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Advances in progressive supranuclear palsy: new diagnostic criteria, biomarkers, and therapeutic approaches

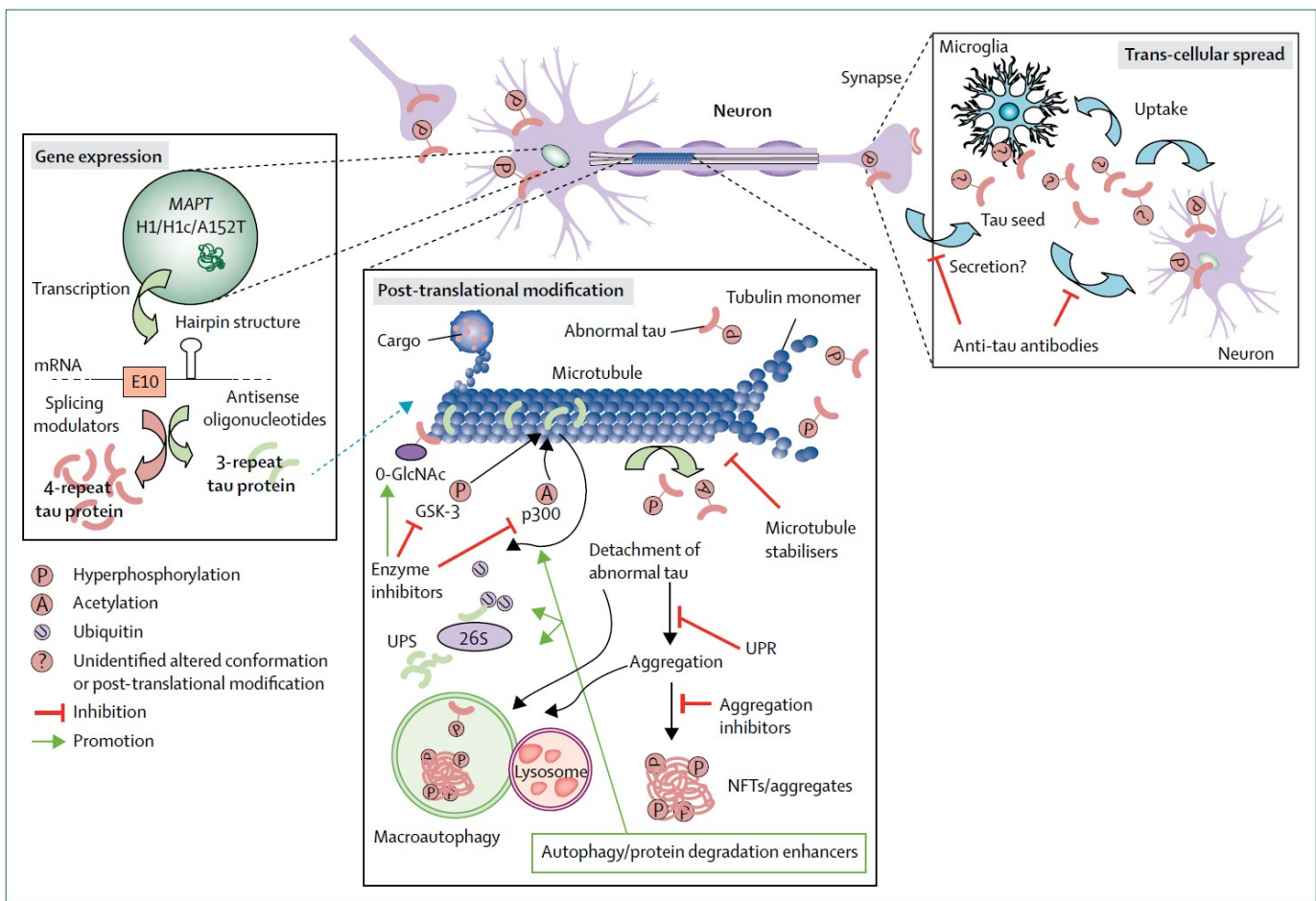


Figure 4: Potential therapeutic targets for progressive supranuclear palsy

Three categories of intervention are under development. (1) Modulation of MAPT gene expression, with antisense oligonucleotides or splicing modulators. (2) Modulation of tau protein post-translational modifications, including phosphorylation, acetylation, and O-GlcNAc modification; degradation by the UPS and autophagy pathways; and modulation of the UPR. (3) Inhibition of tau propagation via trans-synaptic pathways or mediated by microglia. Modulating inflammation might alter tau pathology. GSK=glycogen synthase kinase. p300=acetyltransferase. UPS=ubiquitin proteasome system. UPR=unfolded protein response. NFTs=neurofibrillary tangles. MAPT=microtubule-associated protein tau.