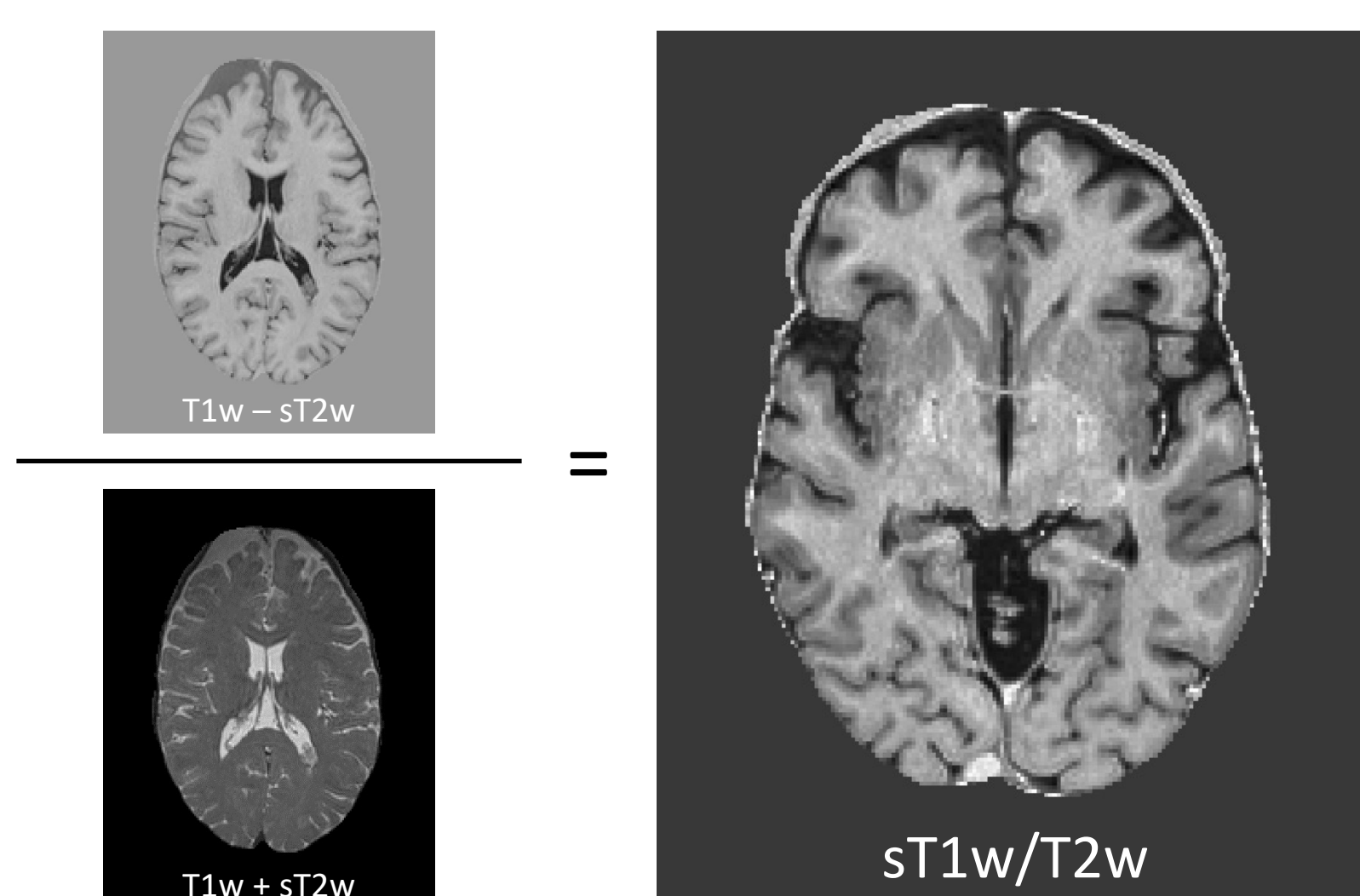


The standardized T1-weighted/T2-weighted ratio as a biomarker of anti-NMDA receptor encephalitis

Tim J. Hartung, Graham Cooper, Valentin Jünger, Darko Komenic, Lara Ryan, Josephine Heine, Claudia Chien, Friedemann Paul, Carsten Finke

Method

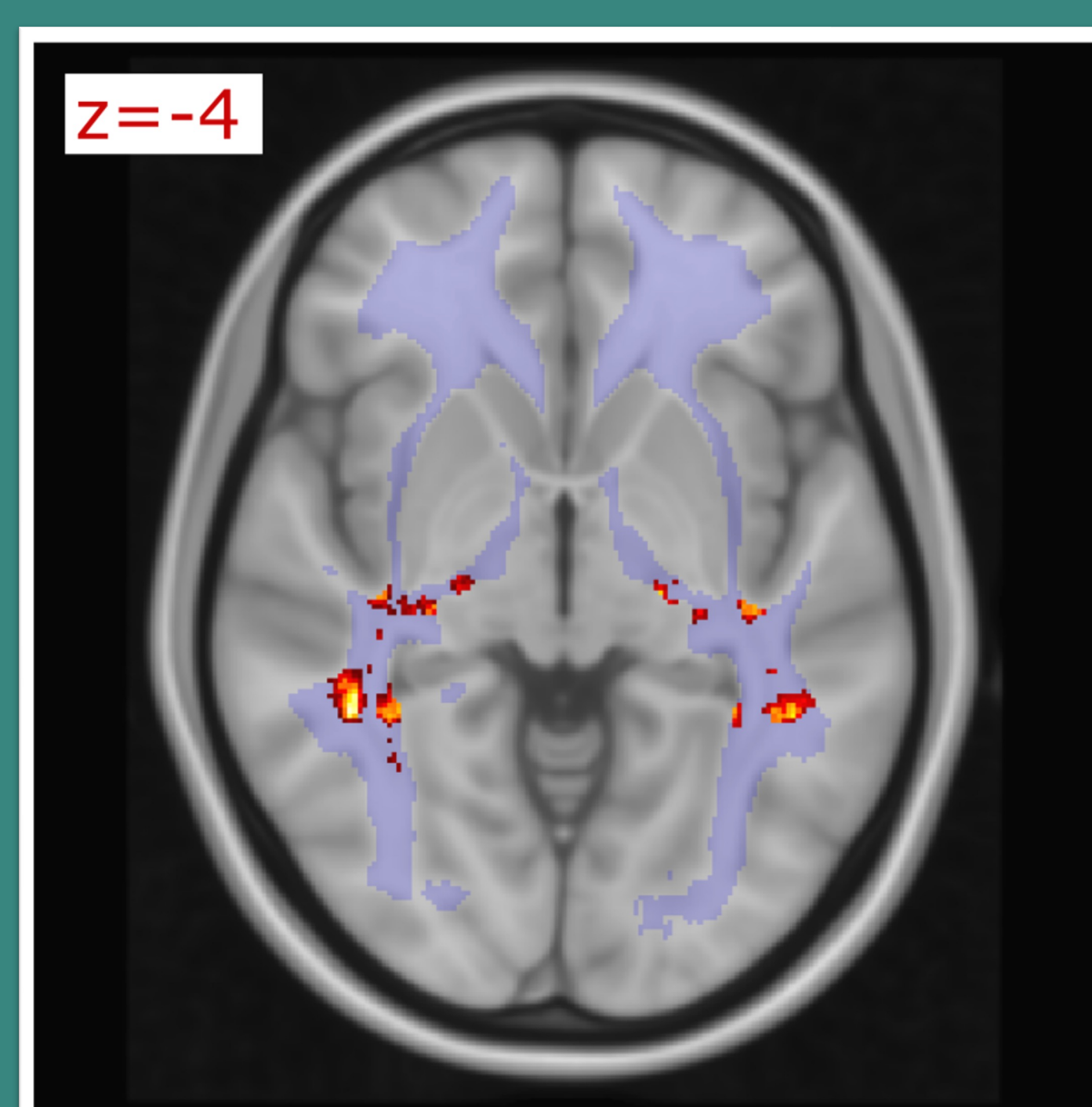
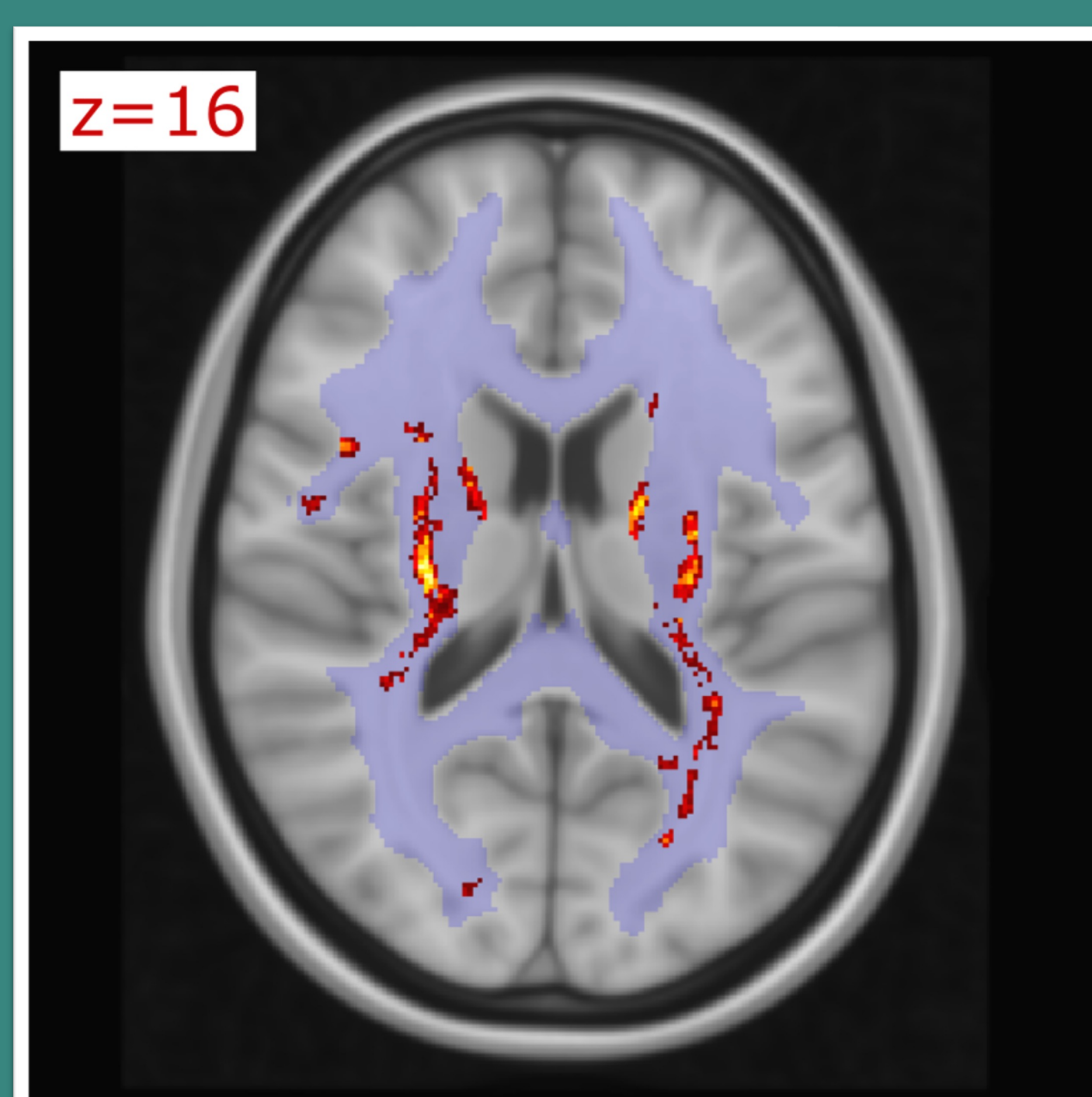
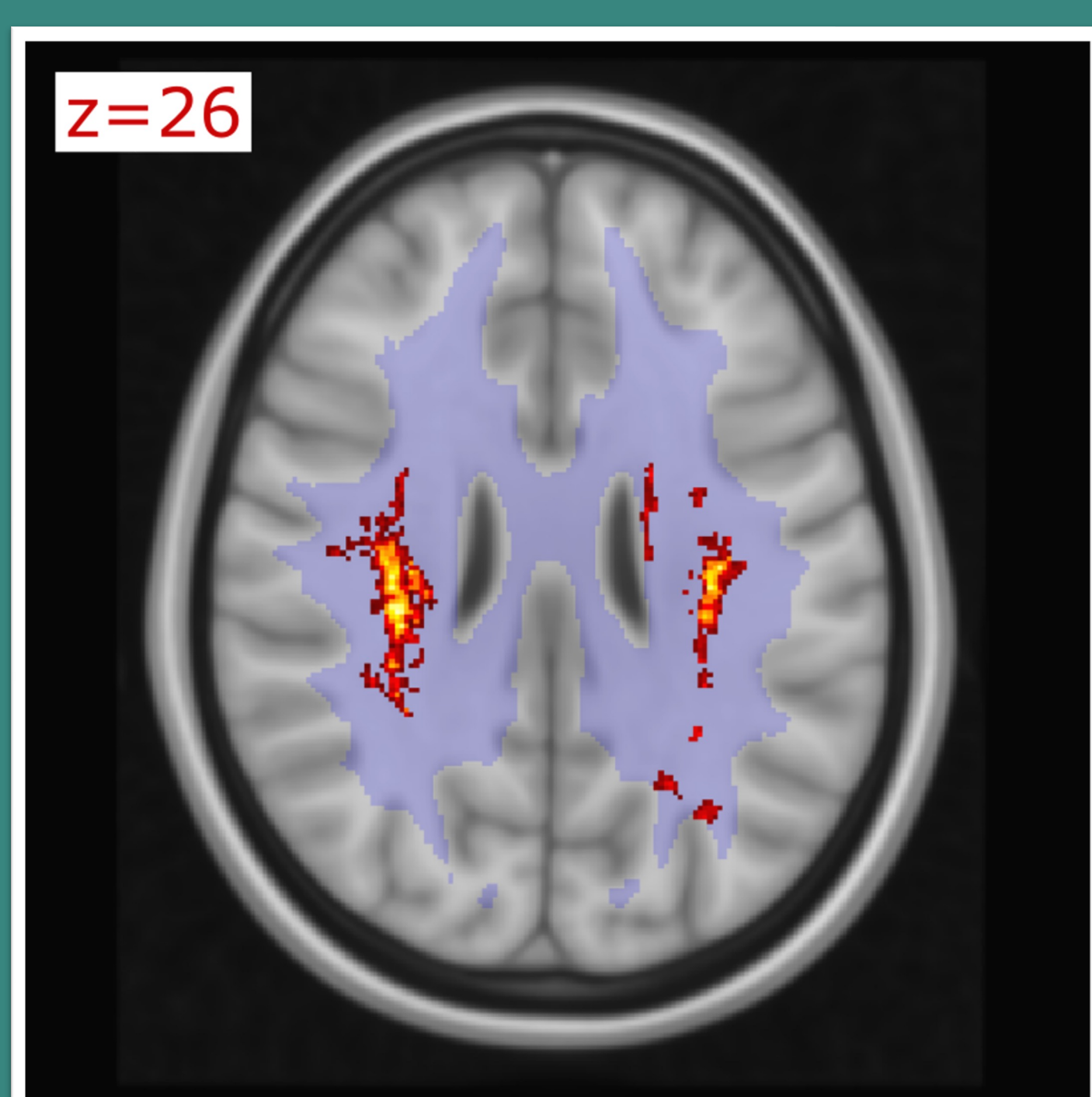
- sT1w/T2w ratio is calculated from standard clinical MRI
- No additional scanning time
- Standardized values across scanners and patients



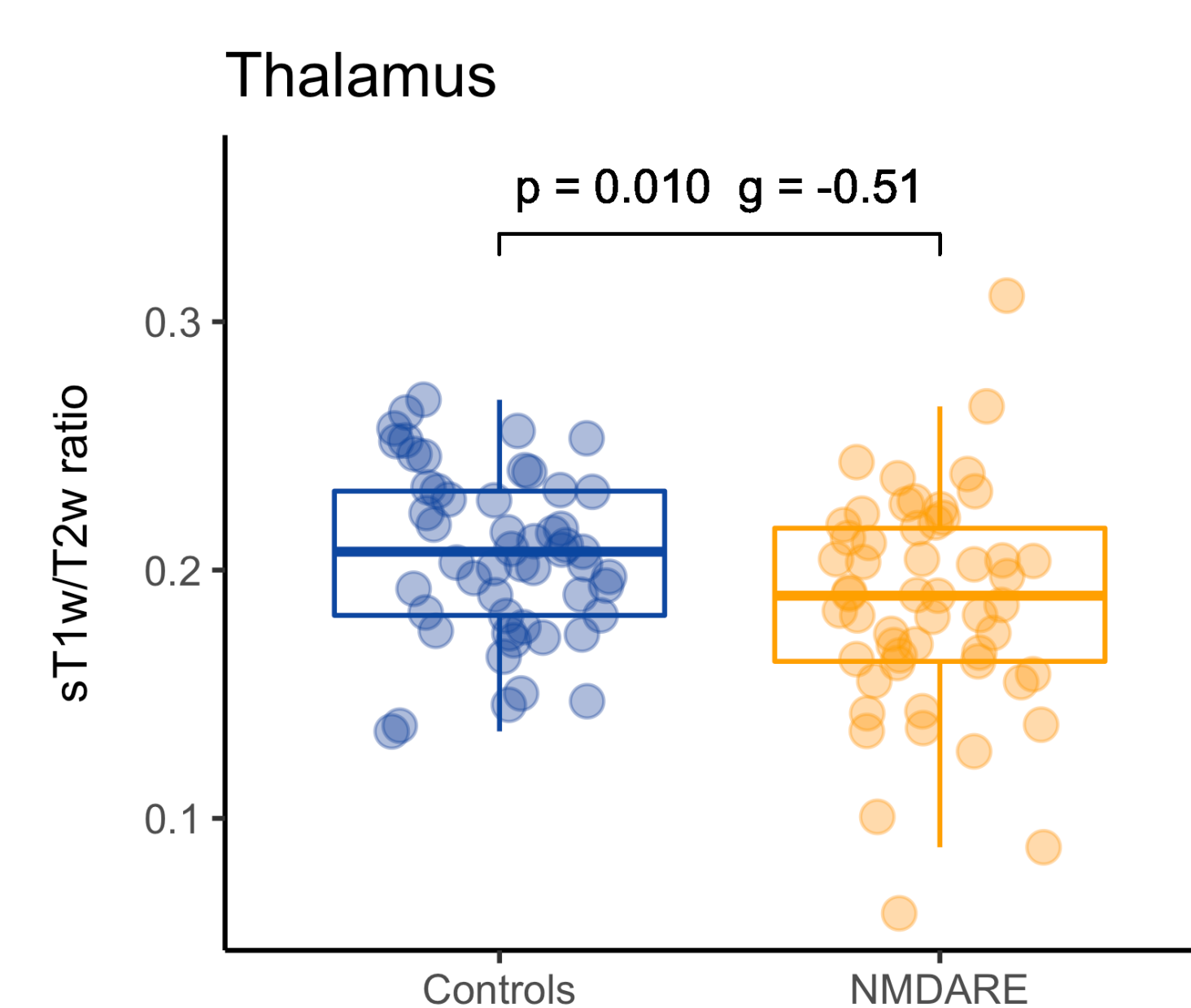
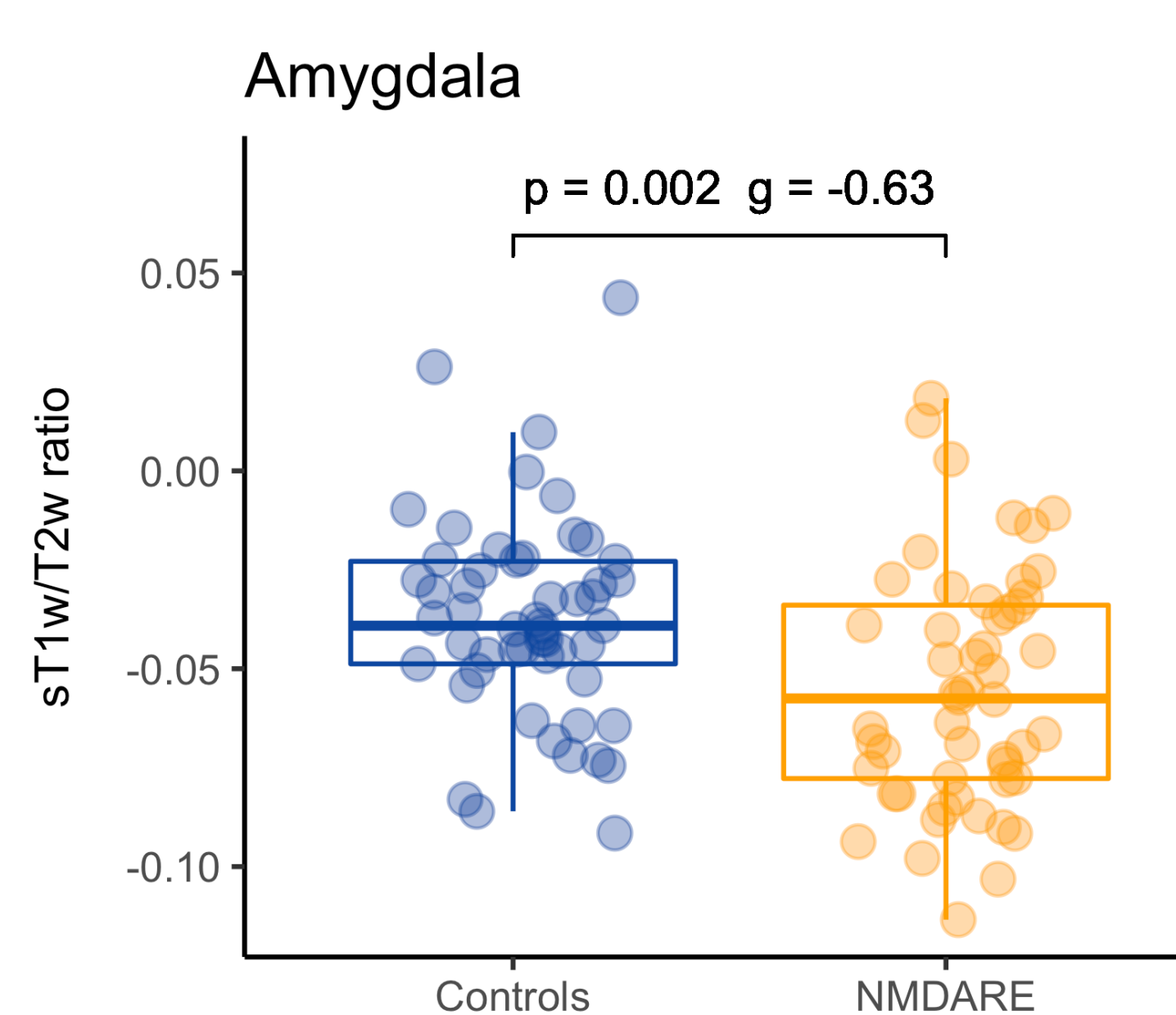
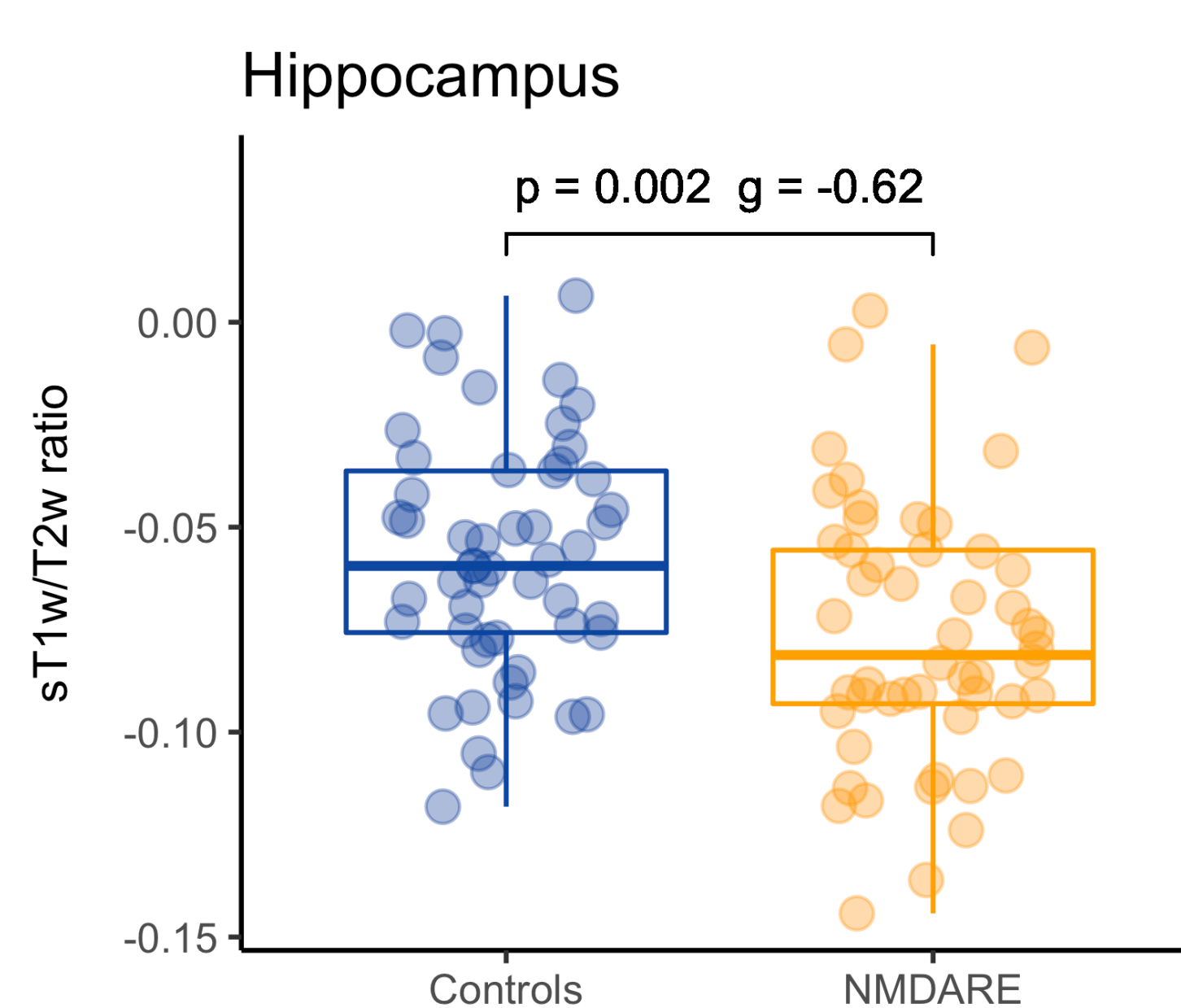
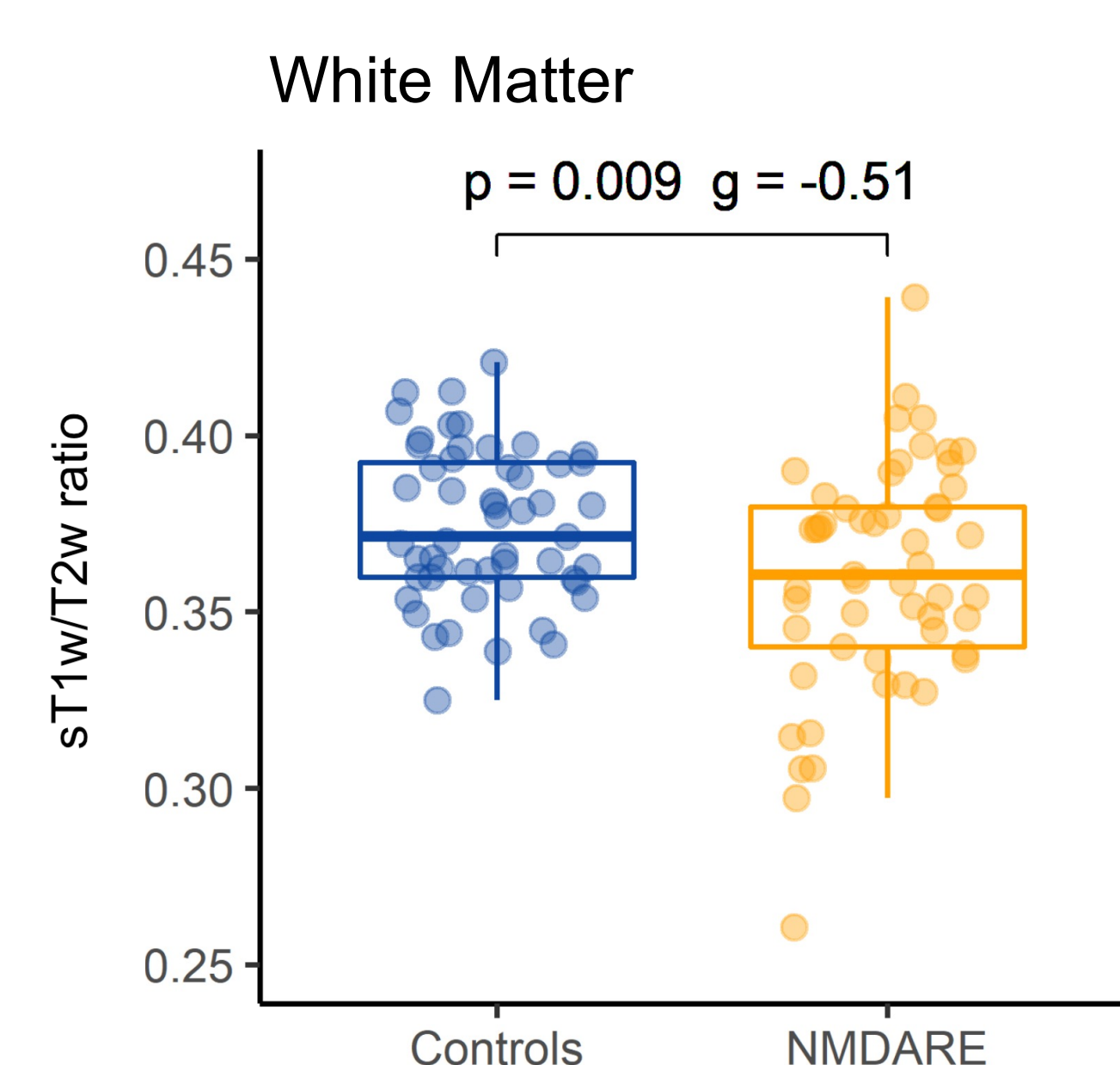
Participants

- N = 53 patients with NMDARE
- Mean disease duration: 3.3 years
- All patients had cognitive deficits
- N = 53 sex- and age-matched controls

The T1/T2 ratio is a biomarker of white matter damage in routine clinical MRI

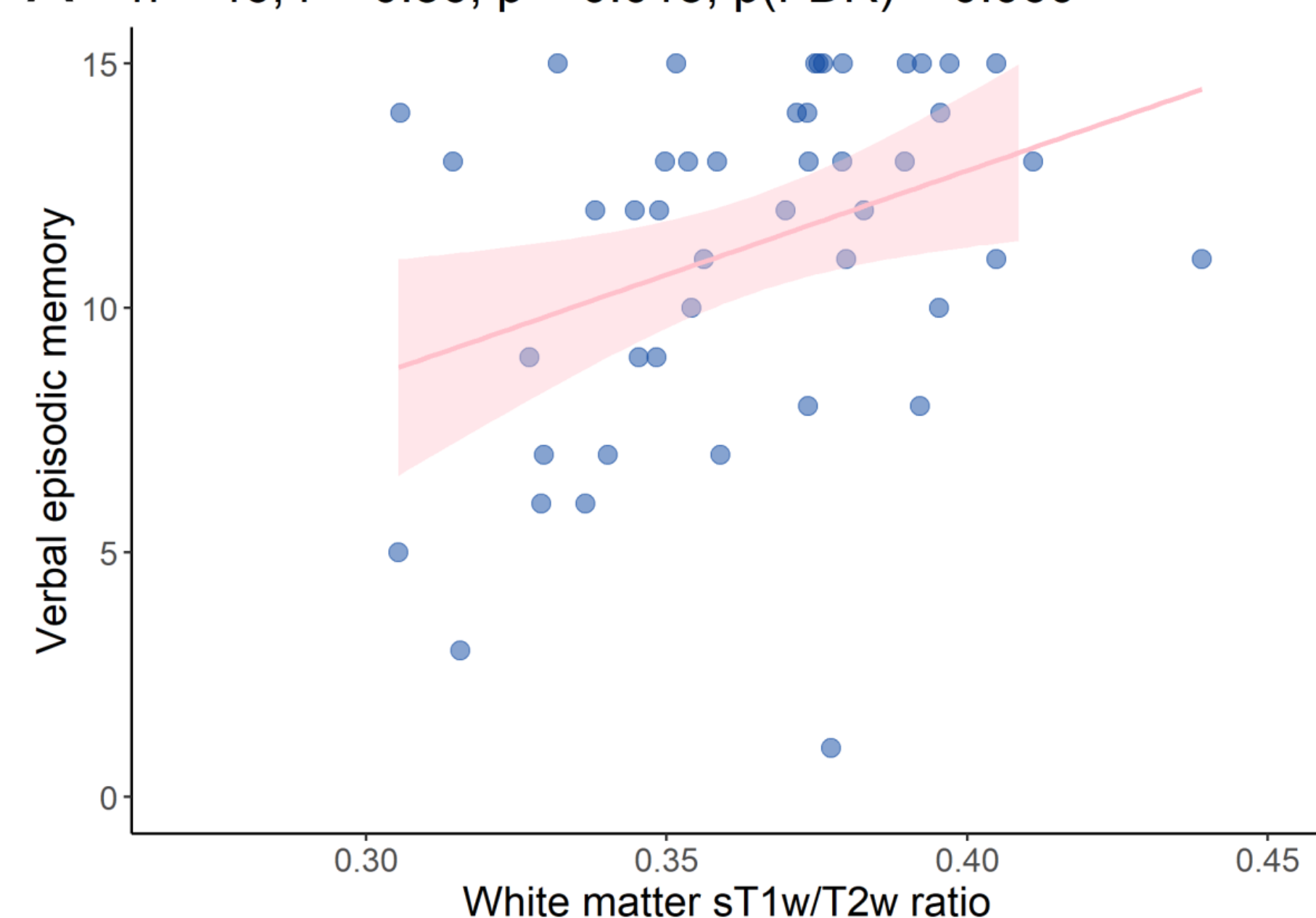


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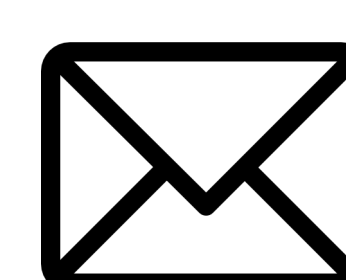
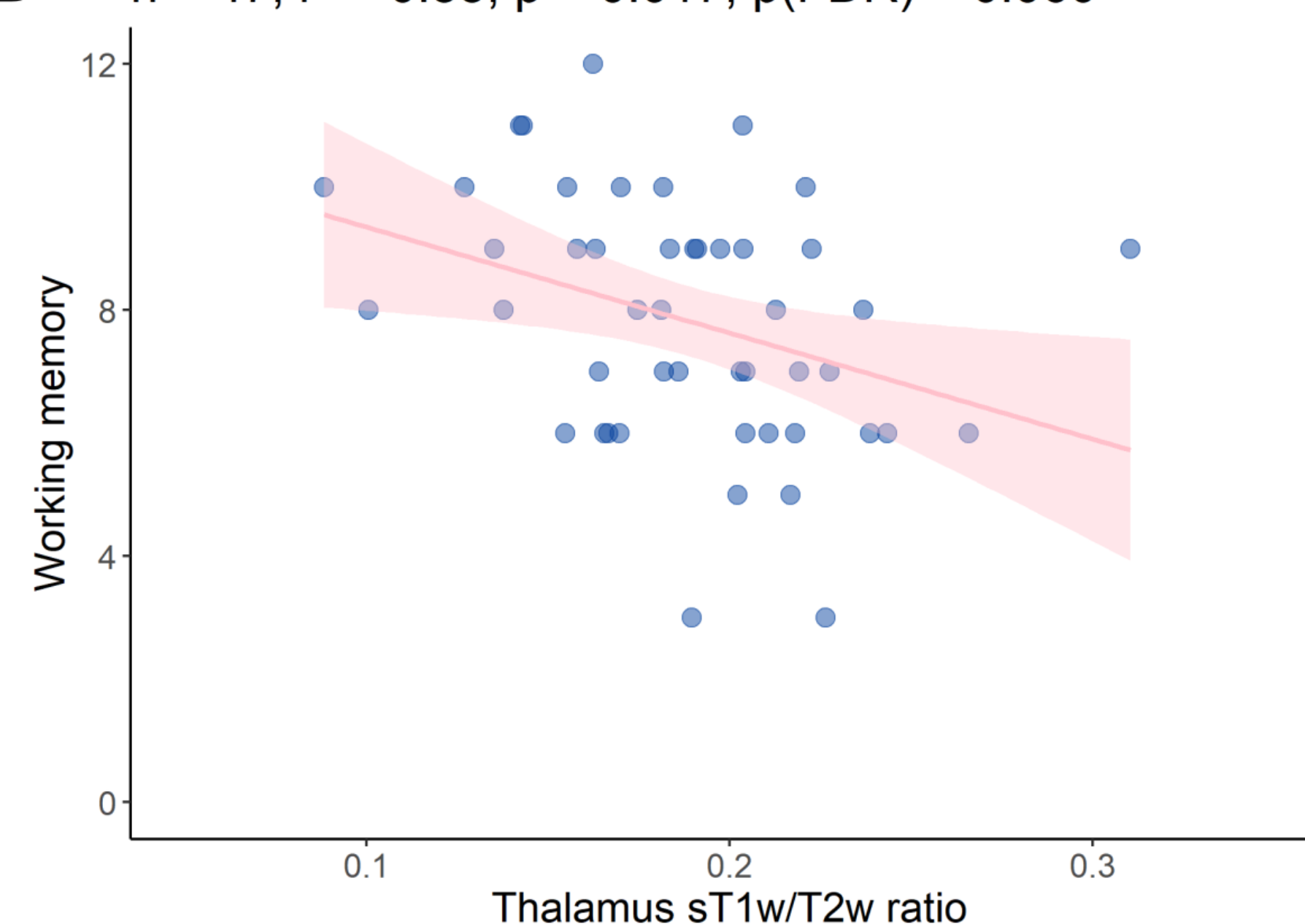


T1/T2 ratio correlates with cognitive impairment

A n = 46, r = 0.36, p = 0.015, p(FDR) = 0.060



B n = 47, r = -0.35, p = 0.017, p(FDR) = 0.060

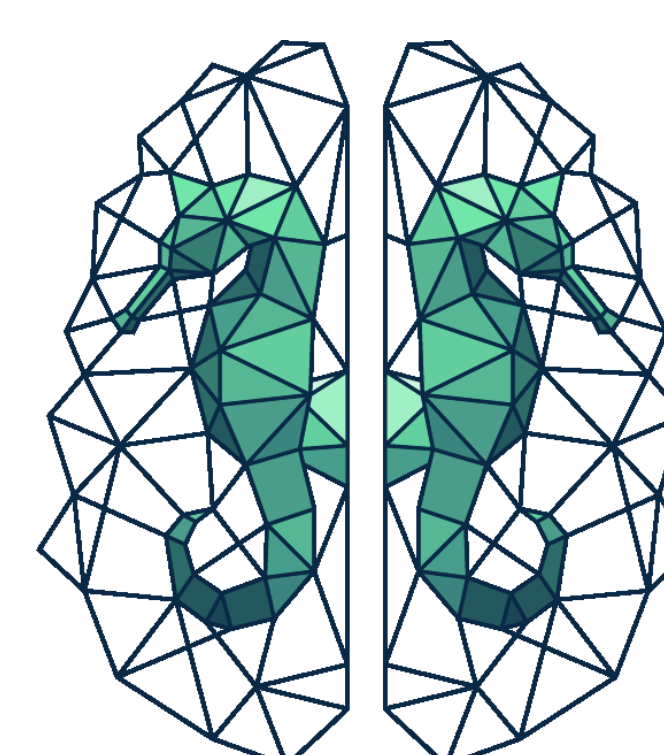


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