

Figure S1

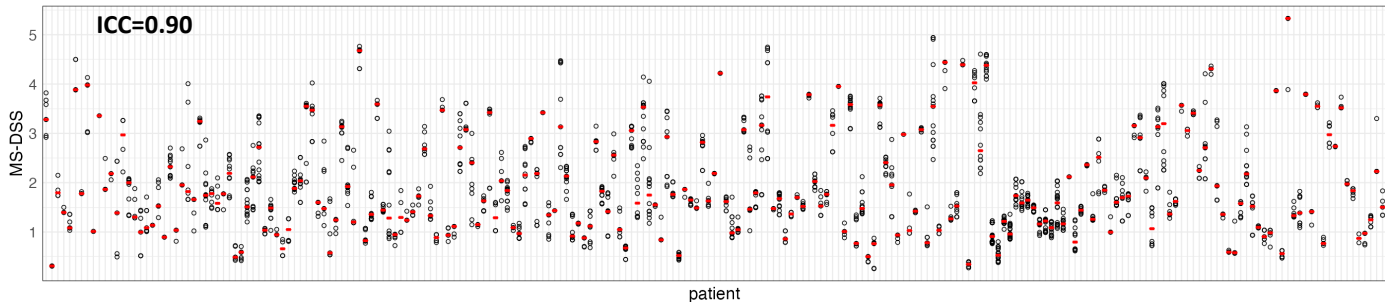


Figure S1: Inter-class correlation coefficient (ICC) for MS-DSS outcomes measured in the longitudinal cohort of MS patients ( $N_{\text{patients}}=227$ ,  $N_{\text{visits}}=1538$ ). Empty black circles represent measured MS-DSS, red bars represent patient's median.

Figure S2

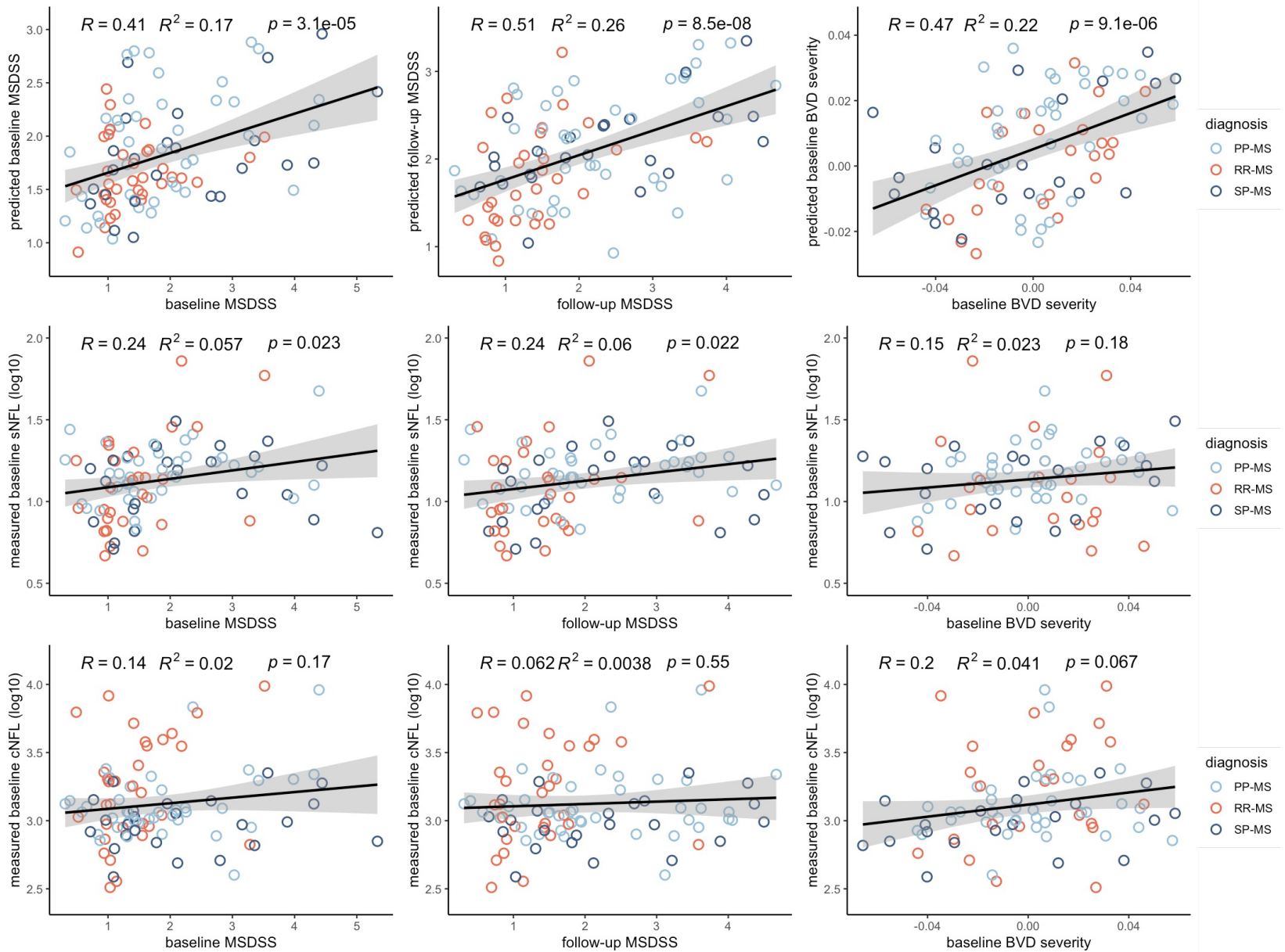


Figure S2: Correlation between measured MS severity outcomes (x-axes) and CSF biomarker-predicted MS severity outcomes (y-axes top row plots), measured baseline serum NFL (y-axes, middle row plots), and measured baseline CSF NFL (y-axes, bottom row plots) in the validation cohort. R was calculated using Pearson correlation test, Coefficient of determination (R<sup>2</sup>) and corresponding p-value were generated from a linear regression model between observed and predicted values. Linear regression lines are shown in black with gray-shaded error band representing 95% confidence interval. All statistical tests were two-sided.