0.769	-0.01	0.01

CAROTID DISTENSIBILITY

	Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Cingulate gyrus (MD)									
Base model (R²= .02)	(Intercept)	-0.56	0.64	-0.87	145.8	0.388	0.531	-1.82	0.71
	Distensibility (z-score)	-0.01	0.02	-0.57	126.2	0.569	0.885	-0.05	0.03
	Female sex	0.05	0.04	1.29	149.3	0.198	0.277	-0.03	0.12
	Age at MRI	-0.05	0.06	-0.85	118.8	0.398	0.519	-0.15	0.06
	Age delta	-0.01	0.05	-0.18	90.8	0.860	0.963	-0.11	0.09
	Height	0.00	0.00	-1.05	118.7	0.298	0.949	-0.01	0.00
	TIV	0.00	0.00	7.12	114.5	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .02)	(Intercept)	-0.83	0.66	-1.26	150.5	0.210	0.394	-2.13	0.47
	Distensibility (z-score)	-0.02	0.02	-0.85	135.9	0.397	0.885	-0.05	0.02
	Female sex	0.05	0.04	1.31	149.0	0.193	0.277	-0.02	0.12
	Age at MRI	-0.04	0.06	-0.76	123.8	0.449	0.524	-0.15	0.07
	Age delta	-0.01	0.05	-0.23	87.1	0.817	0.963	-0.12	0.09
	Height	0.00	0.00	-0.67	127.6	0.503	0.949	-0.01	0.00
	TIV	0.00	0.00	7.01	107.2	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.01	0.04	0.17	143.6	0.862	0.925	-0.07	0.08
	BMI (z-score)	-0.03	0.02	-1.78	105.3	0.078	0.174	-0.07	0.01
	Parental education	0.00	0.01	-0.41	317.5	0.683	0.921	-0.02	0.01
	Maternal age	0.00	0.00	0.98	132.0	0.328	0.774	0.00	0.01
Cortico-spinal tract (MD)									
Base model (R²= .01)	(Intercept)	1.27	0.71	1.79	86.5	0.077	0.394	-0.14	2.67
	Distensibility (z-score)	0.00	0.02	0.12	93.7	0.904	0.904	-0.04	0.04
	Female sex	0.02	0.04	0.48	101.4	0.633	0.668	-0.06	0.10
	Age at MRI	-0.09	0.06	-1.62	116.3	0.108	0.350	-0.20	0.02
	Age delta	0.00	0.05	-0.01	118.7	0.995	0.995	-0.10	0.10
	Height	-0.01	0.00	-1.53	82.8	0.129	0.602	-0.01	0.00
	TIV	0.00	0.00	2.62	100.7	0.010	0.014	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	0.88	0.72	1.22	89.6	0.224	0.394	-0.55	2.32
	Distensibility (z-score)	-0.01	0.02	-0.46	104.4	0.647	0.904	-0.05	0.03
	Female sex	0.02	0.04	0.43	104.4	0.668	0.668	-0.06	0.09
	Age at MRI	-0.08	0.06	-1.45	131.8	0.149	0.350	-0.19	0.03
	Age delta	-0.01	0.05	-0.13	138.6	0.894	0.963	-0.10	0.09
	Height	0.00	0.00	-0.74	71.4	0.461	0.949	-0.01	0.00
	TIV	0.00	0.00	2.63	99.1	0.010	0.014	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.74	258.1	0.460	0.771	-0.10	0.05
	BMI (z-score)	-0.07	0.02	-3.83	83.0	0.000	0.000	-0.11	-0.04
	Parental education	0.00	0.01	-0.49	162.1	0.625	0.921	-0.02	0.01
	Maternal age	0.00	0.00	0.20	158.9	0.842	0.842	-0.01	0.01
Uncinate fasciculus (MD)									
Base model (R²= .01)	(Intercept)	-1.02	0.64	-1.60	157.7	0.112	0.394	-2.28	0.24
	Distensibility (z-score)	-0.02	0.02	-1.03	85.5	0.308	0.885	-0.06	0.02
	Female sex	0.17	0.04	4.74	183.1	0.000	0.000	0.10	0.24
	Age at MRI	0.06	0.05	1.10	125.0	0.273	0.425	-0.05	0.17
	Age delta	-0.05	0.05	-0.99	123.8	0.326	0.852	-0.15	0.05
	Height	0.00	0.00	0.50	100.5	0.620	0.949	0.00	0.01
	TIV	0.00	0.00	0.49	307.4	0.628	0.676	0.00	0.00
Fully adjusted model (R²= .01)	(Intercept)	-0.74	0.65	-1.15	180.3	0.253	0.394	-2.02	0.53
	Distensibility (z-score)	-0.02	0.02	-0.84	83.8	0.406	0.885	-0.05	0.02
	Female sex	0.18	0.04	4.91	176.7	0.000	0.000	0.10	0.25
	Age at MRI	0.03	0.05	0.56	148.2	0.580	0.580	-0.08	0.14
	Age delta	-0.03	0.05	-0.50	131.7	0.615	0.861	-0.12	0.07
	Height	0.00	0.00	0.58	95.7	0.562	0.949	0.00	0.01
	TIV	0.00	0.00	0.92	266.5	0.360	0.458	0.00	0.00
	Non-European ethnicity	0.09	0.04	2.40	204.1	0.017	0.119	0.02	0.16
	BMI (z-score)	0.01	0.02	0.73	92.9	0.467	0.467	-0.02	0.05
	Parental education	-0.01	0.01	-0.99	169.0	0.325	0.921	-0.02	0.01
	Maternal age	0.00	0.00	-0.55	179.5	0.582	0.774	-0.01	0.01
Inferior longitudinal fasciculus (MD)									
Base model (R²= .03)	(Intercept)	-1.05	0.65	-1.61	123.0	0.111	0.394	-2.34	0.25
	Distensibility (z-score)	-0.02	0.02	-0.88	128.5	0.379	0.885	-0.05	0.02
	Female sex	-0.10	0.04	-2.50	91.3	0.014	0.028	-0.18	-0.02
	Age at MRI	-0.03	0.05	-0.66	160.5	0.508	0.547	-0.14	0.07
	Age delta	-0.04	0.05	-0.86	146.0	0.392	0.852	-0.14	0.05
	Height	0.00	0.00	0.14	115.7	0.887	0.949	-0.01	0.01
	TIV	0.00	0.00	8.70	472.1	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .03)	(Intercept)	-0.78	0.67	-1.16	132.1	0.246	0.394	-2.10	0.54
	Distensibility (z-score)	-0.01	0.02	-0.63	141.6	0.533	0.885	-0.05	0.02
	Female sex	-0.10	0.04	-2.45	89.0	0.016	0.028	-0.18	-0.02
	Age at MRI	-0.04	0.05	-0.83	157.0	0.408	0.519	-0.15	0.06
	Age delta	-0.03	0.05	-0.70	144.1	0.484	0.852	-0.13	0.06
	Height	0.00	0.00	-0.11	152.7	0.915	0.949	-0.01	0.01
	TIV	0.00	0.00	8.62	439.0	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.00	0.04	0.09	135.7	0.925	0.925	-0.07	0.08
	BMI (z-score)	0.03	0.02	1.60	150.7	0.112	0.174	-0.01	0.06
	Parental education	0.00	0.01	-0.45	127.2	0.656	0.921	-0.02	0.01
	Maternal age	0.00	0.00	-0.57	141.8	0.572	0.774	-0.01	0.01
Superior longitudinal fasciculus (MD)									
Base model (R²= .02)	(Intercept)	1.07	0.68	1.57	102.2	0.119	0.394	-0.24	2.41
	Distensibility (z-score)	-0.01	0.02	-0.37	113.6	0.710	0.904	-0.04	0.03
	Female sex	-0.09	0.04	-2.69	202.2	0.008	0.022	-0.16	-0.03
	Age at MRI	-0.08	0.06	-1.38	93.9	0.170	0.350	-0.19	0.03
	Age delta	-0.05	0.05	-1.09	118.7	0.279	0.852	-0.15	0.04
	Height	-0.01	0.00	-2.23	77.0	0.029	0.406	-0.01	0.00
	TIV	0.00	0.00	5.39	104.4	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .03)	(Intercept)	0.98	0.68	1.44	116.8	0.153	0.394	-0.37	2.34
	Distensibility (z-score)	-0.01	0.02	-0.67	117.6	0.505	0.885	-0.04	0.03
	Female sex	-0.09	0.04	-2.57	180.2	0.011	0.026	-0.16	-0.02
	Age at MRI	-0.09	0.06	-1.66	113.4	0.100	0.350	-0.20	0.02
	Age delta	-0.04	0.05	-0.85	139.3	0.395	0.852	-0.14	0.06
	Height	-0.01	0.00	-1.68	92.2	0.096	0.602	-0.01	0.00
	TIV	0.00	0.00	5.45	90.4	0.000	0.000	0.00	0.00
	Non-European ethnicity	0.06	0.04	1.68	239.9	0.095	0.306	-0.01	0.13
	BMI (z-score)	-0.04	0.02	-2.25	115.3	0.026	0.091	-0.08	-0.01
	Parental education	0.00	0.01	0.33	437.6	0.741	0.921	-0.01	0.02
	Maternal age	0.00	0.00	-1.04	209.0	0.301	0.774	-0.01	0.00
Major forceps (MD)									
Base model (R²= .01)	(Intercept)	0.37	0.65	0.57	132.9	0.570	0.614	-0.92	1.66
	Distensibility (z-score)	-0.01	0.02	-0.62	142.6	0.538	0.885	-0.05	0.02
	Female sex	-0.11	0.04	-2.99	219.7	0.003	0.011	-0.17	-0.04
	Age at MRI	-0.09	0.05	-1.76	229.5	0.081	0.350	-0.19	0.01
	Age delta	0.03	0.05	0.70	181.5	0.487	0.852	-0.06	0.13
	Height	0.00	0.00	-0.49	60.0	0.629	0.949	-0.01	0.01
	TIV	0.00	0.00	4.30	105.3	0.000	0.000	0.00	0.00
Fully adjusted model (R²= .02)	(Intercept)	0.23	0.67	0.34	136.8	0.734	0.734	-1.10	1.55
	Distensibility (z-score)	-0.02	0.02	-0.90	154.7	0.372	0.885	-0.05	0.02
	Female sex	-0.11	0.04	-3.05	222.7	0.003	0.011	-0.17	-0.04
	Age at MRI	-0.08	0.05	-1.56	192.6	0.121	0.350	-0.18	0.02
	Age delta	0.03	0.05	0.58	170.8	0.564	0.861	-0.07	0.12
	Height	0.00	0.00	-0.26	60.6	0.830	0.949	-0.01	0.01
	TIV	0.00	0.00	4.27	114.5	0.000	0.000	0.00	0.00
	Non-European ethnicity	-0.03	0.04	-0.60	91.8	0.551	0.771	-0.11	0.06
	BMI (z-score)	-0.03	0.02	-1.56	69.3	0.124	0.174	-0.07	0.01
	Parental education	0.00	0.01	0.27	68.0	0.789	0.921	-0.02	0.02
	Maternal age	0.00	0.00	-0.44	111.0	0.663	0.774	-0.01	0.01
Minor forceps (MD)									
Base model (R²< .01)	(Intercept)	-0.46	0.61	-0.75	228.9	0.452	0.531	-1.67	0.75
	Distensibility (z-score)	0.00	0.02	-0.22	85.4	0.828	0.904	-0.04	0.03
	Female sex	0.03	0.04	0.77	99.2	0.443	0.564	-0.05	0.11
	Age at MRI	0.06	0.05	1.12	152.6	0.265	0.425	-0.05	0.16
	Age delta	-0.08	0.05	-1.57	148.0	0.118	0.826	-0.17	0.02
	Height	0.00	0.00	0.06	134.2	0.949	0.949	-0.01	0.01
	TIV	0.00	0.00	-0.41	157.0	0.685	0.685	0.00	0.00
Fully adjusted model (R²< .01)	(Intercept)	-0.48	0.64	-0.75	219.6	0.455	0.531	-1.73	0.78
	Distensibility (z-score)	0.00	0.02	-0.14	83.3	0.892	0.904	-0.04	0.04
	Female sex	0.03	0.04	0.69	98.7	0.495	0.578	-0.05	0.10
	Age at MRI	0.07	0.05	1.36	158.3	0.175	0.350	-0.03	0.18
	Age delta	-0.09	0.05	-1.78	146.7	0.077	0.826	-0.18	0.01
	Height	0.00	0.00	-0.22	120.4	0.823	0.949	-0.01	0.01
	TIV	0.00	0.00	-0.63	150.3	0.528	0.616	0.00	0.00
	Non-European ethnicity	-0.06	0.04	-1.51	231.6	0.131	0.306	-0.13	0.02
	BMI (z-score)	0.01	0.02	0.74	68.0	0.459	0.467	-0.02	0.05
	Parental education	0.00	0.01	-0.03	79.7	0.979	0.979	-0.02	0.01
	Maternal age	0.00	0.00	0.47	80.6	0.642	0.774	-0.01	0.01

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S10 - White matter tracts (MD) (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Cingulate gyrus (MD)								
Base model (R² = .02)								
(Intercept)	-0.63	0.66	-0.96	134.1	0.341	0.460	-1.92	0.67
SBP (z-score)	-0.01	0.02	-0.49	195.1	0.625	0.862	-0.04	0.03
Female sex	0.05	0.04	1.26	138.0	0.212	0.319	-0.03	0.12
Age at MRI	-0.05	0.06	-0.84	118.9	0.403	0.519	-0.15	0.06
Age delta	-0.01	0.05	-0.20	90.7	0.840	0.941	-0.11	0.09
Height	0.00	0.00	-0.84	116.0	0.402	0.929	-0.01	0.00
TIV	0.00	0.00	7.12	115.8	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .02)								
(Intercept)	-0.85	0.67	-1.27	138.7	0.208	0.406	-2.17	0.48
SBP (z-score)	0.00	0.02	0.13	199.7	0.895	0.944	-0.03	0.04
Female sex	0.05	0.04	1.21	134.3	0.228	0.319	-0.03	0.12
Age at MRI	-0.04	0.06	-0.77	124.2	0.445	0.519	-0.15	0.07
Age delta	-0.01	0.05	-0.24	87.1	0.811	0.941	-0.12	0.09
Height	0.00	0.00	-0.60	120.9	0.551	0.929	-0.01	0.00
TIV	0.00	0.00	7.02	107.5	0.000	0.000	0.00	0.00
Non-European ethnicity	0.01	0.04	0.16	147.0	0.874	0.944	-0.07	0.08
BMI (z-score)	-0.03	0.02	-1.63	102.8	0.106	0.158	-0.07	0.01
Parental education	0.00	0.01	-0.41	312.2	0.681	0.923	-0.02	0.01
Maternal age	0.00	0.00	0.98	133.1	0.329	0.770	0.00	0.01
Cortico-spinal tract (MD)								
Base model (R² = .01)								
(Intercept)	1.10	0.70	1.56	91.9	0.122	0.406	-0.30	2.50
SBP (z-score)	-0.03	0.02	-1.92	237.5	0.056	0.784	-0.07	0.00
Female sex	0.02	0.04	0.59	108.7	0.560	0.603	-0.05	0.10
Age at MRI	-0.09	0.06	-1.58	117.4	0.117	0.354	-0.20	0.02
Age delta	0.00	0.05	-0.07	117.0	0.941	0.941	-0.10	0.10
Height	0.00	0.00	-1.16	94.0	0.249	0.929	-0.01	0.00
TIV	0.00	0.00	2.58	100.2	0.011	0.015	0.00	0.00
Fully adjusted model (R² = .01)								
(Intercept)	0.84	0.72	1.17	93.9	0.243	0.406	-0.58	2.27
SBP (z-score)	-0.01	0.02	-0.42	205.5	0.677	0.862	-0.04	0.03
Female sex	0.02	0.04	0.42	110.5	0.676	0.676	-0.06	0.09
Age at MRI	-0.08	0.06	-1.45	130.9	0.149	0.354	-0.19	0.03
Age delta	-0.01	0.05	-0.15	134.4	0.879	0.941	-0.11	0.09
Height	0.00	0.00	-0.65	81.1	0.519	0.929	-0.01	0.01
TIV	0.00	0.00	2.62	98.4	0.010	0.015	0.00	0.00
Non-European ethnicity	-0.03	0.04	-0.75	249.8	0.452	0.763	-0.10	0.05
BMI (z-score)	-0.07	0.02	-3.38	71.8	0.001	0.007	-0.11	-0.03
Parental education	0.00	0.01	-0.52	170.7	0.605	0.923	-0.02	0.01
Maternal age	0.00	0.00	0.20	159.0	0.842	0.842	-0.01	0.01
Uncinate fasciculus (MD)								
Base model (R² = .01)								
(Intercept)	-0.95	0.64	-1.48	156.2	0.141	0.406	-2.22	0.32
SBP (z-score)	0.02	0.02	1.29	286.9	0.198	0.784	-0.01	0.05
Female sex	0.16	0.04	4.66	208.5	0.000	0.000	0.09	0.23
Age at MRI	0.06	0.05	1.07	124.4	0.288	0.448	-0.05	0.17
Age delta	-0.05	0.05	-0.96	125.4	0.340	0.863	-0.15	0.05
Height	0.00	0.00	0.37	107.6	0.715	0.929	-0.01	0.01
TIV	0.00	0.00	0.53	300.9	0.599	0.645	0.00	0.00
Fully adjusted model (R² = .01)								
(Intercept)	-0.73	0.65	-1.13	178.1	0.261	0.406	-2.02	0.55
SBP (z-score)	0.01	0.02	0.63	421.9	0.526	0.818	-0.02	0.04
Female sex	0.17	0.04	4.90	208.7	0.000	0.000	0.10	0.24
Age at MRI	0.03	0.05	0.54	147.0	0.590	0.590	-0.08	0.14
Age delta	-0.03	0.05	-0.50	133.0	0.618	0.865	-0.12	0.07
Height	0.00	0.00	0.57	99.8	0.569	0.929	-0.01	0.01
TIV	0.00	0.00	0.94	262.2	0.348	0.443	0.00	0.00
Non-European ethnicity	0.09	0.04	2.39	211.5	0.018	0.126	0.02	0.16
BMI (z-score)	0.01	0.02	0.67	110.6	0.504	0.504	-0.03	0.05
Parental education	-0.01	0.01	-0.97	169.9	0.336	0.923	-0.02	0.01
Maternal age	0.00	0.00	-0.55	179.4	0.580	0.770	-0.01	0.01
Inferior longitudinal fasciculus (MD)								
Base model (R² = .03)								
(Intercept)	-1.09	0.65	-1.68	130.6	0.096	0.406	-2.39	0.20
SBP (z-score)	0.00	0.02	-0.07	177.2	0.943	0.944	-0.04	0.03
Female sex	-0.10	0.04	-2.59	94.9	0.011	0.022	-0.18	-0.02
Age at MRI	-0.04	0.05	-0.67	161.0	0.505	0.544	-0.14	0.07
Age delta	-0.04	0.05	-0.88	147.4	0.382	0.863	-0.14	0.05
Height	0.00	0.00	0.28	145.4	0.782	0.929	-0.01	0.01
TIV	0.00	0.00	8.70	466.1	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .03)								
(Intercept)	-0.85	0.67	-1.27	134.9	0.208	0.406	-2.17	0.48
SBP (z-score)	-0.01	0.02	-0.82	207.4	0.414	0.784	-0.05	0.02
Female sex	-0.10	0.04	-2.47	91.6	0.015	0.026	-0.17	-0.02
Age at MRI	-0.04	0.05	-0.83	155.9	0.410	0.519	-0.15	0.06
Age delta	-0.04	0.05	-0.74	144.2	0.462	0.863	-0.13	0.06
Height	0.00	0.00	0.10	179.5	0.922	0.977	-0.01	0.01
TIV	0.00	0.00	8.59	429.9	0.000	0.000	0.00	0.00
Non-European ethnicity	0.00	0.04	0.07	135.6	0.944	0.944	-0.08	0.08
BMI (z-score)	0.03	0.02	1.89	171.4	0.061	0.149	0.00	0.07
Parental education	0.00	0.01	-0.49	124.9	0.625	0.923	-0.02	0.01
Maternal age	0.00	0.00	-0.58	140.7	0.573	0.770	-0.01	0.01
Superior longitudinal fasciculus (MD)								
Base model (R² = .02)								
(Intercept)	0.90	0.67	1.35	113.3	0.181	0.406	-0.43	2.23
SBP (z-score)	-0.03	0.02	-1.51	126.1	0.134	0.784	-0.06	0.01
Female sex	-0.09	0.04	-2.65	201.3	0.009	0.022	-0.16	-0.02
Age at MRI	-0.08	0.06	-1.36	96.1	0.177	0.354	-0.19	0.04
Age delta	-0.06	0.05	-1.15	119.1	0.251	0.863	-0.16	0.04
Height	-0.01	0.00	-1.84	81.1	0.070	0.929	-0.01	0.00
TIV	0.00	0.00	5.38	105.8	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .03)								
(Intercept)	0.90	0.68	1.32	122.0	0.189	0.406	-0.45	2.25
SBP (z-score)	-0.02	0.02	-1.02	218.4	0.311	0.784	-0.05	0.02
Female sex	-0.09	0.04	-2.58	183.0	0.011	0.022	-0.16	-0.02
Age at MRI	-0.09	0.06	-1.66	115.3	0.100	0.354	-0.20	0.02
Age delta	-0.04	0.05	-0.89	138.8	0.373	0.863	-0.14	0.05
Height	0.00	0.00	-1.45	93.8	0.151	0.929	-0.01	0.00
TIV	0.00	0.00	5.43	90.8	0.000	0.000	0.00	0.00
Non-European ethnicity	0.06	0.04	1.65	243.1	0.101	0.296	-0.01	0.13
BMI (z-score)	-0.03	0.02	-1.87	159.7	0.064	0.149	-0.07	0.00
Parental education	0.00	0.01	0.27	422.3	0.791	0.923	-0.01	0.02
Maternal age	0.00	0.00	-1.04	209.8	0.301	0.770	-0.01	0.01
Major forceps (MD)								
Base model (R² = .01)								
(Intercept)	0.35	0.64	0.55	155.2	0.587	0.632	-0.92	1.62
SBP (z-score)	0.00	0.02	0.07	132.5	0.944	0.944	-0.03	0.04
Female sex	-0.11	0.03	-3.06	223.8	0.003	0.011	-0.17	-0.04
Age at MRI	-0.09	0.05	-1.76	231.7	0.080	0.354	-0.19	0.01
Age delta	0.03	0.05	0.69	183.1	0.493	0.863	-0.06	0.12
Height	0.00	0.00	-0.44	65.7	0.664	0.929	-0.01	0.01
TIV	0.00	0.00	4.30	103.6	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .02)								
(Intercept)	0.25	0.66	0.38	150.1	0.705	0.705	-1.06	1.56
SBP (z-score)	0.01	0.02	0.76	140.8	0.448	0.784	-0.02	0.05
Female sex	-0.11	0.04	-3.19	225.0	0.002	0.009	-0.18	-0.04
Age at MRI	-0.08	0.05	-1.57	194.6	0.118	0.354	-0.18	0.02
Age delta	0.03	0.05	0.59	172.8	0.557	0.865	-0.07	0.12
Height	0.00	0.00	-0.26	64.0	0.796	0.929	-0.01	0.01
TIV	0.00	0.00	4.30	114.3	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.03	0.04	-0.61	93.2	0.545	0.763	-0.11	0.06
BMI (z-score)	-0.03	0.02	-1.60	70.5	0.113	0.158	-0.08	0.01
Parental education	0.00	0.01	0.30	68.1	0.768	0.923	-0.02	0.02
Maternal age	0.00	0.00	-0.44	111.3	0.660	0.770	-0.01	0.01
Minor forceps (MD)								
Base model (R² < .01)								
(Intercept)	-0.55	0.62	-0.89	217.8	0.375	0.460	-1.78	0.67
SBP (z-score)	-0.02	0.02	-0.83	145.4	0.409	0.784	-0.05	0.02
Female sex	0.03	0.04	0.79	97.1	0.433	0.548	-0.05	0.11
Age at MRI	0.06	0.05	1.14	151.3	0.258	0.448	-0.04	0.17
Age delta	-0.08	0.05	-1.61	147.2	0.110	0.770	-0.17	0.02
Height	0.00	0.00	0.28	120.1	0.778	0.929	-0.01	0.01
TIV	0.00	0.00	-0.42	158.9	0.672	0.672	0.00	0.00
Fully adjusted model (R² < .01)								
(Intercept)	-0.55	0.64	-0.85	210.3	0.394	0.460	-1.81	0.72
SBP (z-score)	-0.02	0.02	-1.01	130.6	0.313	0.784	-0.06	0.02
Female sex	0.03	0.04	0.73	94.3	0.470	0.548	-0.05	0.11
Age at MRI	0.07	0.05	1.37	157.1	0.172	0.354	-0.03	0.18
Age delta	-0.09	0.05	-1.81	144.9	0.072	0.770	-0.19	0.01
Height	0.00	0.00	-0.03	115.1	0.977	0.977	-0.01	0.01
TIV	0.00	0.00	-0.66	153.4	0.509	0.594	0.00	0.00
Non-European ethnicity	-0.06	0.04	-1.53	223.5	0.127	0.296	-0.13	0.02
BMI (z-score)	0.02	0.02	1.03	94.2	0.305	0.356	-0.02	0.06
Parental education	0.00	0.01	-0.08	76.9	0.939	0.939	-0.02	0.02
Maternal age	0.00	0.00	0.47	158.9	0.640	0.770	-0.01	0.01

DIASTOLIC BLOOD PRESSURE (DBP)

Predictor	Beta	SE	Statistic	Df	P_unadjusted	P_FDR	LCI	UCI
Cingulate gyrus (MD)								
Base model (R² = .02)								
(Intercept)	-0.60	0.64	-0.93	146.6	0.354	0.496	-1.86	0.67
DBP (z-score)	-0.01	0.02	-0.66	223.4	0.511	0.790	-0.04	0.02
Female sex	0.05	0.04	1.28	148.3	0.203	0.293	-0.03	0.12
Age at MRI	-0.05	0.06	-0.84	119.8	0.405	0.519	-0.15	0.06
Age delta	-0.01	0.05	-0.21	91.1	0.836	0.928	-0.11	0.09
Height	0.00	0.00	-0.95	120.3	0.344	0.938	-0.01	0.00
TIV	0.00	0.00	7.10	115.0	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .02)								
(Intercept)	-0.86	0.66	-1.31	153.4	0.194	0.369	-2.16	0.44
DBP (z-score)	-0.01	0.02	-0.42	231.6	0.674	0.790	-0.04	0.03
Female sex	0.05	0.04	1.26	147.2	0.209	0.293	-0.03	0.12
Age at MRI	-0.04	0.06	-0.76	124.8	0.448	0.523	-0.15	0.07
Age delta	-0.01	0.05	-0.25	87.2	0.801	0.928	-0.12	0.09
Height	0.00	0.00	-0.58	130.8	0.563	0.938	-0.01	0.00
TIV	0.00	0.00	7.00	107.4	0.000	0.000	0.00	0.00
Non-European ethnicity	0.01	0.04	0.16	144.1	0.870	0.929	-0.07	0.08
BMI (z-score)	-0.03	0.02	-1.62	100.6	0.108	0.186	-0.07	0.01
Parental education	0.00	0.01	-0.44	329.6	0.658	0.917	-0.02	0.01
Maternal age	0.00	0.00	0.97	132.9	0.334	0.790	0.00	0.01
Cortico-spinal tract (MD)								
Base model (R² = .01)								
(Intercept)	1.23	0.70	1.75	88.4	0.084	0.369	-0.17	2.62
DBP (z-score)	-0.03	0.02	-2.11	275.7	0.036	0.426	-0.07	0.00
Female sex	0.02	0.04	0.60	101.2	0.553	0.596	-0.05	0.10
Age at MRI	-0.09	0.06	-1.57	117.1	0.119	0.356	-0.20	0.02
Age delta	0.00	0.05	-0.07	117.8	0.941	0.941	-0.10	0.10
Height	0.00	0.00	-1.49	87.6	0.140	0.653	-0.01	0.00
TIV	0.00	0.00	2.54	100.4	0.013	0.018	0.00	0.00
Fully adjusted model (R² = .01)								
(Intercept)	0.87	0.72	1.20	91.3	0.232	0.369	-0.56	2.29
DBP (z-score)	-0.03	0.02	-1.52	259.7	0.129	0.426	-0.06	0.01
Female sex	0.02	0.04	0.48	103.4	0.635	0.635	-0.06	0.10
Age at MRI	-0.08	0.06	-1.45	132.3	0.151	0.356	-0.19	0.03
Age delta	-0.01	0.05	-0.17	136.5	0.862	0.928	-0.11	0.09
Height	0.00	0.00	-0.67	74.1	0.506	0.938	-0.01	0.00
TIV	0.00	0.00	2.59	99.6	0.011	0.017	0.00	0.00
Non-European ethnicity	-0.03	0.04	-0.72	251.4	0.472	0.736	-0.10	0.05
BMI (z-score)	-0.07	0.02	-3.56	74.7	0.001	0.007	-0.11	-0.03
Parental education	-0.01	0.01	-0.58	168.4	0.561	0.917	-0.02	0.01
Maternal age	0.00	0.00	0.17	159.9	0.869	0.869	-0.01	0.01
Uncinate fasciculus (MD)								
Base model (R² = .01)								
(Intercept)	-1.06	0.64	-1.67	159.6	0.098	0.369	-2.31	0.20
DBP (z-score)	0.01	0.02	0.42	186.5	0.677	0.790	-0.03	0.04
Female sex	0.16	0.04	4.73	222.9	0.000	0.000	0.10	0.23
Age at MRI	0.06	0.05	1.09	126.0	0.279	0.434	-0.05	0.17
Age delta	-0.05	0.05	-0.99	125.6	0.324	0.835	-0.15	0.05
Height	0.00	0.00	0.63	102.9	0.532	0.938	0.00	0.00
TIV	0.00	0.00	0.51	301.1	0.607	0.645	0.00	0.00
Fully adjusted model (R² = .01)								
(Intercept)	-0.77	0.65	-1.19	180.6	0.235	0.369	-2.05	0.51
DBP (z-score)	0.00	0.02	-0.03	182.8	0.975	0.975	-0.03	0.03
Female sex	0.17	0.04	4.96	220.6	0.000	0.000	0.10	0.24
Age at MRI	0.03	0.05	0.55	148.5	0.584	0.584	-0.08	0.14
Age delta	-0.03	0.05	-0.52	133.4	0.605	0.847	-0.12	0.07
Height	0.00	0.00	0.67	95.6	0.504	0.938	0.00	0.01
TIV	0.00	0.00	0.92	262.7	0.357	0.454	0.00	0.00
Non-European ethnicity	0.09	0.04	2.39	210.9	0.018	0.126	0.02	0.16
BMI (z-score)	0.02	0.02	0.87	99.9	0.388	0.388	-0.02	0.05
Parental education	-0.01	0.01	-0.99	162.3	0.323	0.917	-0.02	0.01
Maternal age	0.00	0.00	-0.55	179.7	0.581	0.790	-0.01	0.01
Inferior longitudinal fasciculus (MD)								
Base model (R² = .03)								
(Intercept)	-1.09	0.66	-1.66	116.9	0.100	0.369	-2.39	0.21
DBP (z-score)	0.00	0.02	-0.16	151.8	0.873	0.940	-0.04	0.03
Female sex	-0.10	0.04	-2.58	94.8	0.011	0.024	-0.18	-0.02
Age at MRI	-0.04	0.05	-0.66	157.2	0.508	0.547	-0.14	0.07
Age delta	-0.04	0.05	-0.88	144.8	0.382	0.835	-0.14	0.05
Height	0.00	0.00	0.27	123.3	0.788	0.938	-0.01	0.01
TIV	0.00	0.00	8.72	493.1	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .03)								
(Intercept)	-0.80	0.67	-1.19	128.9	0.237	0.369	-2.12	0.53
DBP (z-score)	-0.01	0.02	-0.48	156.0	0.633	0.790	-0.04	0.03
Female sex	-0.10	0.04	-2.49	91.2	0.015	0.026	-0.18	-0.02
Age at MRI	-0.04	0.05	-0.83	154.5	0.408	0.519	-0.15	0.06
Age delta	-0.04	0.05	-0.72	143.6	0.472	0.835	-0.14	0.06
Height	0.00	0.00	-0.03	164.9	0.976	0.976	-0.01	0.01
TIV	0.00	0.00	8.62	448.7	0.000	0.000	0.00	0.00
Non-European ethnicity	0.00	0.04	0.09	135.4	0.929	0.929	-0.07	0.08
BMI (z-score)	0.03	0.02	1.73	147.9	0.086	0.186	0.00	0.06
Parental education	0.00	0.01	-0.48	125.0	0.634	0.917	-0.02	0.01
Maternal age	0.00	0.00	-0.58	145.2	0.563	0.790	-0.01	0.01
Superior longitudinal fasciculus (MD)								
Base model (R² = .02)								
(Intercept)	1.02	0.68	1.51	103.2	0.135	0.369	-0.32	2.36
DBP (z-score)	-0.03	0.02	-1.44	123.9	0.152	0.426	-0.06	0.01
Female sex	-0.09	0.04	-2.63	196.5	0.009	0.024	-0.16	-0.02
Age at MRI	-0.08	0.06	-1.36	95.0	0.178	0.356	-0.19	0.04
Age delta	-0.06	0.05	-1.14	118.4	0.255	0.835	-0.16	0.04
Height	-0.01	0.00	-2.16	81.2	0.034	0.476	-0.01	0.00
TIV	0.00	0.00	5.33	103.1	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .03)								
(Intercept)	0.96	0.68	1.40	116.9	0.163	0.369	-0.39	2.31
DBP (z-score)	-0.02	0.02	-1.34	139.1	0.183	0.427	-0.06	0.01
Female sex	-0.09	0.04	-2.54	176.7	0.012	0.024	-0.16	-0.02
Age at MRI	-0.09	0.06	-1.65	113.4	0.101	0.356	-0.20	0.02
Age delta	-0.04	0.05	-0.89	137.5	0.374	0.835	-0.14	0.05
Height	-0.01	0.00	-1.60	97.9	0.112	0.653	-0.01	0.00
TIV	0.00	0.00	5.41	90.2	0.000	0.000	0.00	0.00
Non-European ethnicity	0.06	0.04	1.69	243.0	0.093	0.322	-0.01	0.13
BMI (z-score)	-0.04	0.02	-2.04	117.0	0.044	0.154	-0.07	0.00
Parental education	0.00	0.01	0.23	441.4	0.816	0.917	-0.01	0.02
Maternal age	0.00	0.00	-1.07	214.1	0.284	0.790	-0.01	0.01
Major forceps (MD)								
Base model (R² = .01)								
(Intercept)	0.36	0.65	0.56	136.7	0.579	0.624	-0.92	1.64
DBP (z-score)	0.01	0.02	0.75	201.5	0.453	0.790	-0.02	0.04
Female sex	-0.11	0.03	-3.10	231.3	0.002	0.007	-0.17	-0.04
Age at MRI	-0.09	0.05	-1.78	227.4	0.077	0.356	-0.19	0.01
Age delta	0.03	0.05	0.71	179.9	0.477	0.835	-0.06	0.13
Height	0.00	0.00	-0.45	60.8	0.653	0.938	-0.01	0.01
TIV	0.00	0.00	4.32	103.6	0.000	0.000	0.00	0.00
Fully adjusted model (R² = .02)								
(Intercept)	0.21	0.67	0.31	140.8	0.758	0.758	-1.11	1.52
DBP (z-score)	0.02	0.02	1.04	186.6	0.299	0.598	-0.02	0.05
Female sex	-0.11	0.03	-3.22	234.1	0.001	0.005	-0.18	-0.04
Age at MRI	-0.08	0.05	-1.57	193.8	0.117	0.356	-0.18	0.02
Age delta	0.03	0.05	0.59	169.7	0.557	0.847	-0.07	0.12
Height	0.00	0.00	-0.17	61.7	0.864	0.938	-0.01	0.01
TIV	0.00	0.00	4.30	113.6	0.000	0.000	0.00	0.00
Non-European ethnicity	-0.03	0.04	-0.64	93.4	0.526	0.736	-0.11	0.06
BMI (z-score)	-0.03	0.02	-1.52	66.1	0.133	0.186	-0.07	0.01
Parental education	0.00	0.01	0.31	67.4	0.757	0.917	-0.02	0.02
Maternal age	0.00	0.00	-0.42	111.8	0.677	0.790	-0.01	0.01
Minor forceps (MD)								
Base model (R² < .01)								
(Intercept)	-0.51	0.61	-0.82	217.0	0.412	0.523	-1.72	0.71
DBP (z-score)	-0.03	0.02	-1.51	175.4	0.133	0.426	-0.06	0.01
Female sex	0.03	0.04	0.83	97.1	0.411	0.523	-0.05	0.11
Age at MRI	0.06	0.05	1.16	153.9	0.250	0.434	-0.04	0.17
Age delta	-0.08	0.05	-1.63	151.4	0.105	0.735	-0.17	0.02
Height	0.00	0.00	0.17	118.4	0.869	0.938	-0.01	0.01
TIV	0.00	0.00	-0.46	155.3	0.645	0.645	0.00	0.00
Fully adjusted model (R² < .01)								
(Intercept)	-0.49	0.64	-0.76	211.9	0.448	0.523	-1.74	0.77
DBP (z-score)	-0.03	0.02	-1.51	184.8	0.133	0.426	-0.06	0.01
Female sex	0.03	0.04	0.75	95.1	0.453	0.529	-0.05	0.11
Age at MRI	0.07	0.05	1.38	160.6	0.170	0.356	-0.03	0.18
Age delta	-0.09	0.05	-1.82	164.9	0.070	0.735	-0.19	0.01
Height	0.00	0.00	-0.16	110.9	0.871	0.938	-0.01	0.01
TIV	0.00	0.00	-0.69	149.4	0.499	0.582	0.00	0.00
Non-European ethnicity	-0.06	0.04	-1.49	227.2	0.138	0.322	-0.13	0.02
BMI (z-score)	0.02	0.02	0.90	96.0	0.366	0.388	-0.02	0.05
Parental education	0.00	0.01	-0.11	78.5	0.917	0.917	-0.02	0.01
Maternal age	0.00	0.00	0.44	80.8	0.664	0.790	-0.01	0.01

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval; TIV = Total intracranial volume.

Table S11 - Vertex-wise analysis results

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Left hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145744	2.66	3.01	0.17	superiorfrontal (8.35%, 99.97%)
Female sex	1	9277	2.68	-0.05	0.01	precuneus (35.81%, 45.46%)
	2	3221	2.68	-0.04	0.01	rostralmiddlefrontal (93.76%, 41.70%)
	3	1903	2.68	0.06	0.01	precentral (94.80%, 16.80%)
	4	1949	2.60	0.06	0.01	postcentral (99.79%, 20.43%)
	5	1653	2.65	0.07	0.01	superiortemporal (71.57%, 16.27%)
	6	1483	2.60	-0.04	0.01	inferiorparietal (100%, 18.84%)
	7	905	2.68	0.07	0.02	superiortemporal (43.43%, 5.41%)
	8	896	2.63	-0.04	0.01	superiorfrontal (71.09%, 5.23%)
	9	918	2.77	0.05	0.01	pericalcarine (84.75%, 40.69%)
	10	1122	2.65	-0.04	0.01	supramarginal (60.7%, 7.92%)
	11	1099	2.61	0.06	0.01	parahippocampal (82.98%, 49.62%)
	12	1330	2.69	-0.04	0.01	paracentral (39.10%, 15.79%)
	13	1011	2.65	-0.04	0.01	insula (53.21%, 10.29%)
	14	610	2.55	0.06	0.01	rostralanteriorcingulate (76.89%, 34.74
	15	381	2.82	0.05	0.01	inferiortemporal (96.06%, 8.29%)
	16	560	2.74	0.05	0.01	paracentral (60.89%, 10.35%)
	17	379	2.64	0.04	0.01	parsorbitalis (93.93%, 37.24%)
	18	484	2.71	-0.04	0.01	superiortemporal (82.23%, 5.47%)
	19	283	2.71	0.06	0.01	middletemporal (55.83%, 3.55%)
	20	292	2.78	-0.06	0.02	inferiortemporal (100%, 6.61%)
Age at MRI	1	58914	2.65	-0.04	0.01	superiorfrontal (9.66%, 46.74%)
	2	946	2.80	-0.03	0.01	fusiform (66.81%, 13.41%)
Height	1	980	2.63	0.00	0.00	lateralorbitofrontal (83.57%, 19.56%)
	2	477	2.53	0.00	0.00	medialorbitofrontal (68.13%, 12.25%)
Ethnicity	1	3226	2.66	-0.05	0.01	lateraloccipital (54.06%, 27.34%)
	2	3610	2.71	-0.06	0.01	precuneus (45.93%, 22.69%)
	3	2173	2.63	-0.04	0.01	inferiorparietal (39.94%, 11.03%)
	4	3014	2.61	-0.04	0.01	superiortemporal (36.16%, 14.99%)
	5	2250	2.71	-0.04	0.01	paracentral (45.87%, 31.33%)
	6	1407	2.58	-0.04	0.01	isthmuscingulate (51.46%, 28.61%)
	7	672	2.72	-0.07	0.02	lingual (78.12%, 12.49%)
	8	615	2.59	-0.04	0.01	fusiform (95.61%, 12.47%)
	9	398	2.74	-0.06	0.02	inferiortemporal (83.92%, 7.57%)
	10	245	2.74	0.04	0.01	lingual (100%, 5.83%)
	11	395	2.72	-0.04	0.01	fusiform (56.2%, 4.71%)
	12	211	2.68	0.07	0.02	superiortemporal (61.61%, 1.79%)
	13	422	2.76	-0.04	0.01	postcentral (94.79%, 4.20%)
BMI (z)	1	1828	2.69	0.03	0.01	fusiform (27.13%, 10.52%)
	2	982	2.66	0.03	0.01	lateraloccipital (93.99%, 14.47%)
	3	692	2.66	-0.02	0.01	superiorfrontal (81.50%, 4.63%)
	4	587	2.60	0.02	0.01	postcentral (100%, 6.17%)
	5	522	2.64	-0.02	0.01	superiorfrontal (73.95%, 3.17%)

Right hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145637	2.65	3.00	0.17	superiorfrontal (8.15%, 99.93%)
Female sex	1	10092	2.68	-0.05	0.01	precuneus (53.55%, 67.76%)
	2	3423	2.62	-0.04	0.01	rostralmiddlefrontal (90.39%, 39.34%)
	3	2433	2.63	-0.04	0.01	superiorparietal (46.94%, 11.17%)
	4	3142	2.69	-0.04	0.01	insula (55.92%, 34.52%)
	5	1480	2.58	0.06	0.01	middletemporal (51.55%, 15.09%)
	6	1297	2.59	0.05	0.01	pericalcarine (88.9%, 63.25%)
	7	1253	2.62	0.06	0.01	postcentral (100%, 13.71%)
	8	994	2.60	-0.04	0.01	rostralmiddlefrontal (90.34%, 11.42%)
	9	960	2.62	0.06	0.01	parahippocampal (64.79%, 35.71%)
	10	1019	2.55	-0.04	0.01	superiorfrontal (76.45%, 6.56%)
	11	1076	2.63	0.03	0.01	postcentral (55.67%, 6.56%)
	12	861	2.63	-0.04	0.01	inferiorparietal (100%, 8.9%)
	13	810	2.68	0.05	0.01	precentral (100%, 7.57%)
	14	626	2.61	-0.04	0.01	lateralorbitofrontal (100%, 14.38%)
	15	455	2.76	-0.04	0.01	fusiform (100%, 9.76%)
	16	528	2.54	0.04	0.01	postcentral (73.30%, 4.24%)
	17	467	2.67	-0.05	0.01	medialorbitofrontal (72.16%, 12.03%)
	18	519	2.77	-0.04	0.01	superiortemporal (80.73%, 6.10%)
	19	518	2.70	-0.04	0.01	supramarginal (100%, 6.36%)
	20	247	2.63	0.04	0.01	parsorbitalis (100%, 26.11%)
Age at MRI	1	37166	2.65	-0.04	0.01	precuneus (15.52%, 72.34%)
	2	12410	2.64	-0.03	0.01	inferiorparietal (44.79%, 57.44%)
	3	2415	2.69	-0.03	0.01	lateraloccipital (45.51%, 18.43%)
	4	1168	2.70	-0.03	0.01	fusiform (94.01%, 23.56%)
	5	663	2.71	-0.03	0.01	precentral (48.42%, 3.00%)
	6	603	2.62	-0.03	0.01	superiorfrontal (36.98%, 1.88%)
	7	458	2.53	-0.03	0.01	caudalmiddlefrontal (100%, 13.11%)
	8	673	2.74	-0.03	0.01	supramarginal (94.06%, 7.77%)
Height	1	690	2.60	0.00	0.00	lateralorbitofrontal (100%, 15.85%)
	2	272	2.65	0.00	0.00	lateraloccipital (58.46%, 2.67%)
Ethnicity	1	5243	2.63	-0.06	0.01	precuneus (37.02%, 24.34%)
	2	3589	2.65	-0.05	0.01	lateraloccipital (77.68%, 46.75%)
	3	1809	2.64	-0.04	0.01	inferiorparietal (30.74%, 5.75%)
	4	2284	2.64	-0.05	0.01	superiortemporal (49.39%, 16.42%)
	5	885	2.63	-0.05	0.01	superiorparietal (66.44%, 5.75%)
	6	398	2.53	0.09	0.02	superiortemporal (54.52%, 3.16%)
	7	706	2.73	-0.04	0.01	postcentral (62.75%, 4.85%)
	8	819	2.79	-0.04	0.01	insula (57.14%, 9.19%)
	9	369	2.75	-0.05	0.01	inferiorparietal (58.27%, 5.12%)
	10	203	2.46	0.04	0.01	lingual (100%, 5.21%)
	11	426	2.59	-0.04	0.01	supramarginal (100%, 5.23%)
BMI (z)	1	463	2.71	0.02	0.01	lateraloccipital (100%, 7.76%)
	2	454	2.60	0.03	0.01	superiortemporal (95.81%, 6.33%)

CAROTID DISTENSIBILITY

Left hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145744	2.66	3.01	0.17	superiorfrontal (8.35%, 99.97%)
Female sex	1	9205	2.67	-0.05	0.01	precuneus (35.29%, 44.44%)
	2	3331	2.68	-0.04	0.01	rostralmiddlefrontal (93.31%, 42.91%)
	3	1956	2.68	0.06	0.01	precentral (94.99%, 17.30%)
	4	2004	2.60	0.06	0.01	postcentral (99.60%, 20.97%)
	5	1659	2.65	0.07	0.01	superiortemporal (72.57%, 16.56%)
	6	1448	2.60	-0.04	0.01	inferiorparietal (100%, 18.4%)
	7	967	2.68	0.07	0.02	superiortemporal (41.99%, 5.58%)
	8	898	2.63	-0.04	0.01	superiorfrontal (73.72%, 5.44%)
	9	924	2.77	0.05	0.01	pericalcarine (84.52%, 40.85%)
	10	1163	2.64	-0.04	0.01	supramarginal (59.16%, 8.00%)
	11	1402	2.69	-0.04	0.01	paracentral (38.23%, 16.27%)
	12	1082	2.61	0.06	0.01	parahippocampal (83.73%, 49.29%)
	13	1065	2.65	-0.04	0.01	insula (52.77%, 10.75%)
	14	576	2.55	0.06	0.01	rostralanteriorcingulate (77.26%, 32.96%)
	15	395	2.82	0.05	0.01	inferiortemporal (93.92%, 8.40%)
	16	599	2.74	0.05	0.01	paracentral (61.77%, 11.23%)
	17	352	2.65	0.04	0.01	parsorbitalis (94.6%, 34.83%)
	18	502	2.71	-0.04	0.01	superiortemporal (81.27%, 5.61%)
	19	290	2.70	0.06	0.01	middletemporal (55.17%, 3.59%)
	20	298	2.78	-0.07	0.02	inferiortemporal (100%, 6.75%)
Age at MRI	1	30836	2.64	-0.04	0.01	superiorfrontal (17.41%, 44.08%)
	2	27458	2.65	-0.03	0.01	inferiorparietal (17.38%, 60.64%)
	3	956	2.80	-0.03	0.01	fusiform (66.11%, 13.41%)
Height	1	1007	2.64	0.00	0.00	lateralorbitofrontal (86.59%, 20.82%)
	2	418	2.53	0.00	0.00	medialorbitofrontal (73.68%, 11.61%)
Ethnicity	1	4302	2.71	-0.06	0.01	precuneus (38.42%, 22.62%)
	2	3240	2.66	-0.05	0.01	lateraloccipital (54.01%, 27.43%)
	3	2180	2.63	-0.04	0.01	inferiorparietal (39.72%, 11.00%)
	4	2981	2.61	-0.04	0.01	superiortemporal (36.20%, 14.84%)
	5	2265	2.71	-0.04	0.01	paracentral (45.92%, 31.57%)
	6	1417	2.59	-0.04	0.01	isthmuscingulate (50.95%, 28.53%)
	7	628	2.59	-0.04	0.01	fusiform (95.54%, 12.73%)
	8	381	2.74	-0.06	0.02	inferiortemporal (85.56%, 7.38%)
	9	258	2.74	0.04	0.01	lingual (100%, 6.14%)
	10	234	2.68	0.07	0.02	superiortemporal (59.83%, 1.93%)
	11	376	2.72	-0.04	0.01	fusiform (55.32%, 4.41%)
	12	419	2.76	-0.04	0.01	postcentral (95.47%, 4.20%)
BMI (z)	1	1539	2.69	0.03	0.01	fusiform (31.12%, 10.16%)
	2	982	2.65	0.03	0.01	lateraloccipital (94.3%, 14.52%)
	3	607	2.67	-0.02	0.01	superiorfrontal (84.35%, 4.20%)
	4	538	2.62	0.02	0.01	postcentral (100%, 5.65%)
	5	477	2.64	-0.02	0.01	superiorfrontal (71.07%, 2.78%)

Right hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145637	2.65	3.00	0.17	superiorfrontal (8.15%, 99.93%)
Female sex	1	9854	2.68	-0.05	0.01	precuneus (52.84%, 65.29%)
	2	2906	2.61	-0.04	0.01	rostralmiddlefrontal (98.86%, 36.53%)
	3	2389	2.63	-0.04	0.01	superiorparietal (47.80%, 11.17%)
	4	1573	2.58	0.06	0.02	middletemporal (50.73%, 15.78%)
	5	3155	2.69	-0.04	0.01	insula (55.69%, 34.52%)
	6	1279	2.59	0.05	0.01	pericalcarine (89.6%, 62.86%)
	7	1261	2.62	0.06	0.01	postcentral (100%, 13.8%)
	8	989	2.62	0.07	0.01	parahippocampal (62.69%, 35.59%)
	9	948	2.54	-0.04	0.01	superiorfrontal (77.43%, 6.18%)
	10	785	2.58	-0.04	0.01	rostralmiddlefrontal (97.2%, 9.70%)
	11	1091	2.63	0.03	0.01	postcentral (54.81%, 6.54%)
	12	985	2.68	0.05	0.01	precentral (100%, 9.2%)
	13	784	2.63	-0.04	0.01	inferiorparietal (100%, 8.1%)
	14	629	2.61	-0.04	0.01	lateralorbitofrontal (100%, 14.45%)
	15	581	2.54	0.04	0.01	postcentral (71.94%, 4.57%)
	16	450	2.75	-0.04	0.01	fusiform (100%, 9.65%)
	17	460	2.67	-0.05	0.01	medialorbitofrontal (73.04%, 12.00%)
	18	504	2.78	-0.04	0.01	superiortemporal (81.15%, 5.96%)
	19	529	2.69	-0.04	0.01	supramarginal (100%, 6.49%)
	20	398	2.65	-0.04	0.01	superiorfrontal (60.80%, 2.04%)
	21	248	2.63	0.04	0.01	parsorbitalis (100%, 26.22%)
Age at MRI	1	36994	2.65	-0.04	0.01	precuneus (15.59%, 72.34%)
	2	12384	2.64	-0.03	0.01	inferiorparietal (44.89%, 57.45%)
	3	2412	2.69	-0.03	0.01	lateraloccipital (46.48%, 18.80%)
	4	1101	2.70	-0.03	0.01	fusiform (92.73%, 21.91%)
	5	625	2.71	-0.03	0.01	precentral (49.44%, 2.89%)
	6	591	2.62	-0.03	0.01	superiorfrontal (35.87%, 1.78%)
	7	438	2.53	-0.03	0.01	caudalmiddlefrontal (100%, 12.54%)
	8	660	2.74	-0.03	0.01	supramarginal (93.48%, 7.57%)
Height	1	710	2.60	0.00	0.00	lateralorbitofrontal (100%, 16.31%)
	2	239	2.67	0.00	0.00	lateraloccipital (59.83%, 2.40%)
Ethnicity	1	5272	2.63	-0.06	0.01	precuneus (37.03%, 24.48%)
	2	3616	2.65	-0.05	0.01	lateraloccipital (77.52%, 47.01%)
	3	1812	2.64	-0.04	0.01	inferiorparietal (31.24%, 5.85%)
	4	2260	2.64	-0.05	0.01	superiortemporal (48.72%, 16.03%)
	5	911	2.63	-0.05	0.01	superiorparietal (65.75%, 5.86%)
	6	420	2.53	0.09	0.02	superiortemporal (54.05%, 3.31%)
	7	703	2.73	-0.04	0.01	postcentral (62.45%, 4.80%)
	8	822	2.78	-0.04	0.01	insula (57.06%, 9.21%)
	9	208	2.47	0.04	0.01	lingual (100%, 5.34%)
	10	355	2.75	-0.05	0.01	inferiortemporal (58.31%, 4.93%)
BMI (z)	1	432	2.71	0.02	0.01	lateraloccipital (100%, 7.24%)

Table S11 - Vertex-wise analysis results (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Left hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145744	2.66	2.99	0.17	superiorfrontal (8.35%, 99.97%)
Female sex	1	8964	2.68	-0.05	0.01	precuneus (36.04%, 44.21%)
	2	3163	2.68	-0.04	0.01	rostralmiddlefrontal (93.65%, 40.89%)
	3	2005	2.60	0.06	0.01	postcentral (99.25%, 20.91%)
	4	1917	2.68	0.06	0.01	precentral (93.38%, 16.67%)
	5	1630	2.64	0.07	0.01	superiortemporal (70.8%, 15.87%)
	6	1340	2.60	-0.04	0.01	inferiorparietal (100%, 17.02%)
	7	876	2.68	0.07	0.02	superiortemporal (43.04%, 5.18%)
	8	934	2.63	-0.04	0.01	superiorfrontal (73.13%, 5.61%)
	9	880	2.77	0.05	0.01	pericalcarine (86.25%, 39.70%)
	10	1117	2.62	0.07	0.01	parahippocampal (81.29%, 49.40%)
	11	1093	2.65	-0.04	0.01	supramarginal (59.93%, 7.62%)
	12	1290	2.69	-0.04	0.01	paracentral (39.15%, 15.33%)
	13	1006	2.65	-0.04	0.01	insula (53.58%, 10.31%)
	14	600	2.55	0.06	0.01	rostralanteriorcingulate (75.33%, 33.48)
	15	583	2.74	0.05	0.01	paracentral (61.92%, 10.96%)
	16	348	2.82	0.05	0.01	inferiortemporal (98.28%, 7.75%)
	17	362	2.64	0.05	0.01	parsorbitalis (92.82%, 35.15%)
	18	487	2.71	-0.04	0.01	superiortemporal (85.42%, 5.72%)
	19	281	2.70	0.06	0.01	middletemporal (51.96%, 3.28%)
	20	289	2.78	-0.06	0.02	inferiortemporal (100%, 6.55%)
Age at MRI	1	31447	2.64	-0.04	0.01	superiorfrontal (18.02%, 46.52%)
	2	27741	2.65	-0.03	0.01	inferiorparietal (17.26%, 60.84%)
	3	971	2.80	-0.03	0.01	fusiform (66.43%, 13.68%)
Height	1	695	2.59	0.00	0.00	lateralorbitofrontal (87.77%, 14.57%)
	2	383	2.53	0.00	0.00	medialorbitofrontal (71.28%, 10.29%)
Ethnicity	1	4291	2.71	-0.06	0.01	precuneus (38.41%, 22.55%)
	2	3204	2.66	-0.05	0.01	lateraloccipital (54.31%, 27.28%)
	3	2115	2.63	-0.04	0.01	inferiorparietal (40.38%, 10.85%)
	4	2905	2.61	-0.04	0.01	superiortemporal (36.52%, 14.59%)
	5	2243	2.72	-0.04	0.01	paracentral (45.52%, 31.00%)
	6	1396	2.59	-0.04	0.01	isthmuscingulate (50.86%, 28.05%)
	7	625	2.59	-0.04	0.01	fusiform (95.84%, 12.71%)
	8	385	2.74	-0.06	0.02	inferiortemporal (85.19%, 7.43%)
	9	252	2.73	0.04	0.01	lingual (100%, 5.99%)
	10	226	2.68	0.07	0.02	superiortemporal (61.06%, 1.90%)
	11	382	2.72	-0.04	0.01	fusiform (56.81%, 4.60%)
BMI (z)	1	2031	2.69	0.04	0.01	fusiform (25.21%, 10.86%)
	2	995	2.65	0.03	0.01	lateraloccipital (93.97%, 14.66%)
	3	609	2.66	-0.02	0.01	superiorfrontal (81.94%, 4.10%)
	4	573	2.59	0.02	0.01	postcentral (100%, 6.02%)

Right hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145637	2.65	2.99	0.17	superiorfrontal (8.15%, 99.93%)
Female sex	1	9801	2.68	-0.05	0.01	precuneus (52.88%, 64.99%)
	2	2907	2.61	-0.04	0.01	rostralmiddlefrontal (99.07%, 36.62%)
	3	2305	2.63	-0.04	0.01	superiorparietal (47.85%, 10.79%)
	4	3176	2.69	-0.04	0.01	insula (54.72%, 34.15%)
	5	1466	2.59	0.06	0.01	middletemporal (51.98%, 15.07%)
	6	1269	2.59	0.05	0.01	pericalcarine (89.76%, 62.48%)
	7	1279	2.62	0.06	0.01	postcentral (100%, 14%)
	8	955	2.62	0.06	0.01	parahippocampal (64.61%, 35.42%)
	9	1003	2.55	-0.04	0.01	superiorfrontal (76.17%, 6.43%)
	10	823	2.59	-0.04	0.01	rostralmiddlefrontal (94.41%, 9.88%)
	11	1072	2.63	0.03	0.01	postcentral (55.88%, 6.56%)
	12	802	2.63	-0.04	0.01	inferiorparietal (100%, 8.29%)
	13	835	2.68	0.05	0.01	precentral (100%, 7.8%)
	14	599	2.60	-0.04	0.01	lateralorbitofrontal (100%, 13.76%)
	15	563	2.54	0.04	0.01	postcentral (72.65%, 4.48%)
	16	421	2.74	-0.04	0.01	fusiform (100%, 9.03%)
	17	470	2.67	-0.05	0.01	medialorbitofrontal (71.49%, 12.00%)
	18	519	2.77	-0.04	0.01	superiortemporal (81.31%, 6.14%)
	19	512	2.70	-0.04	0.01	supramarginal (100%, 6.28%)
	20	387	2.65	-0.04	0.01	superiorfrontal (62.27%, 2.03%)
	21	254	2.62	0.04	0.01	parsorbitalis (100%, 26.85%)
Age at MRI	1	37347	2.65	-0.04	0.01	precuneus (15.67%, 73.38%)
	2	12582	2.64	-0.03	0.01	inferiorparietal (44.76%, 58.21%)
	3	2458	2.69	-0.03	0.01	lateraloccipital (45.65%, 18.82%)
	4	1259	2.70	-0.03	0.01	fusiform (94.44%, 25.51%)
	5	650	2.71	-0.03	0.01	precentral (48.92%, 2.97%)
	6	611	2.62	-0.03	0.01	superiorfrontal (36.66%, 1.89%)
	7	459	2.53	-0.03	0.01	caudalmiddlefrontal (100%, 13.14%)
	8	710	2.74	-0.03	0.01	superiorfrontal (91.55%, 7.98%)
Height	1	612	2.61	0.00	0.00	lateralorbitofrontal (100%, 14.06%)
Ethnicity	1	5229	2.63	-0.06	0.01	precuneus (36.72%, 24.08%)
	2	3611	2.65	-0.05	0.01	lateraloccipital (77.76%, 47.09%)
	3	1787	2.64	-0.04	0.01	inferiorparietal (31.34%, 5.79%)
	4	2278	2.64	-0.05	0.01	superiortemporal (48.99%, 16.25%)
	5	882	2.64	-0.05	0.01	superiorparietal (66.67%, 5.75%)
	6	416	2.53	0.09	0.02	superiortemporal (53.85%, 3.26%)
	7	695	2.73	-0.04	0.01	postcentral (62.73%, 4.77%)
	8	814	2.79	-0.04	0.01	insula (57.00%, 9.12%)
	9	206	2.47	0.04	0.01	lingual (100%, 5.29%)
	10	359	2.75	-0.05	0.01	inferiortemporal (58.22%, 4.98%)
BMI (z)	1	414	2.70	0.02	0.01	lateraloccipital (100%, 6.94%)
	2	550	2.60	0.03	0.01	superiorfrontal (82.55%, 6.61%)
	3	370	2.72	0.02	0.01	postcentral (100%, 4.05%)

DIASTOLIC BLOOD PRESSURE (DBP)

Left hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145744	2.66	3.00	0.17	superiorfrontal (8.35%, 99.97%)
Female sex	1	8758	2.67	-0.05	0.01	precuneus (35.88%, 42.99%)
	2	3161	2.68	-0.04	0.01	rostralmiddlefrontal (94.27%, 41.14%)
	3	2019	2.60	0.06	0.01	postcentral (98.66%, 20.93%)
	4	1915	2.68	0.06	0.01	precentral (92.90%, 16.56%)
	5	1609	2.64	0.07	0.01	superiortemporal (71.35%, 15.79%)
	6	1317	2.59	-0.04	0.01	inferiorparietal (100%, 16.73%)
	7	915	2.63	-0.04	0.01	superiorfrontal (74.54%, 5.60%)
	8	800	2.69	0.07	0.02	superiortemporal (47.38%, 5.21%)
	9	1162	2.61	0.07	0.01	parahippocampal (80.46%, 50.87%)
	10	849	2.78	0.05	0.01	pericalcarine (86.22%, 38.28%)
	11	1032	2.66	-0.04	0.01	supramarginal (63.18%, 7.58%)
	12	1301	2.69	-0.04	0.01	paracentral (38.74%, 15.30%)
	13	604	2.56	0.06	0.01	rostralanteriorcingulate (74.5%, 33.33%)
	14	957	2.66	-0.04	0.01	insula (52.04%, 9.52%)
	15	632	2.75	0.05	0.01	paracentral (63.61%, 12.20%)
	16	372	2.82	0.05	0.01	inferiortemporal (97.58%, 8.22%)
	17	376	2.64	0.05	0.01	parsorbitalis (93.09%, 36.61%)
	18	444	2.71	-0.04	0.01	superiortemporal (86.71%, 5.30%)
	19	290	2.70	0.06	0.01	middletemporal (53.45%, 3.48%)
	20	296	2.78	-0.06	0.02	inferiortemporal (100%, 6.7%)
Age at MRI	1	31406	2.64	-0.04	0.01	superiorfrontal (18.05%, 46.55%)
	2	27678	2.65	-0.03	0.01	inferiorparietal (17.24%, 60.61%)
	3	957	2.80	-0.03	0.01	fusiform (66.88%, 13.58%)
Height	1	934	2.64	0.00	0.00	lateralorbitofrontal (86.19%, 19.22%)
	2	449	2.53	0.00	0.00	medialorbitofrontal (69.49%, 11.76%)
Ethnicity	1	4231	2.71	-0.06	0.01	precuneus (38.29%, 22.17%)
	2	3157	2.66	-0.05	0.01	lateraloccipital (54.93%, 27.18%)
	3	2083	2.63	-0.04	0.01	inferiorparietal (40.23%, 10.65%)
	4	2816	2.61	-0.04	0.01	superiortemporal (36.47%, 14.12%)
	5	2205	2.71	-0.04	0.01	paracentral (45.12%, 30.21%)
	6	1389	2.59	-0.04	0.01	isthmuscingulate (51.12%, 28.05%)
	7	609	2.59	-0.04	0.01	fusiform (96.22%, 12.43%)
	8	378	2.74	-0.06	0.02	inferiortemporal (84.92%, 7.27%)
	9	243	2.73	0.04	0.01	lingual (100%, 5.78%)
	10	401	2.72	-0.04	0.01	fusiform (56.86%, 4.84%)
	11	219	2.68	0.07	0.02	superiortemporal (61.64%, 1.86%)
BMI (z)	1	1983	2.70	0.03	0.01	fusiform (24.86%, 10.46%)
	2	1011	2.66	0.03	0.01	lateraloccipital (93.77%, 14.86%)
	3	652	2.67	-0.02	0.01	superiorfrontal (80.98%, 4.34%)
	4	575	2.59	0.02	0.01	postcentral (100%, 6.04%)
	5	482	2.64	-0.02	0.01	superiorfrontal (76.14%, 3.01%)

Right hemisphere

Variable	Cluster	n vertices	Thickness	Coefficient	SE	Top region
(Intercept)	1	145637	2.65	3.00	0.17	superiorfrontal (8.15%, 99.93%)
Female sex	1	9456	2.68	-0.05	0.01	precuneus (52.54%, 62.29%)
	2	2830	2.61	-0.04	0.01	rostralmiddlefrontal (99.33%, 35.75%)
	3	2284	2.63	-0.04	0.01	superiorparietal (48.25%, 10.78%)
	4	3110	2.69	-0.04	0.01	insula (55.31%, 33.79%)
	5	1467	2.59	0.06	0.01	middletemporal (51.74%, 15.01%)
	6	1245	2.59	0.05	0.01	pericalcarine (90.6%, 61.88%)
	7	1293	2.62	0.06	0.01	postcentral (100%, 14.15%)
	8	955	2.62	0.06	0.01	parahippocampal (65.97%, 36.17%)
	9	963	2.54	-0.04	0.01	superiorfrontal (75.7%, 6.14%)
	10	789	2.60	-0.04	0.01	rostralmiddlefrontal (92.4%, 9.27%)
	11	1101	2.63	0.03	0.01	postcentral (55.31%, 6.66%)
	12	768	2.63	-0.04	0.01	inferiorparietal (100%, 7.94%)
	13	820	2.69	0.05	0.01	precentral (100%, 7.66%)
	14	569	2.60	-0.04	0.01	lateralorbitofrontal (100%, 13.07%)
	15	607	2.54	0.04	0.01	postcentral (70.84%, 4.71%)
	16	463	2.67	-0.05	0.01	medialorbitofrontal (71.06%, 11.75%)
	17	278	2.62	0.04	0.01	parsorbitalis (100%, 29.39%)
	18	505	2.76	-0.04	0.01	superiortemporal (81.98%, 6.03%)
	19	503	2.70	-0.04	0.01	supramarginal (100%, 6.17%)
	20	346	2.73	0.04	0.01	fusiform (100%, 7.42%)
	21	342	2.67	-0.04	0.01	superiorfrontal (62.87%, 1.81%)
Age at MRI	1	37324	2.65	-0.04	0.01	precuneus (15.63%, 73.14%)
	2	12528	2.64	-0.03	0.01	inferiorparietal (44.67%, 57.83%)
	3	2456	2.69	-0.03	0.01	lateraloccipital (45.64%, 18.80%)
	4	1092	2.70	-0.03	0.01	fusiform (95.51%, 22.38%)
	5	666	2.71	-0.03	0.01	precentral (48.95%, 3.05%)
	6	607	2.63	-0.03	0.01	superiorfrontal (37.4%, 1.91%)
	7	457	2.53	-0.03	0.01	caudalmiddlefrontal (100%, 13.08%)
	8	718	2.75	-0.03	0.01	supramarginal (91.78%, 8.09%)
Height	1	656	2.60	0.00	0.00	lateralorbitofrontal (100%, 15.07%)
	2	272	2.66	0.00	0.00	lateraloccipital (58.46%, 2.67%)
Ethnicity	1	5163	2.63	-0.06	0.01	precuneus (36.41%, 23.57%)
	2	3562	2.65	-0.05	0.01	lateraloccipital (77.82%, 46.49%)
	3	1743	2.64	-0.04	0.01	middletemporal (31.50%, 10.86%)
	4	2255	2.64	-0.05	0.01	superiortemporal (48.78%, 16.02%)
	5	872	2.63	-0.05	0.01	superiorparietal (66.28%, 5.65%)
	6	414	2.53	0.09	0.02	superiortemporal (54.11%, 3.26%)
	7	682	2.74	-0.04	0.01	postcentral (62.46%, 4.66%)
	8	800	2.79	-0.04	0.01	insula (57.00%, 8.96%)
	9	203	2.46	0.04	0.01	lingual (100%, 5.21%)
	10	357	2.75	-0.05	0.01	inferiortemporal (58.26%, 4.95%)
BMI (z)	1	462	2.71	0.02	0.01	lateraloccipital (100%, 7.75%)
	2	507	2.59	0.03	0.01	superiortemporal (93.29%, 6.89%)

Table S12 - Birth-related covariates

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Fully adjusted model

Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV) (R^2 = .21)								
(Intercept)	-1.98	0.56	-3.55	206.2	0.000	0.000	-3.08	-0.88
IMT (z-score)	0.02	0.02	1.10	72.5	0.275	0.550	-0.02	0.05
Female sex	-0.73	0.03	-23.87	159.2	0.000	0.000	-0.79	-0.67
Age at MRI	0.02	0.05	0.50	282.4	0.618	0.618	-0.07	0.11
Age delta	0.00	0.04	-0.04	215.8	0.969	0.977	-0.08	0.08
Height	0.01	0.00	5.38	266.4	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.22	0.03	-7.08	502.8	0.000	0.000	-0.28	-0.16
BMI (z-score)	0.03	0.02	2.12	209.0	0.035	0.140	0.00	0.06
Parental education	0.02	0.01	3.24	123.0	0.002	0.004	0.01	0.04
Maternal age	0.00	0.00	1.24	214.1	0.218	0.291	0.00	0.01
Birth weight	0.16	0.02	8.69	303.0	0.000	0.000	0.12	0.20
Gestational age (birth)	-0.04	0.02	-1.95	233.8	0.052	0.208	-0.07	0.00
Grey matter volume (GMV) (R^2 = .22)								
(Intercept)	-1.06	0.56	-1.89	187.6	0.060	0.069	-2.17	0.05
IMT (z-score)	0.02	0.02	1.38	87.2	0.173	0.550	-0.01	0.06
Female sex	-0.73	0.03	-24.13	152.6	0.000	0.000	-0.79	-0.67
Age at MRI	-0.03	0.05	-0.67	130.9	0.502	0.574	-0.13	0.06
Age delta	0.00	0.05	0.04	91.5	0.969	0.977	-0.09	0.10
Height	0.01	0.00	4.65	220.9	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.24	0.03	-7.19	212.4	0.000	0.000	-0.31	-0.17
BMI (z-score)	0.02	0.02	1.23	162.4	0.219	0.292	-0.01	0.05
Parental education	0.03	0.01	3.87	129.5	0.000	0.000	0.01	0.04
Maternal age	0.01	0.00	1.64	218.9	0.102	0.291	0.00	0.01
Birth weight	0.16	0.02	8.23	213.1	0.000	0.000	0.12	0.19
Gestational age (birth)	-0.02	0.02	-1.06	132.0	0.293	0.586	-0.06	0.02
Global fractional anisotropy (FA) (R^2 = .01)								
(Intercept)	-1.64	0.62	-2.63	216.5	0.009	0.024	-2.86	-0.41
IMT (z-score)	0.00	0.02	-0.24	136.1	0.809	0.809	-0.04	0.03
Female sex	-0.02	0.03	-0.58	222.7	0.565	0.565	-0.08	0.05
Age at MRI	0.07	0.05	1.30	153.3	0.197	0.315	-0.04	0.18
Age delta	0.00	0.05	0.03	146.1	0.977	0.977	-0.10	0.10
Height	0.00	0.00	1.14	296.9	0.257	0.343	0.00	0.01
Non-European ethnicity	-0.04	0.04	-1.19	247.5	0.234	0.312	-0.12	0.03
BMI (z-score)	0.00	0.02	-0.03	120.3	0.978	0.978	-0.04	0.04
Parental education	0.01	0.01	1.76	282.5	0.079	0.105	0.00	0.03
Maternal age	0.01	0.00	1.37	230.8	0.171	0.291	0.00	0.01
Birth weight	0.01	0.02	0.60	124.4	0.547	0.547	-0.03	0.06
Gestational age (birth)	-0.01	0.02	-0.55	147.7	0.582	0.776	-0.05	0.03
Global mean diffusivity (MD) (R^2 = .01)								
(Intercept)	1.54	0.63	2.46	197.1	0.015	0.026	0.31	2.77
IMT (z-score)	0.01	0.02	0.70	200.3	0.487	0.649	-0.02	0.04
Female sex	-0.15	0.03	-4.81	271.9	0.000	0.000	-0.22	-0.09
Age at MRI	-0.08	0.05	-1.62	388.4	0.107	0.214	-0.18	0.02
Age delta	-0.03	0.05	-0.57	206.0	0.569	0.977	-0.12	0.07
Height	0.00	0.00	-0.43	171.1	0.665	0.760	-0.01	0.00
Non-European ethnicity	0.00	0.04	-0.06	202.2	0.952	0.952	-0.08	0.07
BMI (z-score)	-0.02	0.02	-1.25	105.0	0.214	0.292	-0.06	0.01
Parental education	0.00	0.01	0.09	124.4	0.926	0.926	-0.02	0.02
Maternal age	0.00	0.00	-0.72	174.5	0.472	0.472	-0.01	0.00
Birth weight	0.04	0.02	2.00	532.3	0.046	0.061	0.00	0.08
Gestational age (birth)	-0.01	0.02	-0.25	227.0	0.801	0.801	-0.05	0.04

CAROTID DISTENSIBILITY

Fully adjusted model

Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV) (R^2 = .21)								
(Intercept)	-2.04	0.55	-3.70	227.0	0.000	0.000	-3.13	-0.96
Distensibility (z-score)	0.01	0.02	0.50	102.7	0.617	0.835	-0.02	0.04
Female sex	-0.73	0.03	-24.46	183.6	0.000	0.000	-0.79	-0.67
Age at MRI	0.02	0.05	0.51	291.0	0.612	0.612	-0.07	0.11
Age delta	0.00	0.04	-0.05	219.8	0.959	0.987	-0.08	0.08
Height	0.01	0.00	5.41	202.3	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.22	0.03	-7.08	568.0	0.000	0.000	-0.28	-0.16
BMI (z-score)	0.03	0.02	2.22	217.4	0.028	0.112	0.00	0.06
Parental education	0.03	0.01	3.28	124.5	0.001	0.002	0.01	0.04
Maternal age	0.00	0.00	1.22	217.7	0.223	0.297	0.00	0.01
Birth weight	0.16	0.02	8.73	290.0	0.000	0.000	0.13	0.20
Gestational age (birth)	-0.04	0.02	-1.97	240.3	0.050	0.200	-0.07	0.00
Grey matter volume (GMV) (R^2 = .22)								
(Intercept)	-1.13	0.56	-2.03	197.3	0.044	0.050	-2.23	-0.03
Distensibility (z-score)	0.01	0.02	0.36	125.2	0.721	0.835	-0.03	0.04
Female sex	-0.74	0.03	-24.18	147.5	0.000	0.000	-0.80	-0.68
Age at MRI	-0.03	0.05	-0.66	131.3	0.508	0.581	-0.13	0.06
Age delta	0.00	0.05	0.04	91.2	0.977	0.987	-0.09	0.10
Height	0.01	0.00	4.73	177.4	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.24	0.03	-7.15	219.4	0.000	0.000	-0.30	-0.17
BMI (z-score)	0.02	0.02	1.31	170.3	0.191	0.255	-0.01	0.05
Parental education	0.03	0.01	3.91	130.9	0.000	0.000	0.01	0.04
Maternal age	0.01	0.00	1.62	219.2	0.106	0.297	0.00	0.01
Birth weight	0.16	0.02	8.26	201.0	0.000	0.000	0.12	0.19
Gestational age (birth)	-0.02	0.02	-1.08	133.6	0.283	0.566	-0.06	0.02
Global fractional anisotropy (FA) (R^2 = .01)								
(Intercept)	-1.65	0.61	-2.68	240.1	0.008	0.021	-2.86	-0.44
Distensibility (z-score)	0.02	0.02	0.89	141.2	0.375	0.750	-0.02	0.05
Female sex	-0.02	0.03	-0.63	204.7	0.529	0.529	-0.09	0.05
Age at MRI	0.07	0.05	1.29	154.5	0.200	0.320	-0.04	0.18
Age delta	0.00	0.05	0.02	147.8	0.987	0.987	-0.10	0.10
Height	0.00	0.00	1.17	224.3	0.242	0.323	0.00	0.01
Non-European ethnicity	-0.05	0.04	-1.23	247.7	0.221	0.295	-0.12	0.03
BMI (z-score)	0.00	0.02	0.09	129.0	0.931	0.931	-0.03	0.04
Parental education	0.01	0.01	1.75	290.9	0.081	0.108	0.00	0.03
Maternal age	0.01	0.00	1.37	231.7	0.172	0.297	0.00	0.01
Birth weight	0.01	0.02	0.60	120.6	0.548	0.548	-0.03	0.06
Gestational age (birth)	-0.01	0.02	-0.55	146.3	0.582	0.776	-0.05	0.03
Global mean diffusivity (MD) (R^2 = .01)								
(Intercept)	1.54	0.63	2.45	186.3	0.015	0.027	0.30	2.78
Distensibility (z-score)	-0.02	0.02	-1.12	157.9	0.264	0.750	-0.05	0.02
Female sex	-0.15	0.03	-4.77	270.3	0.000	0.000	-0.22	-0.09
Age at MRI	-0.08	0.05	-1.60	377.9	0.111	0.222	-0.17	0.02
Age delta	-0.03	0.05	-0.55	202.7	0.581	0.987	-0.12	0.07
Height	0.00	0.00	-0.47	156.1	0.641	0.733	-0.01	0.00
Non-European ethnicity	0.00	0.04	0.00	203.6	0.999	0.999	-0.07	0.07
BMI (z-score)	-0.03	0.02	-1.39	112.6	0.168	0.255	-0.06	0.01
Parental education	0.00	0.01	0.12	124.4	0.903	0.903	-0.02	0.02
Maternal age	0.00	0.00	-0.72	173.7	0.471	0.471	-0.01	0.00
Birth weight	0.04	0.02	2.01	494.3	0.045	0.060	0.00	0.08
Gestational age (birth)	-0.01	0.02	-0.26	228.6	0.799	0.799	-0.05	0.04

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S12 - Birth-related covariates (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV) — Fully adjusted model ($R^2 = .21$)								
(Intercept)	-2.13	0.56	-3.80	206.1	0.000	0.000	-3.23	-1.03
SBP (z-score)	-0.03	0.02	-1.58	218.9	0.115	0.230	-0.06	0.01
Female sex	-0.73	0.03	-24.19	173.0	0.000	0.000	-0.78	-0.67
Age at MRI	0.02	0.05	0.52	283.0	0.605	0.605	-0.07	0.11
Age delta	0.00	0.04	-0.09	218.1	0.932	0.991	-0.09	0.08
Height	0.01	0.00	5.69	239.7	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.22	0.03	-7.12	592.8	0.000	0.000	-0.28	-0.16
BMI (z-score)	0.04	0.02	2.63	296.2	0.009	0.036	0.01	0.07
Parental education	0.02	0.01	3.22	126.2	0.002	0.004	0.01	0.04
Maternal age	0.00	0.00	1.24	216.7	0.217	0.289	0.00	0.01
Birth weight	0.16	0.02	8.48	264.4	0.000	0.000	0.12	0.20
Gestational age (birth)	-0.04	0.02	-1.95	240.3	0.053	0.212	-0.07	0.00
Grey matter volume (GMV) — Fully adjusted model ($R^2 = .22$)								
(Intercept)	-1.24	0.56	-2.22	198.8	0.028	0.037	-2.34	-0.14
SBP (z-score)	-0.03	0.02	-1.73	118.7	0.086	0.229	-0.06	0.00
Female sex	-0.73	0.03	-23.94	141.2	0.000	0.000	-0.80	-0.67
Age at MRI	-0.03	0.05	-0.65	129.8	0.516	0.590	-0.13	0.07
Age delta	0.00	0.05	-0.01	91.9	0.991	0.991	-0.09	0.09
Height	0.01	0.00	5.08	208.3	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.24	0.03	-7.19	223.3	0.000	0.000	-0.30	-0.17
BMI (z-score)	0.03	0.02	1.76	149.8	0.081	0.162	0.00	0.06
Parental education	0.03	0.01	3.86	137.6	0.000	0.000	0.01	0.04
Maternal age	0.01	0.00	1.64	216.4	0.102	0.289	0.00	0.01
Birth weight	0.15	0.02	8.07	204.0	0.000	0.000	0.12	0.19
Gestational age (birth)	-0.02	0.02	-1.05	135.5	0.295	0.590	-0.06	0.02
Global fractional anisotropy (FA) — Fully adjusted model ($R^2 = .01$)								
(Intercept)	-1.61	0.62	-2.59	228.7	0.010	0.027	-2.83	-0.39
SBP (z-score)	0.00	0.02	0.20	131.4	0.841	0.841	-0.03	0.04
Female sex	-0.02	0.03	-0.56	199.6	0.576	0.576	-0.08	0.05
Age at MRI	0.07	0.05	1.29	156.1	0.197	0.315	-0.04	0.18
Age delta	0.00	0.05	0.04	143.2	0.971	0.991	-0.10	0.10
Height	0.00	0.00	1.05	290.9	0.294	0.392	0.00	0.01
Non-European ethnicity	-0.04	0.04	-1.21	251.9	0.229	0.305	-0.12	0.03
BMI (z-score)	0.00	0.02	-0.09	114.8	0.926	0.926	-0.04	0.04
Parental education	0.01	0.01	1.77	298.9	0.078	0.104	0.00	0.03
Maternal age	0.01	0.00	1.38	231.9	0.171	0.289	0.00	0.01
Birth weight	0.01	0.02	0.60	114.9	0.549	0.549	-0.03	0.06
Gestational age (birth)	-0.01	0.02	-0.55	144.6	0.583	0.777	-0.05	0.03
Global mean diffusivity (MD) — Fully adjusted model ($R^2 = .01$)								
(Intercept)	1.49	0.63	2.38	203.3	0.018	0.036	0.26	2.73
SBP (z-score)	0.00	0.02	-0.23	127.8	0.822	0.841	-0.04	0.03
Female sex	-0.16	0.03	-4.89	283.7	0.000	0.000	-0.22	-0.09
Age at MRI	-0.08	0.05	-1.61	380.8	0.109	0.218	-0.18	0.02
Age delta	-0.03	0.05	-0.58	199.7	0.565	0.991	-0.12	0.07
Height	0.00	0.00	-0.32	179.7	0.752	0.859	-0.01	0.01
Non-European ethnicity	0.00	0.04	-0.03	196.8	0.975	0.975	-0.08	0.07
BMI (z-score)	-0.02	0.02	-1.10	105.5	0.272	0.363	-0.06	0.02
Parental education	0.00	0.01	0.10	123.7	0.919	0.919	-0.02	0.02
Maternal age	0.00	0.00	-0.73	175.5	0.468	0.468	-0.01	0.00
Birth weight	0.04	0.02	1.99	466.8	0.047	0.063	0.00	0.08
Gestational age (birth)	-0.01	0.02	-0.26	230.2	0.798	0.798	-0.05	0.03

DIASTOLIC BLOOD PRESSURE (DBP)

Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV) — Fully adjusted model ($R^2 = .21$)								
(Intercept)	-2.05	0.55	-3.73	231.6	0.000	0.000	-3.13	-0.97
DBP (z-score)	-0.04	0.01	-2.75	254.7	0.006	0.024	-0.07	-0.01
Female sex	-0.72	0.03	-24.16	174.2	0.000	0.000	-0.78	-0.67
Age at MRI	0.02	0.05	0.53	291.7	0.600	0.600	-0.07	0.11
Age delta	0.00	0.04	-0.09	218.8	0.932	0.994	-0.09	0.08
Height	0.01	0.00	5.56	240.8	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.22	0.03	-7.06	602.4	0.000	0.000	-0.28	-0.16
BMI (z-score)	0.04	0.02	2.35	209.0	0.020	0.080	0.01	0.06
Parental education	0.02	0.01	3.15	120.0	0.002	0.004	0.01	0.04
Maternal age	0.00	0.00	1.18	212.6	0.239	0.319	0.00	0.01
Birth weight	0.16	0.02	8.62	288.8	0.000	0.000	0.12	0.20
Gestational age (birth)	-0.04	0.02	-1.96	243.1	0.051	0.204	-0.07	0.00
Grey matter volume (GMV) — Fully adjusted model ($R^2 = .22$)								
(Intercept)	-1.14	0.55	-2.07	207.7	0.040	0.046	-2.23	-0.05
DBP (z-score)	-0.05	0.02	-2.92	118.4	0.004	0.024	-0.08	-0.02
Female sex	-0.73	0.03	-23.72	134.5	0.000	0.000	-0.79	-0.67
Age at MRI	-0.03	0.05	-0.65	132.6	0.516	0.590	-0.13	0.07
Age delta	0.00	0.05	-0.01	93.4	0.994	0.994	-0.09	0.09
Height	0.01	0.00	4.86	195.6	0.000	0.000	0.01	0.02
Non-European ethnicity	-0.24	0.03	-7.12	223.7	0.000	0.000	-0.30	-0.17
BMI (z-score)	0.02	0.02	1.49	162.7	0.138	0.276	-0.01	0.05
Parental education	0.03	0.01	3.81	136.5	0.000	0.000	0.01	0.04
Maternal age	0.01	0.00	1.58	215.2	0.116	0.319	0.00	0.01
Birth weight	0.16	0.02	8.16	204.5	0.000	0.000	0.12	0.19
Gestational age (birth)	-0.02	0.02	-1.06	134.1	0.290	0.580	-0.06	0.02
Global fractional anisotropy (FA) — Fully adjusted model ($R^2 = .01$)								
(Intercept)	-1.62	0.62	-2.64	232.6	0.009	0.024	-2.84	-0.41
DBP (z-score)	0.00	0.02	0.05	113.9	0.958	0.958	-0.04	0.04
Female sex	-0.02	0.03	-0.55	196.6	0.582	0.582	-0.08	0.05
Age at MRI	0.07	0.05	1.30	154.5	0.197	0.315	-0.04	0.18
Age delta	0.00	0.05	0.03	145.9	0.976	0.994	-0.10	0.10
Height	0.00	0.00	1.11	275.7	0.270	0.360	0.00	0.01
Non-European ethnicity	-0.05	0.04	-1.21	245.4	0.228	0.304	-0.12	0.03
BMI (z-score)	0.00	0.02	-0.04	112.9	0.969	0.969	-0.04	0.04
Parental education	0.01	0.01	1.76	282.8	0.080	0.107	0.00	0.03
Maternal age	0.01	0.00	1.38	241.1	0.168	0.319	0.00	0.01
Birth weight	0.01	0.02	0.60	124.8	0.552	0.552	-0.03	0.06
Gestational age (birth)	-0.01	0.02	-0.55	146.0	0.584	0.779	-0.05	0.03
Global mean diffusivity (MD) — Fully adjusted model ($R^2 = .01$)								
(Intercept)	1.50	0.63	2.39	187.1	0.018	0.035	0.26	2.74
DBP (z-score)	-0.01	0.02	-0.70	158.5	0.486	0.648	-0.05	0.02
Female sex	-0.15	0.03	-4.81	260.9	0.000	0.000	-0.22	-0.09
Age at MRI	-0.08	0.05	-1.60	379.6	0.109	0.218	-0.18	0.02
Age delta	-0.03	0.05	-0.58	205.6	0.560	0.994	-0.12	0.07
Height	0.00	0.00	-0.34	165.9	0.736	0.841	-0.01	0.00
Non-European ethnicity	0.00	0.04	-0.01	195.9	0.990	0.990	-0.08	0.07
BMI (z-score)	-0.02	0.02	-1.15	100.9	0.251	0.335	-0.06	0.02
Parental education	0.00	0.01	0.07	125.1	0.942	0.942	-0.02	0.02
Maternal age	0.00	0.00	-0.74	175.2	0.459	0.459	-0.01	0.00
Birth weight	0.04	0.02	1.98	468.3	0.048	0.064	0.00	0.08
Gestational age (birth)	-0.01	0.02	-0.25	226.3	0.800	0.800	-0.05	0.04

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S13 - Sensitivity (complete MRI data)

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .31)	(Intercept)	-0.87	0.69	-1.26	1393.0	0.207	0.211	-2.23	0.48
	IMT (z-score)	0.03	0.02	1.20	356.0	0.232	0.464	-0.02	0.07
	Female sex	-1.06	0.04	-28.79	2033.9	0.000	0.000	-1.14	-0.99
	Age at MRI	-0.19	0.06	-3.16	1114.5	0.002	0.008	-0.32	-0.07
	Age delta	0.17	0.06	2.93	892.4	0.003	0.012	0.06	0.28
	Height	0.02	0.00	8.24	1414.9	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .36)	(Intercept)	-2.32	0.70	-3.32	1099.7	0.001	0.008	-3.69	-0.95
	IMT (z-score)	0.02	0.02	1.21	395.9	0.228	0.464	-0.02	0.06
	Female sex	-1.05	0.04	-29.56	2017.1	0.000	0.000	-1.12	-0.98
	Age at MRI	-0.08	0.06	-1.26	783.1	0.209	0.279	-0.20	0.04
	Age delta	0.08	0.06	1.43	604.0	0.153	0.306	-0.03	0.20
	Height	0.02	0.00	6.69	1273.1	0.000	0.000	0.01	0.03
	Non-European ethnicity	-0.32	0.04	-7.56	1782.7	0.000	0.000	-0.40	-0.23
	BMI (z-score)	0.04	0.02	2.15	809.8	0.032	0.128	0.00	0.08
	Parental education	0.05	0.01	4.94	1069.5	0.000	0.000	0.03	0.06
	Maternal age	0.02	0.00	4.21	1962.1	0.000	0.000	0.01	0.02
Grey matter volume (GMV)									
Base model (R^2 = .32)	(Intercept)	1.01	0.68	1.48	1449.6	0.139	0.185	-0.33	2.35
	IMT (z-score)	0.03	0.02	1.40	400.9	0.163	0.464	-0.01	0.07
	Female sex	-1.07	0.04	-29.27	2033.5	0.000	0.000	-1.15	-1.00
	Age at MRI	-0.32	0.06	-5.24	1168.6	0.000	0.000	-0.44	-0.20
	Age delta	0.19	0.06	3.38	932.6	0.001	0.008	0.08	0.31
	Height	0.02	0.00	7.72	1340.8	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .39)	(Intercept)	-0.85	0.68	-1.25	1141.9	0.211	0.211	-2.18	0.48
	IMT (z-score)	0.03	0.02	1.45	445.1	0.147	0.464	-0.01	0.07
	Female sex	-1.06	0.04	-30.58	2006.7	0.000	0.000	-1.13	-0.99
	Age at MRI	-0.18	0.06	-2.99	776.8	0.003	0.008	-0.29	-0.06
	Age delta	0.09	0.06	1.58	594.4	0.114	0.304	-0.02	0.20
	Height	0.02	0.00	6.28	1165.9	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.36	0.04	-8.90	1750.0	0.000	0.000	-0.44	-0.28
	BMI (z-score)	0.03	0.02	1.33	806.3	0.183	0.244	-0.01	0.06
	Parental education	0.05	0.01	6.06	1016.9	0.000	0.000	0.04	0.07
	Maternal age	0.02	0.00	5.14	1941.7	0.000	0.000	0.01	0.03
Global fractional anisotropy (FA)									
Base model (R^2 = .01)	(Intercept)	-1.61	0.79	-2.02	1479.8	0.043	0.069	-3.16	-0.05
	IMT (z-score)	-0.01	0.02	-0.26	590.4	0.793	0.793	-0.05	0.04
	Female sex	-0.02	0.04	-0.38	2295.0	0.701	0.723	-0.10	0.07
	Age at MRI	0.01	0.07	0.16	1356.9	0.876	0.876	-0.13	0.15
	Age delta	0.10	0.07	1.57	1021.0	0.117	0.187	-0.03	0.23
	Height	0.01	0.00	2.19	1591.7	0.029	0.046	0.00	0.01
Fully adjusted model (R^2 = .02)	(Intercept)	-2.42	0.82	-2.95	1524.3	0.003	0.011	-4.03	-0.81
	IMT (z-score)	-0.01	0.02	-0.34	560.0	0.738	0.793	-0.05	0.04
	Female sex	-0.02	0.04	-0.35	2288.0	0.723	0.723	-0.10	0.07
	Age at MRI	0.06	0.07	0.84	1384.1	0.401	0.458	-0.08	0.20
	Age delta	0.07	0.07	1.03	1053.3	0.302	0.302	-0.06	0.20
	Height	0.01	0.00	1.65	1419.4	0.099	0.132	0.00	0.01
	Non-European ethnicity	-0.09	0.05	-1.83	1889.2	0.067	0.089	-0.19	0.01
	BMI (z-score)	0.01	0.02	0.29	1817.3	0.772	0.772	-0.04	0.05
	Parental education	0.03	0.01	2.33	467.3	0.020	0.027	0.00	0.05
	Maternal age	0.01	0.00	2.26	2232.6	0.024	0.032	0.00	0.02
Global mean diffusivity (MD)									
Base model (R^2 = .03)	(Intercept)	2.28	0.78	2.90	1489.3	0.004	0.011	0.74	3.82
	IMT (z-score)	0.01	0.02	0.47	595.2	0.636	0.793	-0.03	0.06
	Female sex	-0.24	0.04	-5.88	2296.2	0.000	0.000	-0.32	-0.16
	Age at MRI	-0.09	0.07	-1.28	1004.7	0.201	0.322	-0.23	0.05
	Age delta	-0.11	0.07	-1.64	740.7	0.102	0.187	-0.24	0.02
	Height	0.00	0.00	-0.95	1275.2	0.343	0.392	-0.01	0.00
Fully adjusted model (R^2 = .03)	(Intercept)	2.13	0.81	2.62	1571.9	0.009	0.018	0.54	3.72
	IMT (z-score)	0.01	0.02	0.50	589.9	0.618	0.793	-0.03	0.06
	Female sex	-0.25	0.04	-5.93	2290.1	0.000	0.000	-0.33	-0.16
	Age at MRI	-0.09	0.07	-1.28	988.9	0.200	0.322	-0.23	0.05
	Age delta	-0.11	0.07	-1.61	728.4	0.109	0.187	-0.24	0.02
	Height	0.00	0.00	-0.46	1258.7	0.648	0.648	-0.01	0.01
	Non-European ethnicity	0.02	0.05	0.45	2041.3	0.653	0.653	-0.07	0.12
	BMI (z-score)	-0.04	0.02	-1.81	1718.6	0.070	0.093	-0.08	0.00
	Parental education	0.00	0.01	0.05	503.1	0.963	0.963	-0.02	0.02
	Maternal age	0.00	0.00	-0.48	2242.0	0.630	0.630	-0.01	0.01

CAROTID DISTENSIBILITY

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .31)	(Intercept)	-0.97	0.70	-1.40	1294.2	0.163	0.178	-2.34	0.39
	Distensibility (z-score)	0.01	0.02	0.60	409.4	0.547	0.736	-0.03	0.05
	Female sex	-1.07	0.04	-28.84	2034.1	0.000	0.000	-1.14	-1.00
	Age at MRI	-0.19	0.06	-3.15	1109.2	0.002	0.008	-0.31	-0.07
	Age delta	0.17	0.06	2.92	884.0	0.004	0.016	0.06	0.28
	Height	0.03	0.00	8.39	1445.1	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .36)	(Intercept)	-2.41	0.70	-3.44	1073.8	0.001	0.008	-3.78	-1.04
	Distensibility (z-score)	0.01	0.02	0.60	291.5	0.552	0.736	-0.03	0.05
	Female sex	-1.06	0.04	-29.61	2014.3	0.000	0.000	-1.13	-0.99
	Age at MRI	-0.08	0.06	-1.25	784.8	0.212	0.283	-0.20	0.04
	Age delta	0.08	0.06	1.42	606.1	0.156	0.312	-0.03	0.19
	Height	0.02	0.00	6.86	1368.9	0.000	0.000	0.02	0.03
	Non-European ethnicity	-0.31	0.04	-7.52	1821.1	0.000	0.000	-0.40	-0.23
	BMI (z-score)	0.05	0.02	2.21	598.2	0.027	0.108	0.01	0.09
	Parental education	0.05	0.01	5.00	1029.3	0.000	0.000	0.03	0.06
	Maternal age	0.02	0.00	4.23	1959.0	0.000	0.000	0.01	0.02
Grey matter volume (GMV)									
Base model (R^2 = .32)	(Intercept)	0.93	0.69	1.35	1413.6	0.178	0.178	-0.42	2.28
	Distensibility (z-score)	0.01	0.02	0.30	457.5	0.762	0.871	-0.03	0.05
	Female sex	-1.08	0.04	-29.27	2032.0	0.000	0.000	-1.15	-1.01
	Age at MRI	-0.32	0.06	-5.23	1177.1	0.000	0.000	-0.44	-0.20
	Age delta	0.19	0.06	3.37	938.2	0.001	0.008	0.08	0.31
	Height	0.02	0.00	7.83	1397.6	0.000	0.000	0.02	0.03
Fully adjusted model (R^2 = .39)	(Intercept)	-0.92	0.68	-1.36	1172.6	0.176	0.178	-2.26	0.41
	Distensibility (z-score)	0.00	0.02	0.10	308.5	0.921	0.921	-0.04	0.04
	Female sex	-1.07	0.04	-30.56	1997.9	0.000	0.000	-1.14	-1.00
	Age at MRI	-0.18	0.06	-2.99	786.0	0.003	0.008	-0.29	-0.06
	Age delta	0.09	0.06	1.59	604.4	0.113	0.301	-0.02	0.20
	Height	0.02	0.00	6.41	1289.4	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.36	0.04	-8.85	1789.7	0.000	0.000	-0.44	-0.28
	BMI (z-score)	0.03	0.02	1.35	599.6	0.178	0.237	-0.01	0.07
	Parental education	0.05	0.01	6.12	973.7	0.000	0.000	0.04	0.07
	Maternal age	0.02	0.00	5.16	1942.4	0.000	0.000	0.01	0.03
Global fractional anisotropy (FA)									
Base model (R^2 = .01)	(Intercept)	-1.73	0.80	-2.17	1466.2	0.030	0.048	-3.29	-0.16
	Distensibility (z-score)	0.04	0.02	1.71	665.3	0.089	0.437	-0.01	0.08
	Female sex	-0.02	0.04	-0.56	2291.7	0.573	0.613	-0.11	0.06
	Age at MRI	0.01	0.07	0.16	1296.6	0.872	0.872	-0.13	0.15
	Age delta	0.10	0.07	1.53	986.1	0.127	0.203	-0.03	0.23
	Height	0.01	0.00	2.42	1444.2	0.015	0.024	0.00	0.02
Fully adjusted model (R^2 = .02)	(Intercept)	-2.49	0.82	-3.04	1541.3	0.002	0.008	-4.09	-0.88
	Distensibility (z-score)	0.04	0.02	1.57	698.3	0.117	0.437	-0.01	0.08
	Female sex	-0.02	0.04	-0.51	2283.0	0.613	0.613	-0.10	0.06
	Age at MRI	0.06	0.07	0.83	1333.9	0.406	0.464	-0.08	0.20
	Age delta	0.07	0.07	1.00	1033.2	0.316	0.316	-0.06	0.19
	Height	0.01	0.00	1.82	1342.8	0.069	0.092	0.00	0.01
	Non-European ethnicity	-0.09	0.05	-1.86	1911.6	0.063	0.084	-0.19	0.01
	BMI (z-score)	0.01	0.02	0.53	1768.1	0.599	0.599	-0.03	0.06
	Parental education	0.03	0.01	2.31	479.0	0.021	0.028	0.00	0.05
	Maternal age	0.01	0.00	2.26	2215.0	0.024	0.032	0.00	0.02
Global mean diffusivity (MD)									
Base model (R^2 = .03)	(Intercept)	2.34	0.78	2.98	1543.7	0.003	0.008	0.80	3.87
	Distensibility (z-score)	-0.03	0.02	-1.13	890.9	0.260	0.520	-0.07	0.02
	Female sex	-0.24	0.04	-5.77	2295.0	0.000	0.000	-0.32	-0.16
	Age at MRI	-0.09	0.07	-1.28	983.7	0.202	0.328	-0.23	0.05
	Age delta	-0.11	0.07	-1.62	731.3	0.106	0.203	-0.24	0.02
	Height	0.00	0.00	-1.08	1165.5	0.280	0.320	-0.01	0.00
Fully adjusted model (R^2 = .03)	(Intercept)	2.17	0.81	2.69	1640.5	0.007	0.014	0.59	3.76
	Distensibility (z-score)	-0.03	0.02	-1.39	768.8	0.164	0.437	-0.08	0.01
	Female sex	-0.24	0.04	-5.80	2291.6	0.000	0.000	-0.32	-0.16
	Age at MRI	-0.09	0.07	-1.27	955.0	0.205	0.328	-0.23	0.05
	Age delta	-0.11	0.07	-1.58	708.6	0.114	0.203	-0.24	0.03
	Height	0.00	0.00	-0.59	1210.4	0.553	0.553	-0.01	0.01
	Non-European ethnicity	0.02	0.05	0.48	2048.5	0.630	0.630	-0.07	0.12
	BMI (z-score)	-0.04	0.02	-1.99	1523.1	0.047	0.063	-0.09	0.00
	Parental education	0.00	0.01	0.08	526.1	0.935	0.935	-0.02	0.02
	Maternal age	0.00	0.00	-0.48	2237.7	0.632	0.632	-0.01	0.01

* SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S13 - Sensitivity (complete MRI data) (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R²=.31)	(Intercept)	-1.39	0.70	-1.98	1303.7	0.048	0.067	-2.77	-0.01
	SBP (z-score)	-0.07	0.02	-3.40	1121.6	0.001	0.004	-0.11	-0.03
	Female sex	-1.06	0.04	-28.78	2035.9	0.000	0.000	-1.13	-0.99
	Age at MRI	-0.19	0.06	-3.02	1141.1	0.003	0.008	-0.31	-0.07
	Age delta	0.16	0.06	2.76	905.3	0.006	0.024	0.05	0.27
	Height	0.03	0.00	9.00	1376.3	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.36)	(Intercept)	-2.63	0.70	-3.74	1076.3	0.000	0.000	-4.01	-1.25
	SBP (z-score)	-0.05	0.02	-2.66	1183.0	0.008	0.016	-0.09	-0.01
	Female sex	-1.05	0.04	-29.47	2013.7	0.000	0.000	-1.12	-0.98
	Age at MRI	-0.07	0.06	-1.20	827.3	0.232	0.309	-0.19	0.05
	Age delta	0.08	0.06	1.34	633.2	0.182	0.362	-0.04	0.19
	Height	0.02	0.00	7.22	1269.1	0.000	0.000	0.02	0.03
	Non-European ethnicity	-0.31	0.04	-7.47	1823.5	0.000	0.000	-0.39	-0.23
	BMI (z-score)	0.06	0.02	2.80	722.3	0.005	0.020	0.02	0.10
	Parental education	0.05	0.01	4.91	974.2	0.000	0.000	0.03	0.06
	Maternal age	0.02	0.00	4.17	1949.8	0.000	0.000	0.01	0.02
Grey matter volume (GMV)									
Base model (R²=.32)	(Intercept)	0.40	0.70	0.57	1355.3	0.566	0.566	-0.97	1.77
	SBP (z-score)	-0.08	0.02	-4.06	1208.3	0.000	0.000	-0.12	-0.04
	Female sex	-1.07	0.04	-29.26	2036.6	0.000	0.000	-1.14	-1.00
	Age at MRI	-0.31	0.06	-5.08	1214.4	0.000	0.000	-0.43	-0.19
	Age delta	0.18	0.06	3.18	955.1	0.002	0.016	0.07	0.29
	Height	0.03	0.00	8.67	1258.5	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.40)	(Intercept)	-1.18	0.68	-1.72	1138.0	0.085	0.097	-2.52	0.16
	SBP (z-score)	-0.06	0.02	-2.82	1245.4	0.005	0.013	-0.09	-0.02
	Female sex	-1.06	0.04	-30.49	1999.9	0.000	0.000	-1.13	-0.99
	Age at MRI	-0.17	0.06	-2.94	840.2	0.003	0.008	-0.29	-0.06
	Age delta	0.08	0.06	1.49	638.5	0.137	0.362	-0.03	0.19
	Height	0.02	0.00	6.86	1137.8	0.000	0.000	0.01	0.03
	Non-European ethnicity	-0.36	0.04	-8.81	1805.1	0.000	0.000	-0.44	-0.28
	BMI (z-score)	0.04	0.02	2.08	745.2	0.038	0.076	0.00	0.08
	Parental education	0.05	0.01	6.03	919.0	0.000	0.000	0.04	0.07
	Maternal age	0.02	0.00	5.10	1917.4	0.000	0.000	0.01	0.03
Global fractional anisotropy (FA)									
Base model (R²=.01)	(Intercept)	-1.63	0.81	-2.01	1305.8	0.045	0.060	-3.22	-0.04
	SBP (z-score)	-0.01	0.02	-0.24	689.5	0.812	0.812	-0.05	0.04
	Female sex	-0.01	0.04	-0.34	2298.0	0.731	0.731	-0.10	0.07
	Age at MRI	0.01	0.07	0.17	1319.9	0.869	0.869	-0.13	0.15
	Age delta	0.10	0.07	1.55	978.9	0.121	0.194	-0.03	0.23
	Height	0.01	0.00	2.15	1528.1	0.031	0.050	0.00	0.01
Fully adjusted model (R²=.02)	(Intercept)	-2.36	0.83	-2.85	1433.5	0.004	0.016	-3.98	-0.74
	SBP (z-score)	0.01	0.02	0.33	807.8	0.744	0.812	-0.04	0.06
	Female sex	-0.02	0.04	-0.36	2289.0	0.723	0.731	-0.10	0.07
	Age at MRI	0.06	0.07	0.83	1380.6	0.408	0.466	-0.08	0.20
	Age delta	0.07	0.07	1.05	1033.5	0.296	0.297	-0.06	0.20
	Height	0.01	0.00	1.52	1447.4	0.128	0.171	0.00	0.01
	Non-European ethnicity	-0.09	0.05	-1.86	1928.2	0.063	0.084	-0.19	0.01
	BMI (z-score)	0.00	0.02	0.18	1899.0	0.860	0.860	-0.04	0.05
	Parental education	0.03	0.01	2.34	494.8	0.020	0.027	0.00	0.05
	Maternal age	0.01	0.00	2.26	2233.7	0.024	0.032	0.00	0.02
Global mean diffusivity (MD)									
Base model (R²=.03)	(Intercept)	2.08	0.80	2.60	1407.9	0.009	0.018	0.51	3.65
	SBP (z-score)	-0.02	0.02	-1.07	917.7	0.286	0.458	-0.07	0.02
	Female sex	-0.24	0.04	-5.85	2298.7	0.000	0.000	-0.32	-0.16
	Age at MRI	-0.09	0.07	-1.22	1049.6	0.221	0.354	-0.22	0.05
	Age delta	-0.11	0.07	-1.71	776.6	0.088	0.194	-0.24	0.02
	Height	0.00	0.00	-0.59	1162.3	0.553	0.632	-0.01	0.01
Fully adjusted model (R²=.03)	(Intercept)	2.02	0.82	2.47	1555.0	0.014	0.022	0.42	3.63
	SBP (z-score)	-0.02	0.02	-0.62	834.2	0.535	0.713	-0.06	0.03
	Female sex	-0.24	0.04	-5.92	2294.2	0.000	0.000	-0.33	-0.16
	Age at MRI	-0.09	0.07	-1.26	1023.1	0.209	0.354	-0.23	0.05
	Age delta	-0.11	0.07	-1.64	753.2	0.101	0.194	-0.24	0.02
	Height	0.00	0.00	-0.27	1164.5	0.785	0.785	-0.01	0.01
	Non-European ethnicity	0.02	0.05	0.49	2064.8	0.625	0.625	-0.07	0.12
	BMI (z-score)	-0.04	0.02	-1.55	1671.9	0.122	0.163	-0.08	0.01
	Parental education	0.00	0.01	0.05	511.2	0.960	0.960	-0.02	0.02
	Maternal age	0.00	0.00	-0.48	2244.6	0.629	0.629	-0.01	0.01

DIASTOLIC BLOOD PRESSURE (DBP)

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R²=.32)	(Intercept)	-1.09	0.69	-1.59	1388.1	0.113	0.151	-2.44	0.26
	DBP (z-score)	-0.08	0.02	-3.94	633.0	0.000	0.000	-0.12	-0.04
	Female sex	-1.05	0.04	-28.34	2006.0	0.000	0.000	-1.12	-0.98
	Age at MRI	-0.19	0.06	-3.05	1111.3	0.002	0.008	-0.31	-0.07
	Age delta	0.16	0.06	2.82	903.0	0.005	0.020	0.05	0.28
	Height	0.03	0.00	8.66	1487.8	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.37)	(Intercept)	-2.42	0.70	-3.47	1122.9	0.001	0.008	-3.78	-1.05
	DBP (z-score)	-0.05	0.02	-2.79	693.2	0.005	0.012	-0.09	-0.02
	Female sex	-1.04	0.04	-29.19	1995.5	0.000	0.000	-1.11	-0.97
	Age at MRI	-0.08	0.06	-1.23	810.4	0.218	0.291	-0.19	0.04
	Age delta	0.08	0.06	1.40	631.6	0.163	0.326	-0.03	0.19
	Height	0.02	0.00	6.95	1308.6	0.000	0.000	0.02	0.03
	Non-European ethnicity	-0.31	0.04	-7.40	1821.1	0.000	0.000	-0.39	-0.23
	BMI (z-score)	0.05	0.02	2.39	794.1	0.017	0.068	0.01	0.09
	Parental education	0.04	0.01	4.90	1131.7	0.000	0.000	0.03	0.06
	Maternal age	0.02	0.00	4.07	1963.1	0.000	0.000	0.01	0.02
Grey matter volume (GMV)									
Base model (R²=.33)	(Intercept)	0.77	0.68	1.14	1451.6	0.256	0.256	-0.56	2.11
	DBP (z-score)	-0.08	0.02	-4.24	644.8	0.000	0.000	-0.12	-0.05
	Female sex	-1.06	0.04	-28.80	2002.5	0.000	0.000	-1.13	-0.99
	Age at MRI	-0.31	0.06	-5.13	1150.9	0.000	0.000	-0.43	-0.19
	Age delta	0.19	0.06	3.25	927.7	0.001	0.008	0.07	0.30
	Height	0.02	0.00	8.16	1409.2	0.000	0.000	0.02	0.03
Fully adjusted model (R²=.40)	(Intercept)	-0.96	0.68	-1.41	1159.2	0.159	0.182	-2.28	0.37
	DBP (z-score)	-0.05	0.02	-2.76	660.9	0.006	0.012	-0.09	-0.02
	Female sex	-1.06	0.04	-30.22	1985.4	0.000	0.000	-1.12	-0.99
	Age at MRI	-0.18	0.06	-2.97	808.0	0.003	0.008	-0.29	-0.06
	Age delta	0.09	0.06	1.55	623.0	0.121	0.323	-0.02	0.20
	Height	0.02	0.00	6.55	1176.7	0.000	0.000	0.01	0.03
	Non-European ethnicity	-0.36	0.04	-8.74	1801.3	0.000	0.000	-0.43	-0.28
	BMI (z-score)	0.03	0.02	1.58	800.7	0.115	0.153	-0.01	0.07
	Parental education	0.05	0.01	6.02	1045.0	0.000	0.000	0.04	0.07
	Maternal age	0.02	0.00	5.01	1948.3	0.000	0.000	0.01	0.03
Global fractional anisotropy (FA)									
Base model (R²=.01)	(Intercept)	-1.62	0.79	-2.04	1468.2	0.041	0.055	-3.18	-0.06
	DBP (z-score)	-0.01	0.02	-0.63	643.7	0.532	0.608	-0.06	0.03
	Female sex	-0.01	0.04	-0.29	2293.0	0.772	0.772	-0.09	0.07
	Age at MRI	0.01	0.07	0.17	1376.6	0.863	0.863	-0.12	0.15
	Age delta	0.10	0.07	1.55	1037.4	0.121	0.194	-0.03	0.23
	Height	0.01	0.00	2.19	1519.5	0.028	0.045	0.00	0.01
Fully adjusted model (R²=.02)	(Intercept)	-2.40	0.82	-2.94	1527.0	0.003	0.012	-4.00	-0.80
	DBP (z-score)	0.00	0.02	-0.08	648.9	0.941	0.941	-0.05	0.04
	Female sex	-0.01	0.04	-0.32	2282.9	0.752	0.772	-0.10	0.07
	Age at MRI	0.06	0.07	0.84	1401.7	0.403	0.461	-0.08	0.20
	Age delta	0.07	0.07	1.03	1071.3	0.302	0.302	-0.06	0.20
	Height	0.01	0.00	1.63	1387.9	0.104	0.139	0.00	0.01
	Non-European ethnicity	-0.09	0.05	-1.85	1902.9	0.065	0.087	-0.19	0.01
	BMI (z-score)	0.01	0.02	0.29	1765.7	0.775	0.775	-0.04	0.05
	Parental education	0.03	0.01	2.32	501.0	0.021	0.028	0.00	0.05
	Maternal age	0.01	0.00	2.25	2230.2	0.025	0.033	0.00	0.02
Global mean diffusivity (MD)									
Base model (R²=.03)	(Intercept)	2.20	0.79	2.80	1452.0	0.005	0.013	0.66	3.74
	DBP (z-score)	-0.02	0.02	-1.00	385.4	0.316	0.475	-0.07	0.02
	Female sex	-0.24	0.04	-5.78	2291.8	0.000	0.000	-0.32	-0.16
	Age at MRI	-0.09	0.07	-1.24	1000.9	0.215	0.344	-0.22	0.05
	Age delta	-0.11	0.07	-1.68	743.7	0.094	0.194	-0.24	0.02
	Height	0.00	0.00	-0.85	1243.2	0.397	0.454	-0.01	0.00
Fully adjusted model (R²=.03)	(Intercept)	2.08	0.81	2.56	1594.1	0.010	0.020	0.49	3.66
	DBP (z-score)	-0.02	0.02	-0.92	392.0	0.356	0.475	-0.07	0.02
	Female sex	-0.24	0.04	-5.84	2287.3	0.000	0.000	-0.32	-0.16
	Age at MRI	-0.09	0.07	-1.26	998.9	0.207	0.344	-0.23	0.05
	Age delta	-0.11	0.07	-1.63	739.0	0.103	0.194	-0.24	0.02
	Height	0.00	0.00	-0.37	1260.4	0.713	0.713	-0.01	0.01
	Non-European ethnicity	0.03	0.05	0.52	2027.7	0.605	0.605	-0.07	0.12
	BMI (z-score)	-0.04	0.02	-1.73	1594.9	0.085	0.113	-0.08	0.01
	Parental education	0.00	0.01	0.03	532.7	0.978	0.978	-0.02	0.02
	Maternal age	0.00	0.00	-0.52	2233.9	0.605	0.605	-0.01	0.01

SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;
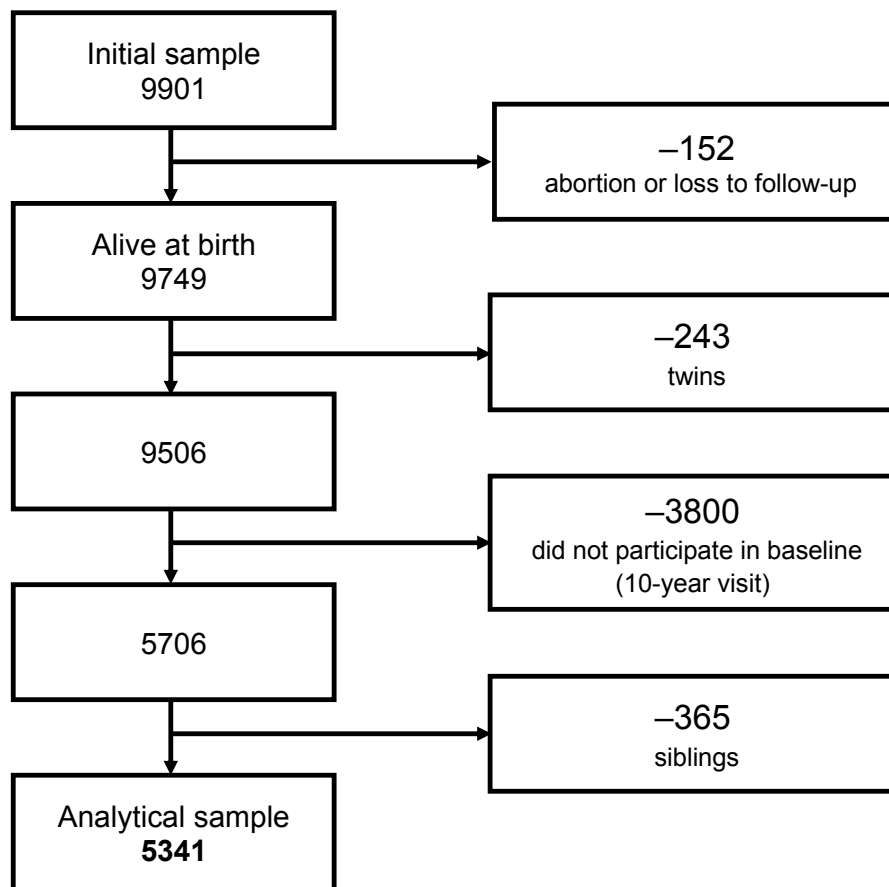
Table S14 - Sensitivity (full sample)

CAROTID INTIMA-MEDIA THICKNESS (IMT)

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .11)	(Intercept)	-1.60	0.45	-3.53	161.9	0.001	0.004	-2.50	-0.70
	IMT (z-score)	0.03	0.02	2.01	58.5	0.050	0.112	0.00	0.06
	Female sex	-0.61	0.02	-26.26	284.2	0.000	0.000	-0.66	-0.56
	Age at MRI	-0.06	0.04	-1.59	241.2	0.113	0.224	-0.13	0.01
	Age delta	0.05	0.03	1.53	179.3	0.128	0.588	-0.01	0.11
	Height	0.02	0.00	7.98	71.8	0.000	0.000	0.01	0.02
Fully adjusted model (R^2 = .12)	(Intercept)	-1.97	0.50	-3.98	106.2	0.000	0.000	-2.96	-0.99
	IMT (z-score)	0.03	0.02	2.08	57.6	0.042	0.112	0.00	0.06
	Female sex	-0.61	0.02	-26.36	269.3	0.000	0.000	-0.66	-0.56
	Age at MRI	-0.02	0.04	-0.47	195.1	0.641	0.641	-0.09	0.06
	Age delta	0.02	0.03	0.54	168.0	0.589	0.838	-0.05	0.08
	Height	0.02	0.00	7.23	82.9	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.17	0.03	-7.05	358.6	0.000	0.000	-0.22	-0.13
	BMI (z-score)	0.03	0.01	2.49	107.8	0.014	0.056	0.01	0.06
	Parental education	0.02	0.01	3.20	83.4	0.002	0.004	0.01	0.03
	Maternal age	0.01	0.00	1.80	83.5	0.075	0.150	0.00	0.01
Grey matter volume (GMV)									
Base model (R^2 = .11)	(Intercept)	-0.74	0.45	-1.64	178.7	0.102	0.102	-1.62	0.15
	IMT (z-score)	0.03	0.02	1.96	49.7	0.056	0.112	0.00	0.06
	Female sex	-0.61	0.03	-22.84	94.9	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.11	0.04	-2.59	93.2	0.011	0.088	-0.19	-0.03
	Age delta	0.06	0.04	1.47	61.8	0.147	0.588	-0.02	0.14
	Height	0.02	0.00	6.89	59.4	0.000	0.000	0.01	0.02
Fully adjusted model (R^2 = .13)	(Intercept)	-1.23	0.47	-2.61	143.4	0.010	0.026	-2.17	-0.30
	IMT (z-score)	0.03	0.02	2.09	50.1	0.042	0.112	0.00	0.07
	Female sex	-0.62	0.03	-23.04	93.8	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.06	0.04	-1.49	96.6	0.140	0.224	-0.14	0.02
	Age delta	0.02	0.04	0.56	62.8	0.580	0.838	-0.06	0.10
	Height	0.01	0.00	6.07	59.9	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.19	0.03	-7.32	196.6	0.000	0.000	-0.24	-0.14
	BMI (z-score)	0.02	0.01	1.79	180.8	0.076	0.152	0.00	0.05
	Parental education	0.02	0.01	3.24	61.8	0.002	0.004	0.01	0.03
	Maternal age	0.01	0.00	2.40	141.9	0.018	0.072	0.00	0.01
Global fractional anisotropy (FA)									
Base model (R^2 < .01)	(Intercept)	-1.03	0.47	-2.19	190.2	0.030	0.037	-1.96	-0.10
	IMT (z-score)	0.00	0.01	-0.22	126.9	0.825	0.854	-0.03	0.02
	Female sex	-0.03	0.03	-1.15	132.9	0.253	0.253	-0.08	0.02
	Age at MRI	0.04	0.04	0.88	144.1	0.380	0.434	-0.04	0.11
	Age delta	0.02	0.04	0.49	110.7	0.626	0.838	-0.06	0.09
	Height	0.00	0.00	1.63	128.0	0.105	0.168	0.00	0.01
Fully adjusted model (R^2 < .01)	(Intercept)	-1.27	0.51	-2.51	134.9	0.013	0.026	-2.28	-0.27
	IMT (z-score)	0.00	0.01	-0.18	124.5	0.854	0.854	-0.03	0.02
	Female sex	-0.03	0.03	-1.16	134.2	0.250	0.253	-0.08	0.02
	Age at MRI	0.05	0.04	1.20	142.9	0.231	0.308	-0.03	0.13
	Age delta	0.01	0.04	0.21	114.0	0.838	0.838	-0.07	0.08
	Height	0.00	0.00	1.47	125.7	0.144	0.192	0.00	0.01
	Non-European ethnicity	-0.03	0.03	-1.12	116.0	0.264	0.352	-0.09	0.03
	BMI (z-score)	0.00	0.02	-0.07	64.9	0.946	0.946	-0.03	0.03
	Parental education	0.01	0.01	1.24	300.9	0.215	0.287	0.00	0.02
	Maternal age	0.00	0.00	1.13	75.2	0.263	0.351	0.00	0.01
Global mean diffusivity (MD)									
Base model (R^2 = .01)	(Intercept)	-1.03	0.47	-2.19	190.2	0.030	0.037	-1.96	-0.10
	IMT (z-score)	0.00	0.01	-0.22	126.9	0.825	0.854	-0.03	0.02
	Female sex	-0.03	0.03	-1.15	132.9	0.253	0.253	-0.08	0.02
	Age at MRI	0.04	0.04	0.88	144.1	0.380	0.434	-0.04	0.11
	Age delta	0.02	0.04	0.49	110.7	0.626	0.838	-0.06	0.09
	Height	0.00	0.00	1.63	128.0	0.105	0.168	0.00	0.01
Fully adjusted model (R^2 = .01)	(Intercept)	-1.27	0.51	-2.51	134.9	0.013	0.026	-2.28	-0.27
	IMT (z-score)	0.00	0.01	-0.18	124.5	0.854	0.854	-0.03	0.02
	Female sex	-0.03	0.03	-1.16	134.2	0.250	0.253	-0.08	0.02
	Age at MRI	0.05	0.04	1.20	142.9	0.231	0.308	-0.03	0.13
	Age delta	0.01	0.04	0.21	114.0	0.838	0.838	-0.07	0.08
	Height	0.00	0.00	1.47	125.7	0.144	0.192	0.00	0.01
	Non-European ethnicity	-0.03	0.03	-1.12	116.0	0.264	0.352	-0.09	0.03
	BMI (z-score)	0.00	0.02	-0.07	64.9	0.946	0.946	-0.03	0.03
	Parental education	0.01	0.01	1.24	300.9	0.215	0.287	0.00	0.02
	Maternal age	0.00	0.00	1.13	75.2	0.263	0.351	0.00	0.01

CAROTID DISTENSIBILITY

Model	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R^2 = .11)	(Intercept)	-1.66	0.46	-3.64	159.5	0.000	0.000	-2.56	-0.76
	Distensibility (z-score)	-0.01	0.01	-0.53	87.8	0.596	0.671	-0.04	0.02
	Female sex	-0.61	0.02	-26.08	248.6	0.000	0.000	-0.66	-0.57
	Age at MRI	-0.06	0.04	-1.56	240.9	0.119	0.234	-0.13	0.01
	Age delta	0.05	0.03	1.53	183.9	0.128	0.588	-0.01	0.11
	Height	0.02	0.00	7.87	64.5	0.000	0.000	0.01	0.02
Fully adjusted model (R^2 = .12)	(Intercept)	-2.04	0.50	-4.09	104.2	0.000	0.000	-3.02	-1.05
	Distensibility (z-score)	-0.01	0.01	-0.43	85.4	0.671	0.671	-0.03	0.02
	Female sex	-0.61	0.02	-26.14	232.2	0.000	0.000	-0.66	-0.57
	Age at MRI	-0.02	0.04	-0.44	194.4	0.657	0.657	-0.09	0.06
	Age delta	0.02	0.03	0.54	170.6	0.591	0.849	-0.05	0.08
	Height	0.02	0.00	7.17	73.0	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.17	0.02	-6.99	366.1	0.000	0.000	-0.22	-0.12
	BMI (z-score)	0.03	0.01	2.48	104.1	0.015	0.060	0.01	0.06
	Parental education	0.02	0.01	3.25	84.8	0.002	0.004	0.01	0.03
	Maternal age	0.01	0.00	1.80	84.8	0.076	0.152	0.00	0.01
Grey matter volume (GMV)									
Base model (R^2 = .11)	(Intercept)	-0.80	0.45	-1.78	182.6	0.077	0.077	-1.68	0.09
	Distensibility (z-score)	-0.01	0.01	-0.59	130.4	0.554	0.671	-0.03	0.02
	Female sex	-0.62	0.03	-22.53	86.6	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.10	0.04	-2.57	93.6	0.012	0.096	-0.19	-0.02
	Age delta	0.06	0.04	1.47	62.5	0.147	0.588	-0.02	0.14
	Height	0.02	0.00	6.84	54.9	0.000	0.000	0.01	0.02
Fully adjusted model (R^2 = .13)	(Intercept)	-1.30	0.47	-2.76	147.0	0.007	0.019	-2.22	-0.37
	Distensibility (z-score)	-0.01	0.01	-0.62	138.1	0.535	0.671	-0.03	0.02
	Female sex	-0.62	0.03	-22.73	85.6	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.06	0.04	-1.47	96.9	0.146	0.234	-0.14	0.02
	Age delta	0.02	0.04	0.56	63.5	0.580	0.849	-0.06	0.10
	Height	0.02	0.00	6.05	55.2	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.19	0.03	-7.19	184.0	0.000	0.000	-0.24	-0.14
	BMI (z-score)	0.02	0.01	1.80	202.5	0.073	0.146	0.00	0.05
	Parental education	0.02	0.01	3.29	62.1	0.002	0.004	0.01	0.03
	Maternal age	0.01	0.00	2.39	142.2	0.018	0.072	0.00	0.01
Global fractional anisotropy (FA)									
Base model (R^2 < .01)	(Intercept)	-1.05	0.47	-2.23	191.4	0.027	0.036	-1.98	-0.12
	Distensibility (z-score)	0.01	0.02	0.94	72.9	0.351	0.671	-0.02	0.05
	Female sex	-0.03	0.03	-1.21	137.8	0.230	0.230	-0.09	0.02
	Age at MRI	0.04	0.04	0.88	147.7	0.380	0.434	-0.04	0.11
	Age delta	0.02	0.04	0.47	114.4	0.636	0.849	-0.06	0.09
	Height	0.00	0.00	1.66	103.4	0.101	0.162	0.00	0.01
Fully adjusted model (R^2 < .01)	(Intercept)	-1.29	0.51	-2.53	135.6	0.012	0.024	-2.29	-0.28
	Distensibility (z-score)	0.01	0.02	0.90	79.0	0.373	0.671	-0.02	0.04
	Female sex	-0.03	0.03	-1.21	139.7	0.228	0.230	-0.09	0.02
	Age at MRI	0.05	0.04	1.20	146.3	0.231	0.308	-0.03	0.13
	Age delta	0.01	0.04	0.19	117.9	0.849	0.849	-0.07	0.08
	Height	0.00	0.00	1.48	103.9	0.141	0.188	0.00	0.01
	Non-European ethnicity	-0.03	0.03	-1.14	115.8	0.259	0.345	-0.09	0.03
	BMI (z-score)	0.00	0.03	0.03	69.9	0.977	0.977	-0.03	0.03
	Parental education	0.01	0.01	1.24	300.9	0.217	0.289	0.00	0.02
	Maternal age	0.00	0.00	1.12	75.5	0.265	0.353	0.00	0.01
Global mean diffusivity (MD)									
Base model (R^2 = .01)	(Intercept)	1.30	0.55	2.36	75.3	0.021	0.034	0.20	2.40
	Distensibility (z-score)	-0.01	0.01	-1.04	203.6	0.301	0.671	-0.04	0.01
	Female sex	-0.11	0.03	-4.21	159.6	0.000	0.000	-0.16	-0.06
	Age at MRI	-0.08	0.05	-1.75	66.3	0.084	0.234	-0.18	0.01
	Age delta	-0.01	0.04	-0.23	72.6	0.823	0.849	-0.09	0.07
	Height	0.00	0.00	-0.20	84.4	0.843	0.963	-0.01	0.00
Fully adjusted model (R^2 = .01)	(Intercept)	1.23	0.57	2.17	76.5	0.033	0.038	0.10	2.36
	Distensibility (z-score)	-0.02	0.01	-1.17	208.3	0.242	0.671	-0.04	0.01
	Female sex	-0.11	0.03	-4.22	157.1	0.000	0.000	-0.16	-0.06
	Age at MRI	-0.08	0.05	-1.67	62.4	0.100	0.234	-0.18	0.02
	Age delta	-0.01	0.04	-0.26	67.7	0.799	0.849	-0.09	0.07
	Height	0.00	0.00	-0.04	79.1	0.968	0.968	-0.01	0.00
	Non-European ethnicity	0.00	0.03	-0.05	116.0	0.959	0.959	-0.06	0.06
	BMI (z-score)	-0.01	0.02	-0.96	75.1	0.342	0.456	-0.04	0.02
	Parental education	0.00	0.01	0.27	97.2	0.789	0.789	-0.01	0.01
	Maternal age	0.00	0.00	-0.09	73.0	0.926	0.926	-0.01	0.01

* SE = standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Table S14 - Sensitivity (full sample) (cont'd)

SYSTOLIC BLOOD PRESSURE (SBP)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R² = .11)	(Intercept)	-1.82	0.46	-3.96	156.6	0.000	0.000	-2.73	-0.91
	SBP (z-score)	-0.03	0.01	-2.62	281.8	0.009	0.018	-0.05	-0.01
	Female sex	-0.61	0.02	-26.37	286.0	0.000	0.000	-0.66	-0.57
	Age at MRI	-0.05	0.04	-1.49	233.1	0.139	0.256	-0.12	0.02
	Age delta	0.05	0.03	1.42	181.7	0.158	0.724	-0.02	0.11
	Height	0.02	0.00	8.44	71.4	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .12)	(Intercept)	-2.15	0.50	-4.31	104.4	0.000	0.000	-3.14	-1.16
	SBP (z-score)	-0.03	0.01	-2.64	289.2	0.009	0.018	-0.06	-0.01
	Female sex	-0.61	0.02	-26.31	256.5	0.000	0.000	-0.66	-0.57
	Age at MRI	-0.02	0.04	-0.40	192.8	0.689	0.689	-0.09	0.06
	Age delta	0.02	0.03	0.45	168.3	0.652	0.830	-0.05	0.08
	Height	0.02	0.00	7.61	79.3	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.17	0.03	-6.97	355.7	0.000	0.000	-0.22	-0.12
	BMI (z-score)	0.04	0.01	3.07	105.4	0.003	0.012	0.02	0.07
	Parental education	0.02	0.01	3.16	83.8	0.002	0.004	0.01	0.03
	Maternal age	0.01	0.00	1.78	86.6	0.078	0.156	0.00	0.01
Grey matter volume (GMV)									
Base model (R² = .11)	(Intercept)	-1.00	0.45	-2.24	193.2	0.026	0.038	-1.89	-0.12
	SBP (z-score)	-0.04	0.01	-3.29	176.5	0.001	0.008	-0.07	-0.02
	Female sex	-0.61	0.03	-22.49	87.1	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.10	0.04	-2.47	91.3	0.015	0.120	-0.18	-0.02
	Age delta	0.05	0.04	1.35	62.6	0.181	0.724	-0.03	0.13
	Height	0.02	0.00	7.49	59.6	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .13)	(Intercept)	-1.43	0.47	-3.06	155.7	0.003	0.008	-2.36	-0.51
	SBP (z-score)	-0.04	0.01	-2.93	151.3	0.004	0.016	-0.06	-0.01
	Female sex	-0.62	0.03	-22.58	84.6	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.06	0.04	-1.42	94.3	0.160	0.256	-0.14	0.02
	Age delta	0.02	0.04	0.47	63.2	0.639	0.830	-0.06	0.10
	Height	0.02	0.00	6.54	59.3	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.19	0.03	-7.20	186.8	0.000	0.000	-0.24	-0.14
	BMI (z-score)	0.03	0.01	2.53	149.9	0.012	0.024	0.01	0.06
	Parental education	0.02	0.01	3.19	61.9	0.002	0.004	0.01	0.03
	Maternal age	0.01	0.00	2.37	144.5	0.019	0.076	0.00	0.01
Global fractional anisotropy (FA)									
Base model (R² < .01)	(Intercept)	-1.03	0.48	-2.15	183.6	0.033	0.038	-1.97	-0.09
	SBP (z-score)	0.00	0.02	-0.02	86.6	0.984	0.984	-0.03	0.03
	Female sex	-0.03	0.03	-1.15	145.2	0.253	0.253	-0.08	0.02
	Age at MRI	0.04	0.04	0.88	148.0	0.380	0.434	-0.04	0.11
	Age delta	0.02	0.04	0.49	113.5	0.624	0.830	-0.06	0.09
	Height	0.00	0.00	1.55	108.6	0.124	0.198	0.00	0.01
Fully adjusted model (R² < .01)	(Intercept)	-1.26	0.51	-2.46	133.0	0.015	0.030	-2.27	-0.25
	SBP (z-score)	0.00	0.02	0.24	102.5	0.809	0.925	-0.03	0.03
	Female sex	-0.03	0.03	-1.17	147.7	0.243	0.253	-0.08	0.02
	Age at MRI	0.05	0.04	1.20	147.2	0.232	0.309	-0.03	0.13
	Age delta	0.01	0.04	0.22	117.1	0.830	0.830	-0.07	0.08
	Height	0.00	0.00	1.37	107.8	0.172	0.229	0.00	0.01
	Non-European ethnicity	-0.03	0.03	-1.13	115.3	0.262	0.349	-0.09	0.03
	BMI (z-score)	0.00	0.02	-0.13	72.6	0.896	0.896	-0.03	0.03
	Parental education	0.01	0.01	1.25	314.7	0.211	0.281	0.00	0.02
	Maternal age	0.00	0.00	1.13	75.2	0.262	0.349	0.00	0.01
Global mean diffusivity (MD)									
Base model (R² = .01)	(Intercept)	1.20	0.54	2.22	83.4	0.029	0.038	0.13	2.28
	SBP (z-score)	-0.02	0.02	-0.97	75.7	0.336	0.538	-0.05	0.02
	Female sex	-0.11	0.03	-4.20	152.6	0.000	0.000	-0.16	-0.06
	Age at MRI	-0.08	0.05	-1.73	67.2	0.088	0.256	-0.17	0.01
	Age delta	-0.01	0.04	-0.28	72.6	0.781	0.830	-0.09	0.07
	Height	0.00	0.00	0.08	91.9	0.936	0.936	0.00	0.01
Fully adjusted model (R² = .01)	(Intercept)	1.17	0.56	2.09	81.3	0.040	0.040	0.06	2.28
	SBP (z-score)	-0.01	0.02	-0.76	84.9	0.450	0.600	-0.04	0.02
	Female sex	-0.11	0.03	-4.23	152.8	0.000	0.000	-0.16	-0.06
	Age at MRI	-0.08	0.05	-1.66	62.9	0.102	0.256	-0.17	0.02
	Age delta	-0.01	0.04	-0.29	67.7	0.771	0.830	-0.10	0.07
	Height	0.00	0.00	0.15	80.5	0.884	0.936	0.00	0.01
	Non-European ethnicity	0.00	0.03	-0.06	113.8	0.954	0.954	-0.06	0.06
	BMI (z-score)	-0.01	0.02	-0.65	92.5	0.517	0.689	-0.04	0.02
	Parental education	0.00	0.01	0.23	95.1	0.816	0.816	-0.01	0.01
	Maternal age	0.00	0.00	-0.10	72.7	0.917	0.917	-0.01	0.01

DIASTOLIC BLOOD PRESSURE (DBP)

	Predictor	Beta	SE	Statistic	Df	$P_{unadjusted}$	P_{FDR}	LCI	UCI
Total brain volume (TBV)									
Base model (R² = .11)	(Intercept)	-1.74	0.45	-3.88	174.3	0.000	0.000	-2.63	-0.85
	DBP (z-score)	-0.05	0.01	-3.60	90.4	0.001	0.004	-0.08	-0.02
	Female sex	-0.61	0.02	-26.10	266.9	0.000	0.000	-0.65	-0.56
	Age at MRI	-0.05	0.04	-1.50	249.9	0.136	0.243	-0.12	0.02
	Age delta	0.05	0.03	1.41	171.1	0.161	0.712	-0.02	0.11
	Height	0.02	0.00	8.14	65.7	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .13)	(Intercept)	-2.07	0.49	-4.19	107.1	0.000	0.000	-3.05	-1.09
	DBP (z-score)	-0.04	0.01	-3.24	91.1	0.002	0.005	-0.07	-0.02
	Female sex	-0.61	0.02	-26.08	240.5	0.000	0.000	-0.66	-0.56
	Age at MRI	-0.02	0.04	-0.42	198.8	0.677	0.677	-0.09	0.06
	Age delta	0.02	0.03	0.47	162.4	0.640	0.837	-0.05	0.08
	Height	0.02	0.00	7.35	74.3	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.17	0.02	-6.94	381.5	0.000	0.000	-0.22	-0.12
	BMI (z-score)	0.04	0.01	2.86	108.7	0.005	0.020	0.01	0.06
	Parental education	0.02	0.01	3.10	80.4	0.003	0.006	0.01	0.03
	Maternal age	0.01	0.00	1.72	83.2	0.090	0.180	0.00	0.01
Grey matter volume (GMV)									
Base model (R² = .11)	(Intercept)	-0.88	0.44	-2.01	214.0	0.045	0.045	-1.75	-0.02
	DBP (z-score)	-0.05	0.02	-3.62	68.0	0.001	0.004	-0.08	-0.02
	Female sex	-0.61	0.03	-22.25	84.1	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.10	0.04	-2.51	93.7	0.014	0.112	-0.18	-0.02
	Age delta	0.06	0.04	1.36	61.2	0.178	0.712	-0.03	0.14
	Height	0.02	0.00	7.11	55.8	0.000	0.000	0.01	0.02
Fully adjusted model (R² = .13)	(Intercept)	-1.33	0.46	-2.87	158.5	0.005	0.013	-2.25	-0.41
	DBP (z-score)	-0.05	0.02	-3.09	64.3	0.003	0.006	-0.08	-0.02
	Female sex	-0.61	0.03	-22.38	82.0	0.000	0.000	-0.67	-0.56
	Age at MRI	-0.06	0.04	-1.44	96.4	0.152	0.243	-0.14	0.02
	Age delta	0.02	0.04	0.50	62.2	0.622	0.837	-0.06	0.10
	Height	0.02	0.00	6.23	56.1	0.000	0.000	0.01	0.02
	Non-European ethnicity	-0.19	0.03	-7.18	196.6	0.000	0.000	-0.24	-0.14
	BMI (z-score)	0.03	0.01	2.18	169.4	0.031	0.062	0.00	0.05
	Parental education	0.02	0.01	3.15	60.8	0.003	0.006	0.01	0.03
	Maternal age	0.01	0.00	2.30	137.8	0.023	0.092	0.00	0.01
Global fractional anisotropy (FA)									
Base model (R² < .01)	(Intercept)	-1.03	0.47	-2.18	190.3	0.030	0.040	-1.96	-0.10
	DBP (z-score)	0.00	0.02	-0.13	85.8	0.898	0.940	-0.03	0.03
	Female sex	-0.03	0.03	-1.14	143.8	0.256	0.256	-0.08	0.02
	Age at MRI	0.04	0.04	0.88	147.4	0.378	0.432	-0.04	0.11
	Age delta	0.02	0.04	0.49	112.6	0.628	0.837	-0.06	0.09
	Height	0.00	0.00	1.60	117.8	0.112	0.179	0.00	0.01
Fully adjusted model (R² < .01)	(Intercept)	-1.27	0.51	-2.50	135.6	0.014	0.028	-2.27	-0.26
	DBP (z-score)	0.00	0.02	0.08	80.6	0.940	0.940	-0.03	0.03
	Female sex	-0.03	0.03	-1.16	145.5	0.247	0.256	-0.08	0.02
	Age at MRI	0.05	0.04	1.21	145.8	0.230	0.307	-0.03	0.13
	Age delta	0.01	0.04	0.21	116.0	0.837	0.837	-0.07	0.08
	Height	0.00	0.00	1.44	116.8	0.153	0.204	0.00	0.01
	Non-European ethnicity	-0.03	0.03	-1.12	113.1	0.264	0.352	-0.09	0.03
	BMI (z-score)	0.00	0.02	-0.08	63.9	0.938	0.938	-0.03	0.03
	Parental education	0.01	0.01	1.24	286.9	0.217	0.289	0.00	0.02
	Maternal age	0.00	0.00	1.13	75.9	0.261	0.348	0.00	0.01
Global mean diffusivity (MD)									
Base model (R² = .01)	(Intercept)	1.25	0.55	2.29	77.8	0.025	0.040	0.17	2.34
	DBP (z-score)	-0.02	0.02	-1.01	75.7	0.317	0.500	-0.05	0.02
	Female sex	-0.11	0.03	-4.17	148.4	0.000	0.000	-0.16	-0.06
	Age at MRI	-0.08	0.05	-1.75	67.9	0.085	0.243	-0.17	0.01
	Age delta	-0.01	0.04	-0.27	74.4	0.789	0.837	-0.09	0.07
	Height	0.00	0.00	-0.07	83.3	0.948	0.949	-0.01	0.00
Fully adjusted model (R² = .01)	(Intercept)	1.20	0.56	2.13	77.5	0.037	0.042	0.08	2.32
	DBP (z-score)	-0.01	0.02	-0.89	69.7	0.375	0.500	-0.04	0.02
	Female sex	-0.11	0.03	-4.19	146.9	0.000	0.000	-0.16	-0.06
	Age at MRI	-0.08	0.05	-1.67	63.2	0.100	0.243	-0.17	0.02
	Age delta	-0.01	0.04	-0.29	68.8	0.775	0.837	-0.09	0.07
	Height	0.00	0.00	0.06	77.4	0.949	0.949	0.00	0.01
	Non-European ethnicity	0.00	0.03	-0.04	113.0	0.967	0.967	-0.06	0.06
	BMI (z-score)	-0.01	0.02	-0.76	72.7	0.453	0.604	-0.04	0.02
	Parental education	0.00	0.01	0.23	93.3	0.823	0.823	-0.01	0.01
	Maternal age	0.00	0.00	-0.12	73.0	0.906	0.906	-0.01	0.01

SE= standard error; Df = degrees of freedom; FDR = false discovery rate; LCI = lower limit of the 95% confidence interval; UCI = upper limit of the 95% confidence interval;

Figure S1 | Flowchart

Flowchart detailing exclusion criteria. Prior to analysis, all twins were excluded, and only one non-twin sibling was retained in the sample (based on data completeness, or, if that was equal between siblings, randomly).

Figure S2 | DAG
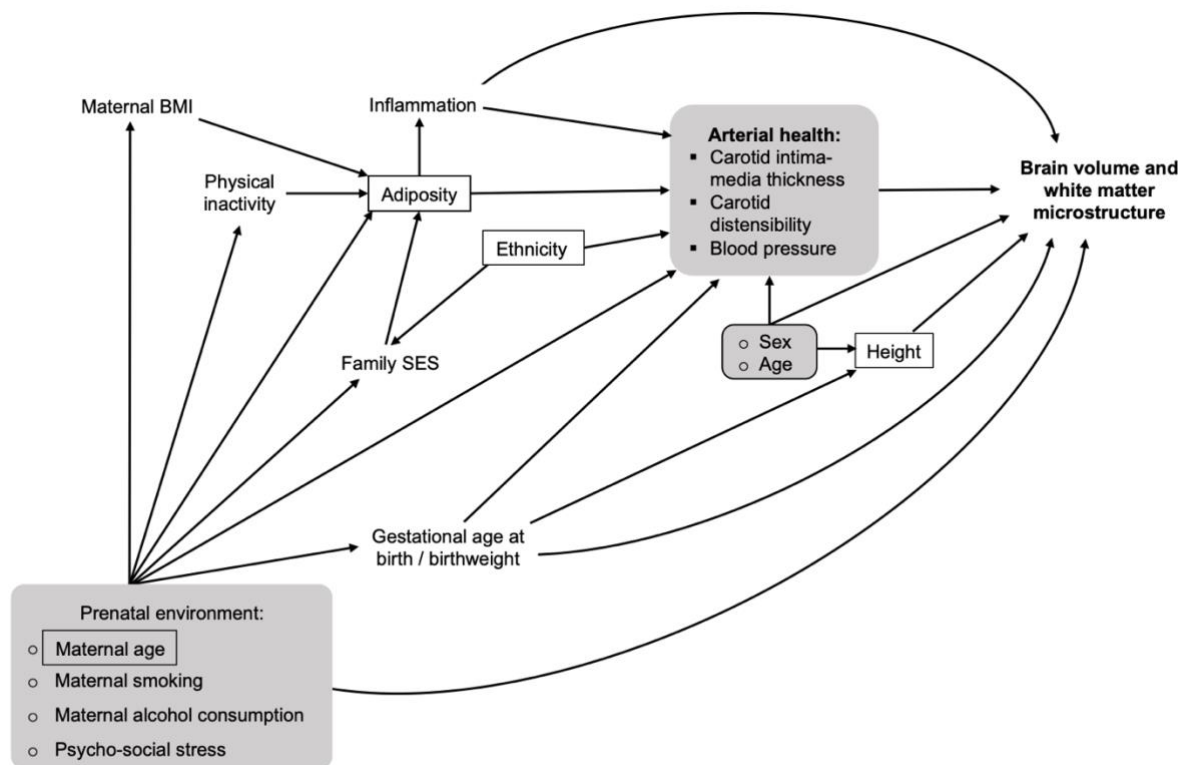
Directed acyclic graph (DAG) representing the assumed causal structure underlying the observed data. Variables which were included in the models as covariates are indicated by a black square box.

Figure S3 | Non-linear associations
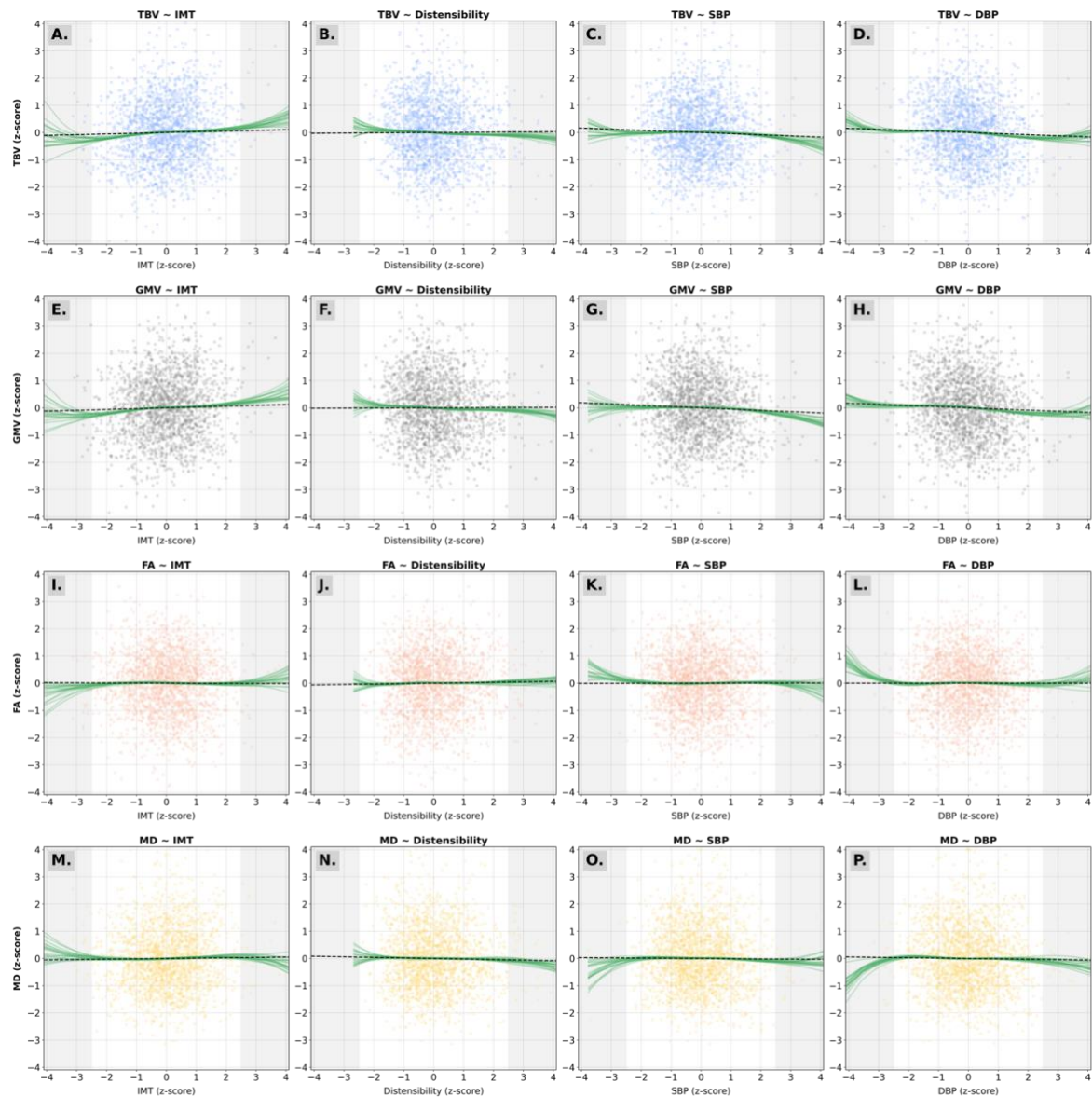
For each exposure - outcome pair (**A-D.** total brain volume (TBV); **E-H.** grey matter volume (GMV); **I-L.** global fractional anisotropy (FA); and **M-P.** mean diffusivity (MD) the linear and non-linear fits are presented. Linear associations (black dashed line) were pooled across datasets, while non-linear associations (green continuous lines) were fit in each imputed dataset individually using natural splines with 4 knots. The gray shadows also mark the –2.5 and +2.5 SD cutoffs of exposure distribution.

Figure S4 | Sex differences
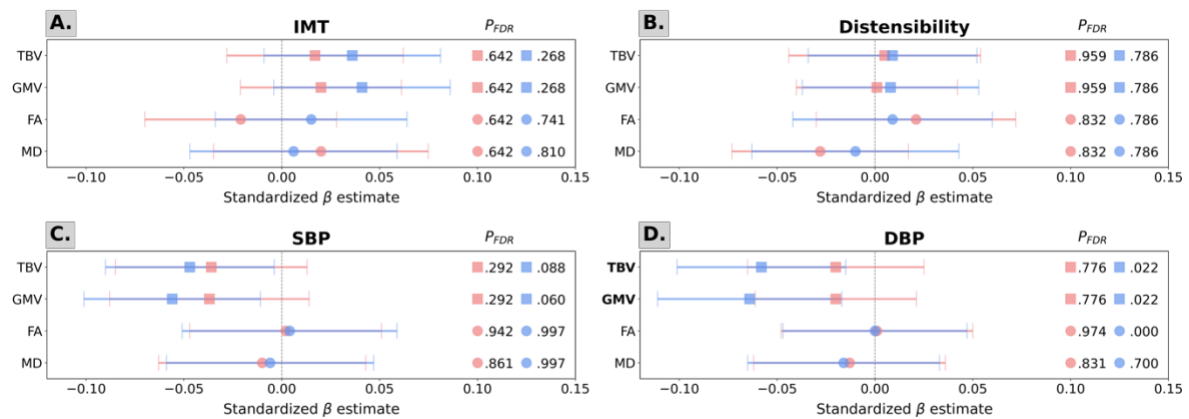
For each exposure of interest (**A.** intima-media thickness (IMT); **B.** carotid distensibility; **C.** Systolic blood pressure (SBP); and **D.** Diastolic blood pressure (DBP)), the standardized association estimates and their 95% confidence intervals are displayed on the x-axis for each outcome (total brain volume (TBV); grey matter volume (GMV); global fractional anisotropy (FA); and mean diffusivity (MD)), in light blue for boys and pink for girls. The corresponding FDR-corrected P-values are also reported.

Figure S5 | Global vs. regional volumes
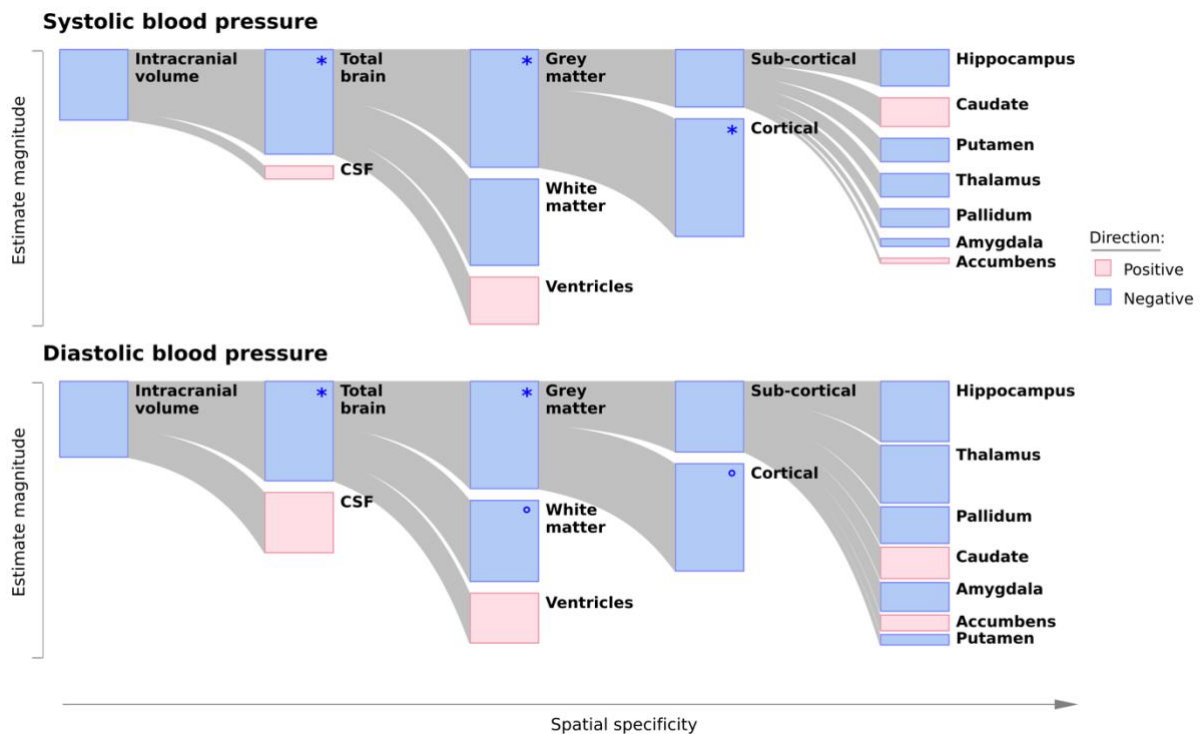
Sankey-like plot representing associations between SBP (above) / DBP (below) and each morphological (i.e., volumetric) brain marker: total intracranial volume (TIV), total brain volume (TBV), cerebro-spinal fluid (CSF), gray and white matter volumes, ventricular volume, subcortical and cortical grey matter volumes and each of the seven subcortical brain regions. The height of each square represents the magnitude of the corresponding estimate and the color indicates its direction (pink for positive associations and blue for negative ones). Estimates that were statistically significant (after adjustment for all covariates and FDR correction) are indicated by an *. Estimates marked with ° were nominally significant, but did not survive FDR correction. Structural relationships between these brain outcomes are represented by the grey lines, with increasing regional specificity from left to right.

Figure S6 | White matter tracts (FA)
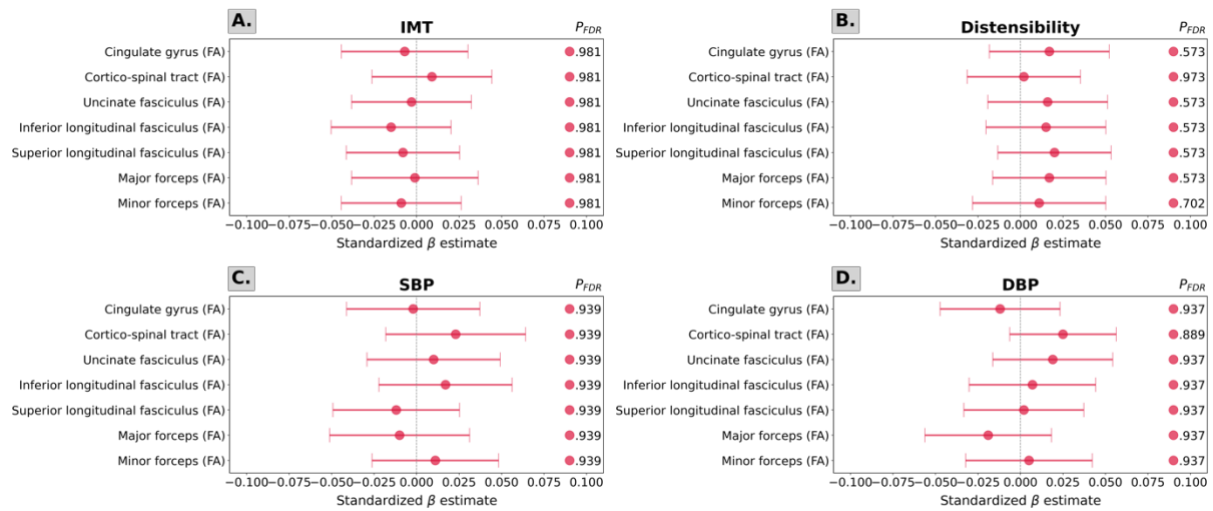
For each exposure of interest (**A.** intima-media thickness (IMT); **B.** carotid distensibility; **C.** Systolic blood pressure (SBP); and **D.** Diastolic blood pressure (DBP)), the standardized association estimates and their 95% confidence intervals are displayed on the x-axis for each white matter tract (Cingulate gyrus, Cortico-spinal tract, Uncinate fasciculus, Inferior & Superior longitudinal fasciculus, Major & Minor forceps) average FA value. The corresponding FDR-corrected P-values are also reported.

Figure S7 | White matter tracts (MD)
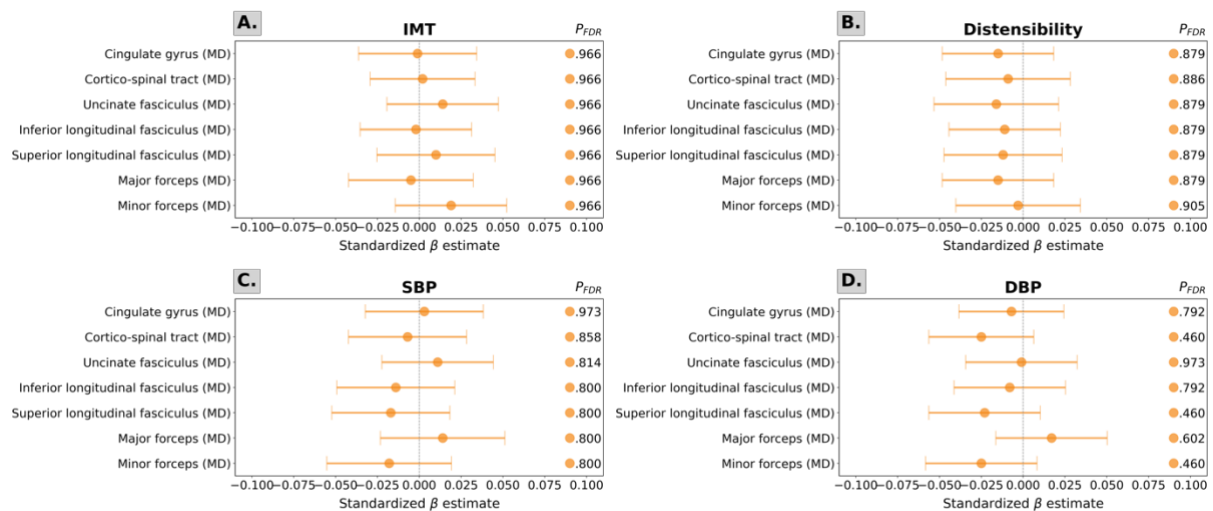
For each exposure of interest (**A.** intima-media thickness (IMT); **B.** carotid distensibility; **C.** Systolic blood pressure (SBP); and **D.** Diastolic blood pressure (DBP)), the standardized association estimates and their 95% confidence intervals are displayed on the x-axis for each white matter tract (Cingulate gyrus, Cortico-spinal tract, Uncinate fasciculus, Inferior & Superior longitudinal fasciculus, Major & Minor forceps) average MD value. The corresponding FDR-corrected P-values are also reported.