

**Title:** The molecular and neuropathological consequences of genetic risk for Alzheimer's dementia

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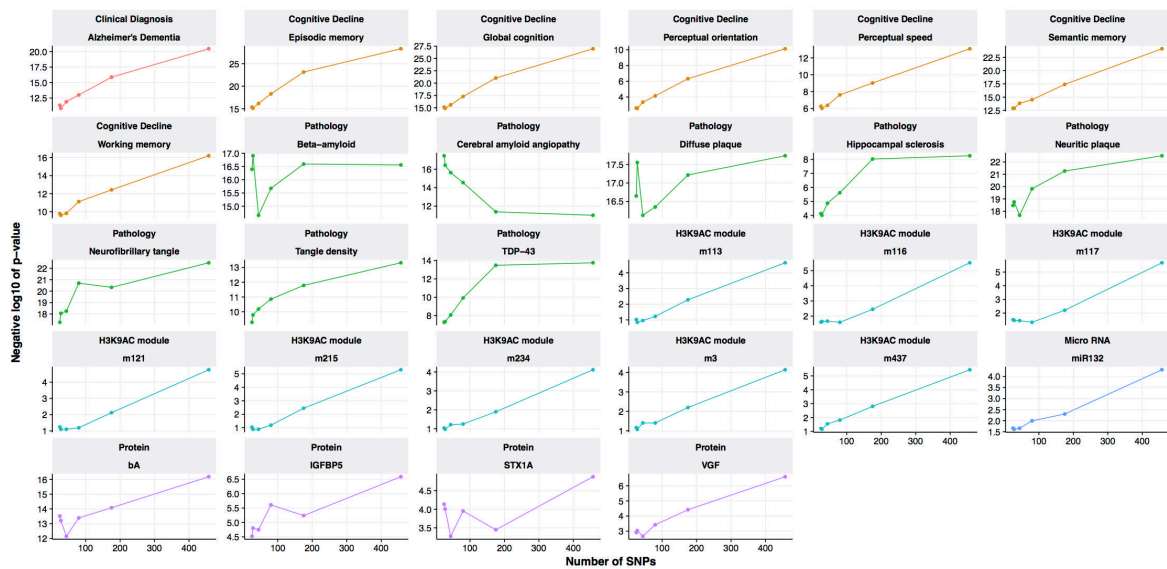
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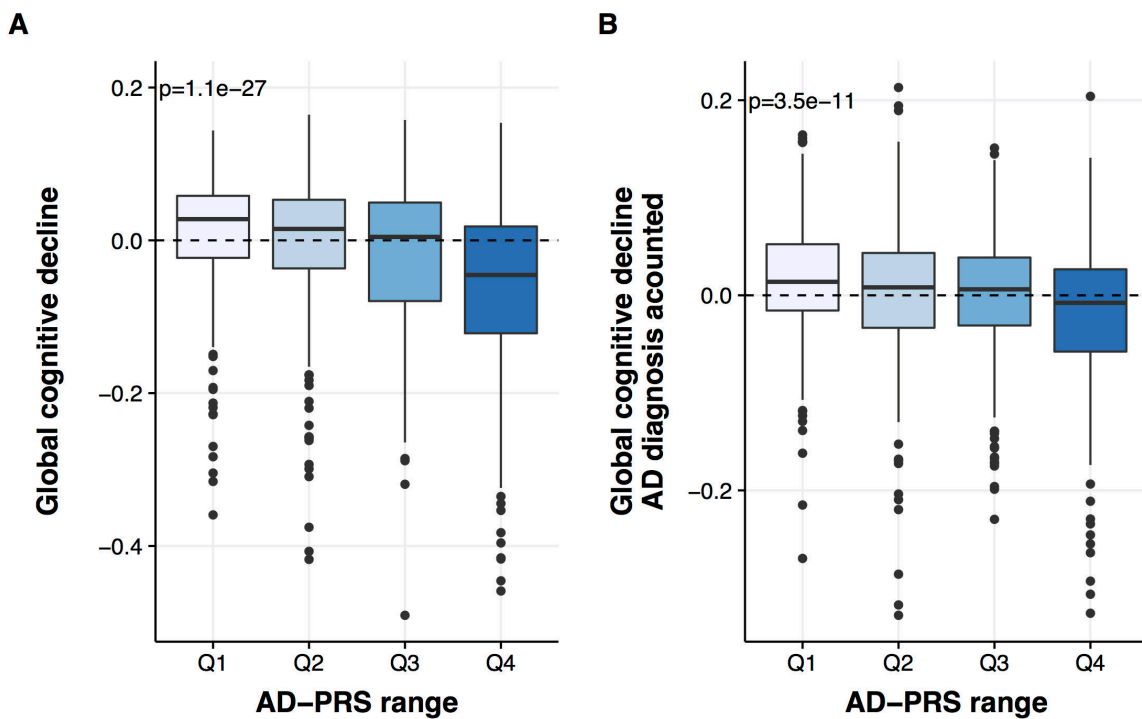
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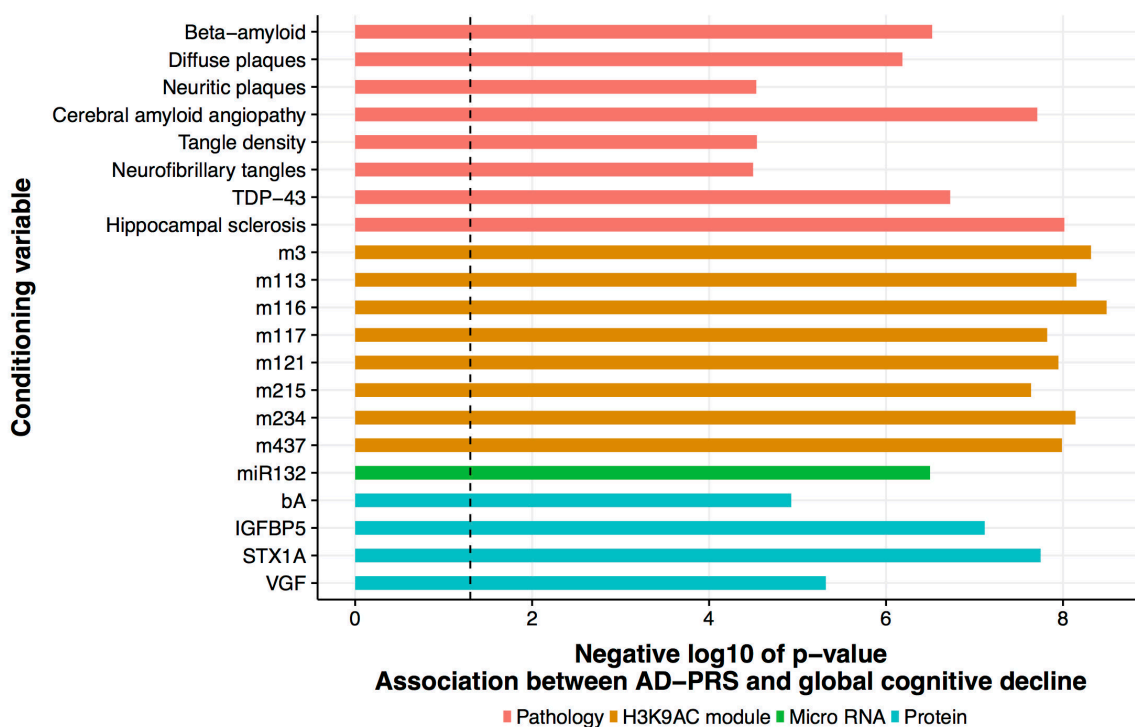


Supplementary Figure 1. Polygenic trend of AD-PRS-associated traits.

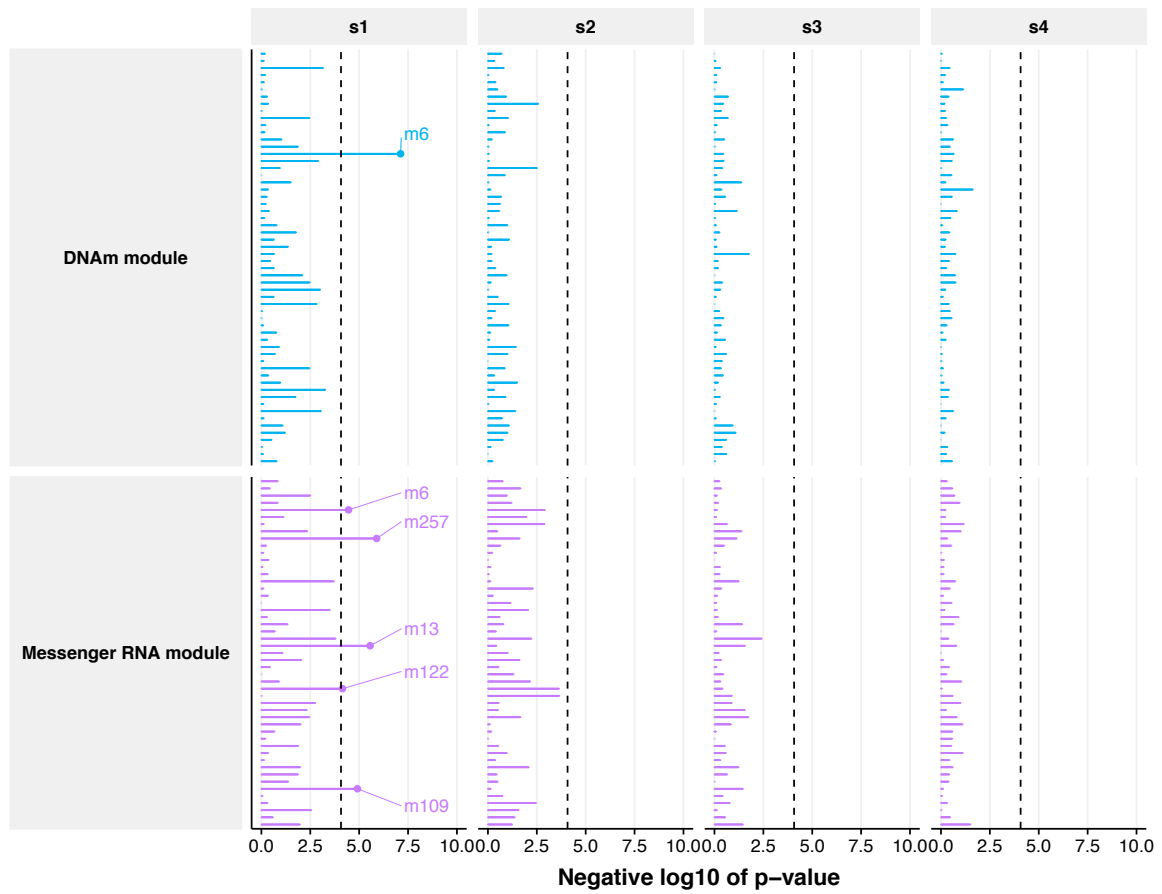


Supplementary Figure 2. Association of AD-PRS with global cognitive decline. (A) Global cognitive decline of individuals with different range of AD-PRS. ROS/MAP

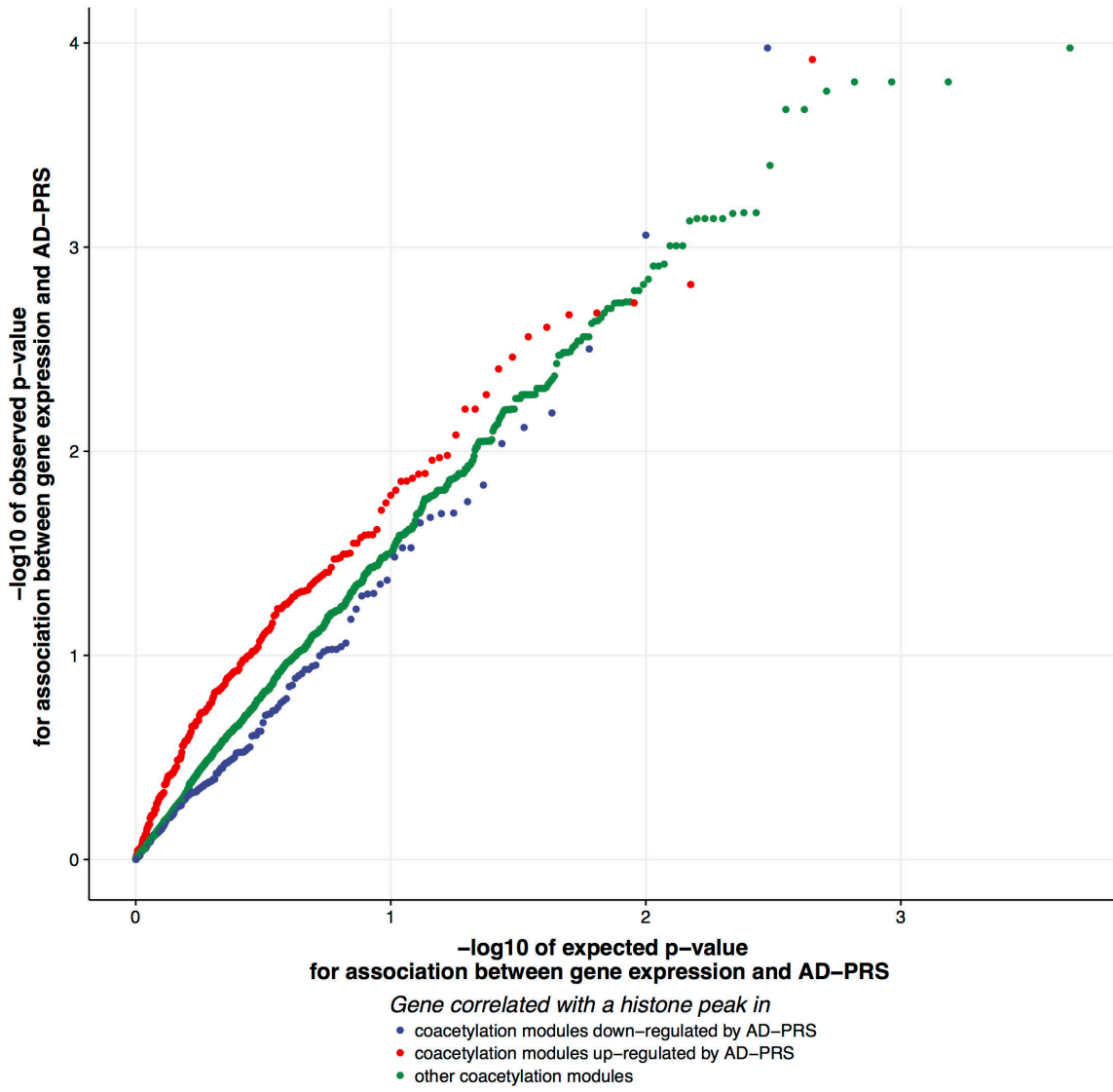
participants were separated into four groups based on quantiles of AD-PRS. (B) Global cognitive decline of individuals with different range of AD-PRS with adjusting AD diagnosis.



Supplementary Figure 3. Association between AD-PRS and global cognitive decline given an endophenotype. A bar plot represent p-values for association of AD-PRS with global cognitive decline given each endophenotype.



Supplementary Figure 4. Association of AD-PRS based on each SNP group with DNAm modules and mRNA modules. A dash line represents significance threshold that is identical to one in Figure 1.



Supplementary Figure 5. Quantile-quantile plot for association of AD-PRS with gene expression grouped by associated eQTHs.