

SUPPLEMENTARY TABLE S5. MODEL ESTIMATION ABOUT MTR IN INTRA- AND INTERHEMISPHERIC CONNECTIONS CORRELATE WITH GFA CHANGES IN CONTROLS OR IN PATIENTS

$\Delta_{ip12c}$  MTR in intra- and inter-hemispheric connections correlate with GFA changes in controls.

Call:  
lm(formula =  $\Delta_{ip12c}$  MTR ~  $\Delta_{ip12c}$  GFA)

Residuals:  
Min 1Q Median 3Q Max  
-0.038068 -0.016490 -0.005498 0.010801 0.106349

Coefficients:  
Estimate Std. Error  $t$  value Pr(>| $t$ )  
(Intercept) 0.038263 0.003612 10.593 <2e-16 \*\*\*  
 $\Delta_{ip12c}$  GFA 0.014691 0.075227 0.195 0.846

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.0267 on 98 degrees of freedom

Multiple R-squared: 0.000389,  
Adjusted R-squared: -0.009811

F-statistic: 0.03814 on 1 and 98 DF,  $p$ -value: 0.8456

$\Delta_{ip12}$  MTR in intra- and inter-hemispheric connections correlate with GFA change in patients.

Call:  
lm(formula =  $\Delta_{ip12}$  MTR ~  $\Delta_{ip12}$  GFA)

Residuals:  
Min 1Q Median 3Q Max  
-0.10904 -0.04879 -0.01862 0.02018 0.54747

Coefficients:  
Estimate Std. Error  $t$  value Pr(>| $t$ )  
(Intercept) 0.05044 0.01140 4.424 2.52e-05\*\*\*  
 $\Delta_{ip12}$  GFA 0.14096 0.06131 2.299 0.0236\*

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.08646 on 98 degrees of freedom

Multiple R-squared: 0.05118,  
Adjusted R-squared: 0.0415

F-statistic: 5.286 on 1 and 98 DF,  $p$ -value: 0.02362

$\Delta_{ip23}$  MTR in intra- and interhemispheric connections correlate with GFA change in patients.

Call:  
lm(formula =  $\Delta_{ip23}$ MTR ~  $\Delta_{ip23}$ GFA)

Residuals:  
Min 1Q Median 3Q Max  
-0.12575 -0.03897 -0.02400 0.00476 0.41748

Coefficients:  
Estimate Std. Error  $t$ -value Pr(>| $t$ )  
(Intercept) 0.03647 0.01171 3.114 0.00242\*\*  
 $\Delta_{ip23}$  GFA 0.28902 0.11600 2.492 0.01440\*

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.08534 on 98 degrees of freedom

Multiple  $R^2$ : 0.05957, Adjusted  $R^2$ : 0.04997

F-statistic: 6.208 on 1 and 98 DF,  $p$ -value: 0.0144

$\Delta_{ip13}$  MTR in intra- and interhemispheric connections correlate with GFA change in patients.

Call:  
lm(formula =  $\Delta_{ip13}$  MTR ~  $\Delta_{ip13}$  GFA)

Residuals:  
Min 1Q Median 3Q Max  
-0.17184 -0.05857 -0.03580 0.02924 0.60269

Coefficients:  
Estimate Std. Error  $t$ -value Pr(>| $t$ )  
(Intercept) 0.06739 0.01515 4.448 2.29e-05\*\*\*  
 $\Delta_{ip13}$  GFA 0.22695 0.08961 2.533 0.0129\*

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1159 on 98 degrees of freedom

Multiple  $R^2$ : 0.06143, Adjusted  $R^2$ : 0.05185

F-statistic: 6.414 on 1 and 98 DF,  $p$ -value: 0.01291