

**Supplementary Figure 1:** Scatter plots of eigenvector centrality (binary) vs. reaction time for controls and patients with microbleeds.

**Supplementary Figure 2:** Scatter plots of eigenvector centrality (binary) vs. executive function for controls and patients with microbleeds.

**Supplementary Figure 3:** Scatter plots of betweenness centrality (binary) vs. associative memory for controls and patients with microbleeds.

**Supplementary Figure 4:** Scatter plots of eigenvector centrality (binary) vs. reaction time for controls and patients without microbleeds.

**Supplementary Figure 5:** Scatter plots of eigenvector centrality (binary) vs. executive function for controls and patients without microbleeds.

**Supplementary Figure 6:** Scatter plots of betweenness centrality (binary) vs. associative memory for controls and patients without microbleeds.