SUPPLEMENTARY FIGURES

retire the terminology FTDP-17 as MAPT mutations are genetic forms of sporadic frontotemporal tauopathies

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Supplementary Figure 1.

Representative images of the neuropathological features of Pick’s disease (PiD) and FTLD-tau with a MAPT K257T mutation. The representative images in each column are taken from the same case and all sections are counterstained with hematoxylin. Neuronal loss and spongiosis in the superior frontal cortex (A), AT8 phosphorylated tau-immunopositive Pick bodies in the hippocampal dentate gyrus (B), AT8-immunopositive ballooned neuron (C) and ramified astrocyte (D) in the superior frontal cortex in PiD. Similar neuropathological features are associated with the K257T mutation (E-H). The pial surface is orientated to the top in (A, E). Scale bar = 500 μm (A, E); 50 μm in (B, F); 20 μm in (C, D, G, H).
Supplementary Figure 2.

Neuropathological features immunostained with AT8 phosphorylated tau antibody in the superior frontal cortex associated with corticobasal degeneration (CBD) and FTLD-tau cases with MAPT mutations. The representative images in each column are taken from the same case. Immunoperoxidase sections are counterstained with hematoxylin. AT8-immunopositive ballooned neurons (A), astrocytic plaques (B), threads (C), coiled bodies (D) and globular oligodendrogial inclusions (E) are observed in CBD. Similar neuropathological features are associated with the S305S mutation (F-J), R406W mutation (K-O) and IVS10+16 mutation (P-T). Images of threads and coiled bodies are taken from the white matter underlying the superior frontal cortex, and all other images are taken from the grey matter. Scale bar = 20 μm (A, D, E, F, I, J, K, N, O, P, S, T); 100 μm (B, C, G, H, L, M, Q, R).
Supplementary Figure 3.

Neuropathological features immunostained with AT8 phosphorylated tau antibody in the superior frontal cortex associated with progressive supranuclear palsy (PSP) and a FTLD-tau case with a S305S MAPT mutation. The representative images in each column are taken from the same case and all sections are counterstained with hematoxylin. AT8-immunopositive tufted astrocytes (A), coiled bodies (B) and neurofibrillary tangles (NFTs) in pigmented neurons of the substantia nigra (C) are observed in PSP. Similar neuropathological features are associated with the S305S mutation (D-F) in addition to ballooned neurons (G), astrocytic plaques (H) and thread pathology (I). Images of threads and coiled bodies are taken from the white matter underlying the superior frontal cortex, and all other images are taken from the grey matter. Scale bar = 20 μm (A, B, D, E, G); 30 μm (C, F); 50 μm (H, I).
Neuropathological features immunostained with AT8 phosphorylated tau antibody in the superior frontal cortex associated with globular glial tauopathy (GGT) and FTLD-tau cases with MAPT mutations. The representative images in each column are taken from the same case and all sections are counterstained with hematoxylin. AT8-immunopositive globular astrocytic inclusions (A), globular oligodendroglial inclusions (B) and coiled bodies (C) are observed in GGT. Similar neuropathological features are associated with the IVS10+16 mutation (D-F) and the P301L mutation (G-I). Scale bar = 20 μm.

Supplementary Figure 4.