

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Genes overlapped with the top 100 loci predicted by EWASplus to have the highest overall prediction scores for AD.

File Name: Supplementary Data 2

Description: Top 60 selected features for Beta-Amyloid (ROS/MAP).

File Name: Supplementary Data 3

Description: Top 60 selected features for Braak Staging (ROS/MAP).

File Name: Supplementary Data 4

Description: Top 60 selected features for CERAD (ROS/MAP).

File Name: Supplementary Data 5

Description: Top 60 selected features for Cognitive Decline Trajectory (ROS/MAP).

File Name: Supplementary Data 6

Description: Top 60 selected features for Global Pathology (ROS/MAP).

File Name: Supplementary Data 7

Description: Top 60 selected features for Neurofibrillary Tangles (ROS/MAP)

File Name: Supplementary Data 8

Description: Top 60 selected features for Braak Staging (London).

File Name: Supplementary Data 9

Description: Top 60 selected features for Braak Staging (Arizona).

File Name: Supplementary Data 10

Description: Top 60 selected features for Braak Staging (Mount Sinai).

File Name: Supplementary Data 11

Description: The list of primers for targeted bisulfite sequencing.