

Supplementary Materials

| Model | β_1 | β_1 p-value | β_1 FDR p-value | β_2 | β_2 p-value | β_2 FDR p-value | R |
|--|-----------|----------------------|-----------------------------|-----------|----------------------|-----------------------------|------|
| ChP Volume ~ $\beta_1 \times$ Age + $\beta_2 \times$ Sex | 0.041 | <0.001 | <0.001 | 0.60 | <0.001 | <0.001 | 0.78 |
| ChP Perfusion ~ $\beta_1 \times$ Age + $\beta_2 \times$ Sex | -0.22 | <0.001 | <0.001 | -3.6 | 0.038 | 0.077 | 0.52 |
| ChP Total Blood Flow ~ $\beta_1 \times$ Age + $\beta_2 \times$ Sex | 0.0075 | <0.001 | <0.001 | 0.086 | 0.19 | 0.23 | 0.47 |
| Net CSF Flow ~ $\beta_1 \times$ Age + $\beta_2 \times$ Sex | -0.0044 | <0.001 | 0.0011 | 0.048 | 0.26 | 0.28 | 0.41 |
| Absolute CSF Flow ~ $\beta_1 \times$ Age + $\beta_2 \times$ Sex | 0.061 | <0.001 | 0.0019 | 1.2 | 0.049 | 0.088 | 0.45 |
| Regurgitant Fraction ~ $\beta_1 \times$ Age + $\beta_2 \times$ Sex | 0.0028 | <0.001 | <0.001 | 0.036 | 0.18 | 0.22 | 0.45 |
| Net CSF Flow ~ $\beta_1 \times$ ChP Perfusion + $\beta_2 \times$ Sex | 0.0058 | 0.033 | 0.074 | 0.056 | 0.23 | 0.26 | 0.26 |
| Absolute CSF Flow ~ $\beta_1 \times$ ChP Perfusion + $\beta_2 \times$ Sex | -0.062 | 0.12 | 0.10 | 1.2 | 0.080 | 0.12 | 0.30 |
| Net CSF Flow ~ $\beta_1 \times$ ChP Total Blood Flow + $\beta_2 \times$ Sex | -0.065 | 0.38 | 0.40 | 0.038 | 0.42 | 0.42 | 0.13 |
| Absolute CSF Flow ~ $\beta_1 \times$ ChP Total Blood Flow + $\beta_2 \times$ Sex | 2.6 | 0.016 | 0.039 | 1.2 | 0.073 | 0.12 | 0.37 |

Table S1. Results from regression analyses. Shaded regions represent significant p-values ($p<0.05$). (FDR: false discovery rate, ChP: choroid plexus, CSF: cerebrospinal fluid).

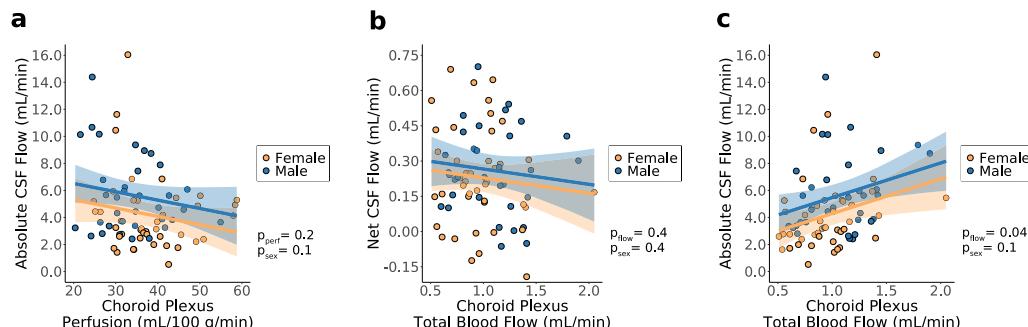


Figure S1. Supplementary graphs from cerebrospinal fluid (CSF) flow versus choroid plexus hemodynamics regression analyses with absolute CSF flow (a,c) and net CSF flow (b) as the response variable (Wald test significance criteria: $p<0.05$). Panel (a) included choroid plexus perfusion and sex as the explanatory variables. Panels (b) and (c) included choroid plexus total blood flow and sex as explanatory variables. Shaded regions represent the 95% confidence interval for the fitted data based on the standard error of the predictions. All p-values shown were corrected for multiple comparisons correction. (CSF: cerebrospinal fluid; p_{perf} : p-value for choroid plexus perfusion coefficient in generalized linear model; p_{flow} : p-value for choroid plexus total blood flow coefficient in generalized linear model; p_{sex} : p-value for sex coefficient in generalized linear model).