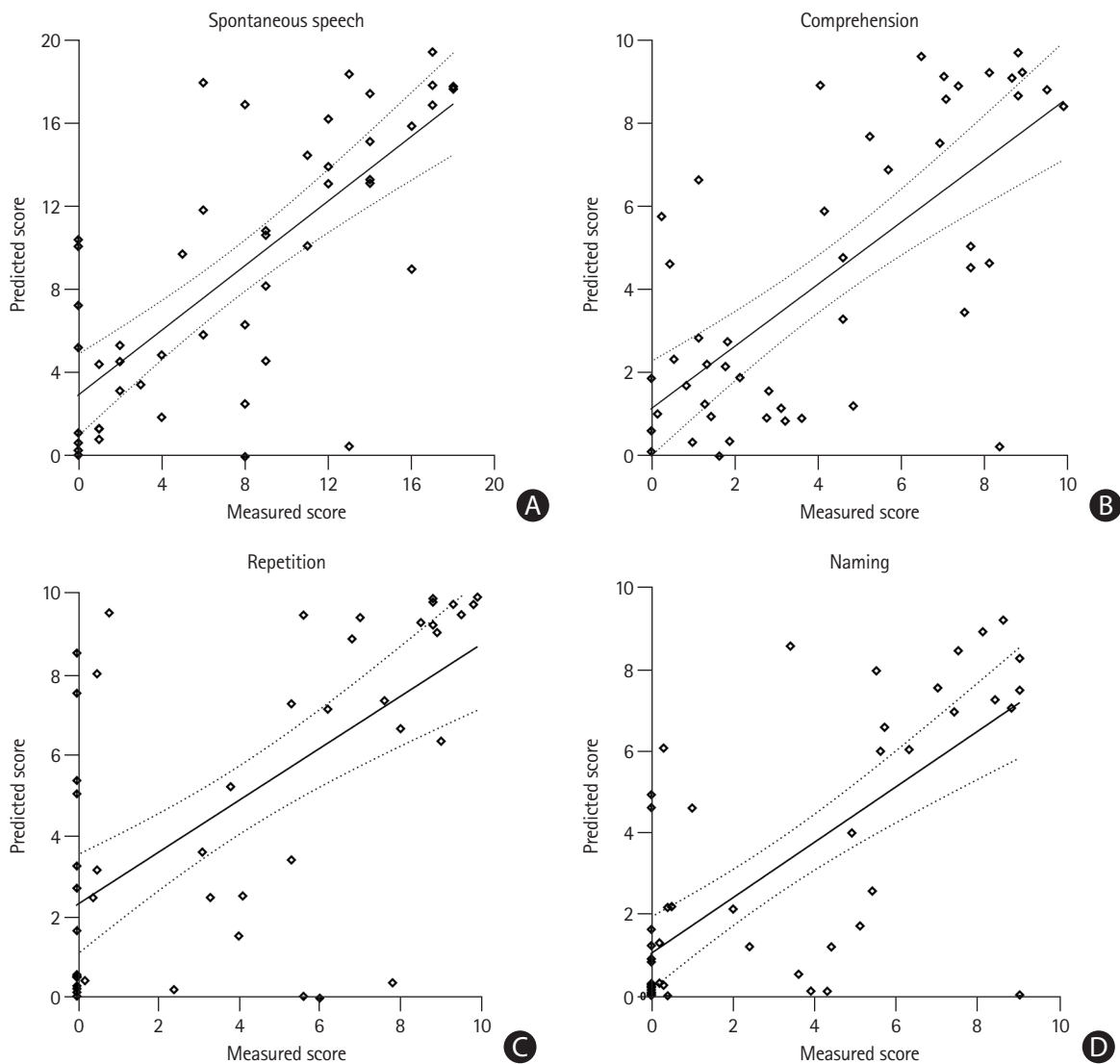


Supplementary Figure 1. Structure of the deep learning (DL) model. The number of nodes in each layer was noted in the box. For the input layer, 178 lesion occupying ratio features (left hemisphere associated regions from various atlases) and six clinical features (age, sex, Korean version of the Western Aphasia Battery [K-WAB] evaluation days from magnetic resonance imaging [MRI], MRI hours from onset, education years, and lesion volume) were used. Using the DL model, the final score was predicted to range from 0 to 1. The true score of the K-WAB was fed into the model by normalizing scores in the range of 0 to 1.



Supplementary Figure 2. Correlation analysis of sub-scores of aphasia quotient in the test set. (A) The correlation coefficient of spontaneous speech was 0.75 (95% confidence interval [CI], 0.59 to 0.85; $P < 0.001$). (B) The correlation coefficient of repetition was 0.65 (95% CI, 0.44 to 0.78; $P < 0.001$). (C) The correlation coefficient of comprehension was 0.71 (95% CI, 0.54 to 0.83; $P < 0.001$). (D) The correlation coefficient of naming was 0.71 (95% CI, 0.54 to 0.83; $P < 0.001$) (solid black line, regression line; dotted black line, 95% confidence limit).