

# MDK: Transcript Report

Jake Gockley

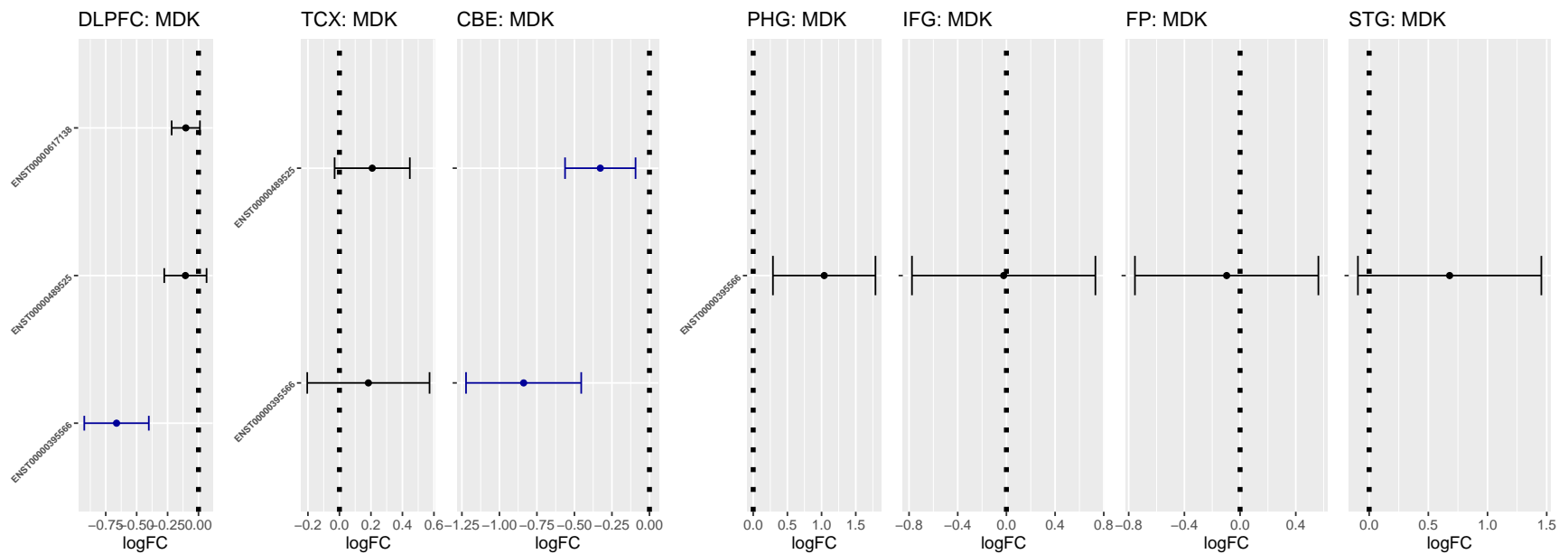
05/28/2020

## Log2 Fold Change of Transcripts By Brain Region Case V. Control

Red indicates over expressed and Blue indicates under expressed in cases versus Controls

AD = CDR  $\geq 1$  & Braak  $\geq 4$  & CERAD  $\geq 2$

CONTROL = CDR  $\leq 0.5$  & Braak  $\leq 3$  & CERAD  $\leq 1$



## Log2 Fold Change of Transcripts By Cognitive Assessment

Red indicates over expressed and Blue indicates under expressed in cases versus Controls

ROSMAP: Cogdx = 4 Versus CogDx = 1

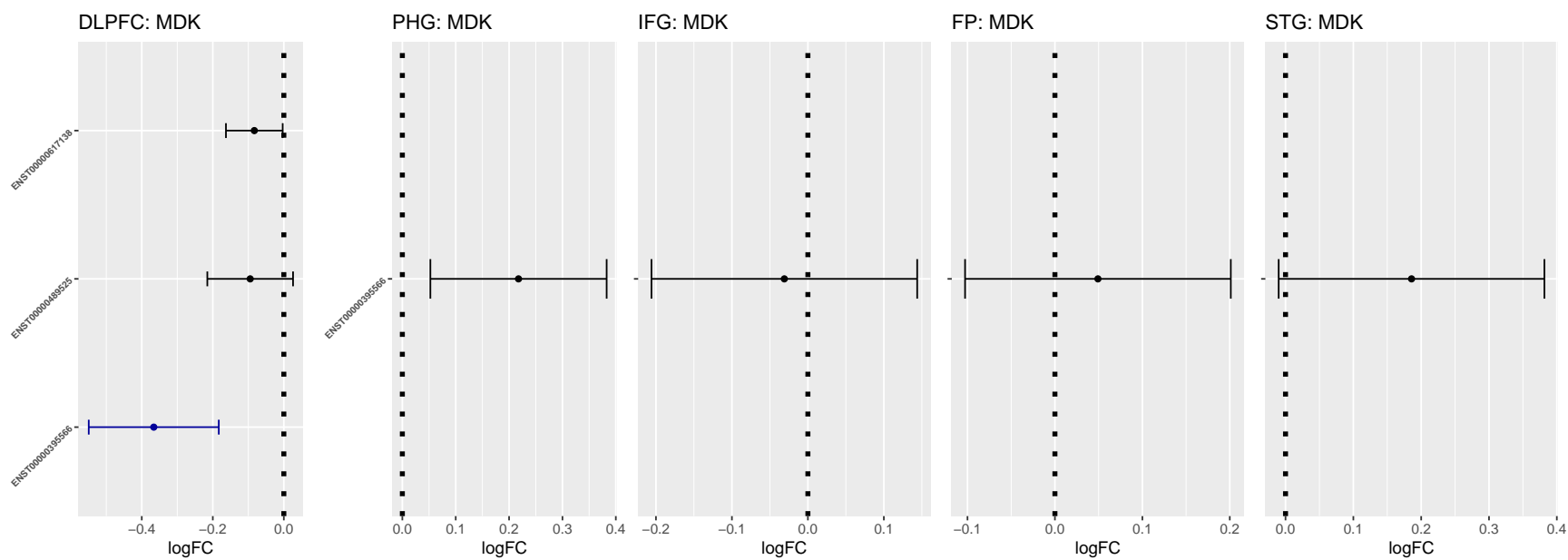
Cogdx = 4: AD: Alzheimer's dementia and NO other cause of CI (NINCDS PROB AD)

Cogdx = 1: NCI: No cognitive impairment (No impaired domains)

MSBB: CDR = 5 Versus CDR = 0

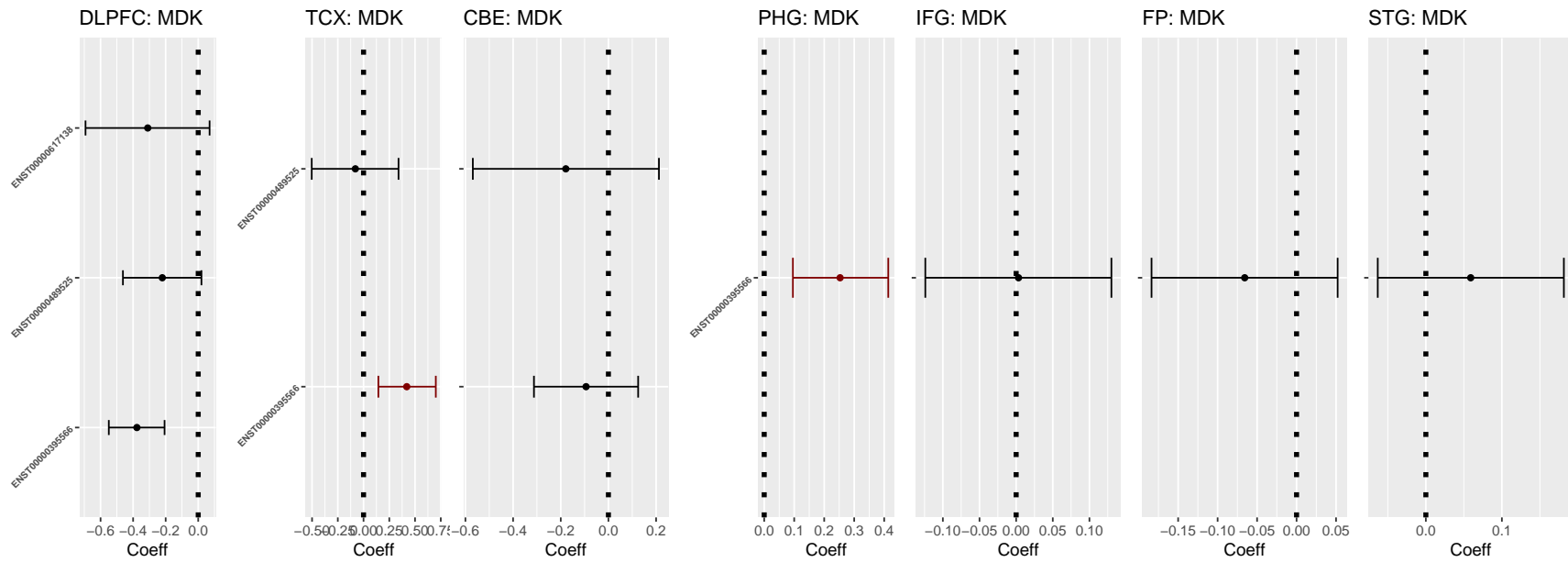
CDR = 5: Severe cognitive decline

CDR = 0: No cognitive decline



## Neuropathology Associations

All associations are logistic ordinal regression models preformed on Braak Score with P-Values correct to the total number of transcripts belonging to the user input gene list expressed in the respective tissue.

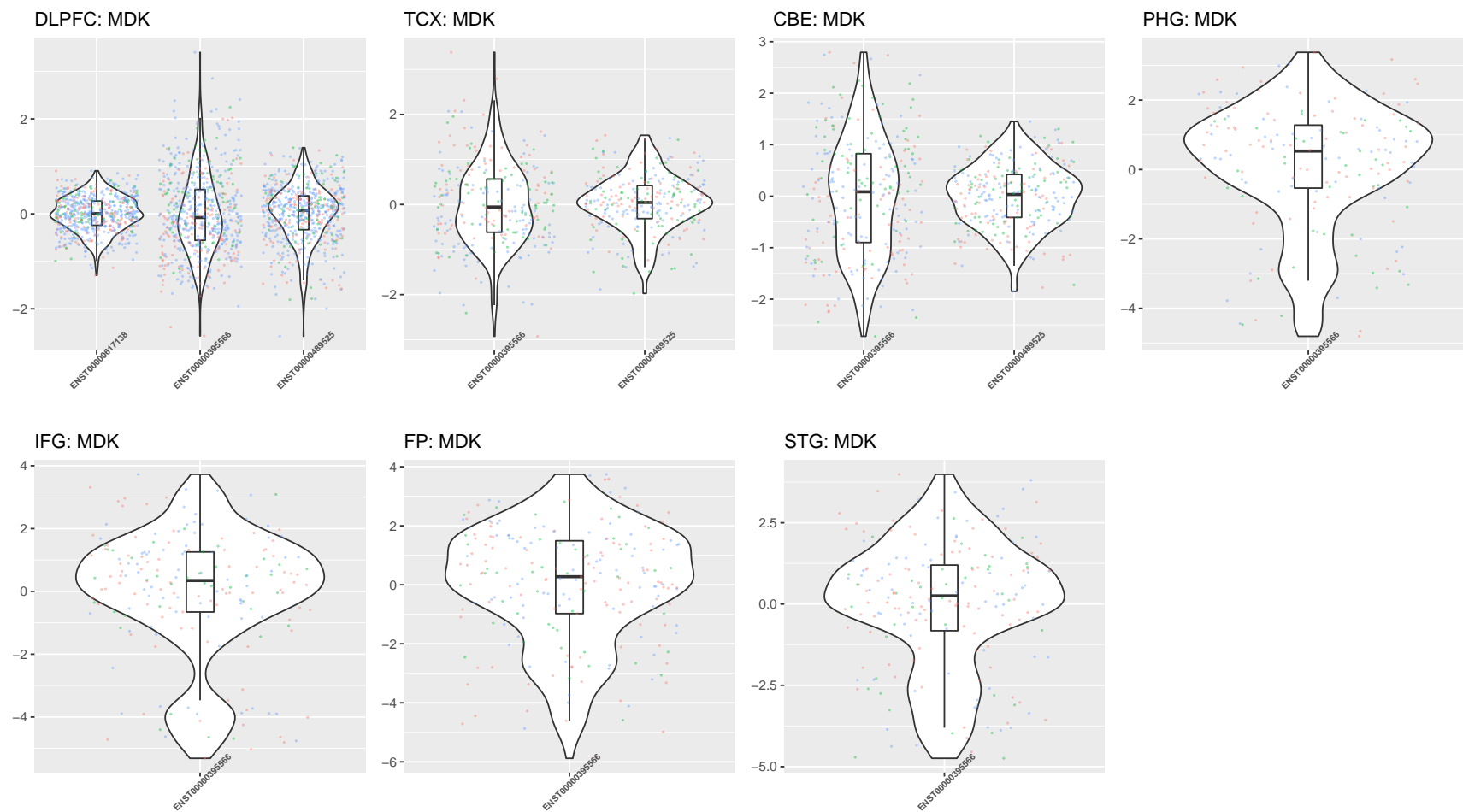


## Transcript Expression Level Boxplot Case V. Control

AD = CDR  $\geq 1$  & Braak  $\geq 4$  & CERAD  $\geq 2$  - Red

CONTROL = CDR  $\leq 0.5$  & Braak  $\leq 3$  & CERAD  $\leq 1$  - Blue

Other - Green



## Gene Model

Only expressed transcripts i.e. those in the analysis above are used in the gene model.

