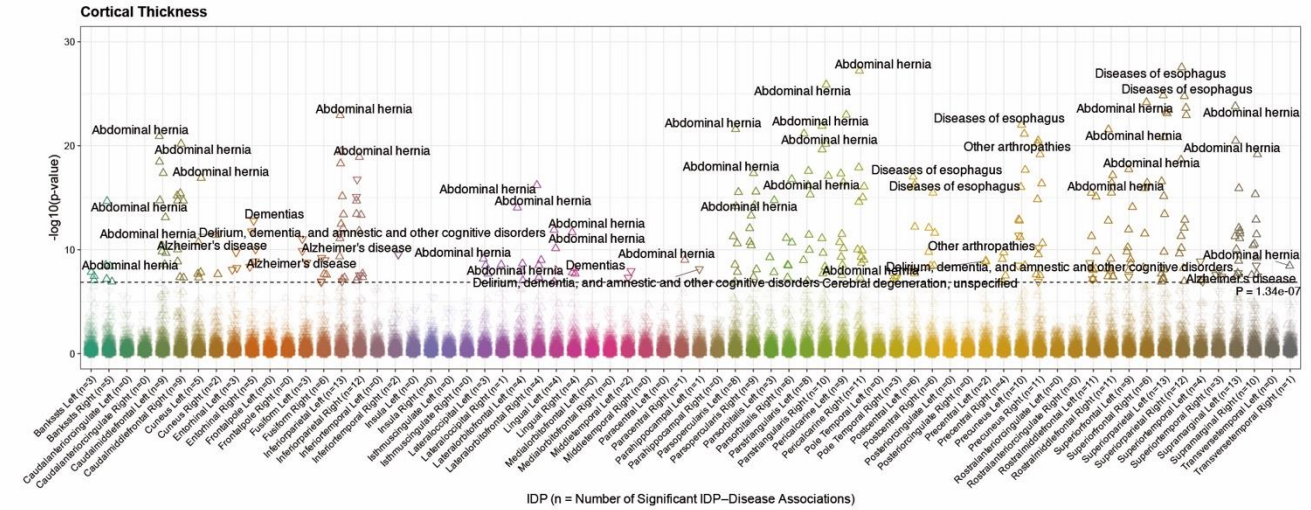
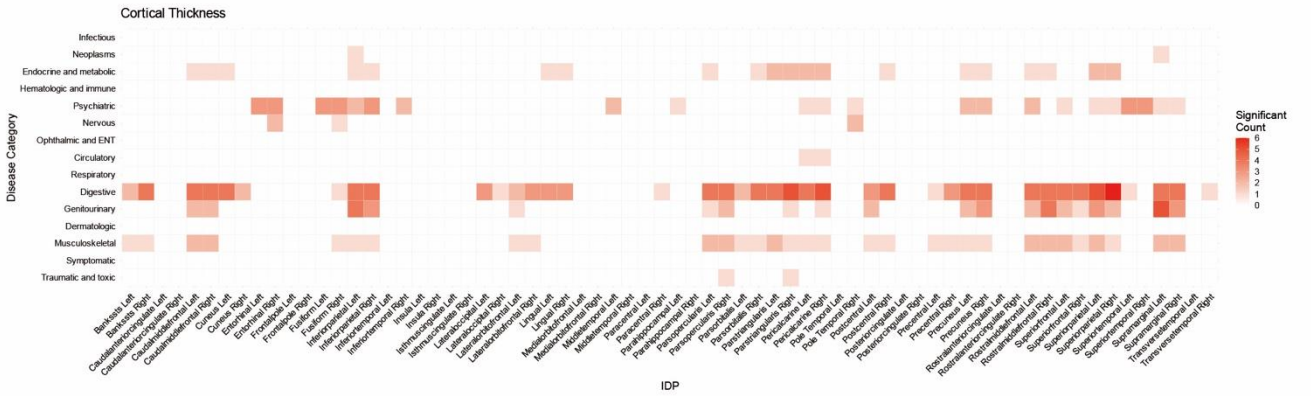
Supplementary Fig.1. Associations between cortical thickness and diseases

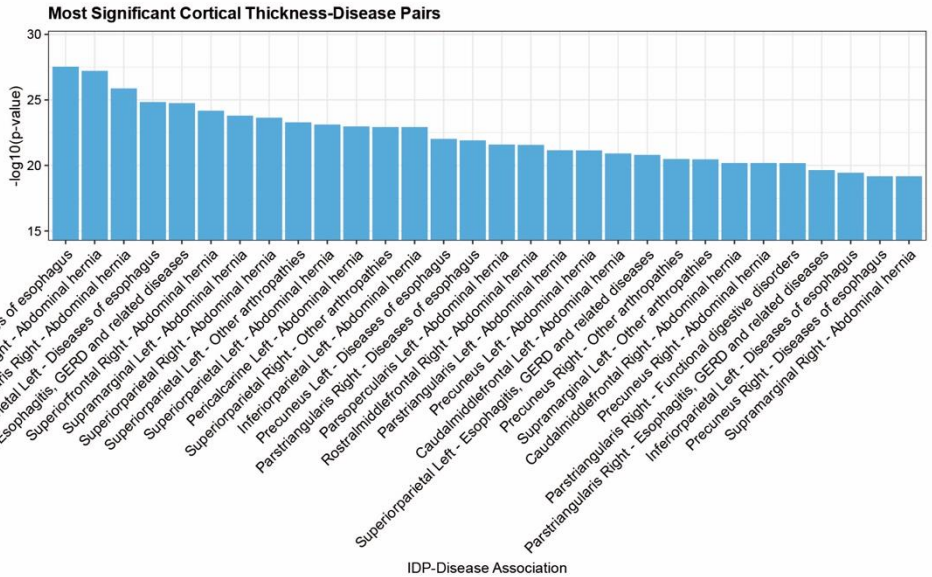
A



B



C

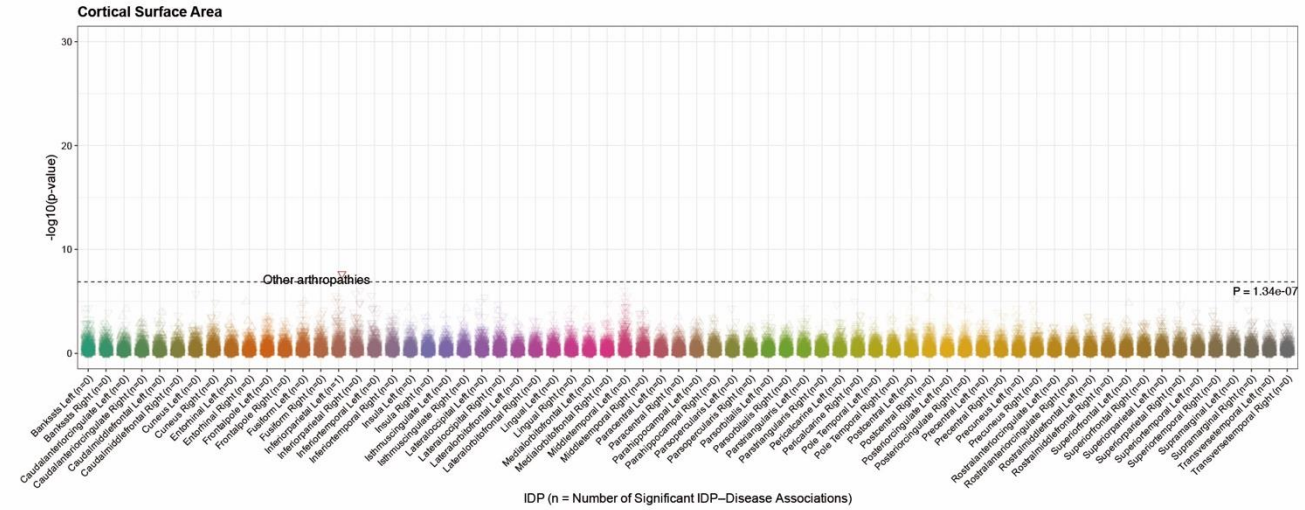


Supplementary Fig.1. Associations between cortical thickness and diseases

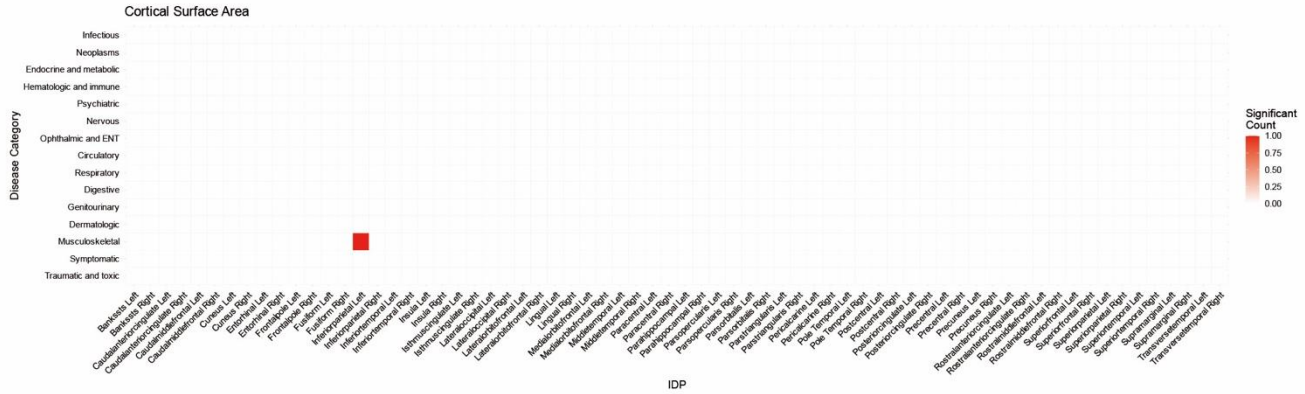
(A) Manhattan-style plot showing the number of significant cortical thickness–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).
(B) Heatmap displaying the distribution of significant associations between cortical thickness IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.
(C) Bar plot presenting the most significant (up to 30) cortical thickness–disease pairs.

Supplementary Fig.2. Associations between cortical surface area and diseases

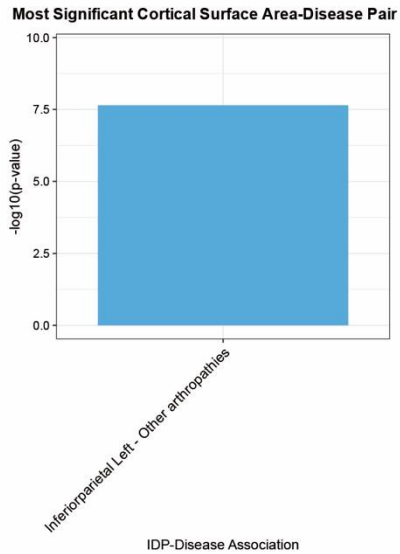
A



B



C

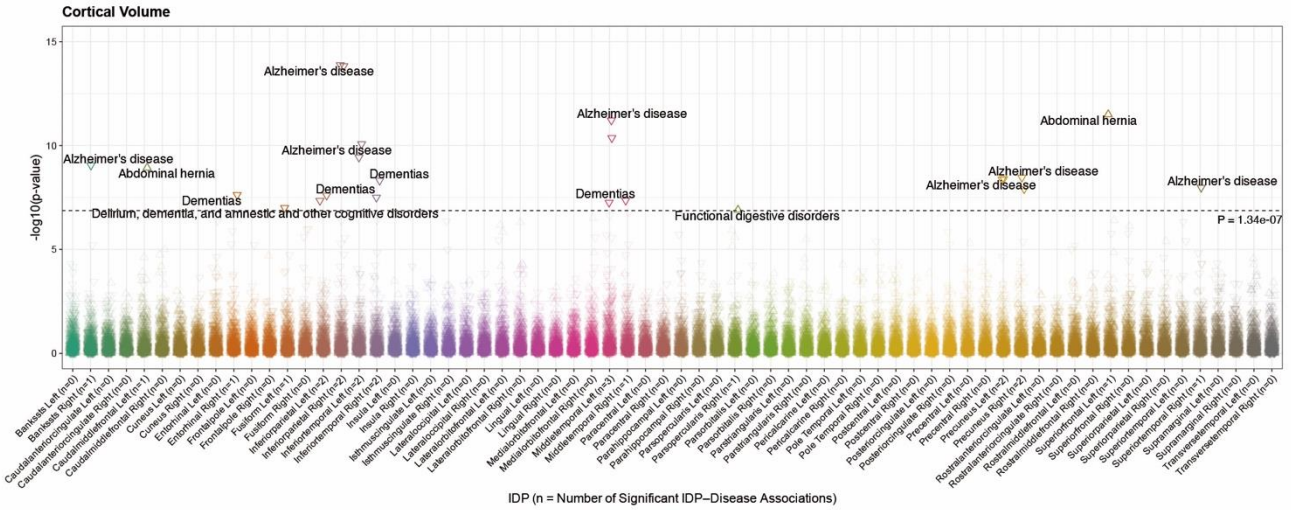


Supplementary Fig.2. Associations between cortical surface area and diseases

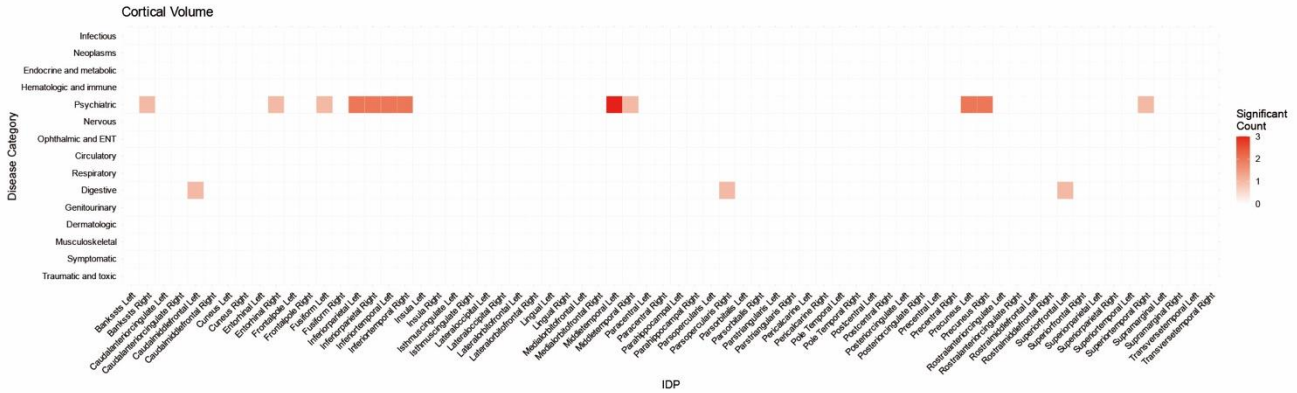
(A) Manhattan-style plot showing the number of significant cortical surface area–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).
(B) Heatmap displaying the distribution of significant associations between cortical surface area IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.
(C) Bar plot presenting the most significant (up to 30) cortical surface area–disease pair.

Supplementary Fig.3. Associations between cortical volume and diseases

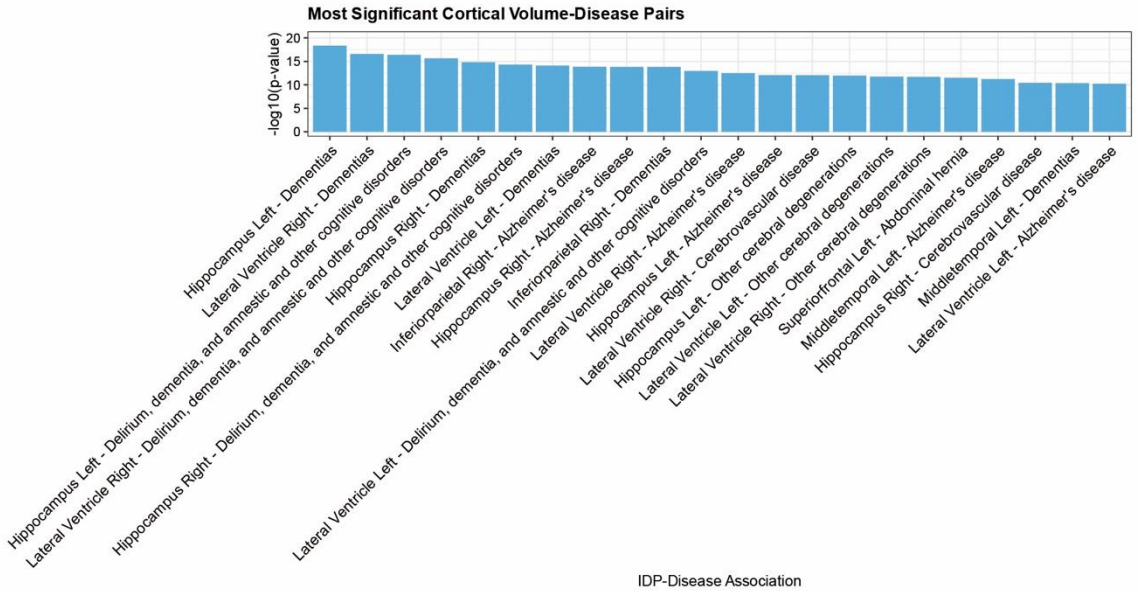
A



B



C

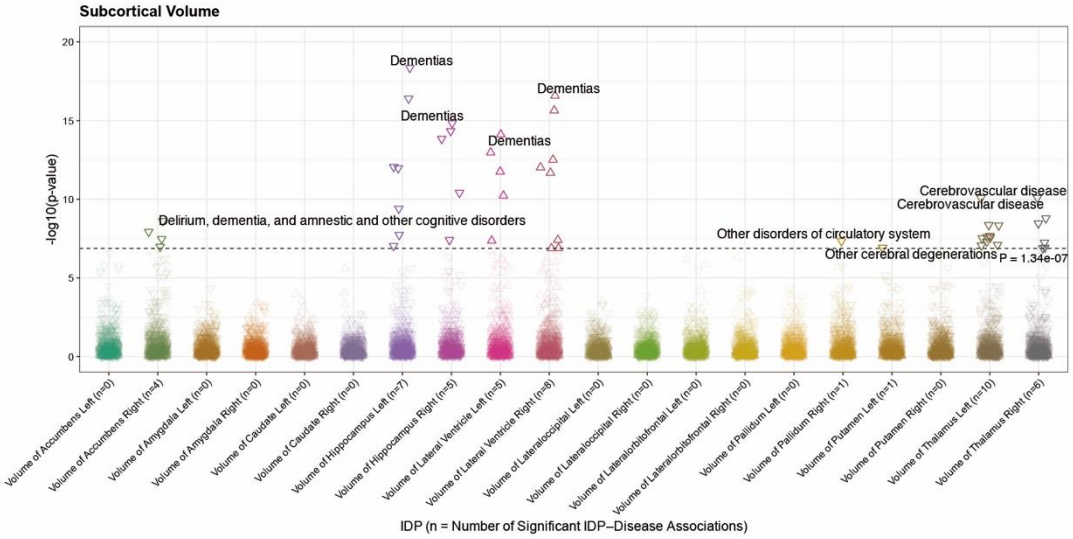


Supplementary Fig.3. Associations between cortical volume and diseases

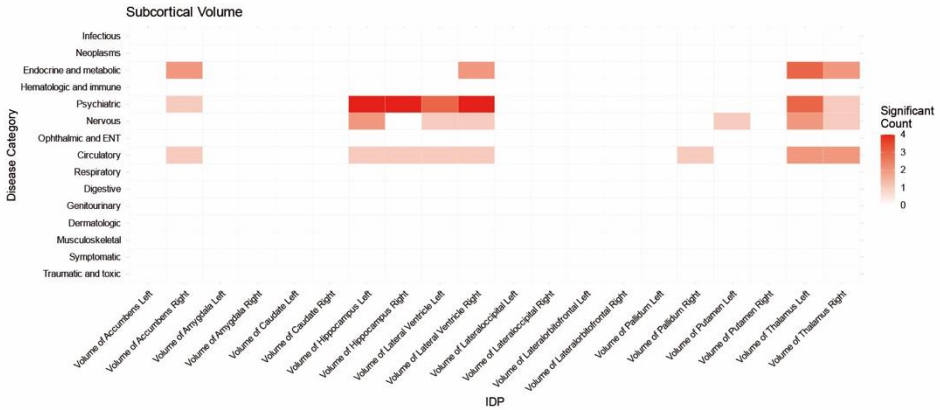
(A) Manhattan-style plot showing the number of significant cortical volume–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).
(B) Heatmap displaying the distribution of significant associations between cortical volume IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.
(C) Bar plot presenting the most significant (up to 30) cortical volume–disease pairs.

Supplementary Fig.4. Associations between subcortical volume and diseases

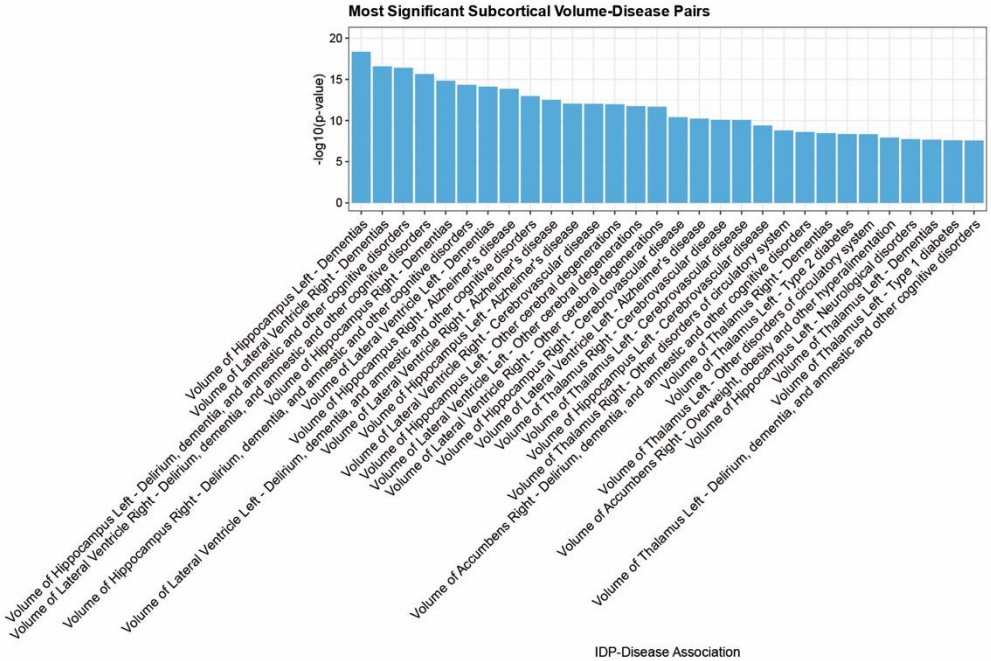
A



B



C

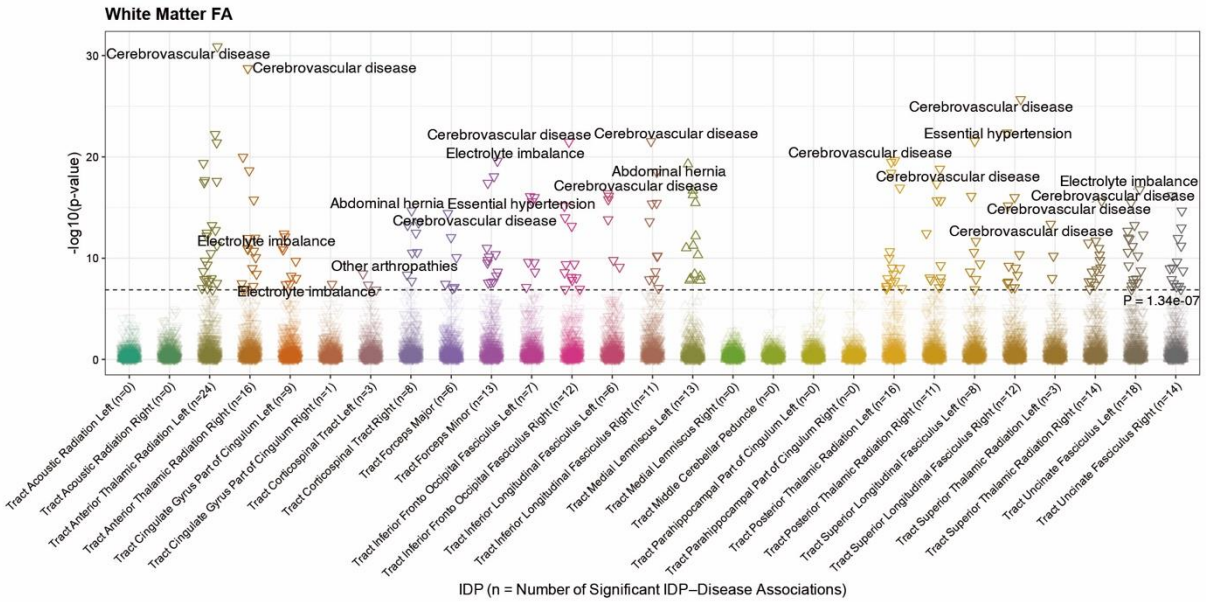


Supplementary Fig.4. Associations between subcortical volume and diseases

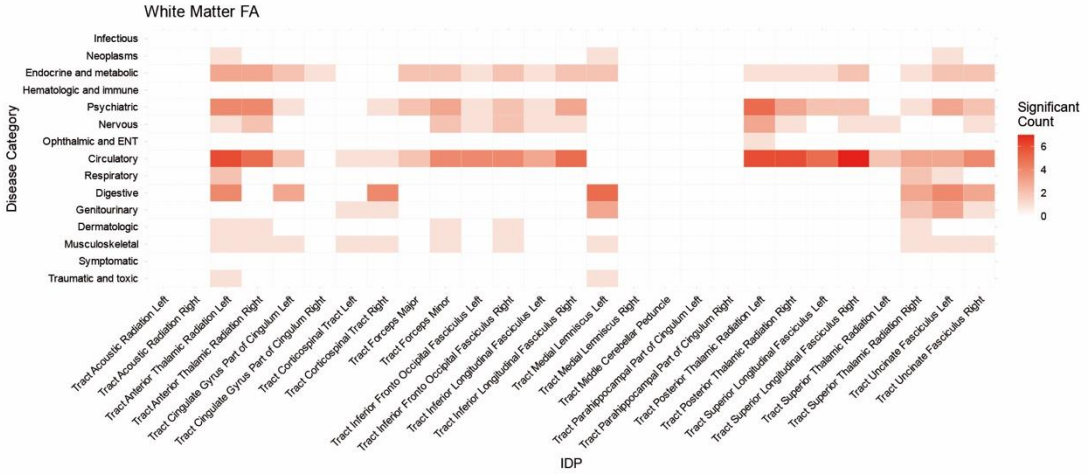
(A) Manhattan-style plot showing the number of significant subcortical volume–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).
(B) Heatmap displaying the distribution of significant associations between subcortical volume IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.
(C) Bar plot presenting the most significant (up to 30) subcortical volume–disease pairs.

Supplementary Fig.5. Associations between white matter FA and diseases

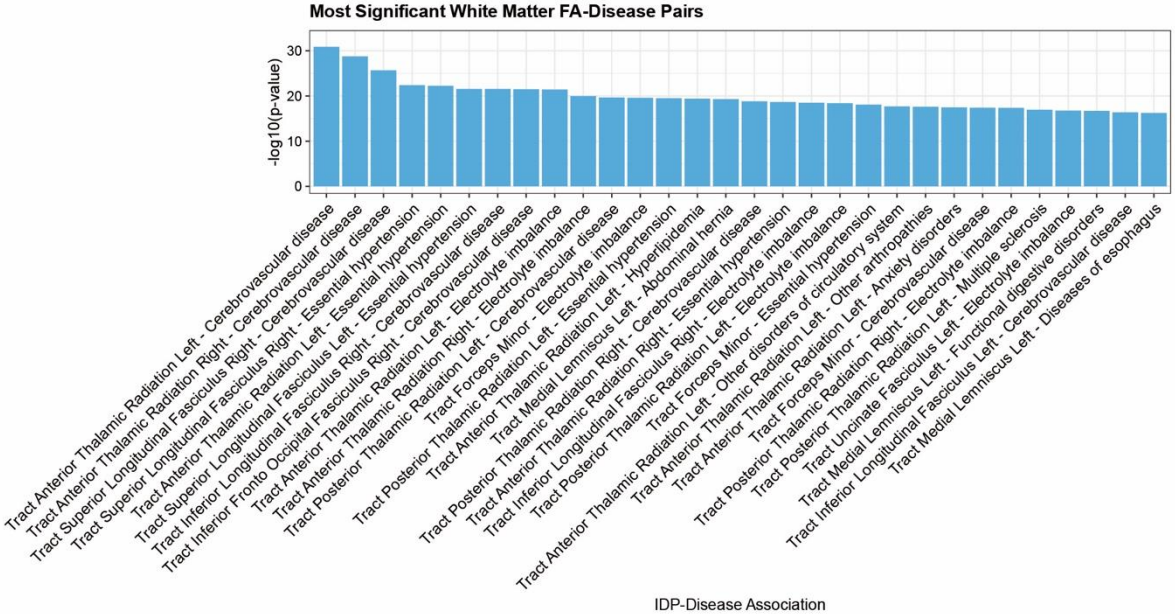
A



B



C

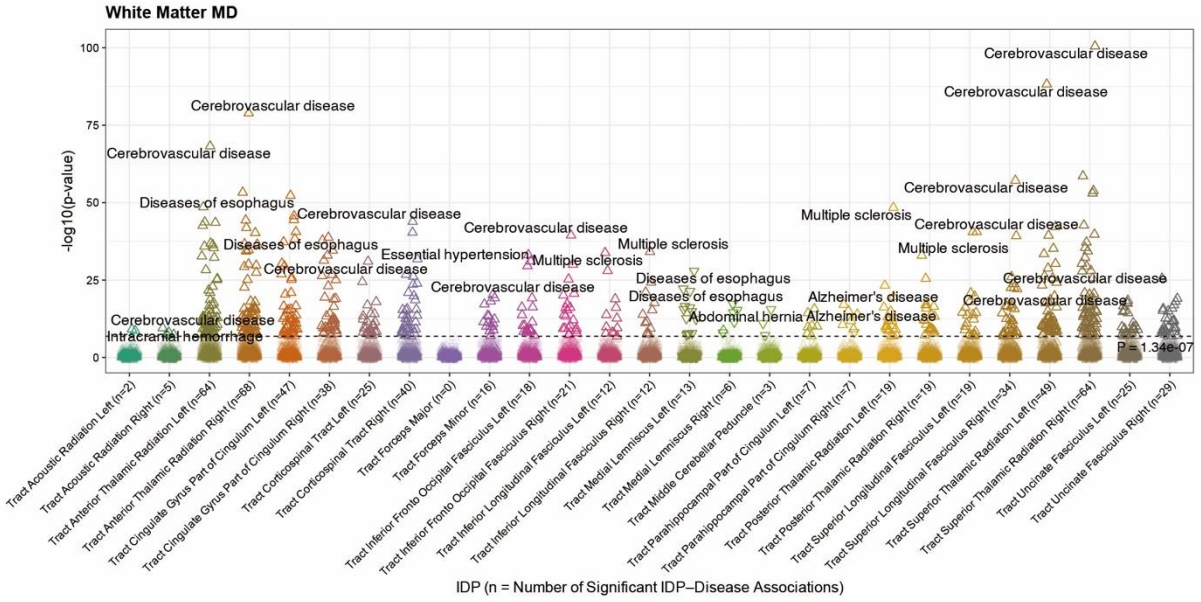


Supplementary Fig.5. Associations between white matter FA and diseases

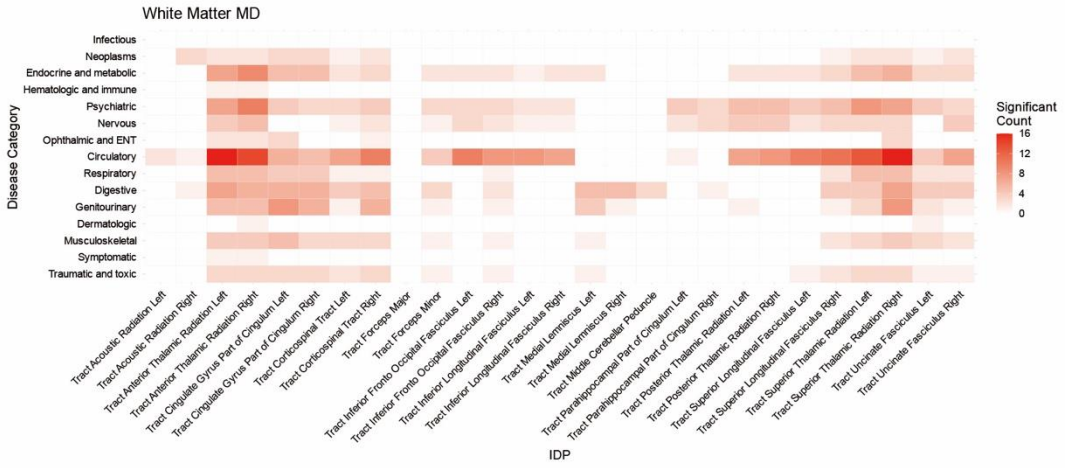
(A) Manhattan-style plot showing the number of significant white matter fractional anisotropy (FA)–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).
(B) Heatmap displaying the distribution of significant associations between white matter FA IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.
(C) Bar plot presenting the most significant (up to 30) white matter FA –disease pairs.

Supplementary Fig.6. Associations between white matter MD and diseases

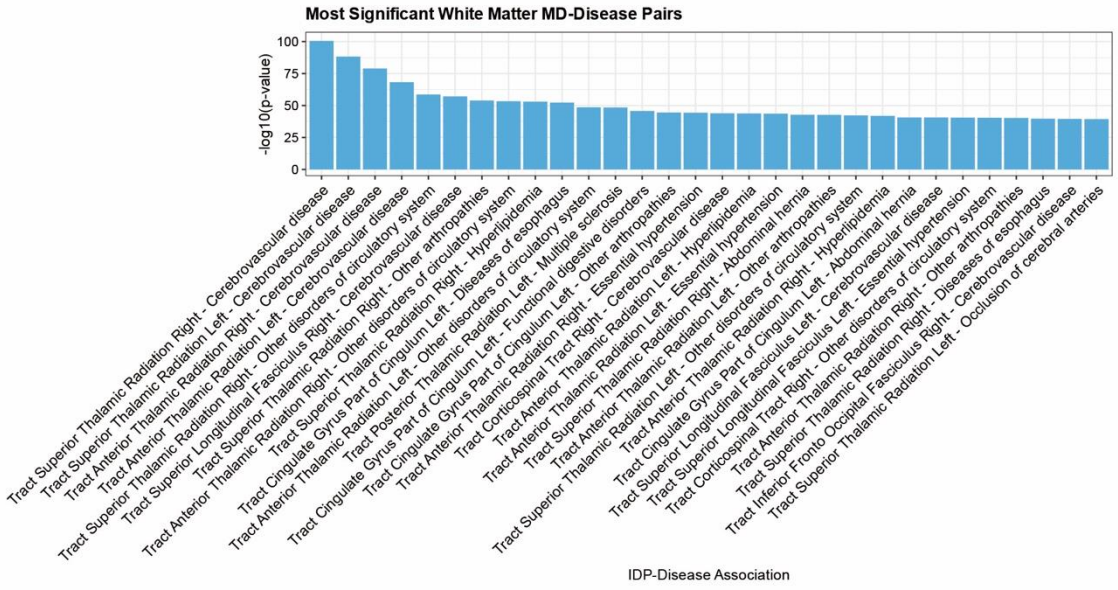
A



B



C

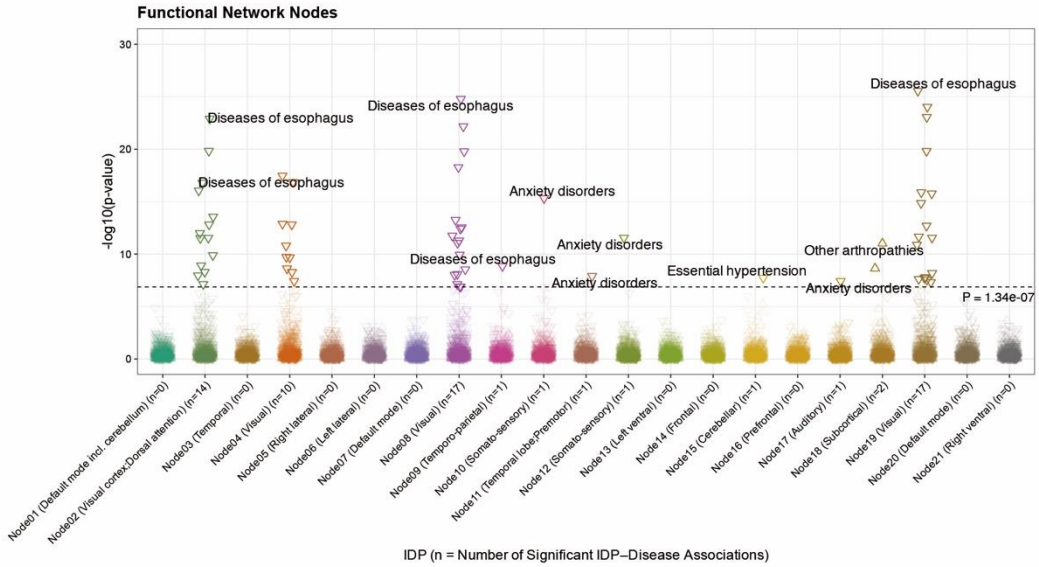


Supplementary Fig.6. Associations between white matter MD and diseases

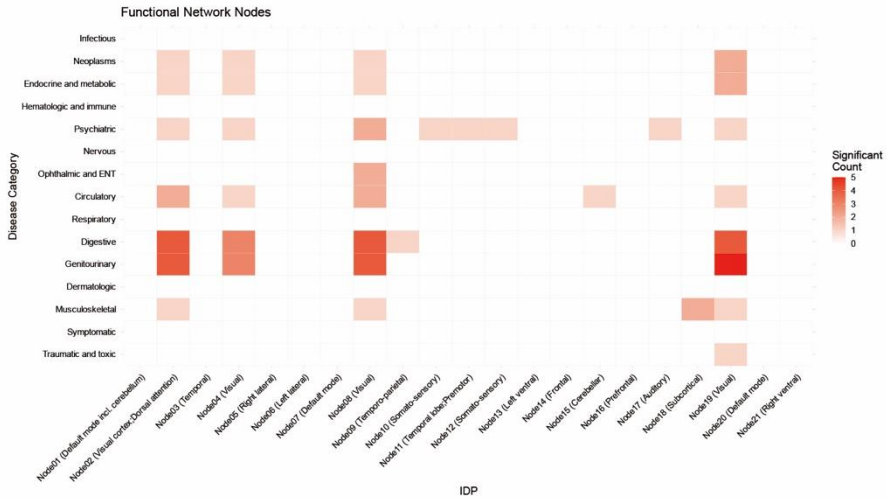
(A) Manhattan-style plot showing the number of significant white matter mean diffusivity (MD)–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).
(B) Heatmap displaying the distribution of significant associations between white matter MD IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.
(C) Bar plot presenting the most significant (up to 30) white matter MD–disease pairs.

Supplementary Fig.7. Associations between functional network nodes and diseases

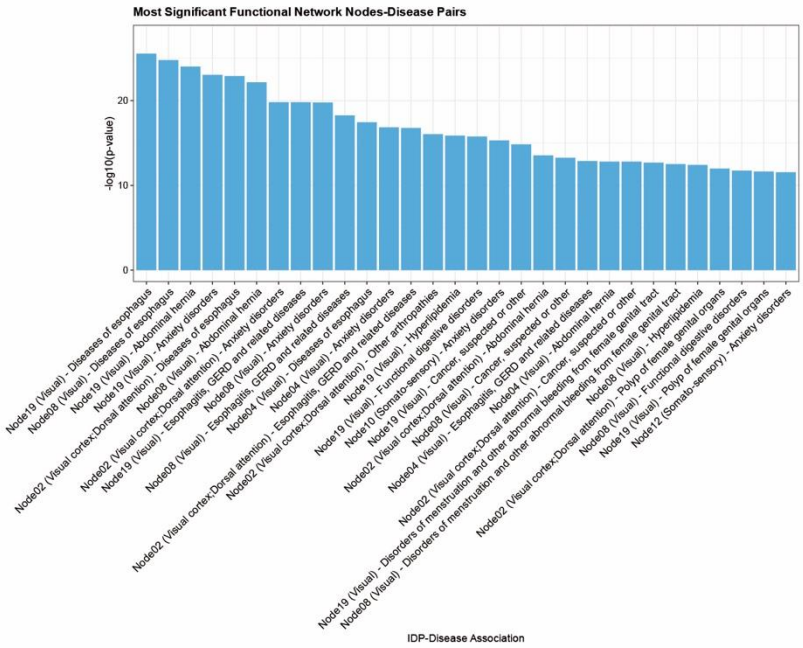
A



B



C

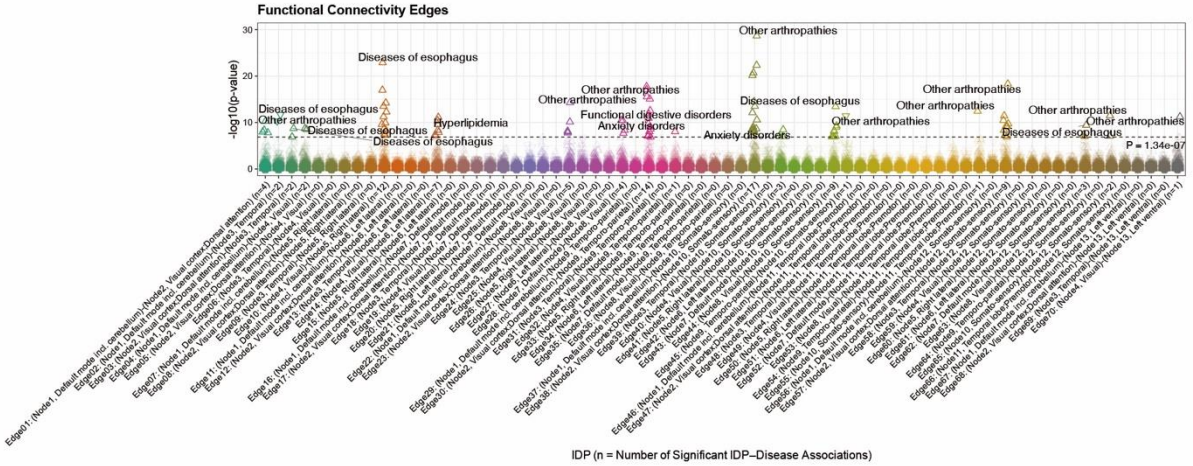


Supplementary Fig.7. Associations between functional network nodes and diseases

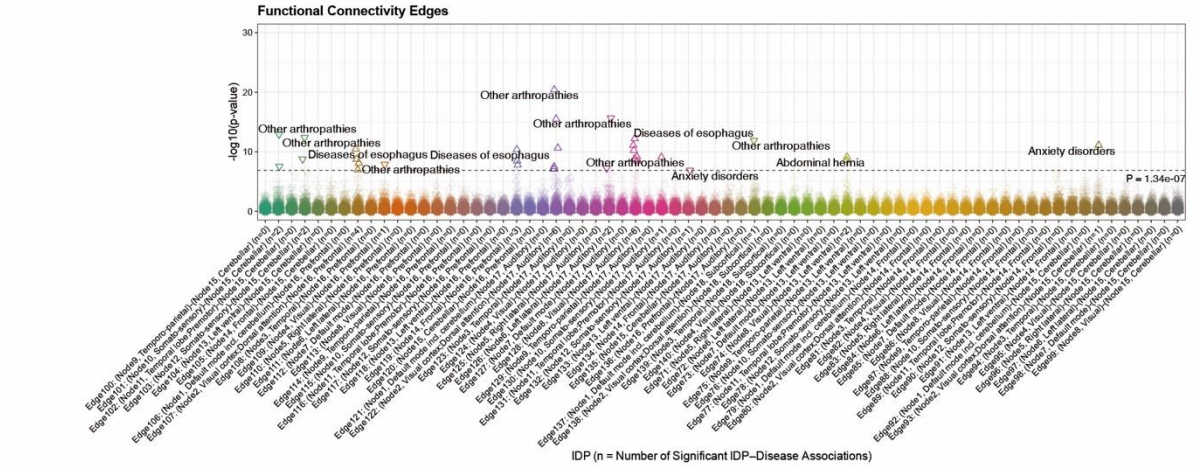
(A) Manhattan-style plot showing the number of significant functional network nodes–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).
(B) Heatmap displaying the distribution of significant associations between functional network nodes IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.
(C) Bar plot presenting the most significant (up to 30) functional network nodes–disease pairs.

Supplementary Fig.8. Associations between functional network edges and diseases

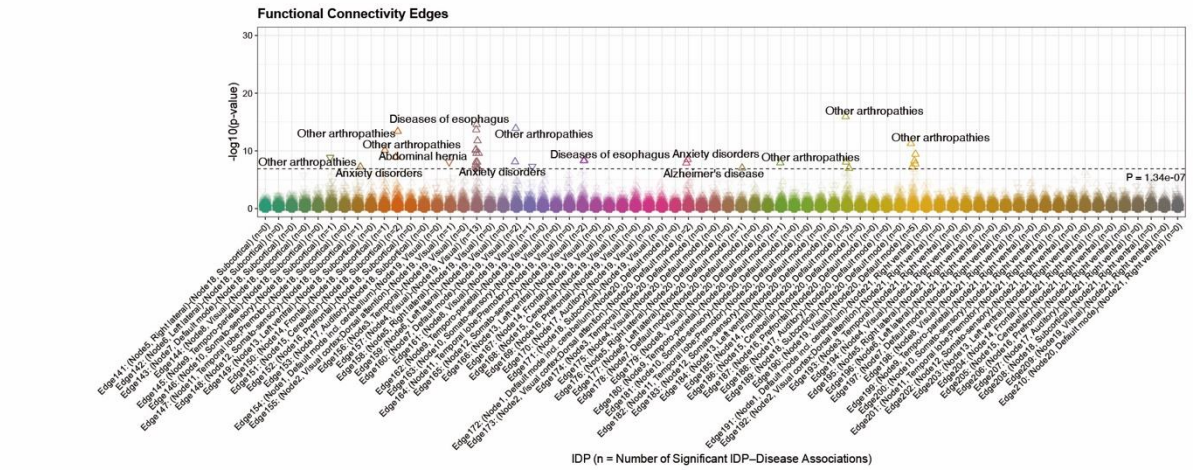
A



B

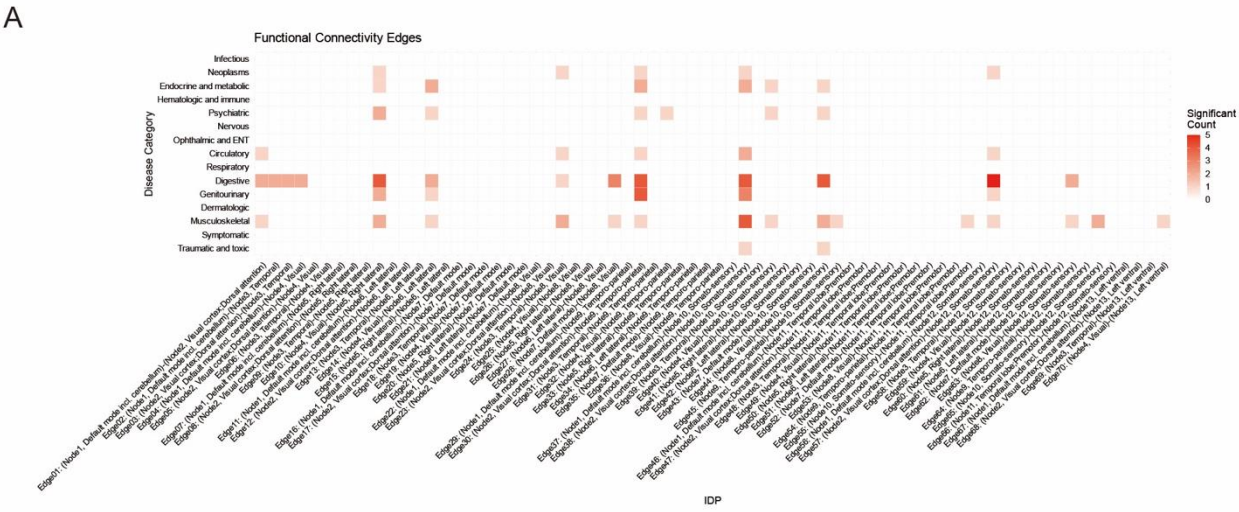


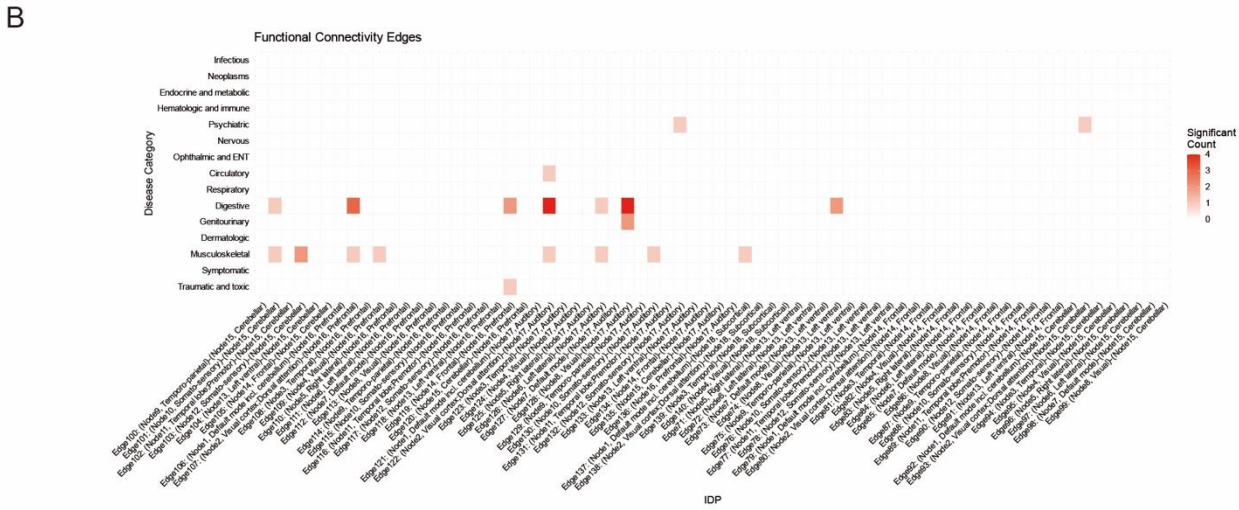
C

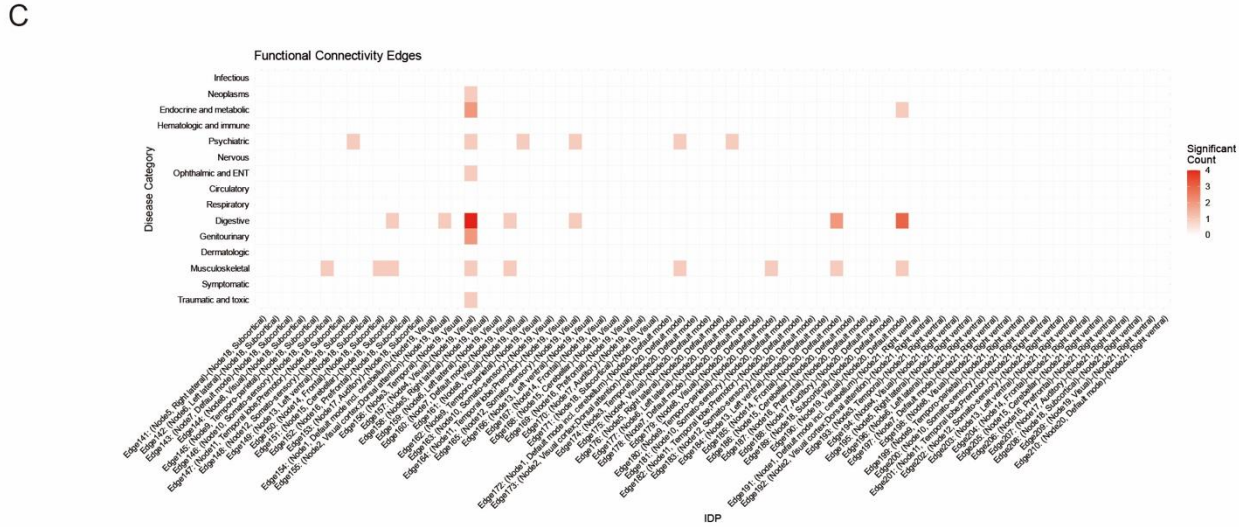


Supplementary Fig.8. Associations between functional network edges and diseases (A-C) Manhattan-style plot showing the number of significant functional network edges–disease associations in each IDP after Bonferroni correction ($P < 1.34 \times 10^{-7}$).

Supplementary Fig.9. Associations between functional network edges and disease categories



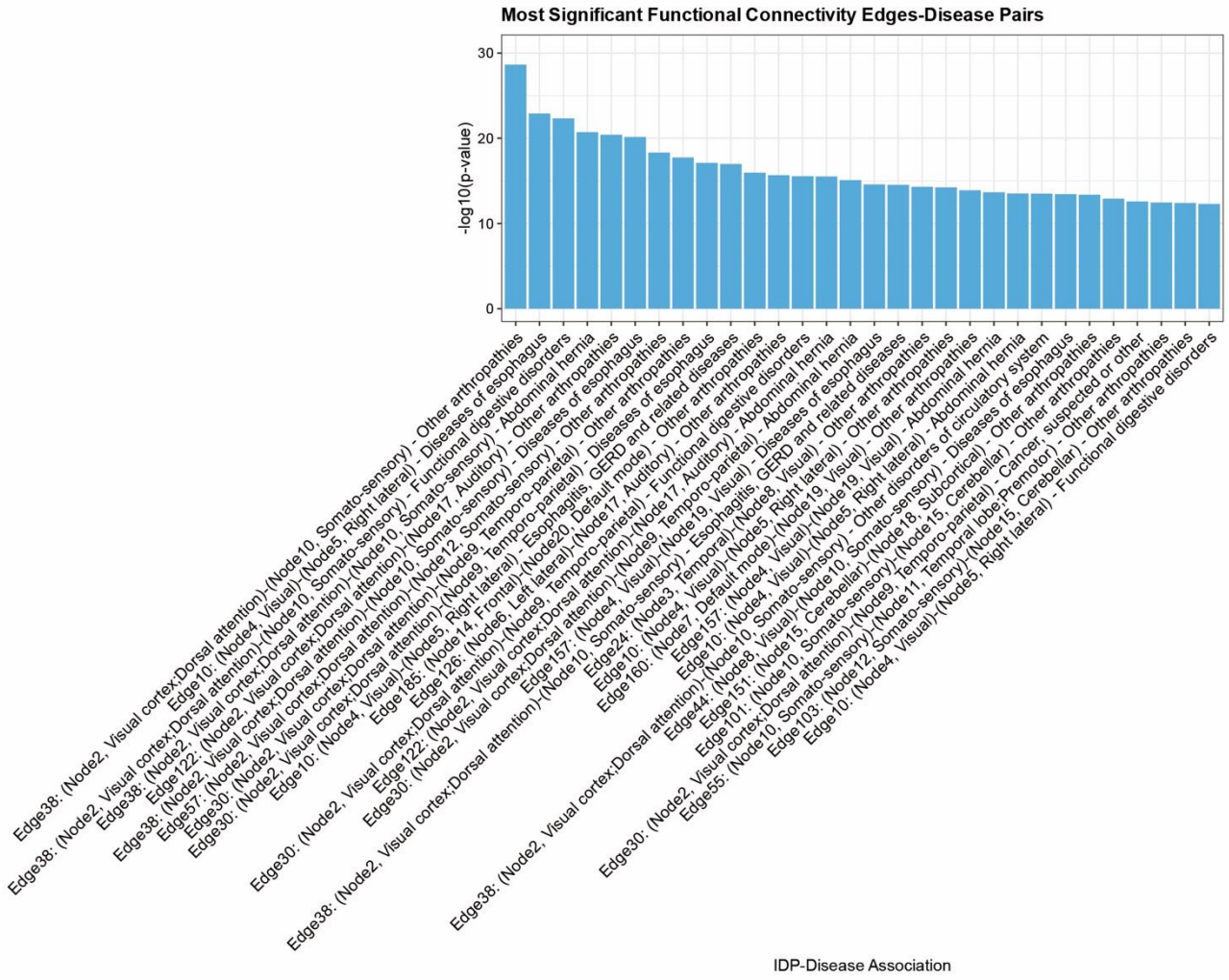




Supplementary Fig.9. Associations between functional network edges and disease categories

(A-C) Heatmap displaying the distribution of significant associations between functional network edges IDPs and disease categories. Color intensity represents the number of significant IDP–disease pairs within each IDP.

Supplementary Fig.10. Most significant functional network edges–disease pairs



Supplementary Fig.10. Most significant functional network edges–disease pairs

Bar plot presenting the most significant (up to 30) functional network edges–disease pairs.