Supplementary figure. Hematoxylin and eosin (H&E) stain of cerebral cortex obtained from the inferior frontal lobule of a male with FTLD showing excessive vaculoation (A, white dots) and excessive gliosis (A, purpule dots), both markers of neurodegeneration. An analogous region of normal frontal lobe cortex (B) is shown for comparison. Immunostaining against phosphorylated tau protein (C) shows the presence of Pick bodies (arrowhead) in frontal lobe cortex (FTLD-tau) (scale bar: $50 \mu m$). Immunostaining against p62 protein (D) in a patient with familial FTLD shows abundant number of C9ORF72 dipeptide inclusions in the cerebellum (small brown dots), particularly in the granular layer (scale bar: $50 \mu m$). Immunostaining against TDP-43 protein in the orbitofrontal cortex of a female with FTLD-TDP (E); normally TDP-43 is expressed in the nucleus of neurons, but in FTLD TDP-43 inclusions are seen in the cytoplasm (arrowhead) and neuropil (arrows) (scale bar: $50 \mu m$). Immunostaining of FUS protein inclusions in the temporal lobe of a patient with FTLD-FUS (F); normally FUS protein is expressed in the nucleus of neurons, but in FTLD FUS is seen in the cytoplasm (arrowhead) (scale bar: $50 \mu m$).

