VX-765

Inflammatory Caspase-1 has a significant impact on AD-like pathophysiology and Caspase-1 inhibitor, VX-765, reverses cognitive deficits in AD mouse models. Here, a one-month pre-symptomatic treatment of Swedish/Indiana mutant amyloid precursor protein (APPSw/Ind) J20 and wild-type mice with VX-765 delays both APPSw/Ind- and age-induced episodic and spatial memory deficits. VX-765 delays inflammation without considerably affecting soluble and aggregated amyloid beta peptide (Aβ) levels. Episodic memory scores correlate negatively with microglial activation. These results suggest that Caspase-1-mediated inflammation occurs early in the disease and raise hope that VX-765, a previously Food and Drug Administration-approved drug for human CNS clinical trials, may be a useful drug to prevent the onset of cognitive deficits and brain inflammation in AD [1].

VX765 can counteract neurological damage after TBI by reducing pyroptosis and HMGB1/TLR4/NF-κB pathway activities. VX765 may have a good therapeutic effect on TBI [2]

1)
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2)
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