

**Supplementary Figure 2.** Multimodal alternatives to the full set of features. **A)** Classification performance vs the number of features. Solid lines and shaded areas represent the average and standard deviation, respectively. **B)** Distributions of the AUC values associated with the squares in **A**. 60 independent random splits were used for cross-validation. The highest classification performance was obtained with the full set of multimodal features, followed by fMRI, only DTC decrease, only DTC increase and only EEG. Asterisks denote Mann-Whitney *p*-value <10<sup>-6</sup>. fMRI: functional magnetic resonance imaging. EEG: electroencephalogram; bvFTD: behavioral variant of frontotemporal dementia; AD: Alzheimer's disease; CN: healthy controls group; DTC: dual total correlation; AUC: Area under the receiver operating characteristic curve;  $\uparrow$ : Increase.