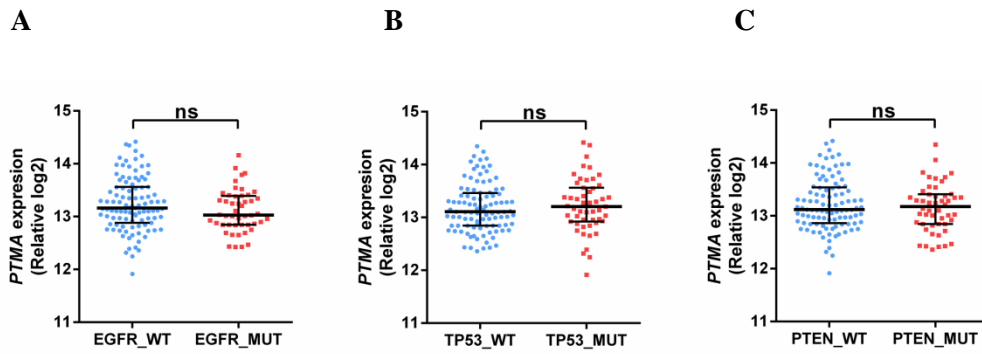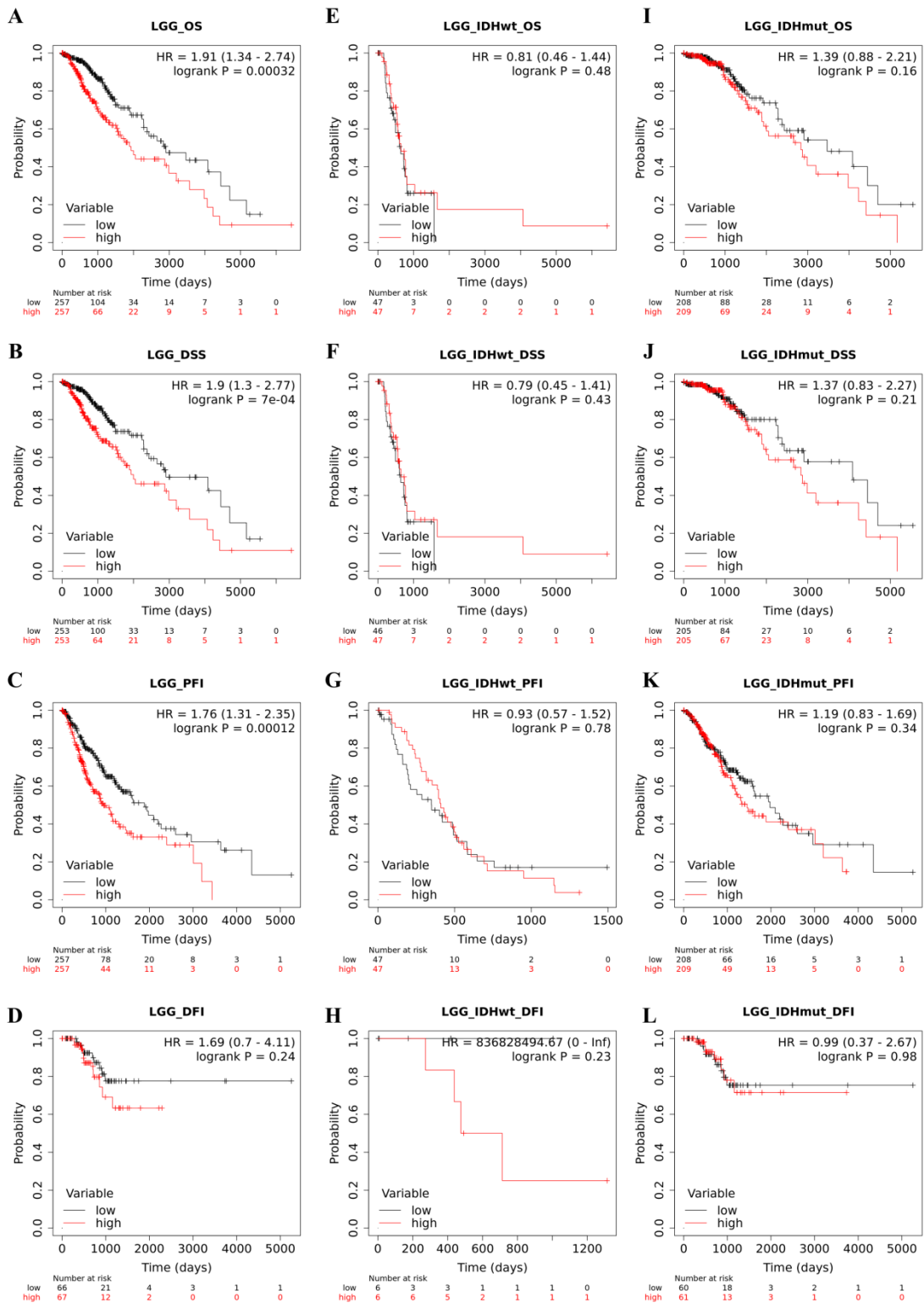**Supplementary Figure 1:** Association of PTMA expression with age (A) and gender (B) in CGGA dataset and TCGA dataset (C and D) respectively.
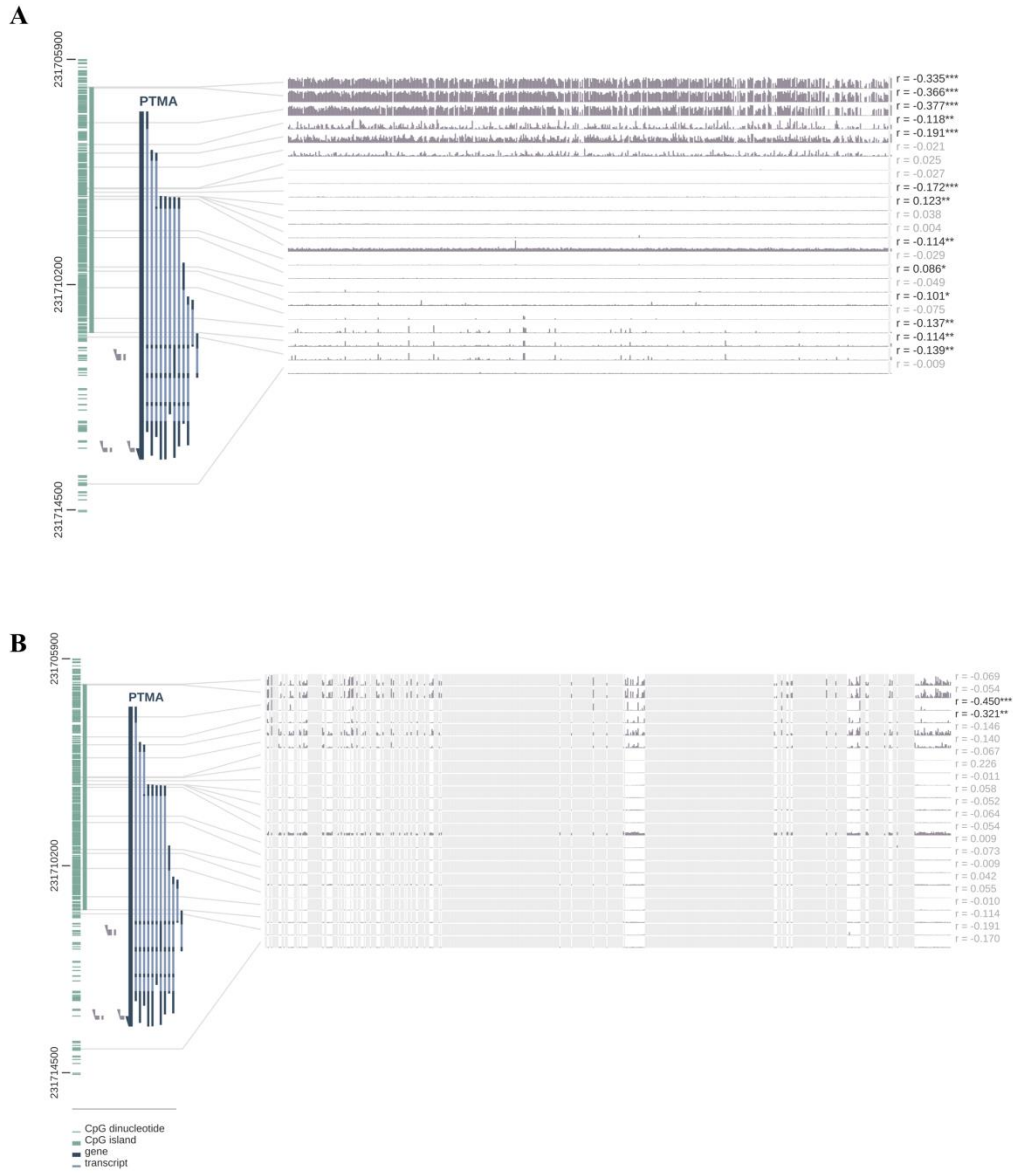
Supplementary Figure 2: Association of PTMA expression with molecular signatures in glioma datasets. (A) EGFR mutation status in TCGA-GBM (B) TP53 mutation status in TCGA-GBM (C) PTEN mutation status in TCGA-GBM.

Supplementary Figure 3: Kaplan-Meier survival analysis showing overall survival (OS), disease-specific survival (DSS), progression-free interval (PFI), and disease-free interval (DFI), respectively in TCGA_LGG samples. (A-D) IDH mutant, (E-H) and IDH wild type (I-L). HR represents the hazard ratio.
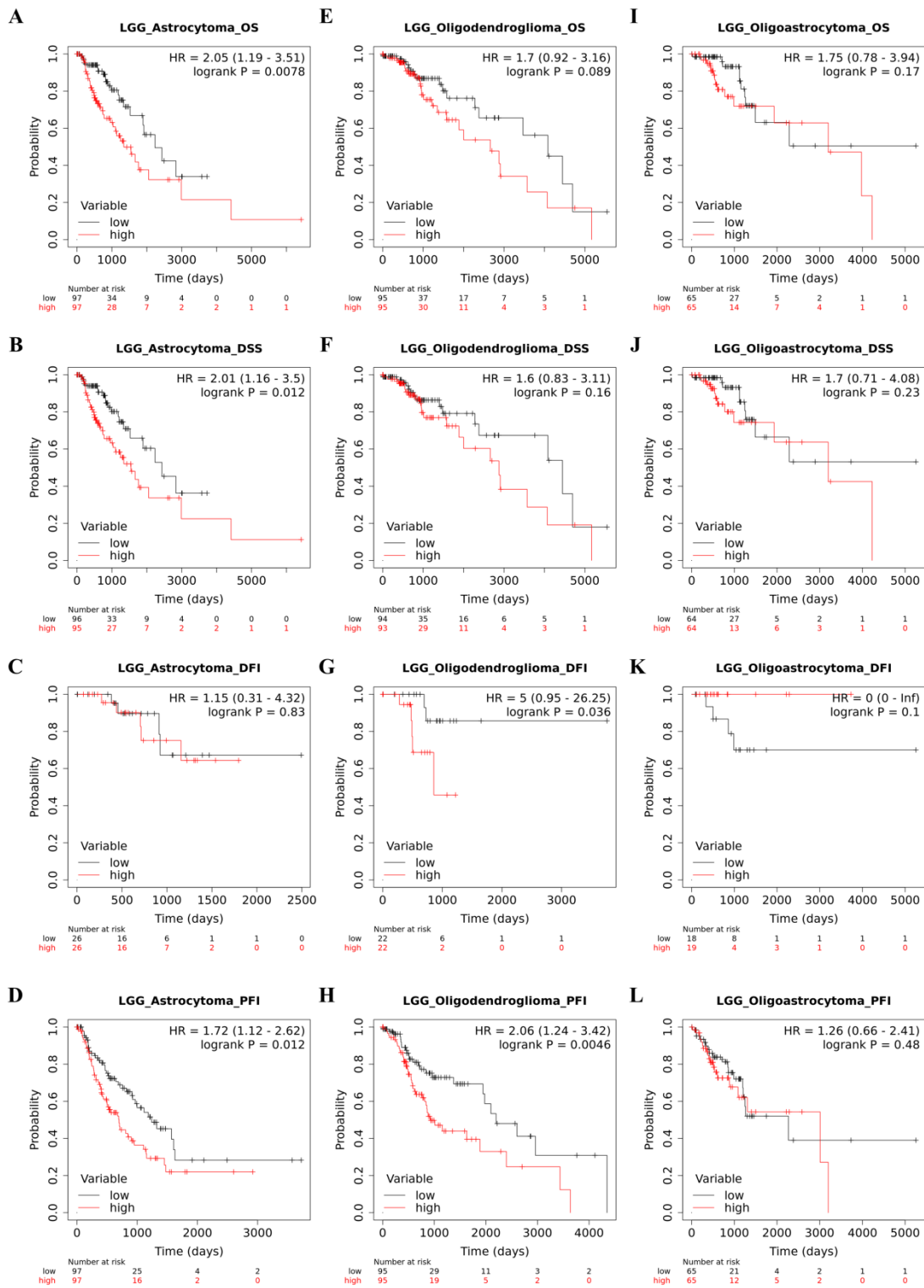
Supplementary Figure 4: Kaplan-Meier survival analysis showing OS, DSS, DFI, and PFI in TCGA_LGG based in tumor histology. (A-D) Astrocytoma; (E-H) Oligodendroglioma; (I-L) Oligoastrocytoma. HR represents the hazard ratio.

A

r = -0.335***
r = -0.366***
r = -0.377***
r = -0.118**
r = -0.191***
r = -0.021
r = 0.025
r = -0.027
r = -0.172***
r = 0.123**
r = 0.038
r = 0.004
r = -0.114**
r = -0.029
r = 0.086*
r = -0.049
r = -0.101*
r = -0.075
r = -0.137**
r = -0.114**
r = -0.139**
r = -0.009

B

r = -0.069
r = -0.054
r = -0.450***
r = -0.321**
r = -0.146
r = -0.140
r = -0.067
r = 0.226
r = -0.011
r = 0.058
r = -0.052
r = -0.064
r = -0.054
r = 0.009
r = -0.073
r = -0.009
r = 0.042
r = 0.055
r = -0.010
r = -0.114
r = -0.191
r = -0.170

CpG dinucleotide
CpG island
gene
transcript

Supplementary Figure 5: Correlation of PAXX gene methylation with gene expression in (A) TCGA-LGG and (B) TCGA-GBM dataset from MEXPRESS webserver.

A)

Gr I   Gr II   Gr III   Gr IV

PTMA (12.5 kDa)

B)

Gr I   Gr II   Gr III   Gr IV

Beta Actin (42 kDa)
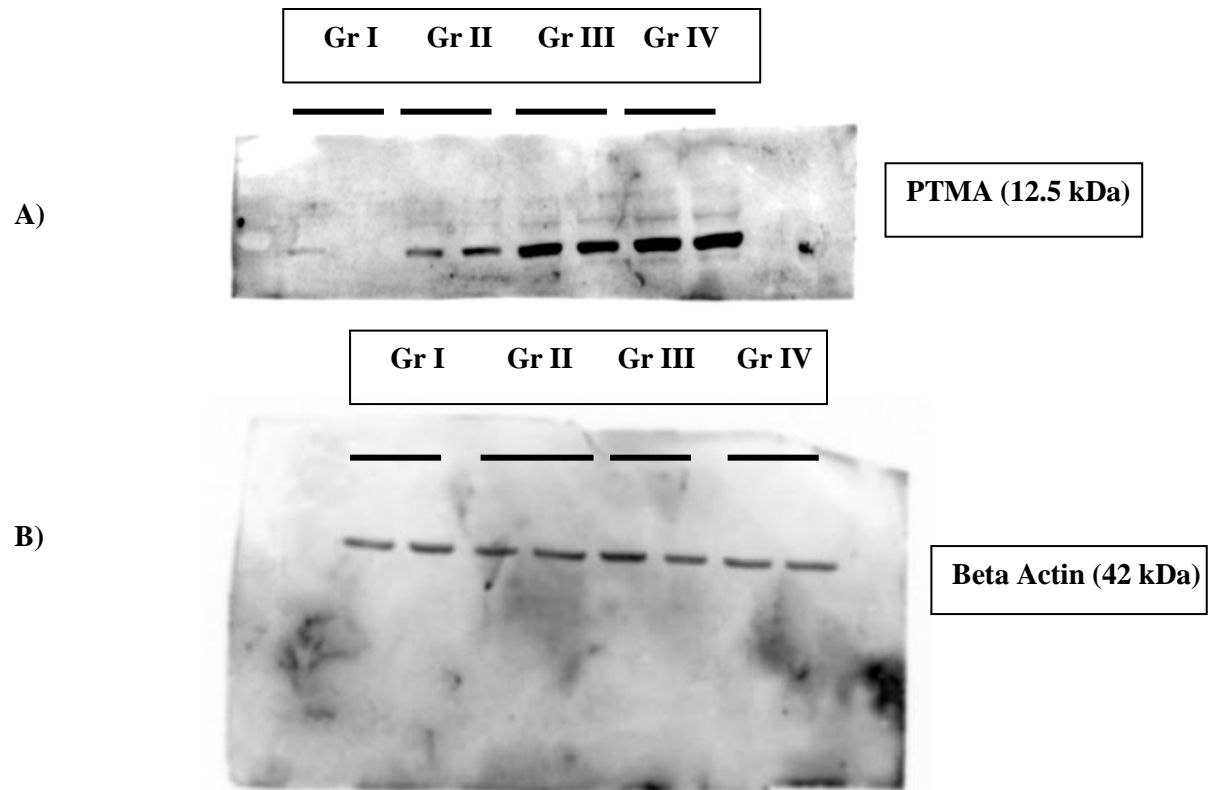
Supplementary Figure 6: Raw and uncropped western blot images of glioma tissue lysates (A and B), represented as figure 1E in main article file. Here, figure A and B represents blots for PTMA and beta actin respectively.