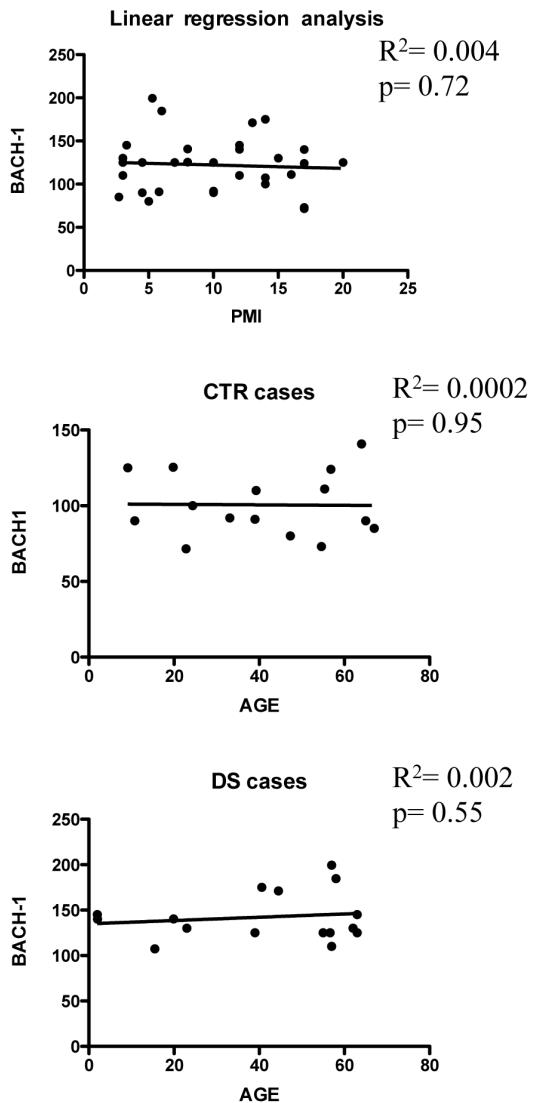


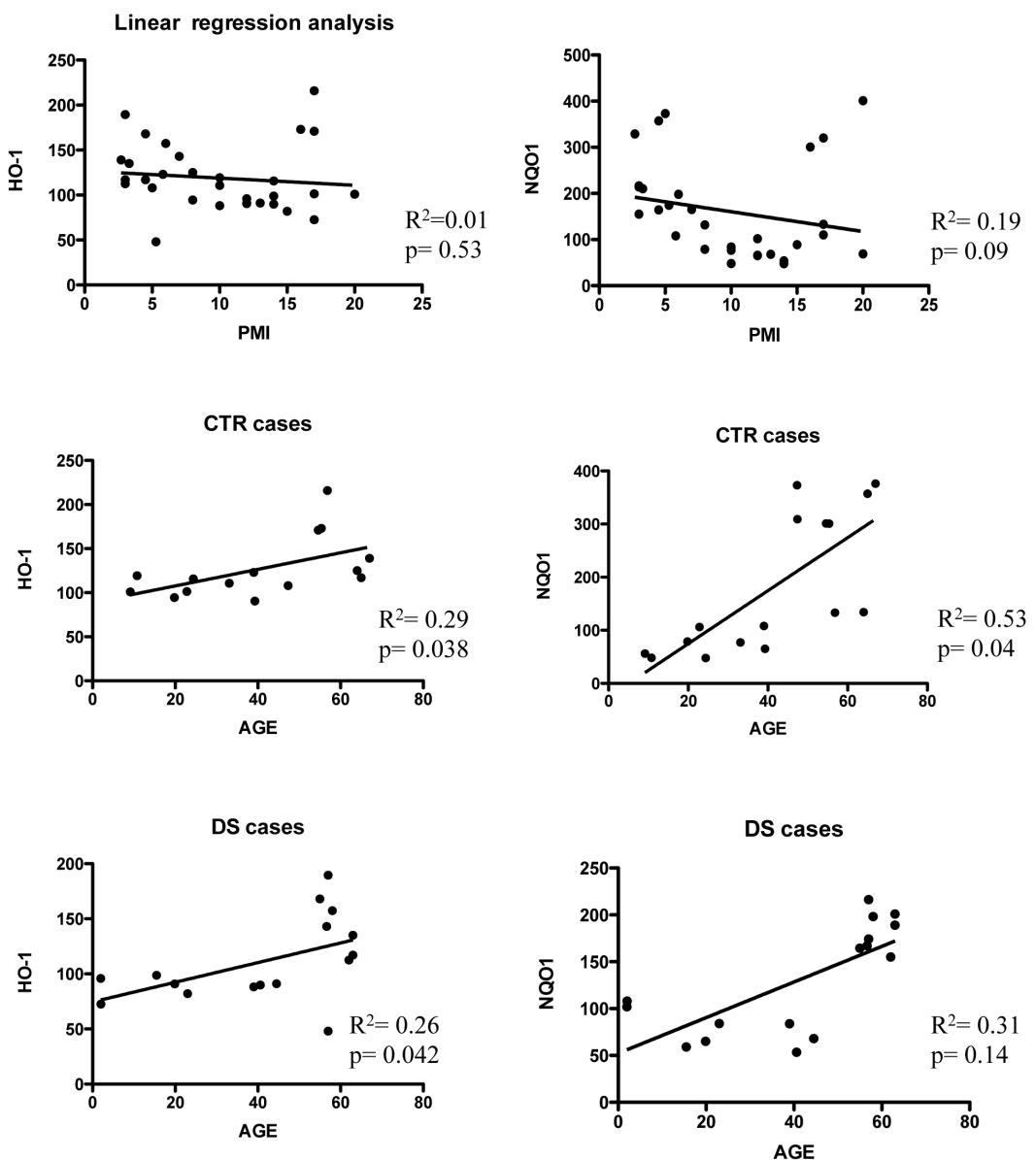
Supplementary materials:

Sup. Fig. 1



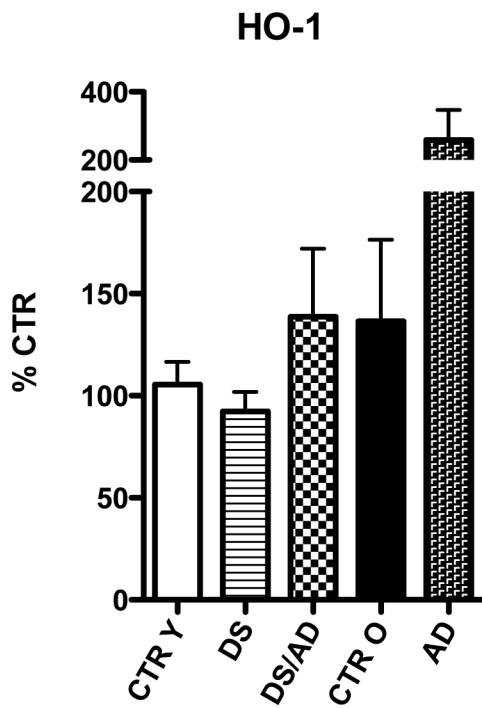
Linear regression analysis of BACH1 relation with PMI (upper graph) in all groups and BACH1 relation with AGE in CTR and DS cases separately.

Sup. Fig. 2



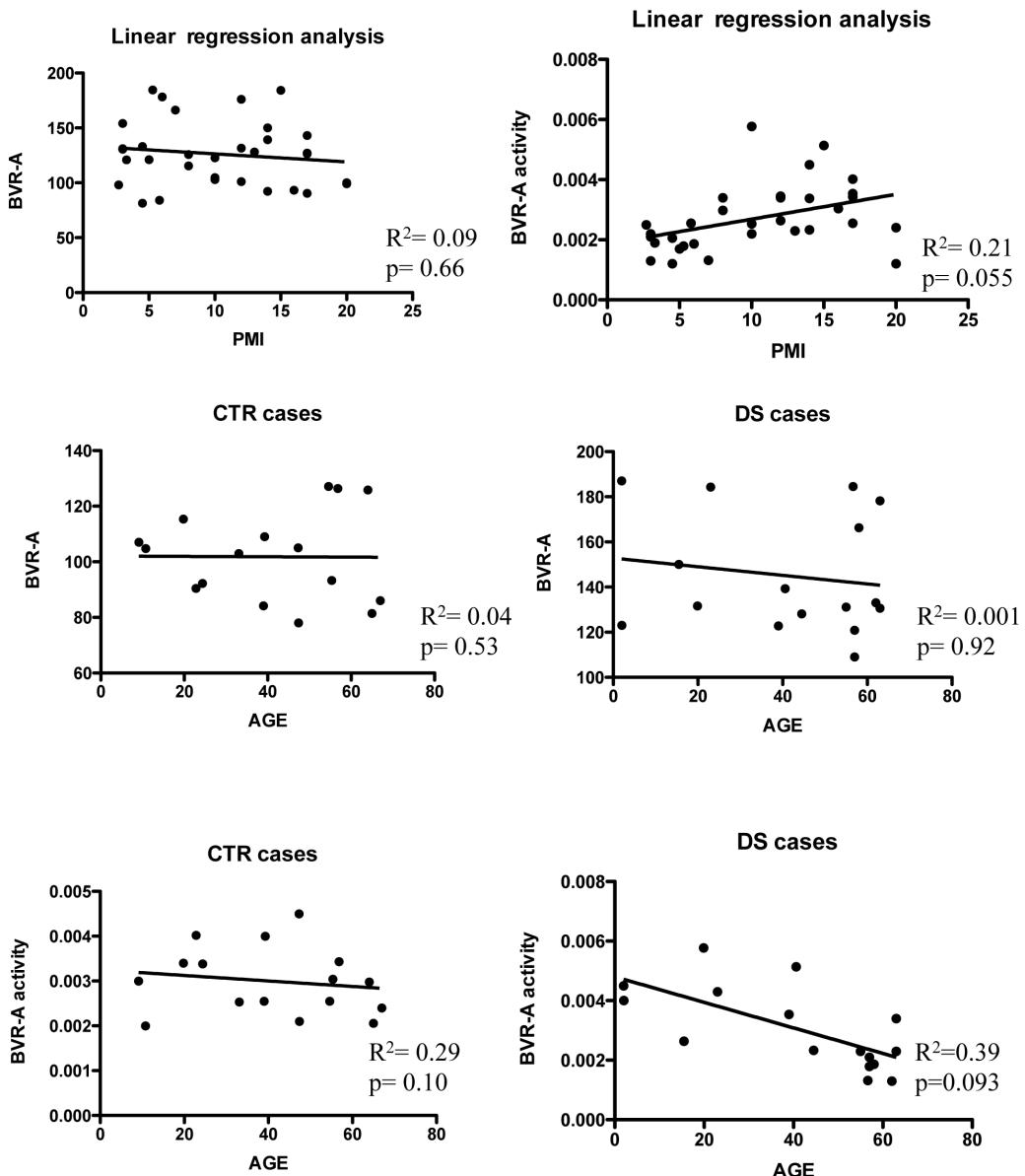
Linear regression analysis of HO-1 and NQO1 relation with PMI (upper graphs) in all groups and HO-1 and NQO1 relation with AGE in CTR and DS cases separately.

Sup. Fig. 3



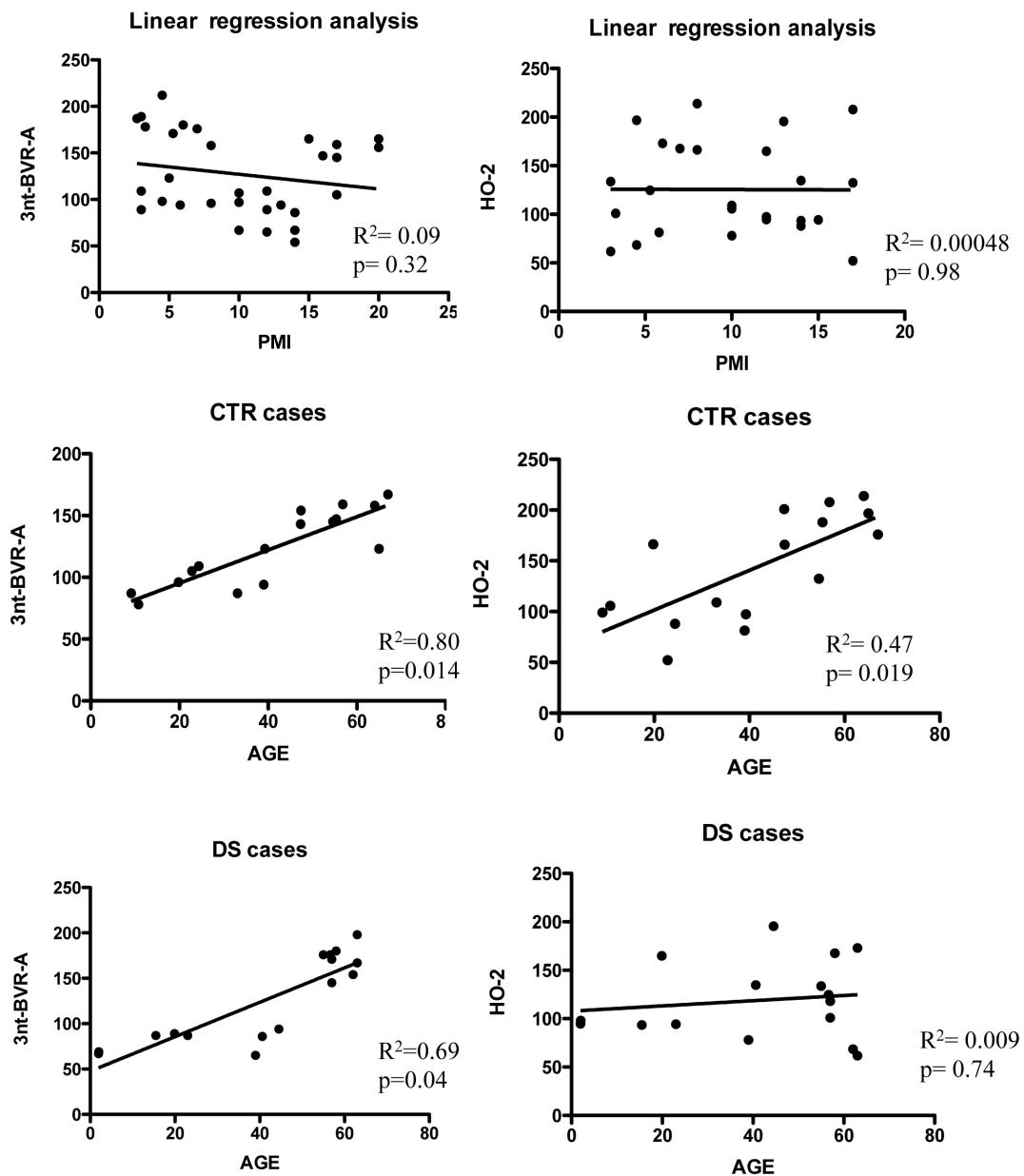
HO-1 protein expression of CTR and DS cases (fig.2) compared to frontal cortex samples from AD individuals. Data show the induction of HO-1 in AD samples without DS pathology.

Sup. Fig. 4



Linear regression analysis of BVR-A expression and activity relation with PMI (upper graphs) in all groups and BVR-A expression and activity relation with AGE in CTR and DS cases separately.

Sup. Fig. 5



Linear regression analysis of BVR-A 3nt and HO-2 relation with PMI (upper graphs) in all groups and BVR-A 3nt and HO-2 relation with AGE in CTR and DS cases separately.