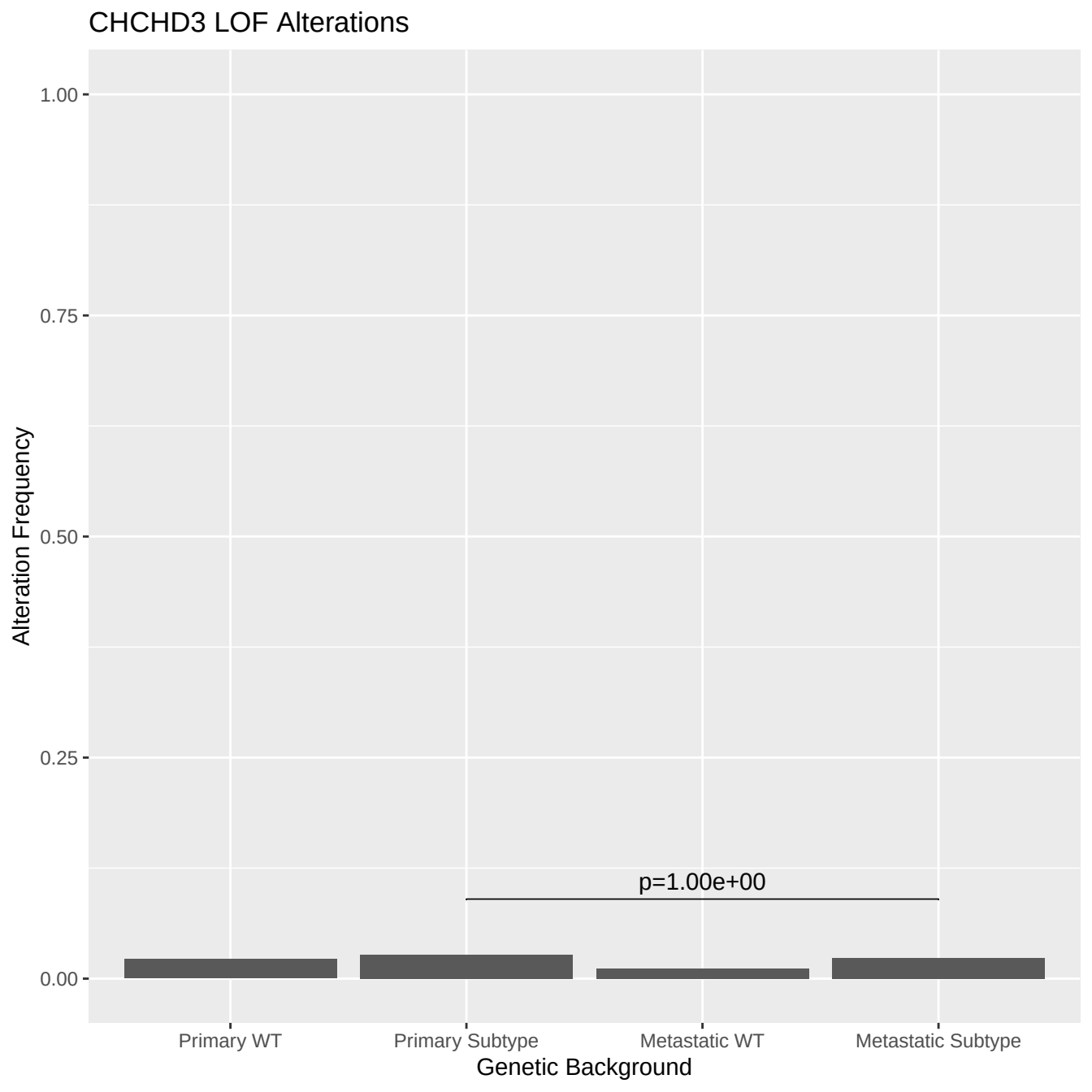
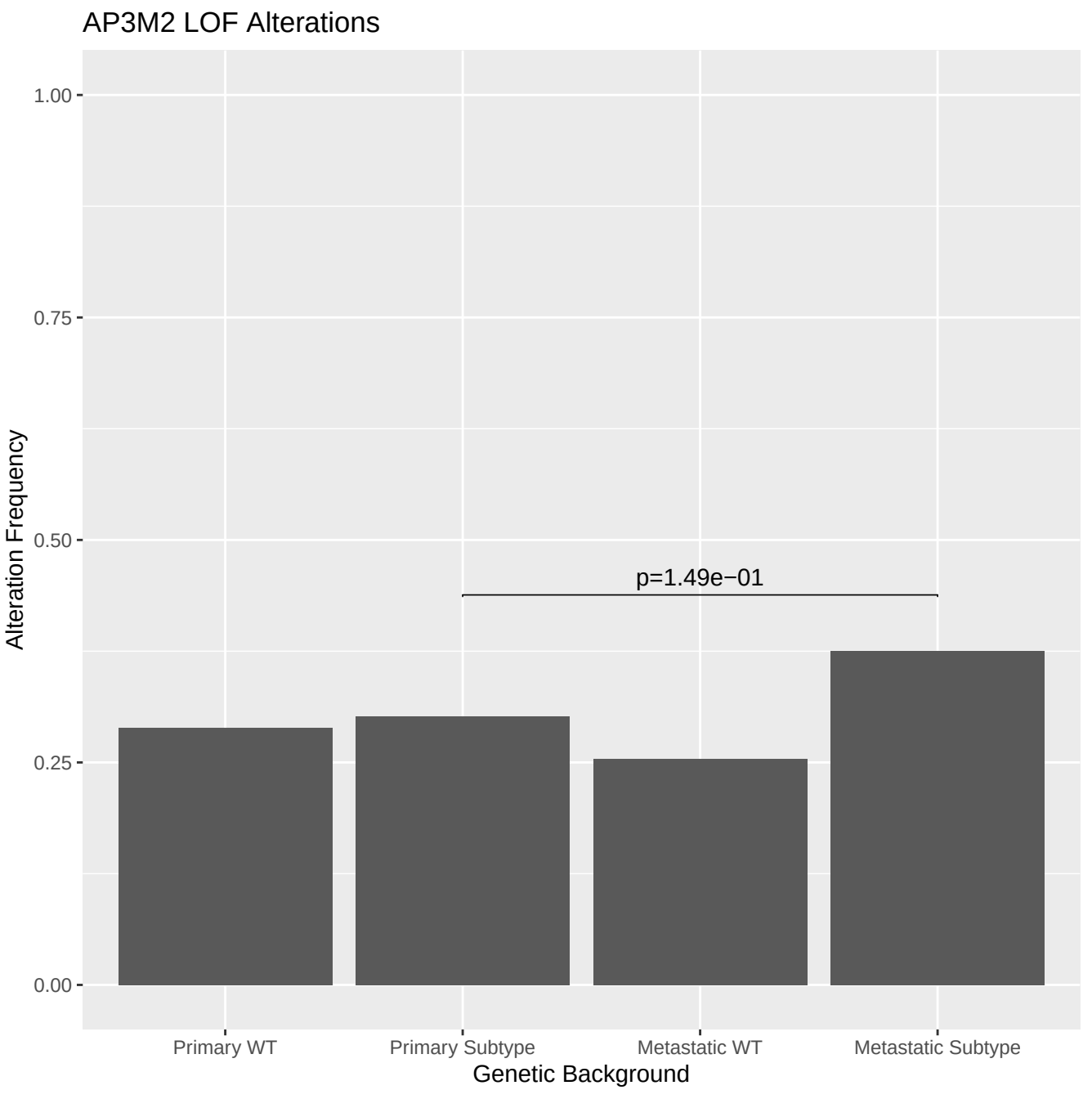
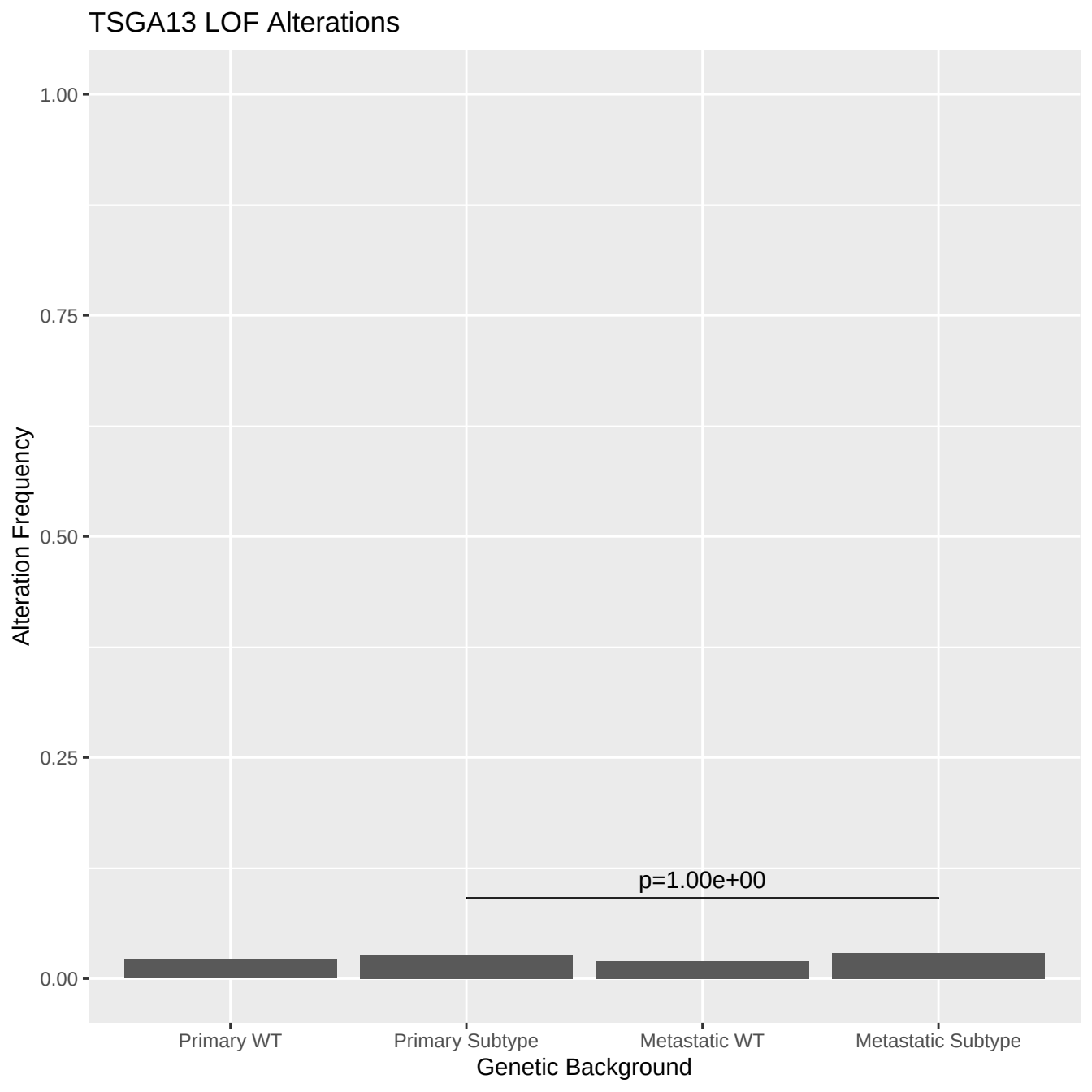
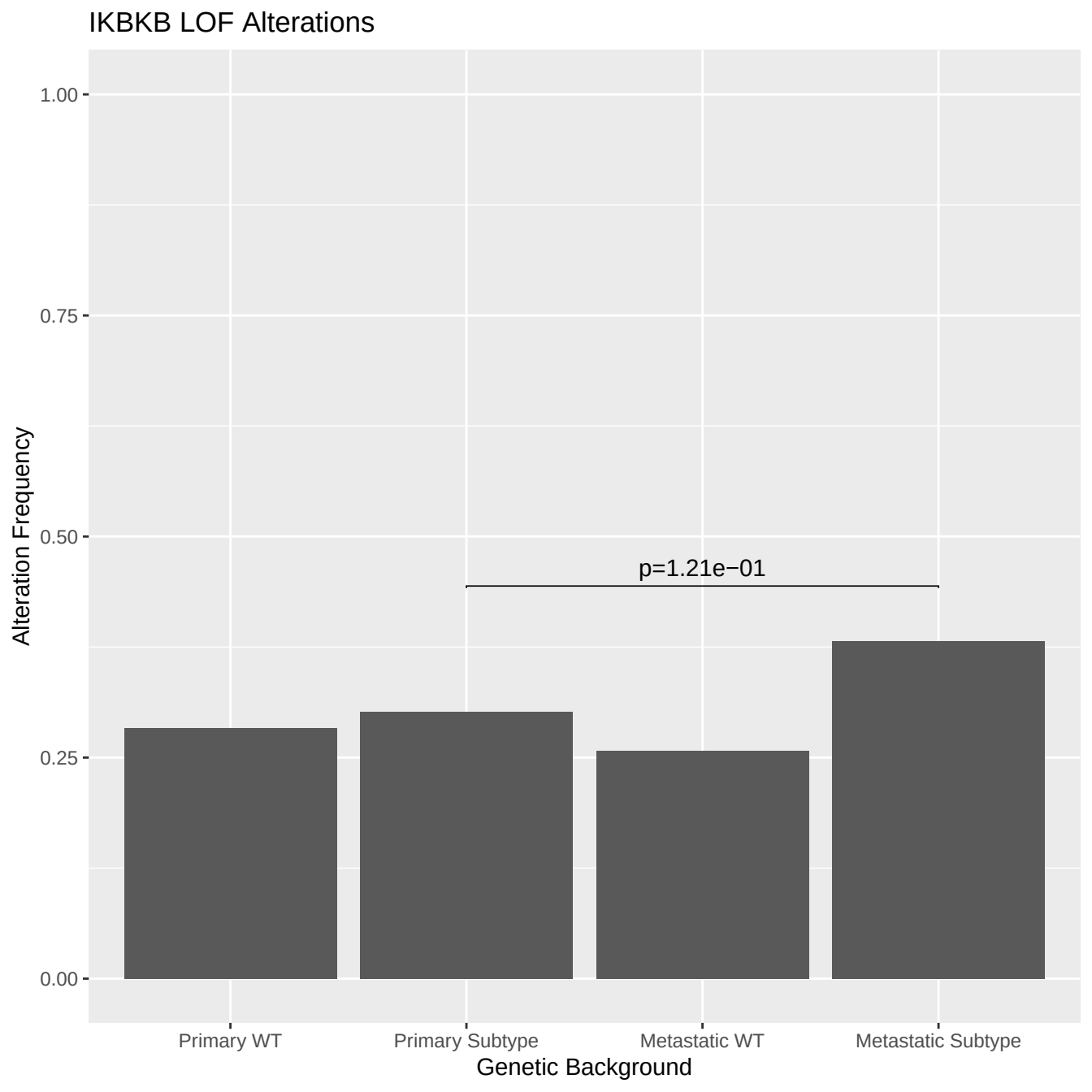
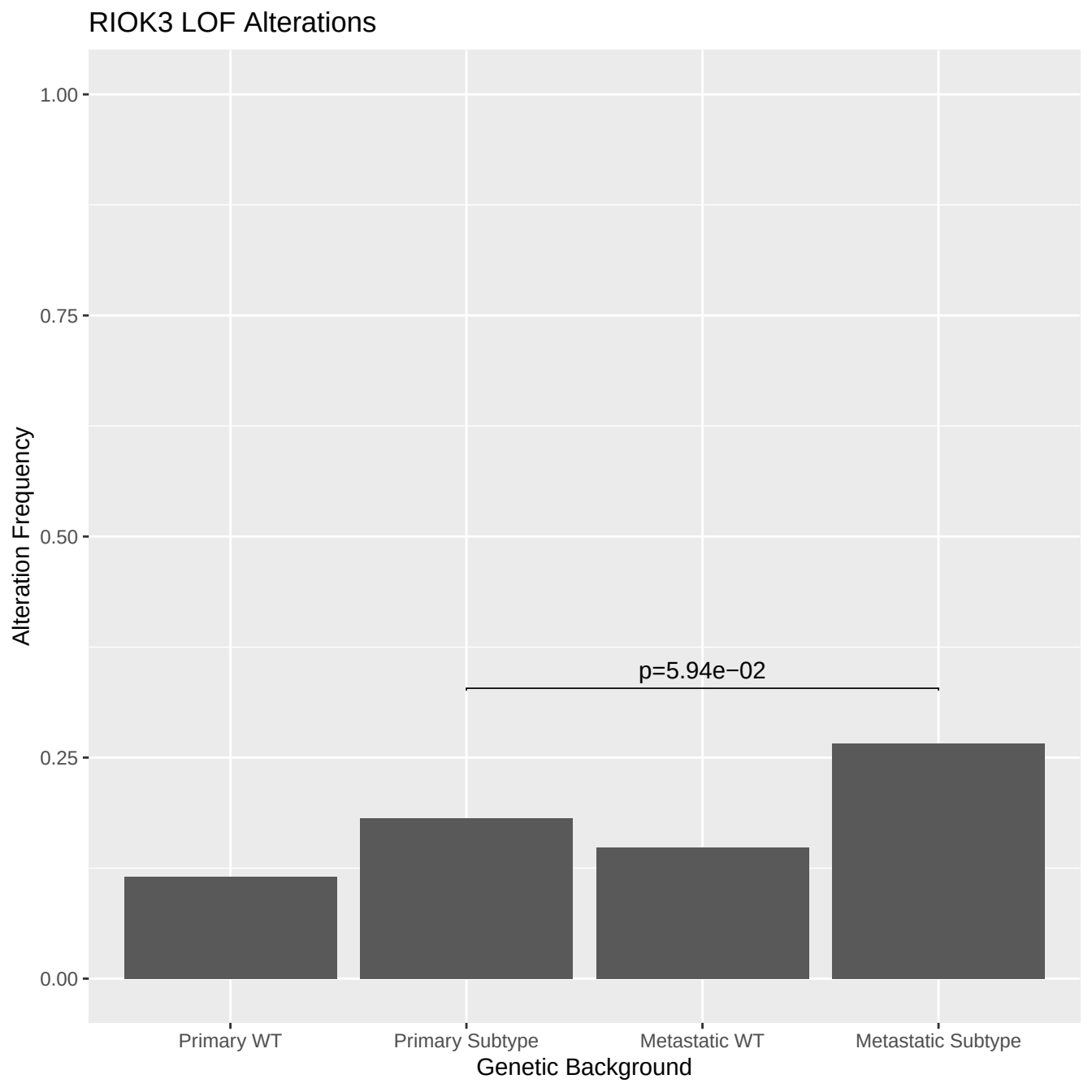
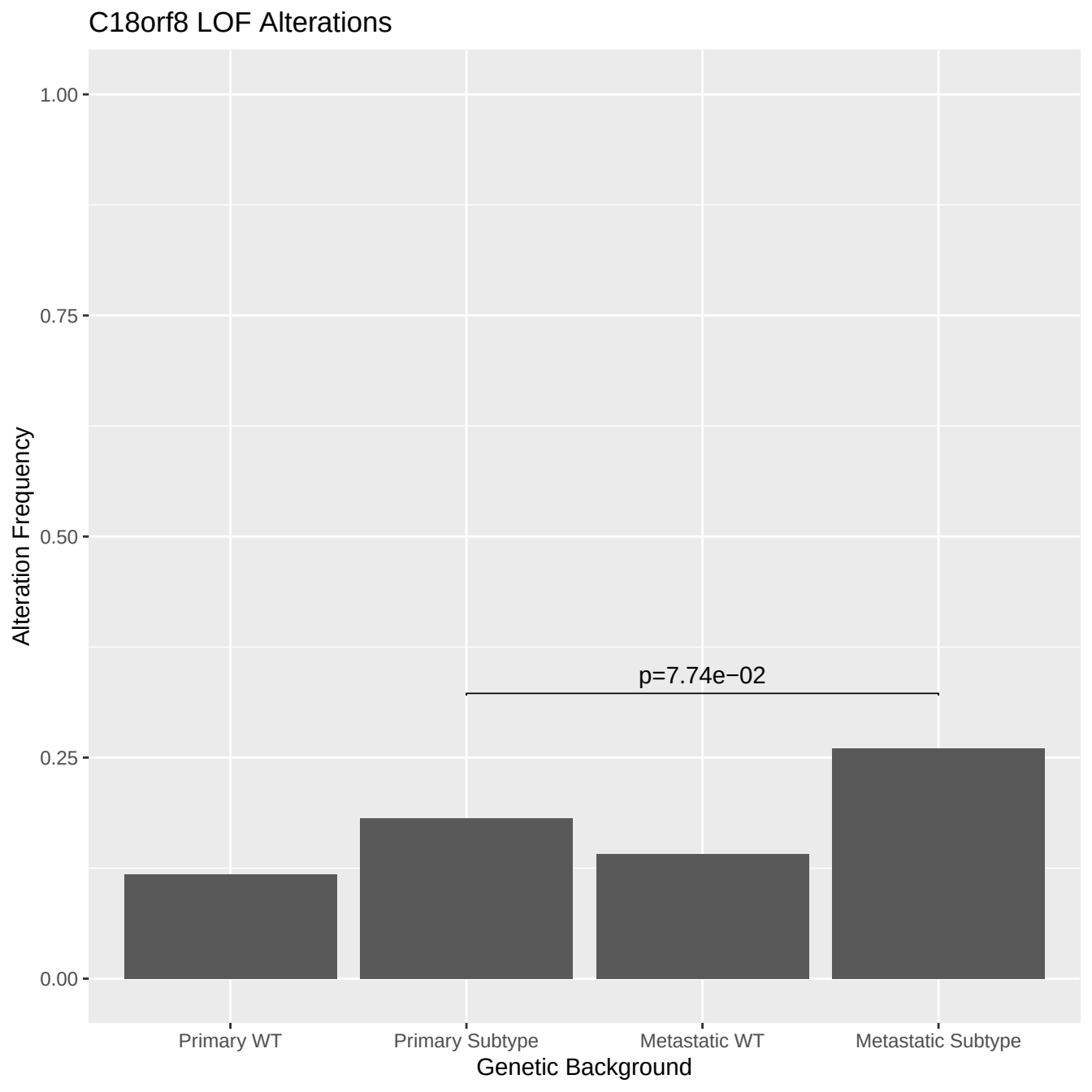

CHCHD3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

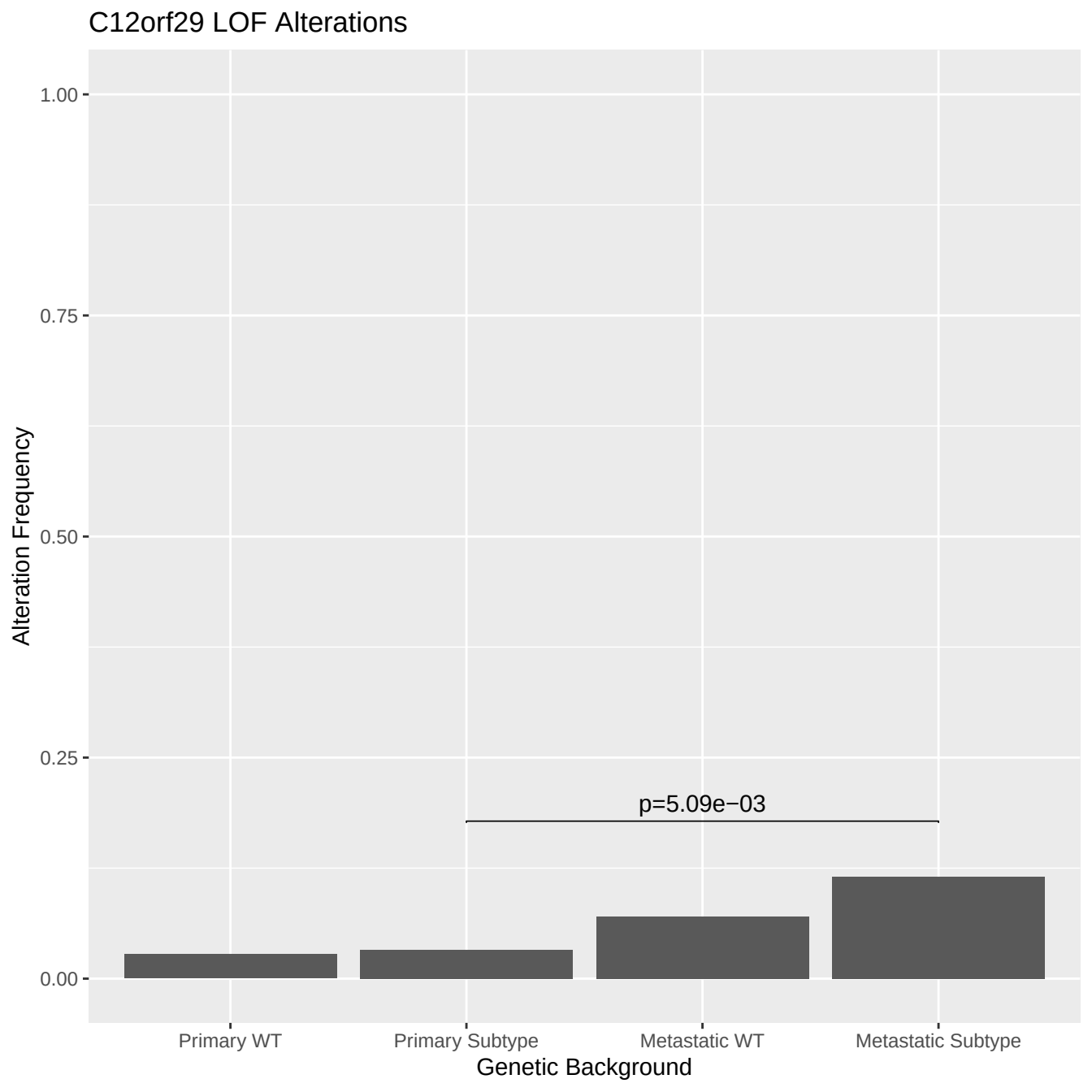

AP3M2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

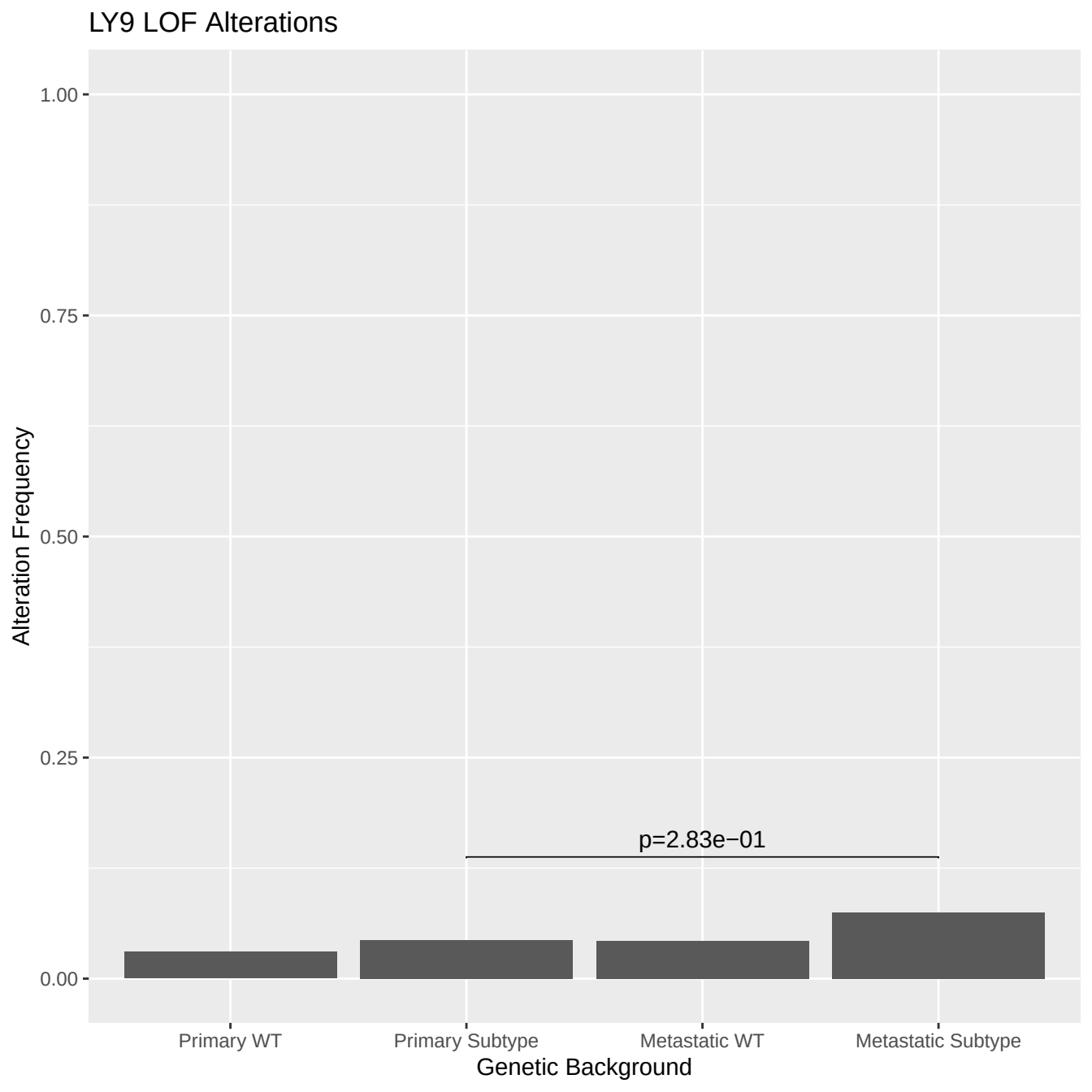

TSGA13 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

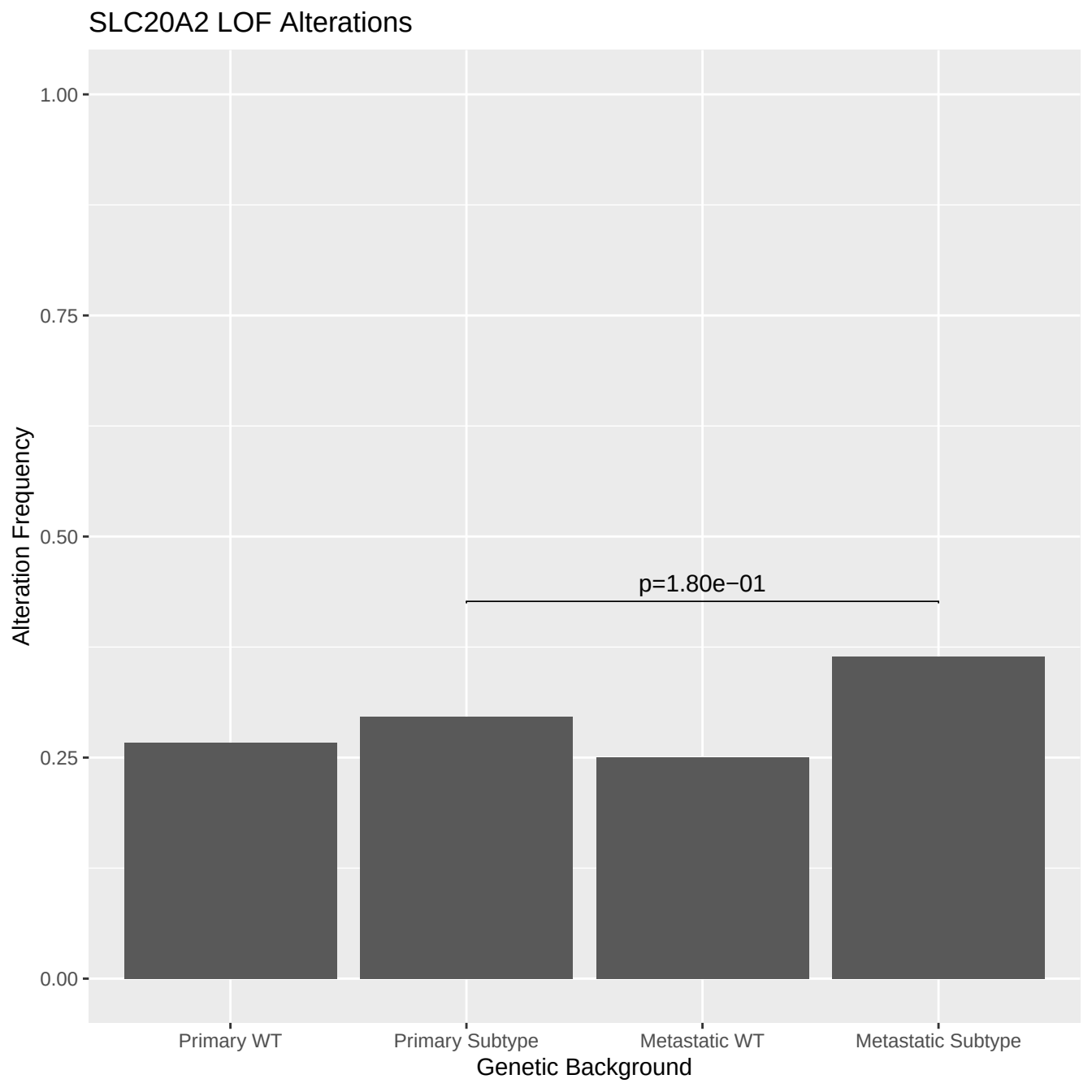

IKBKB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.21e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

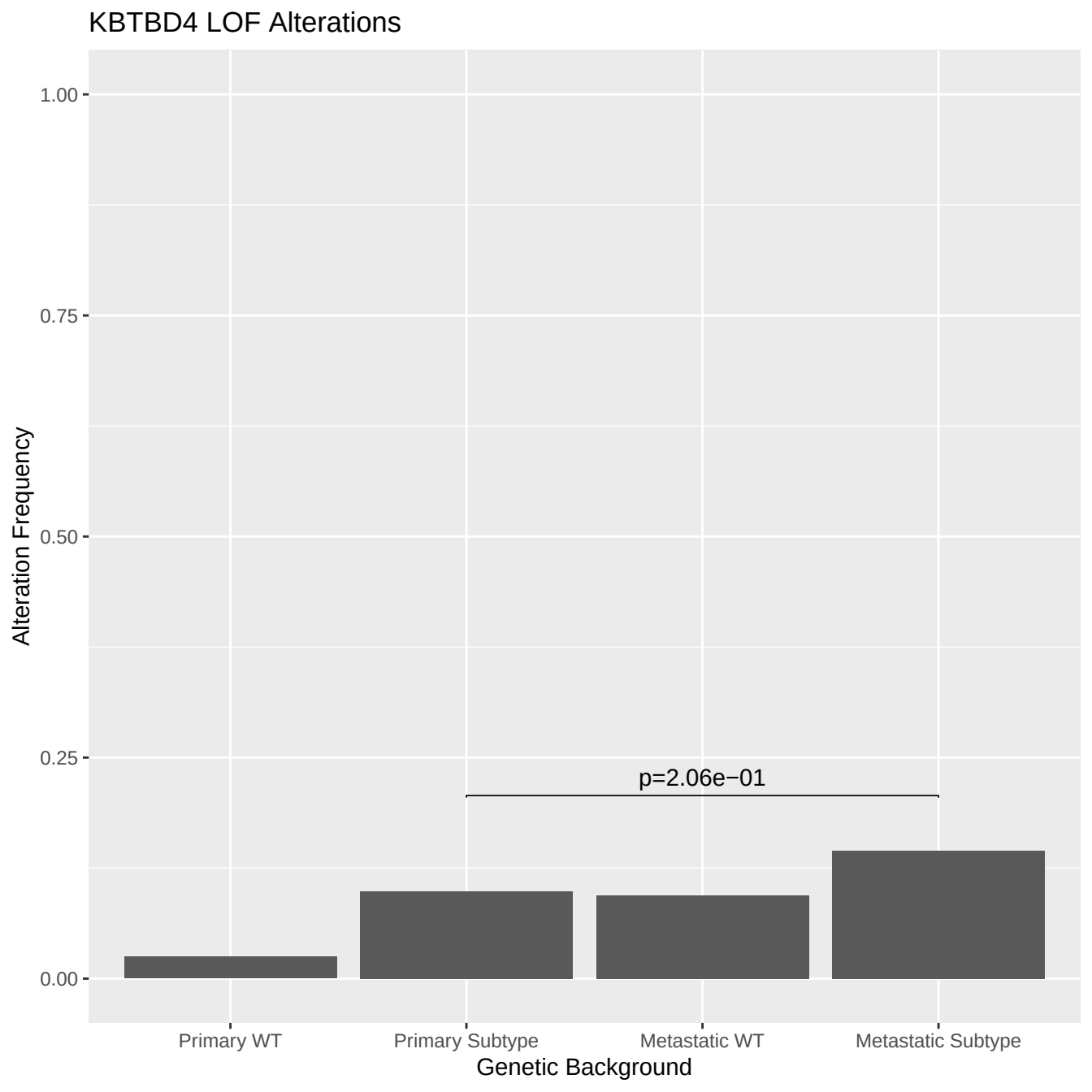

RIOK3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.94e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

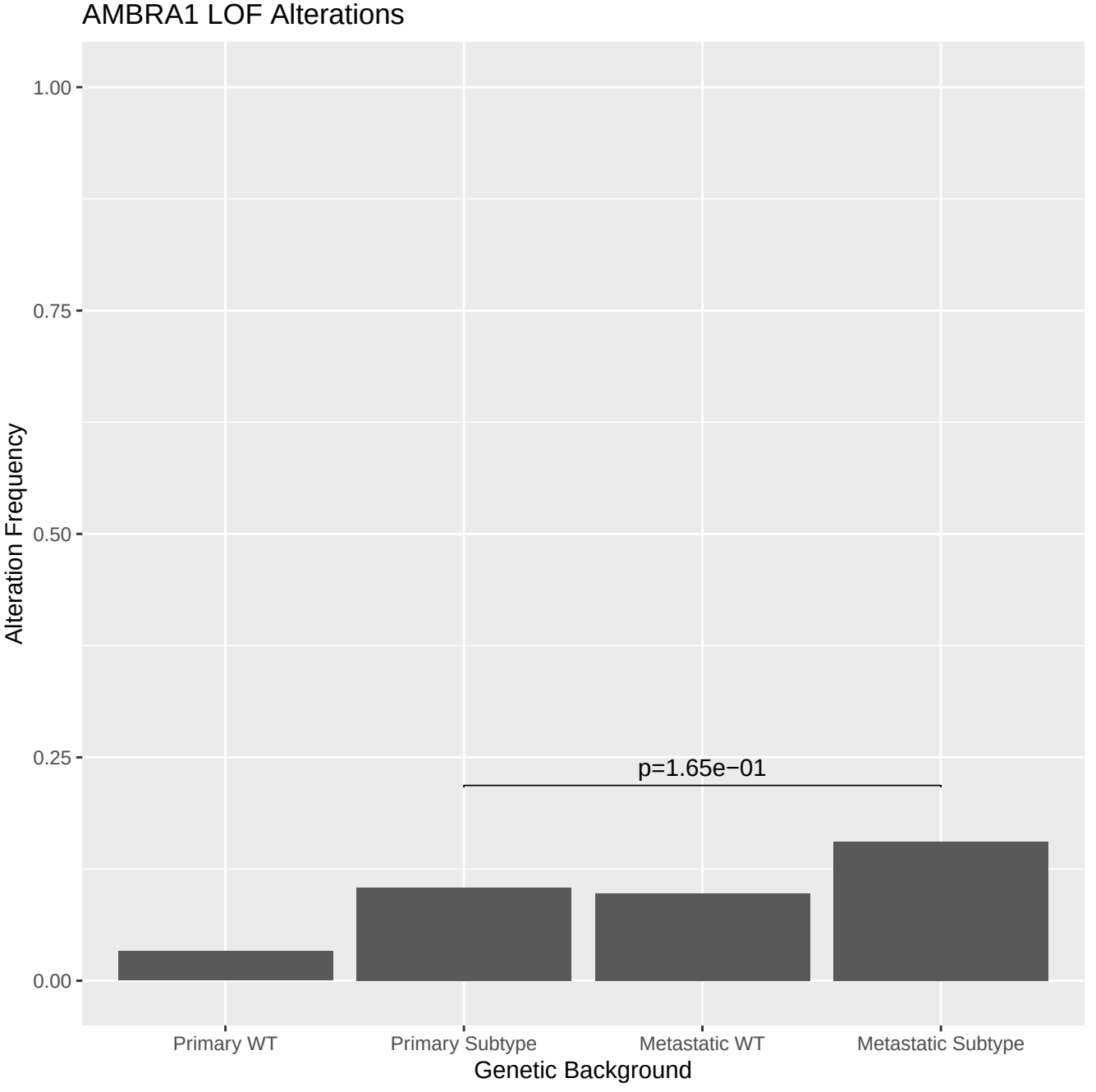

C18orf8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.74e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

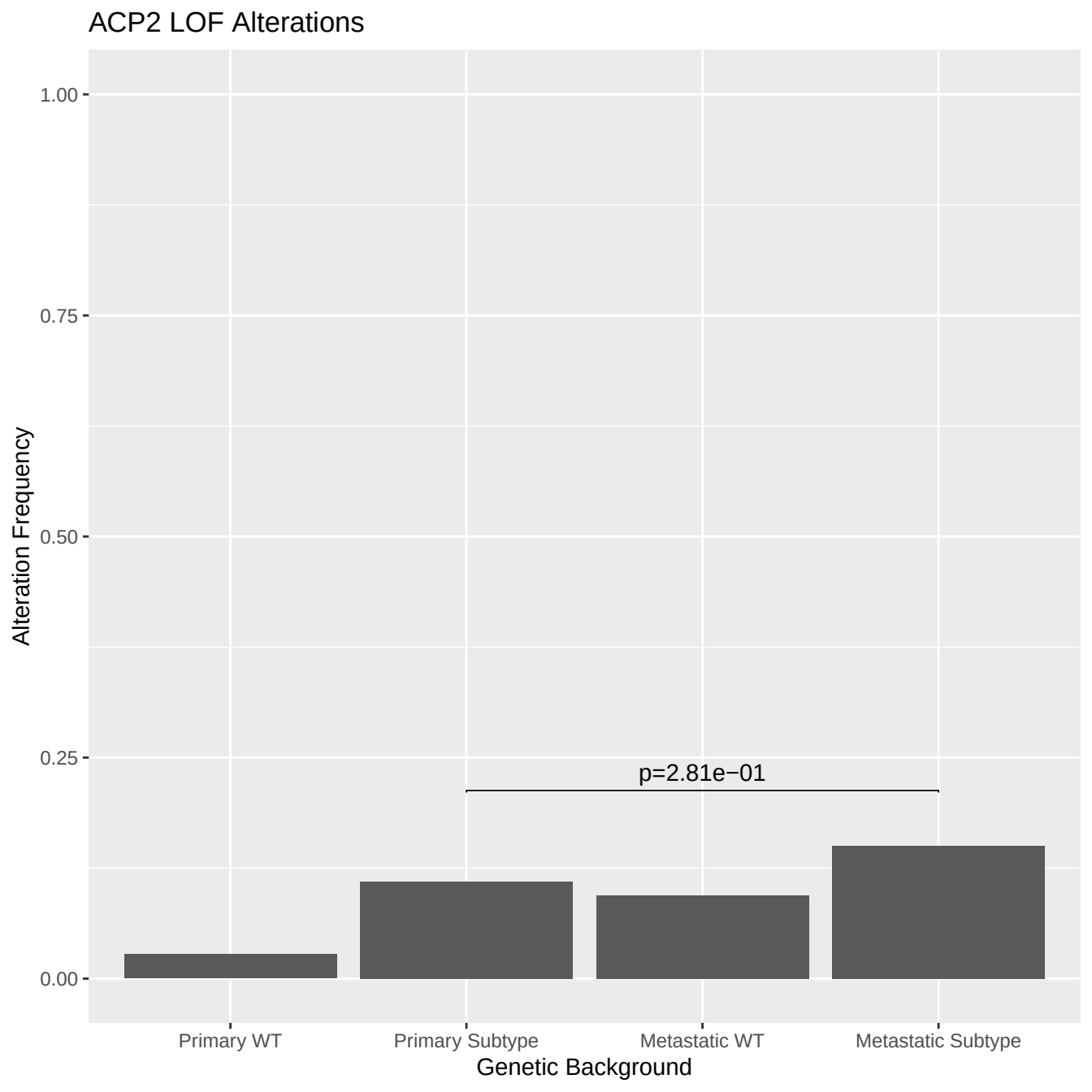

C12orf29 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.09e−03
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

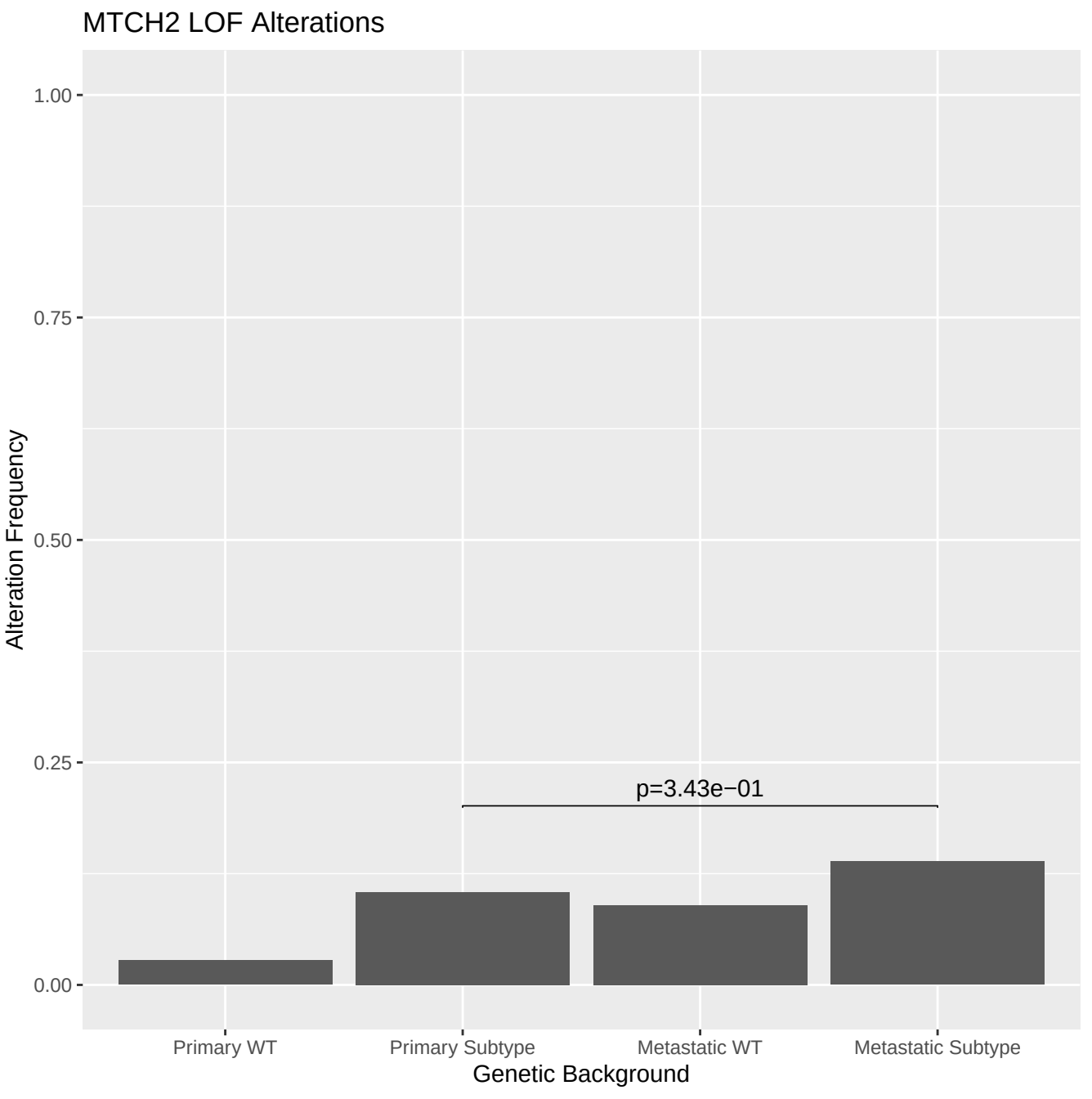

LY9 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

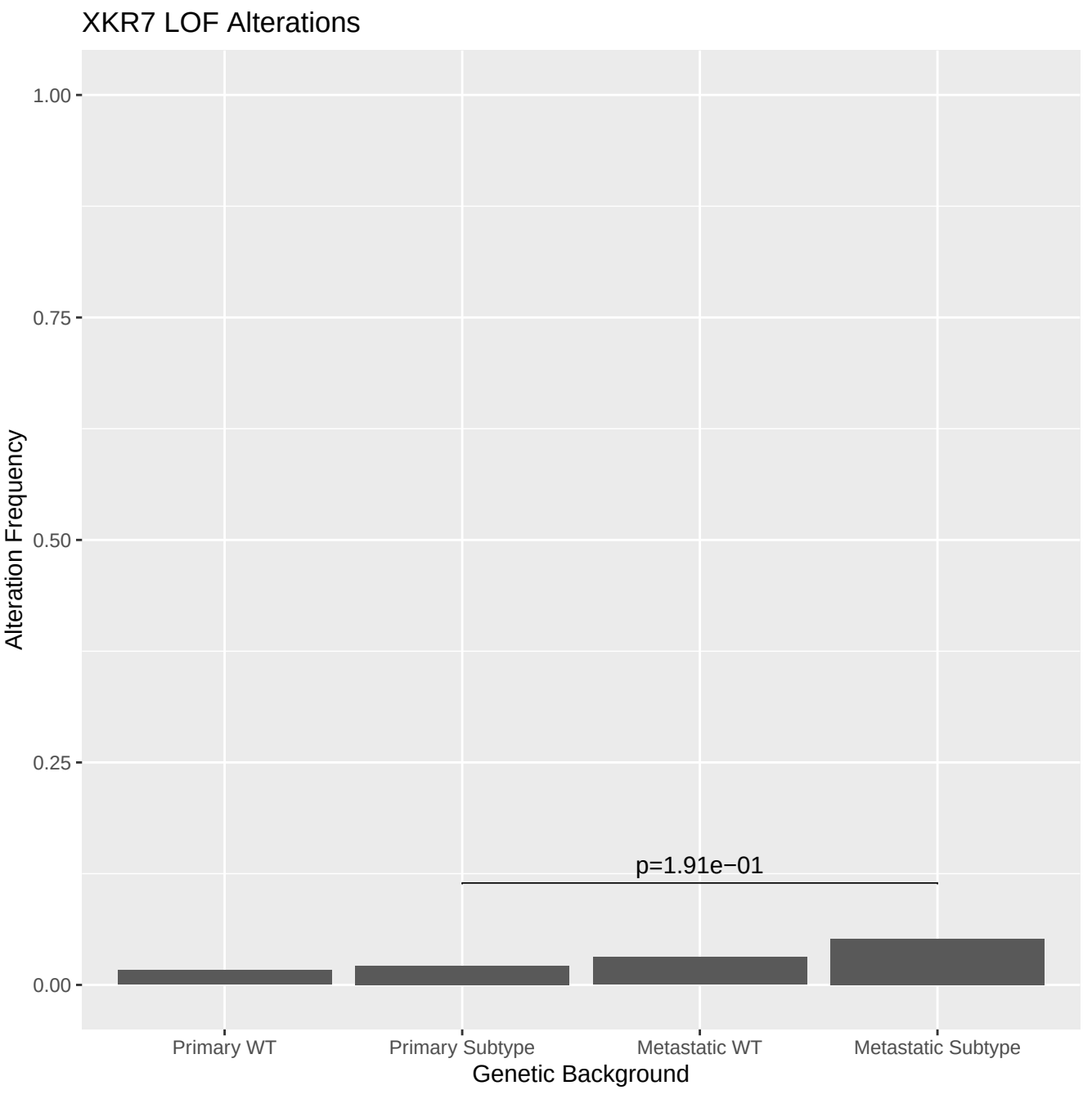

SLC20A2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.80e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

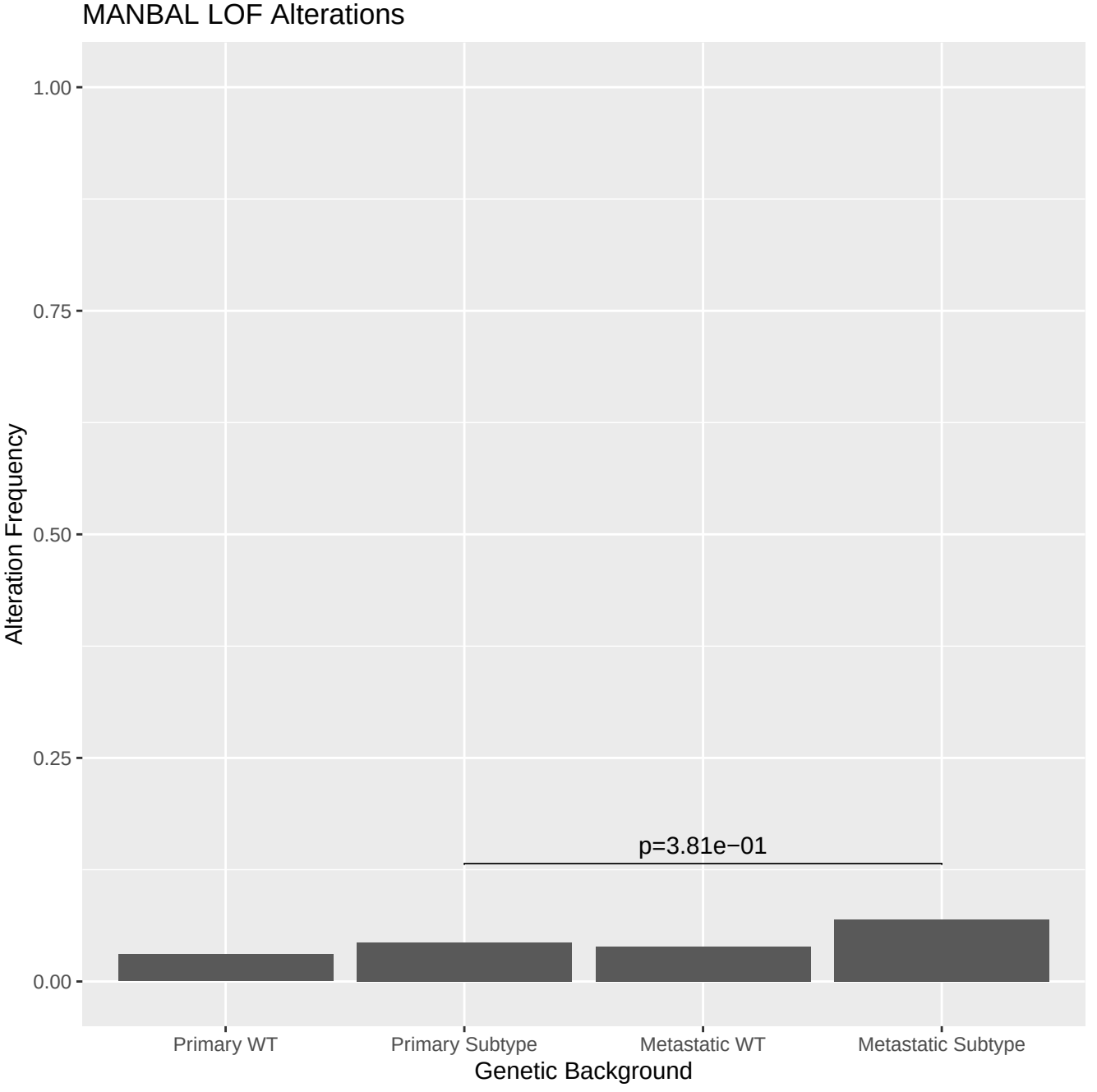

KBTBD4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

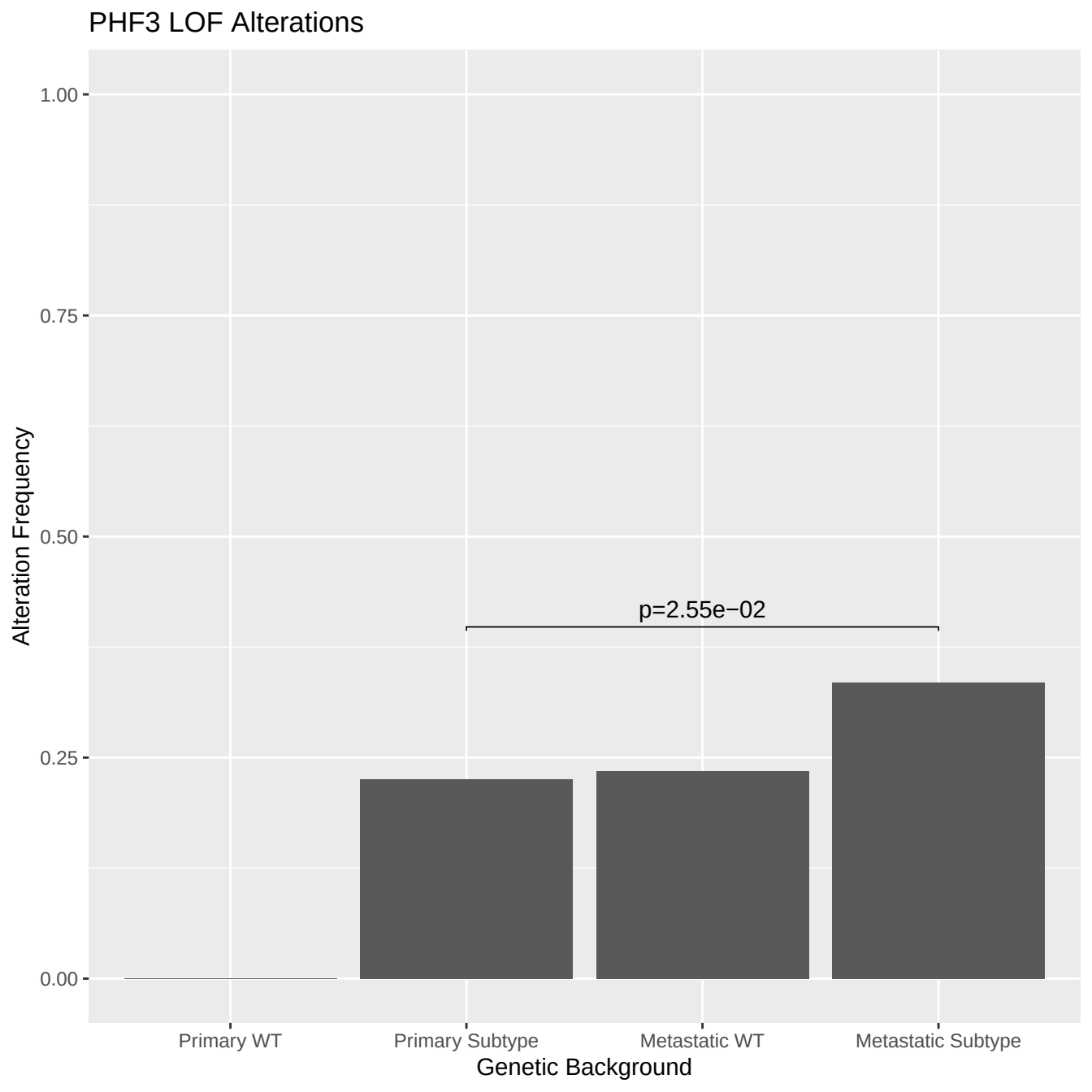

AMBRA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.65e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

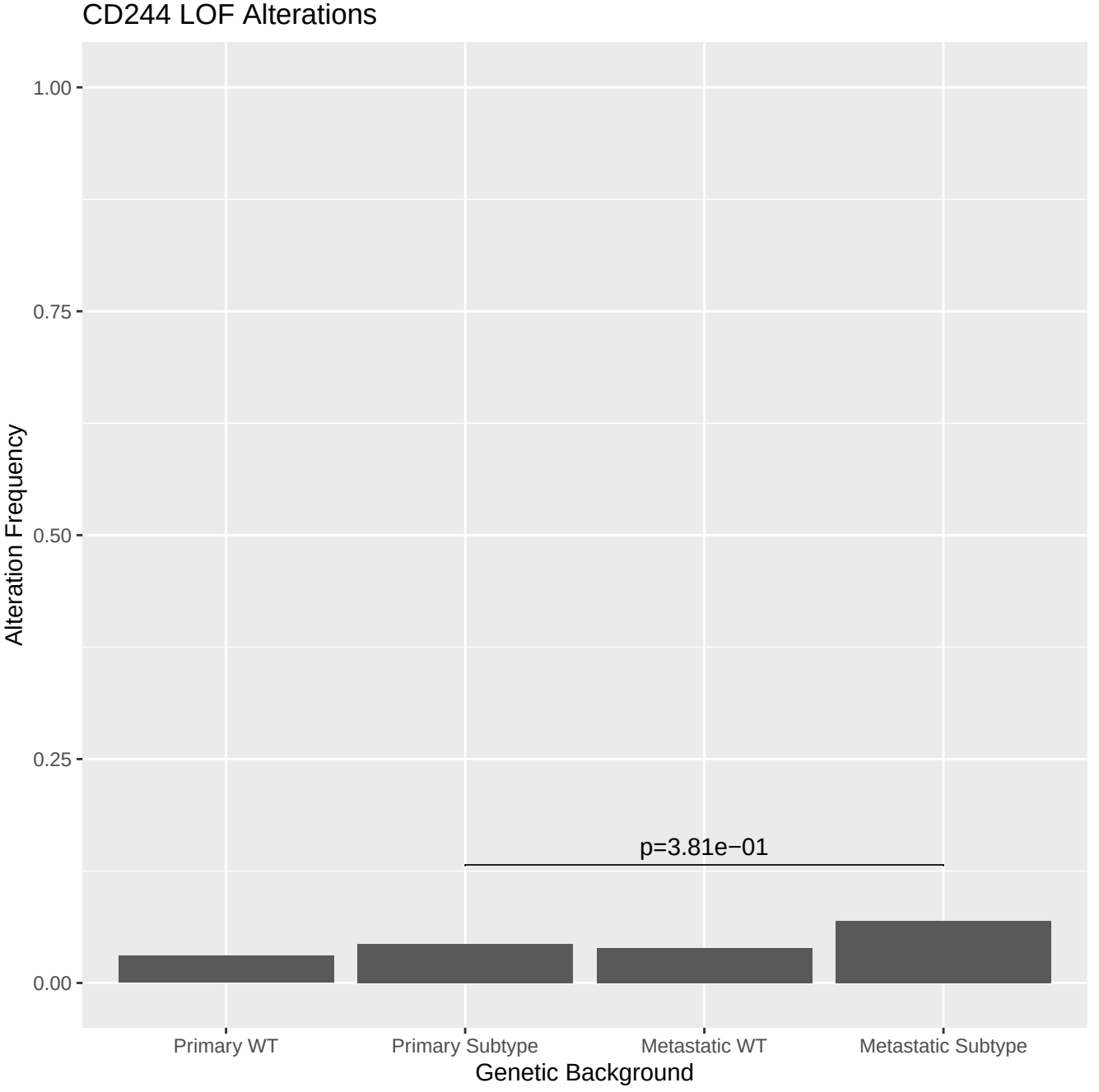

ACP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

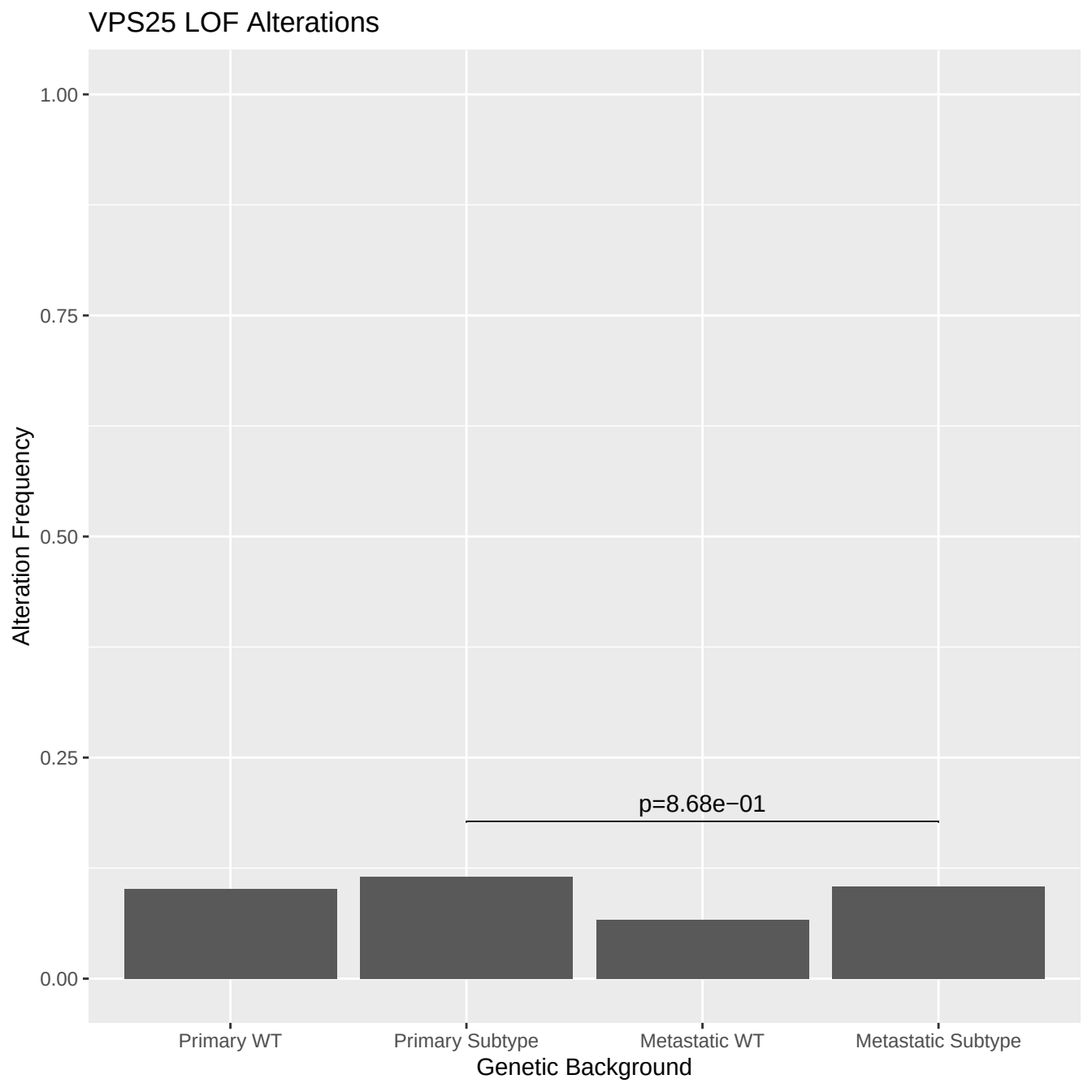

MTCH2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.43e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

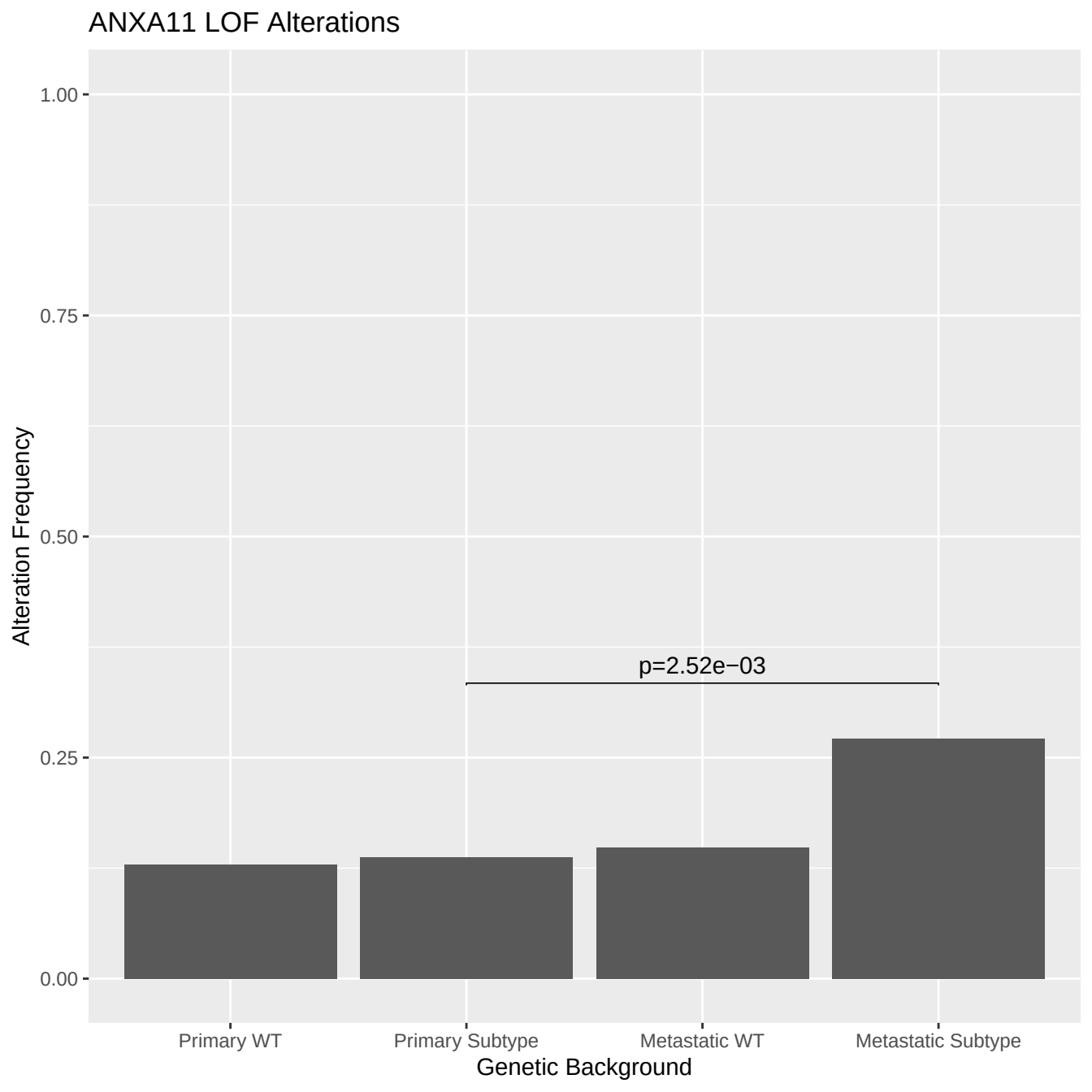

XKR7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.91e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

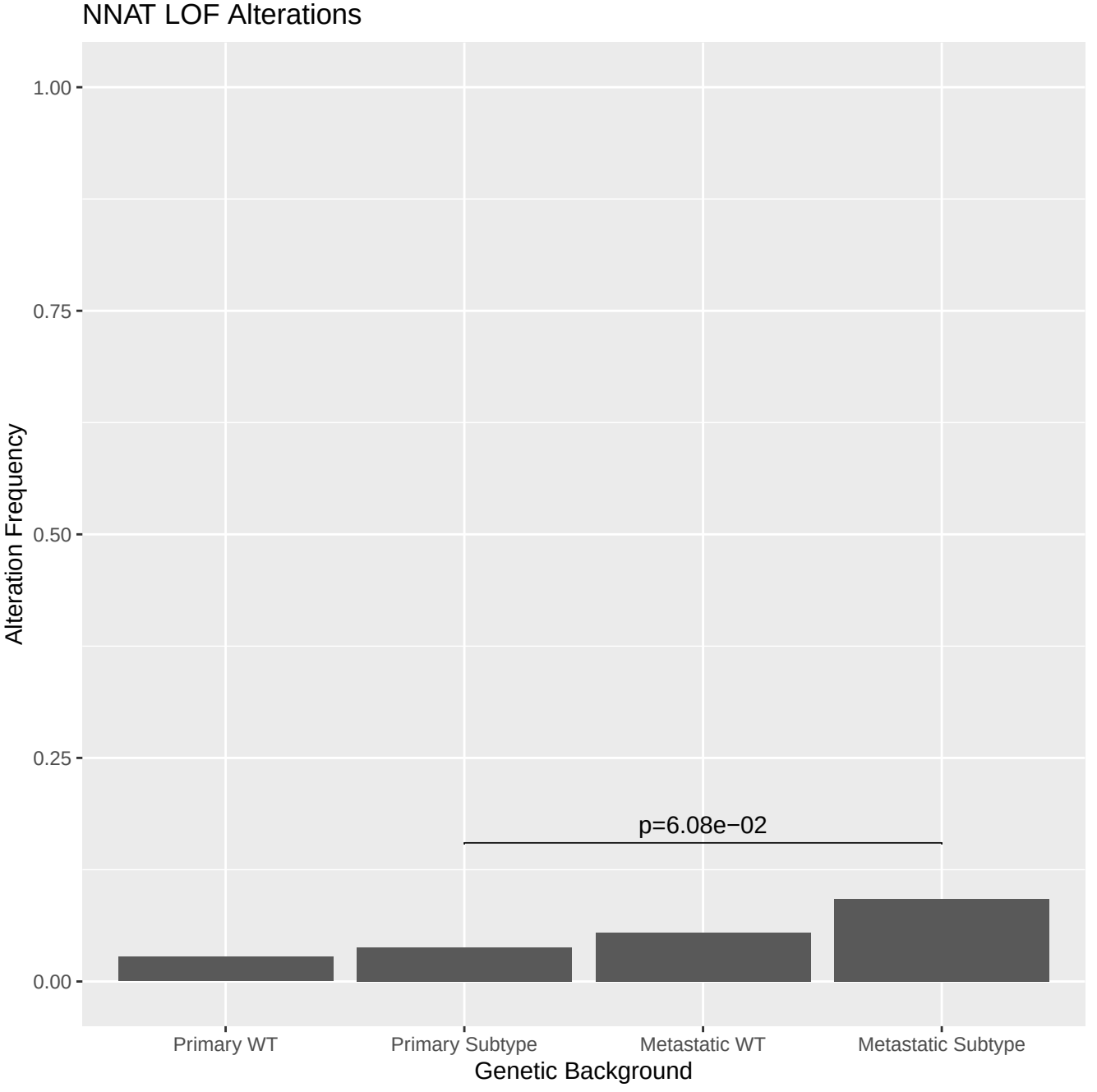

MANBAL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

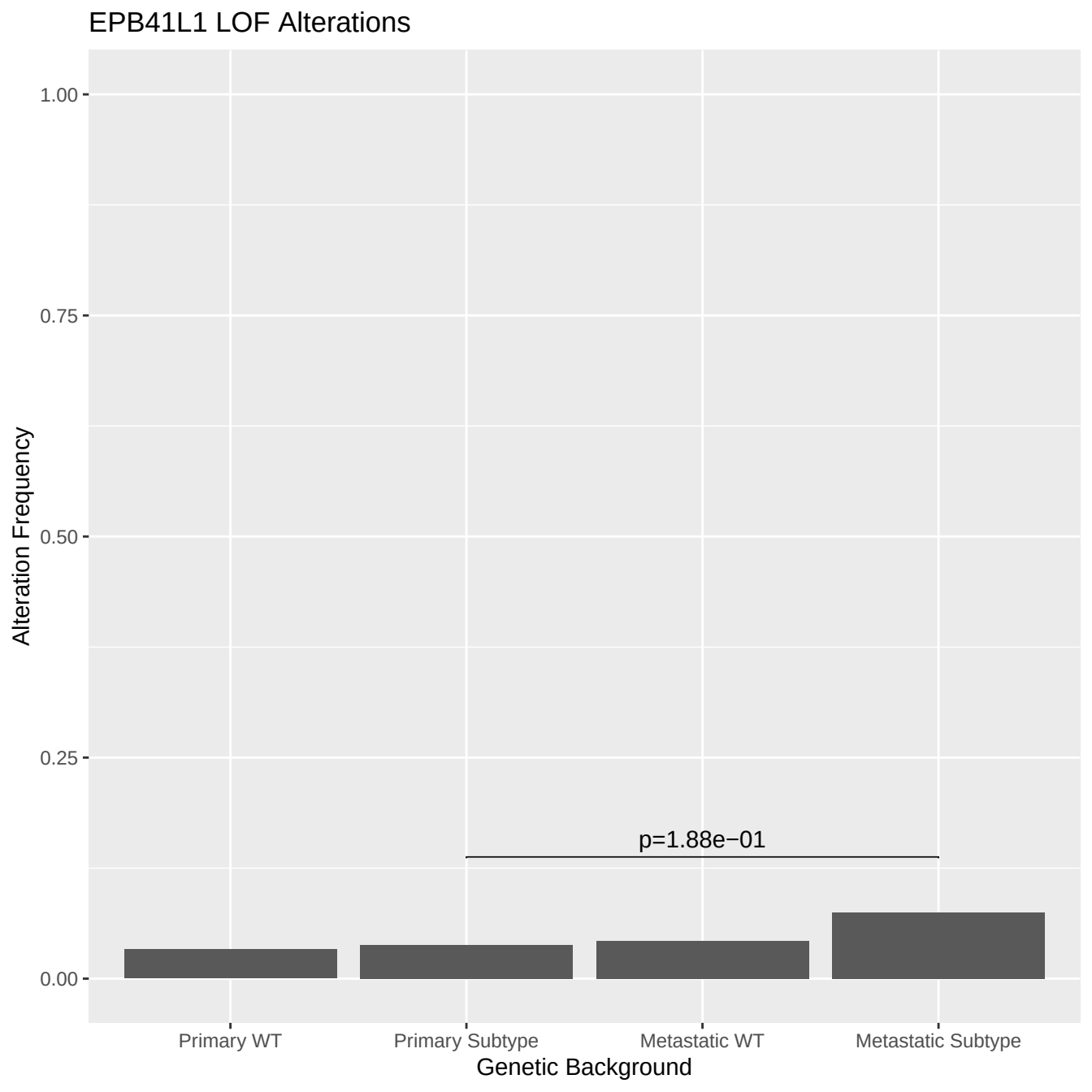

PHF3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.55e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

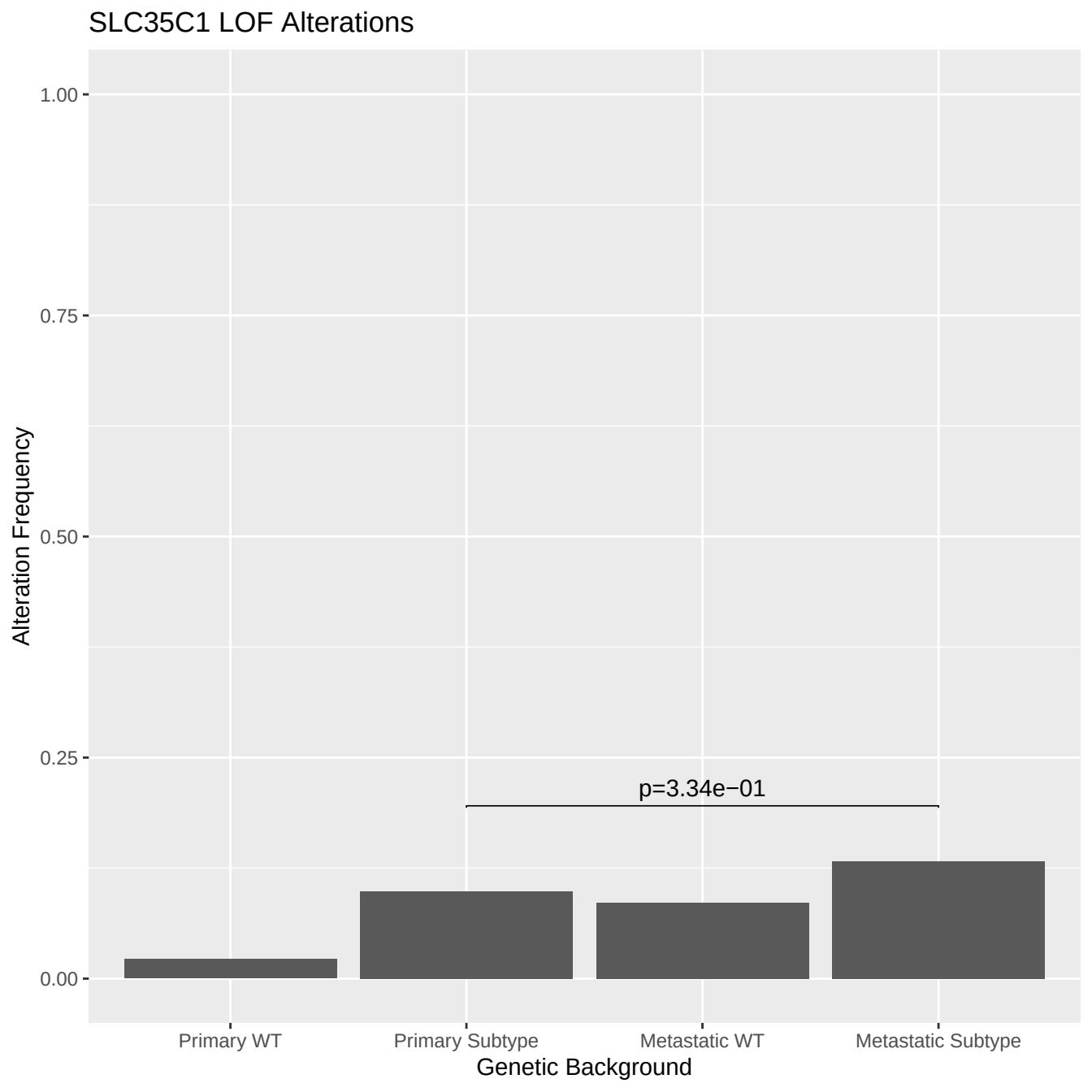

CD244 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

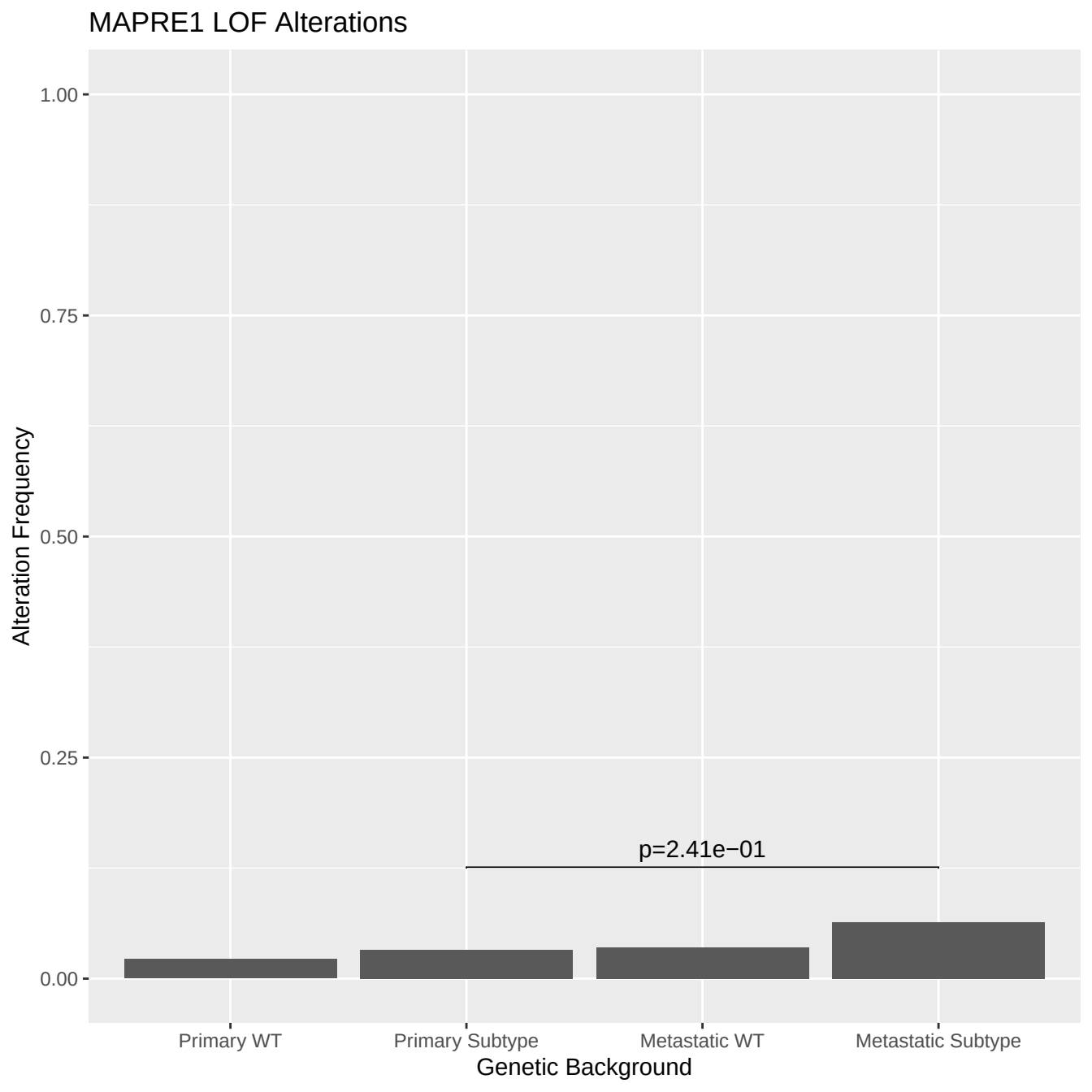

VPS25 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.68e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

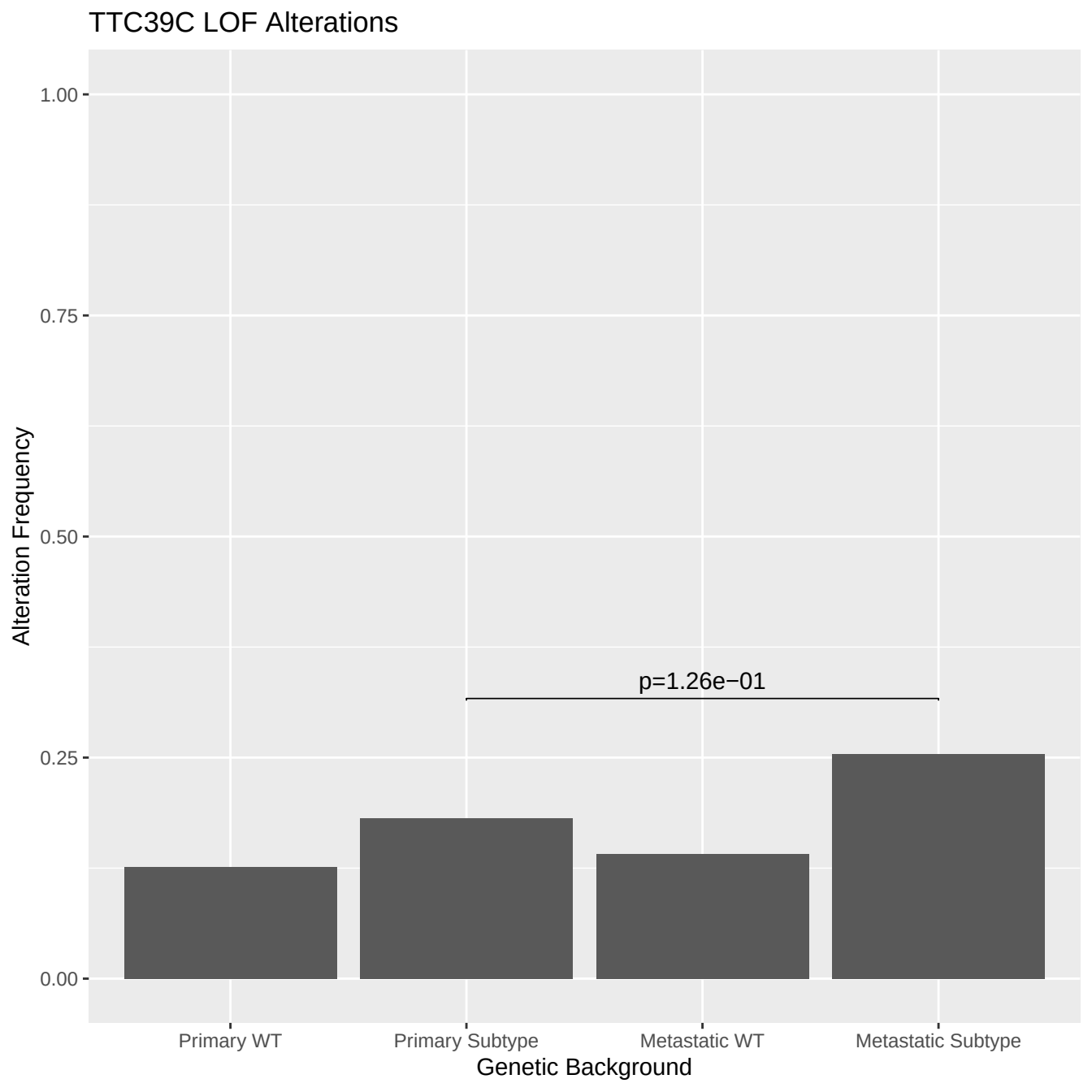

ANXA11 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.52e−03
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

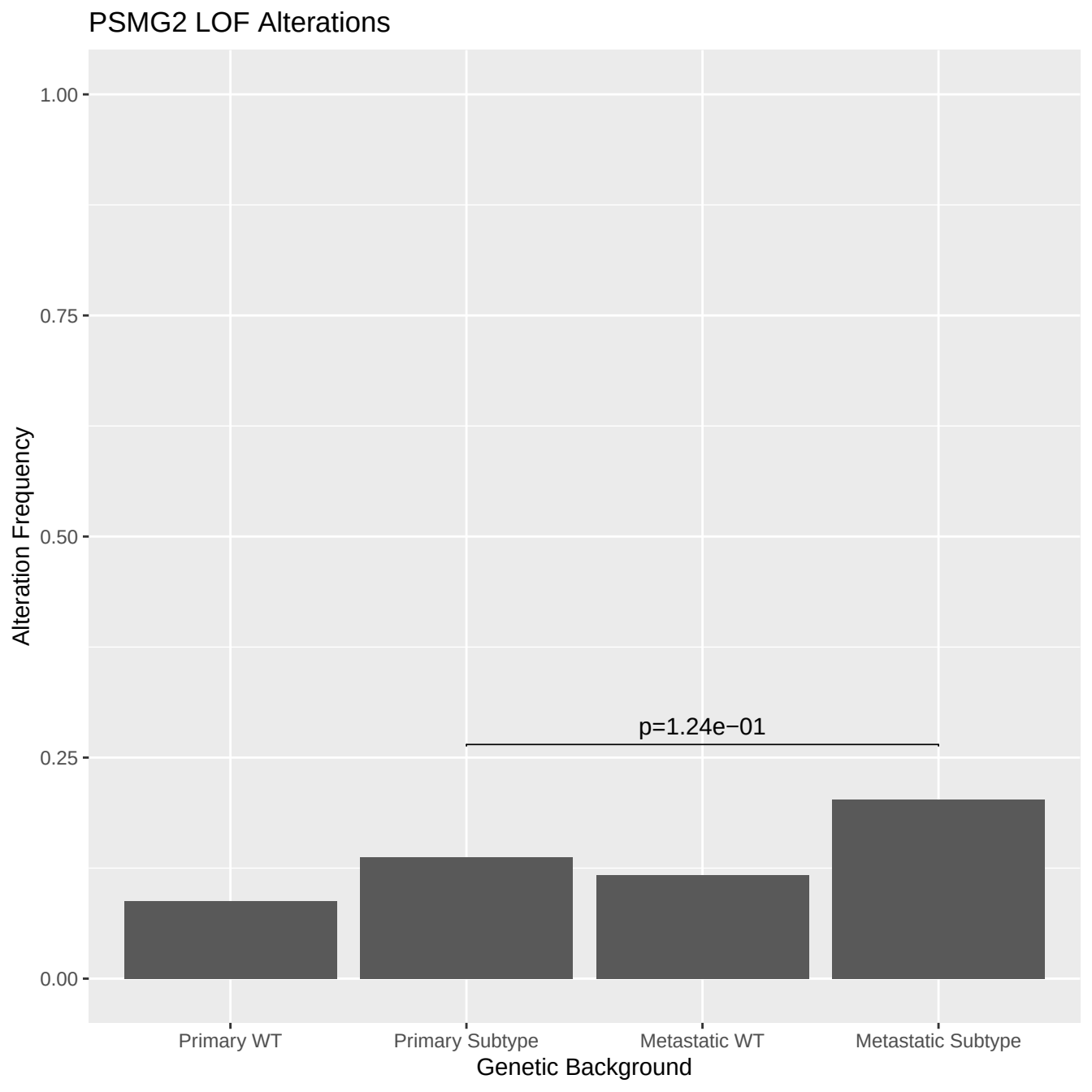

NNAT LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.08e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

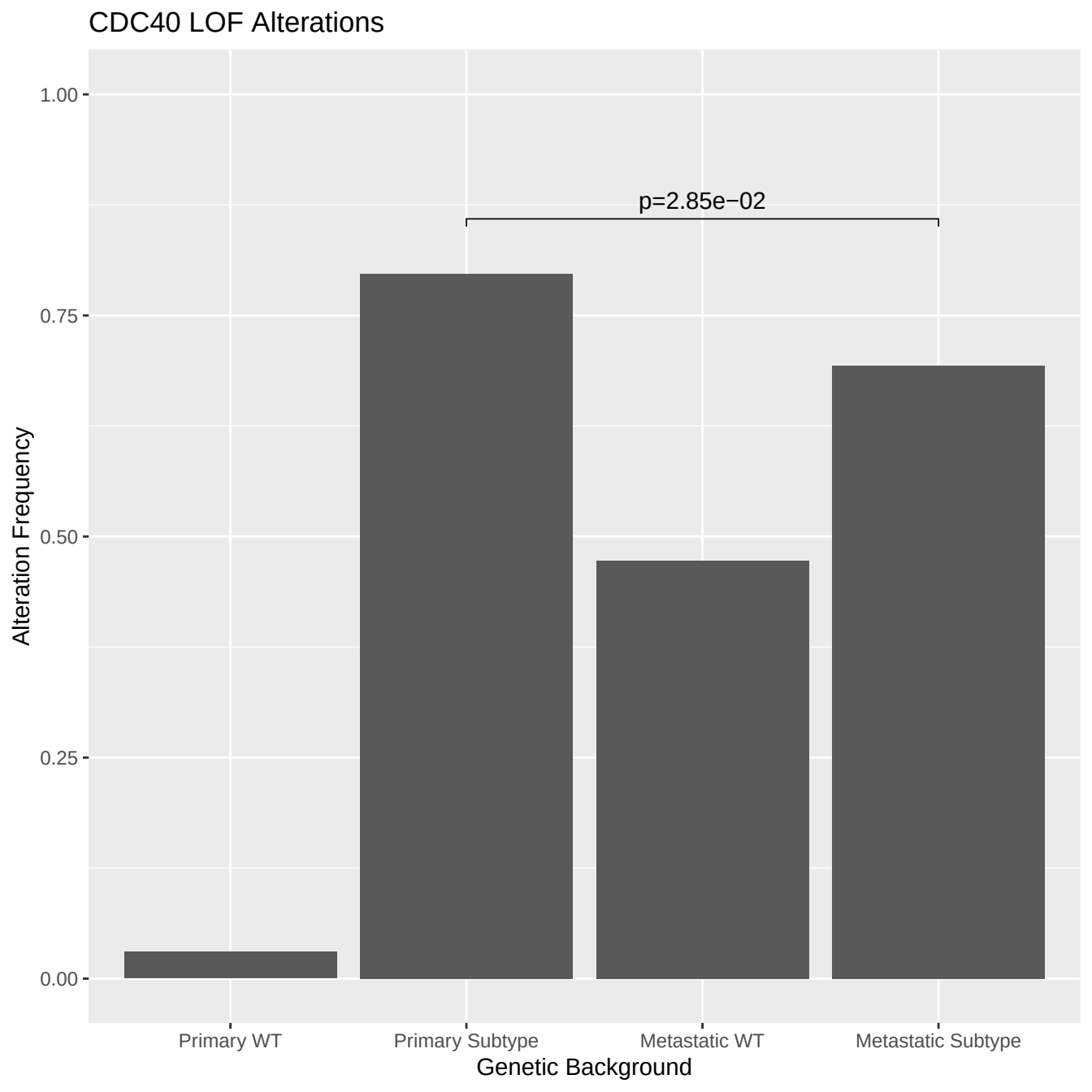

EPB41L1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

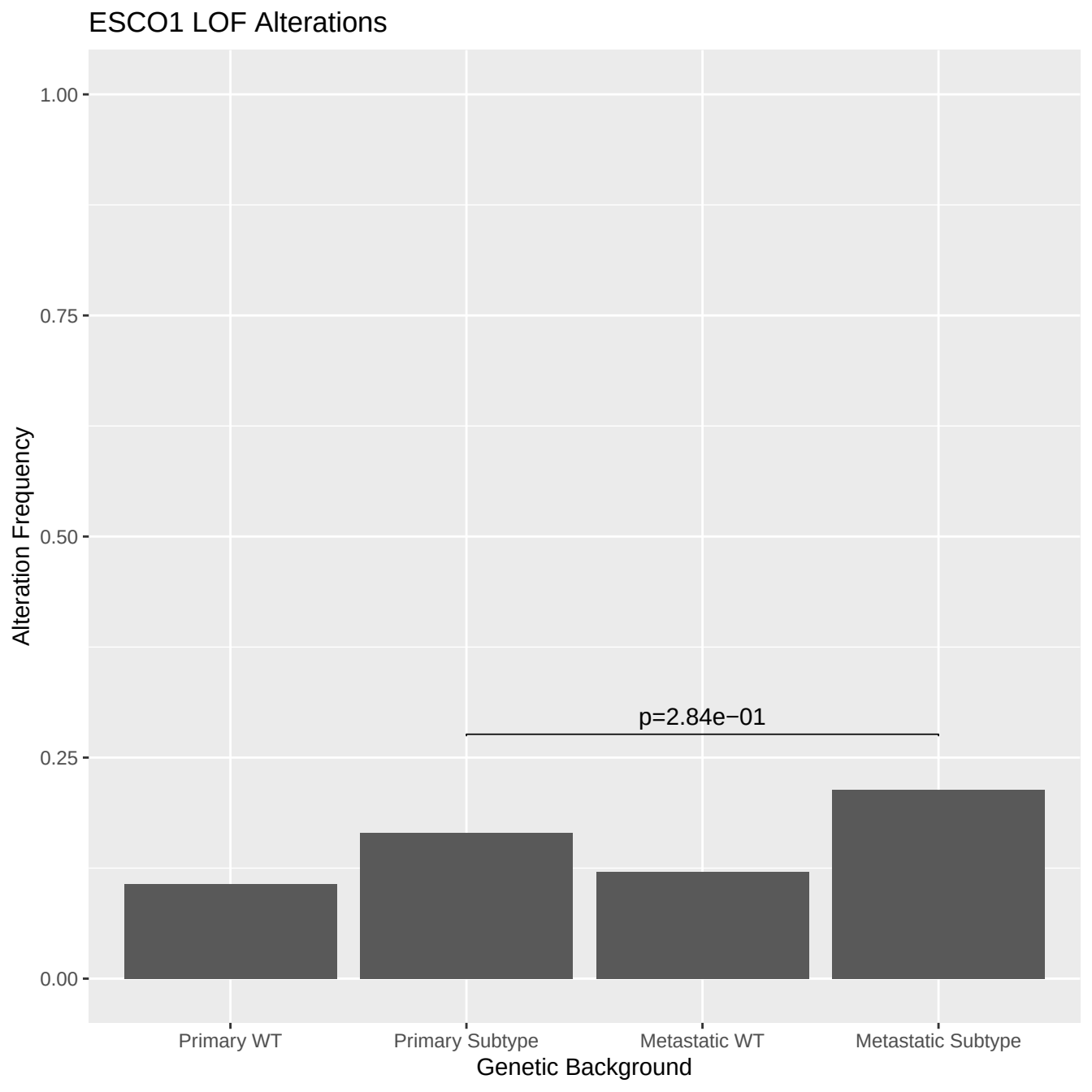

SLC35C1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.34e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

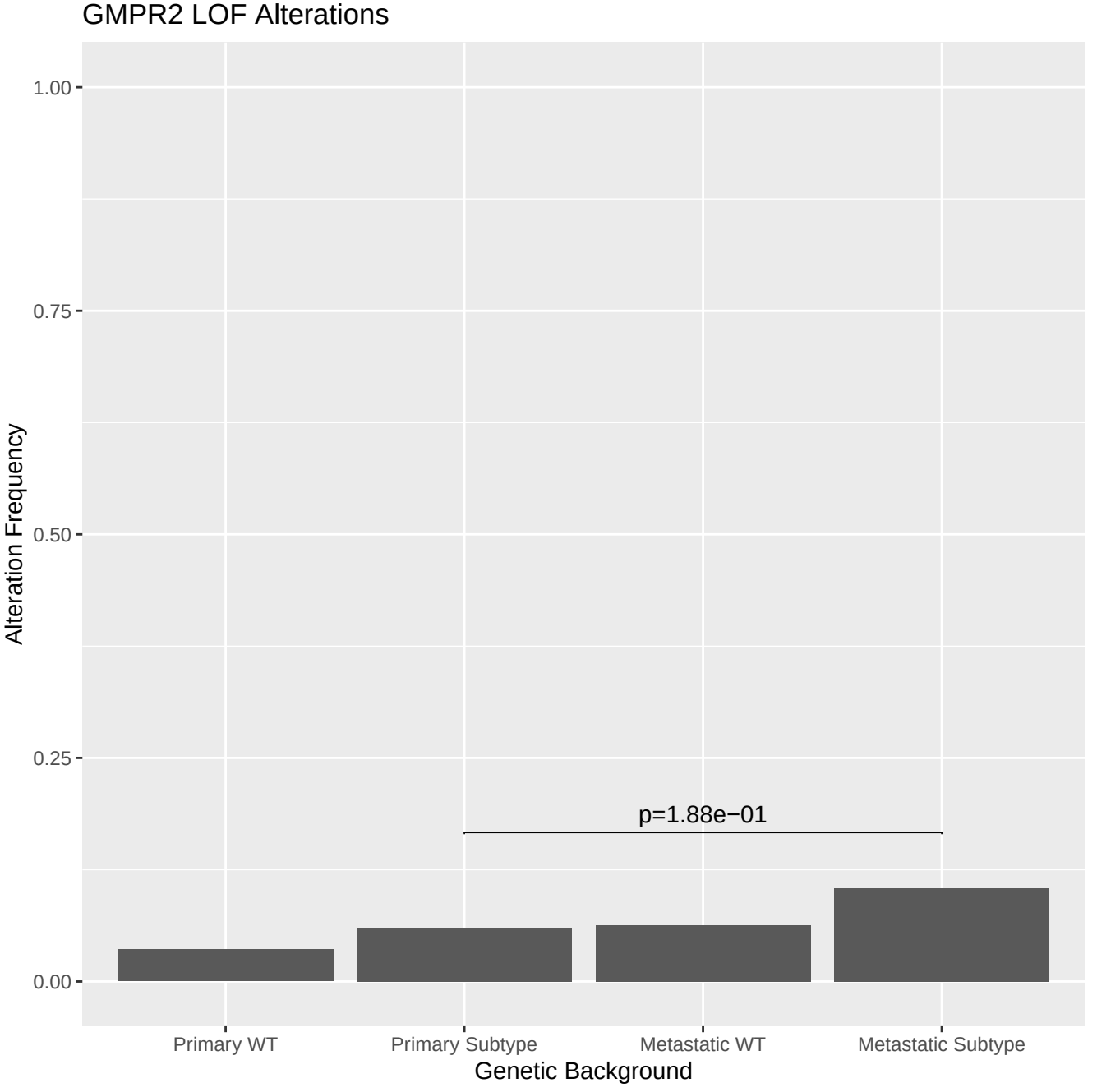

MAPRE1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

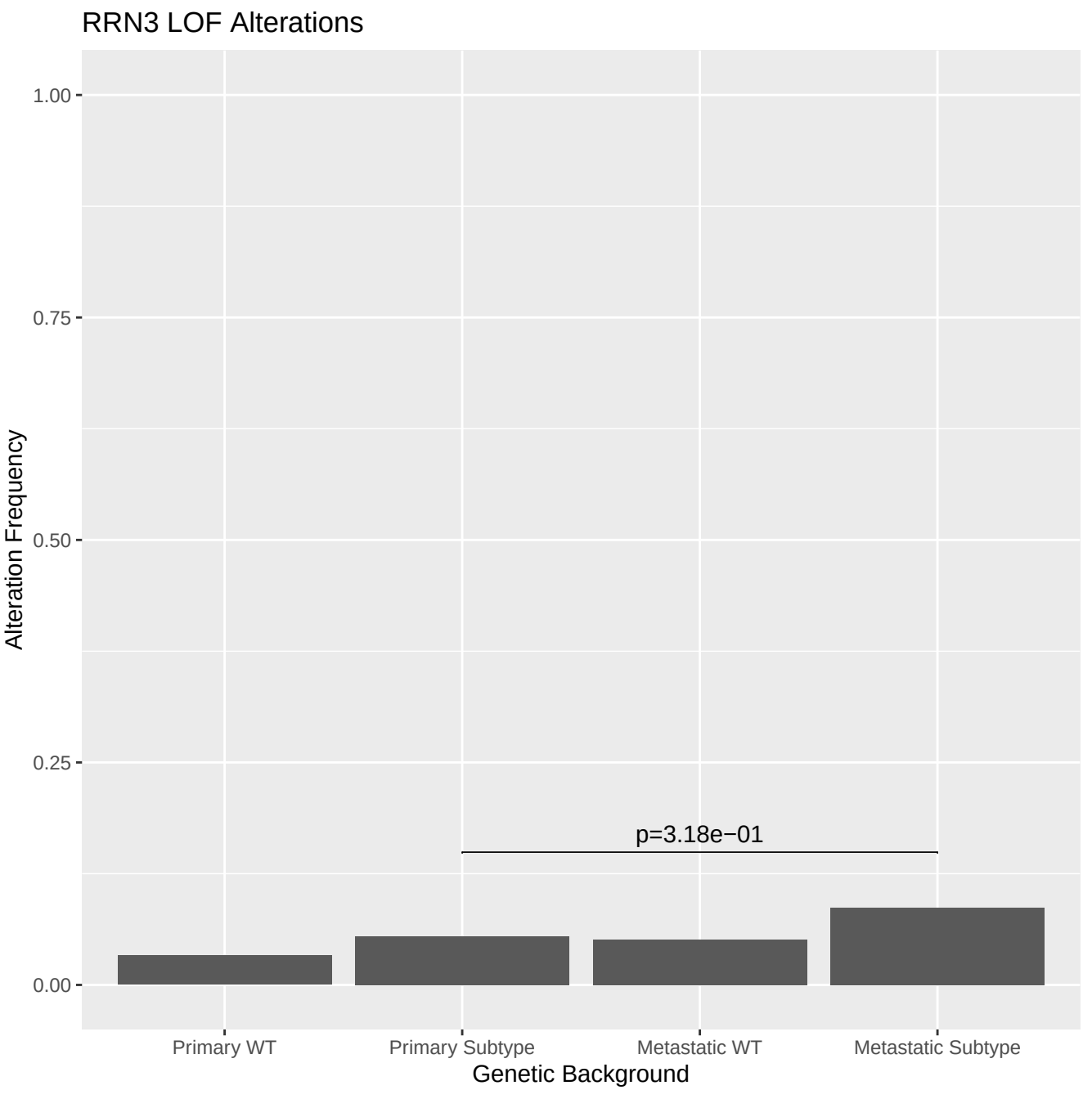

TTC39C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.26e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

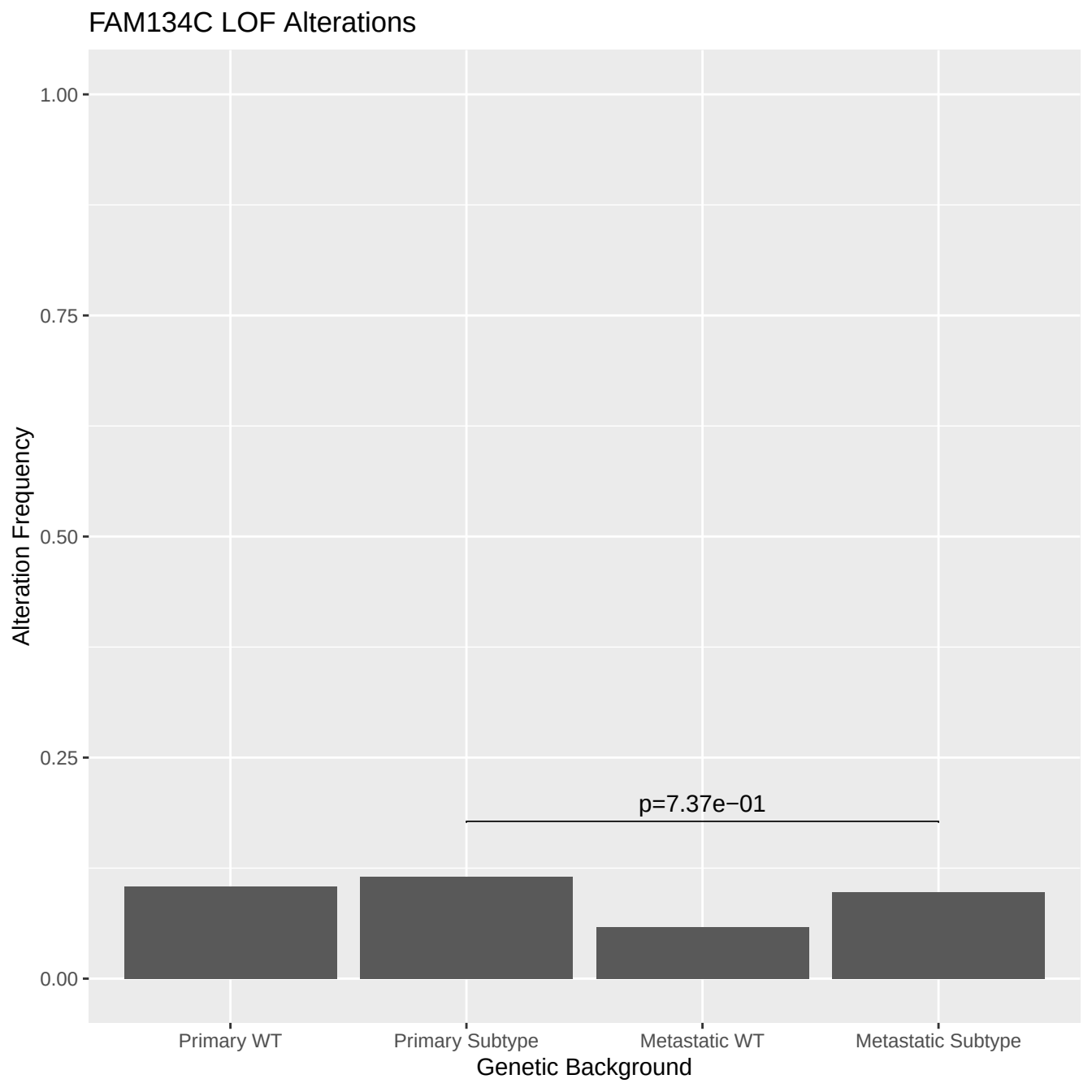

PSMG2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.24e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

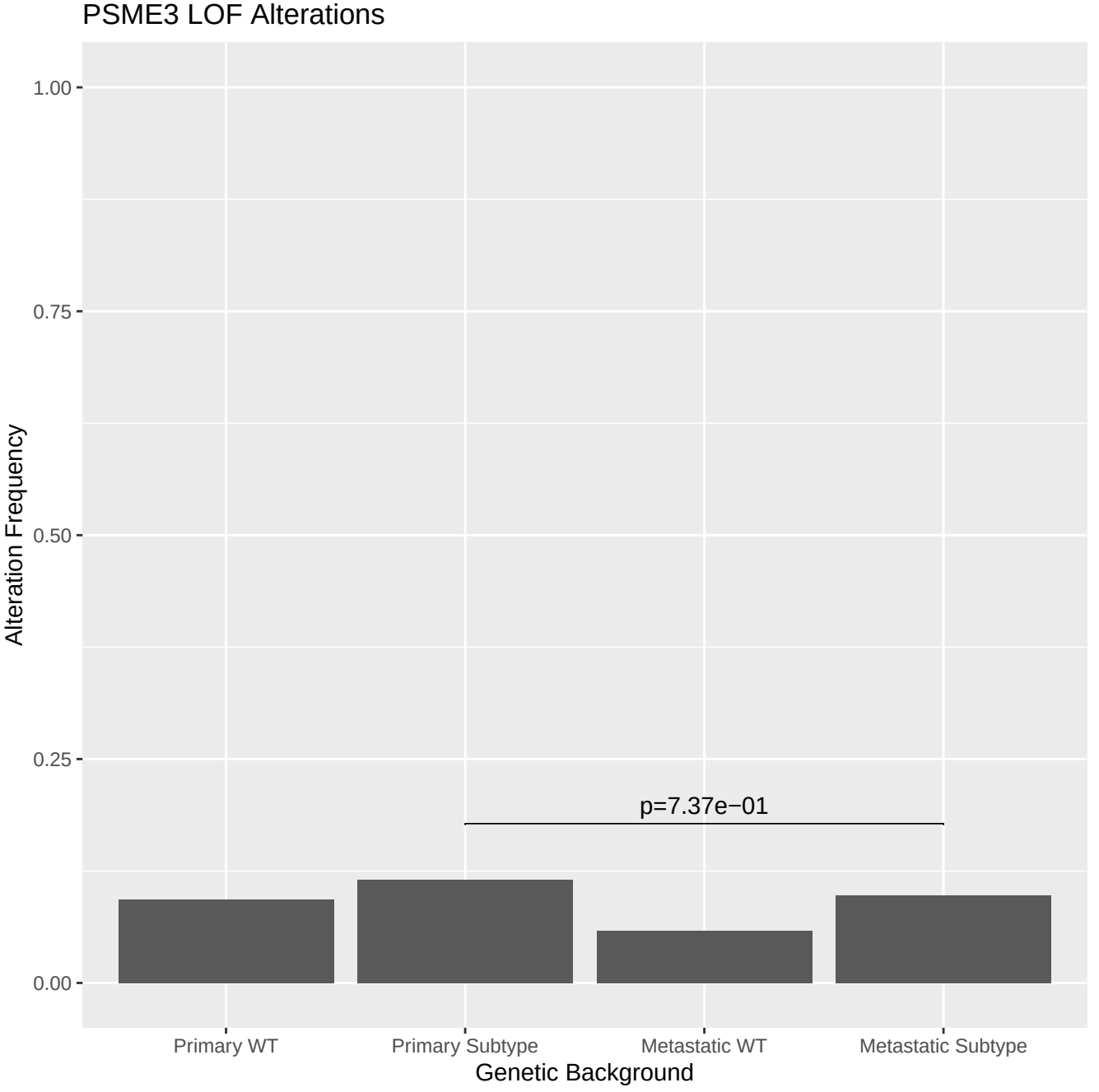

CDC40 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.85e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

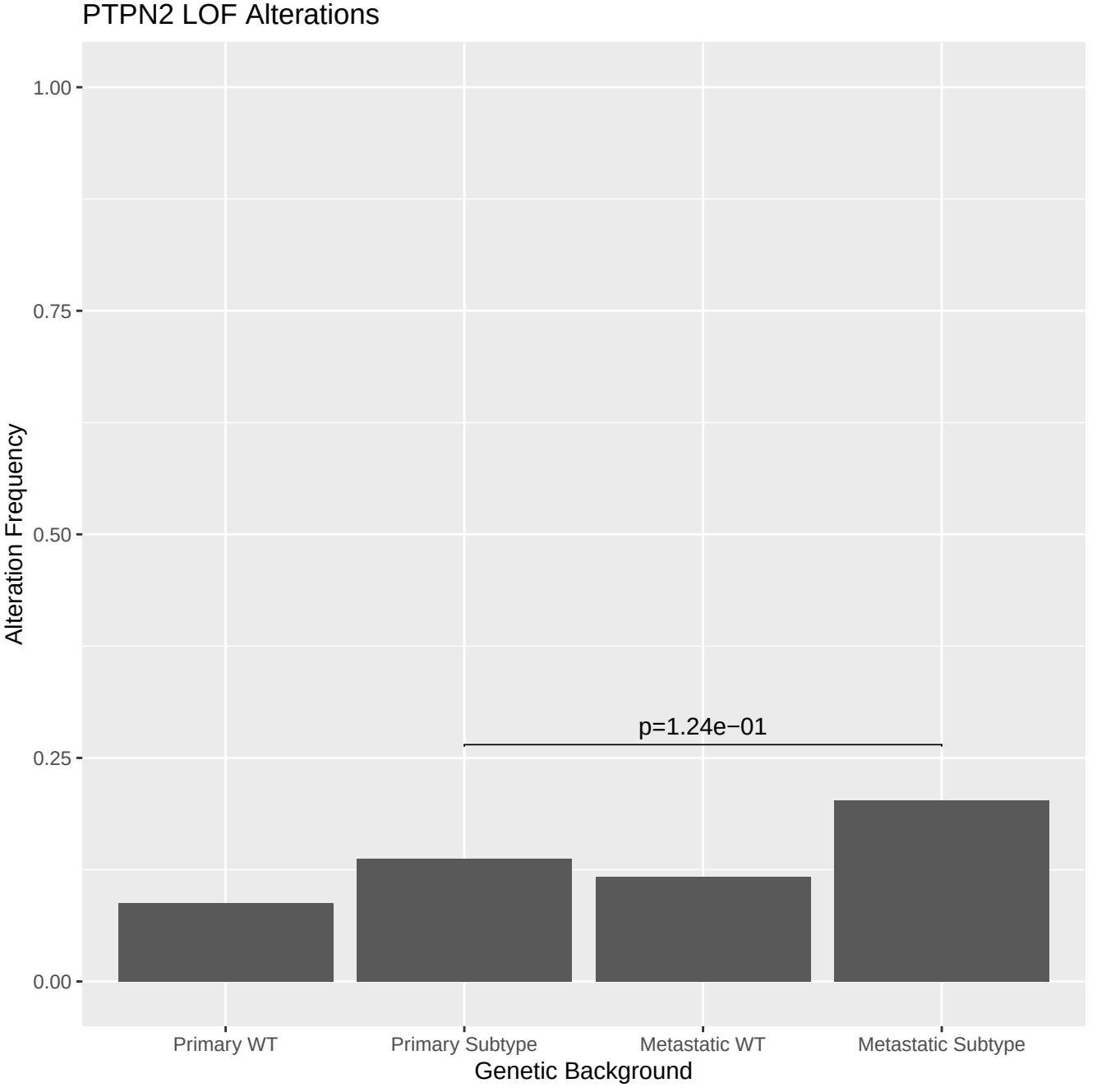

ESCO1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.84e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

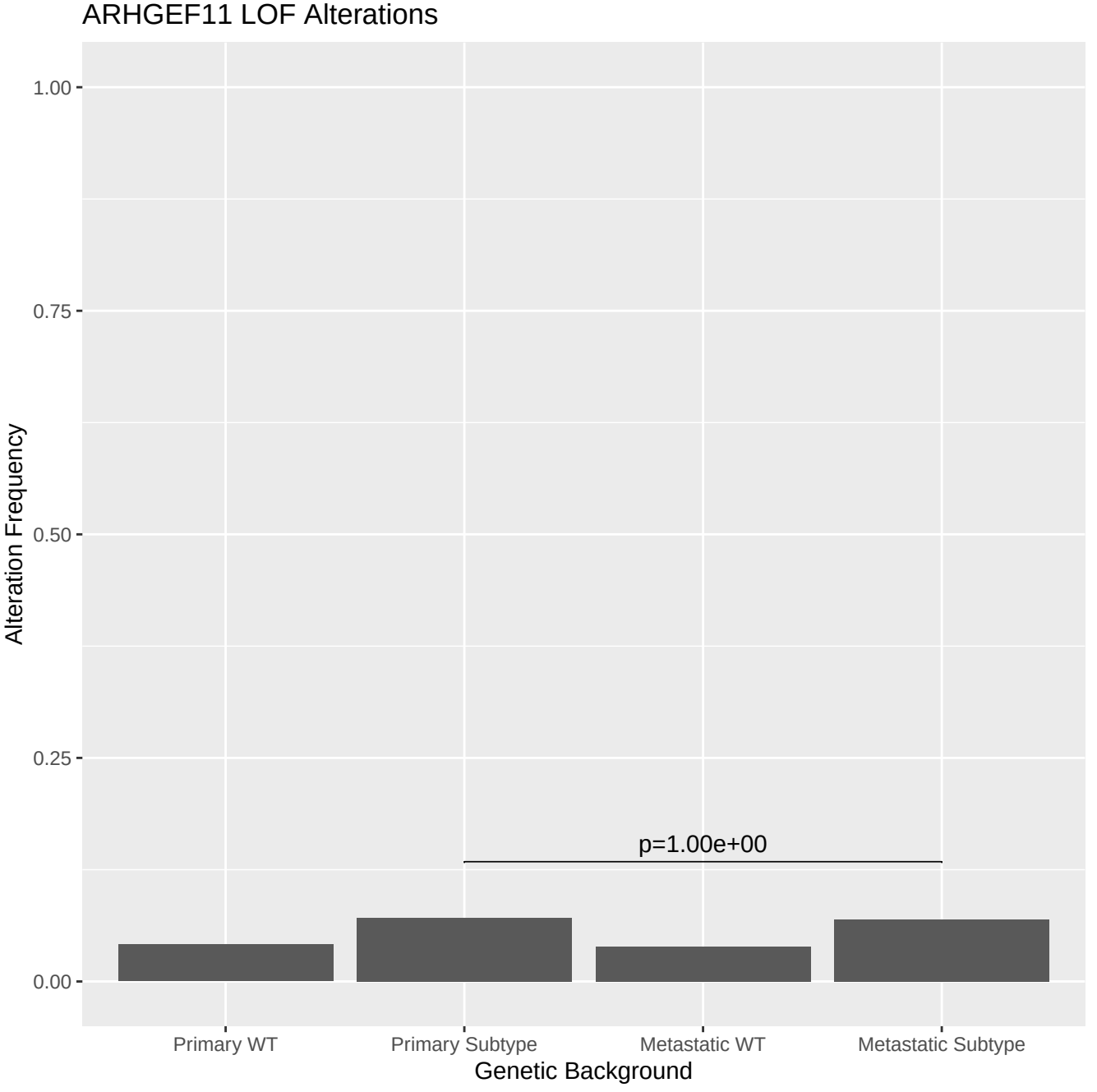

GMPR2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

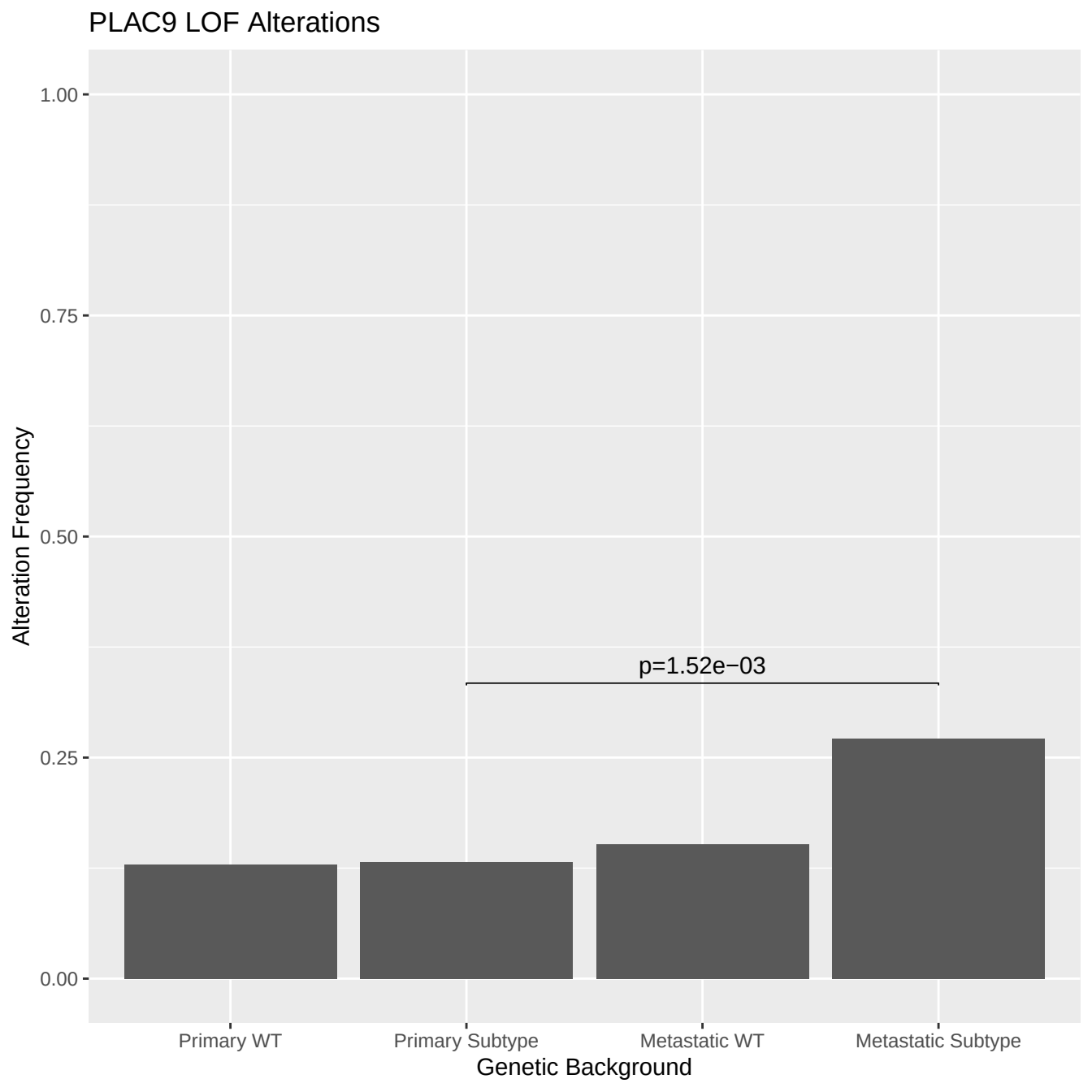

RRN3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

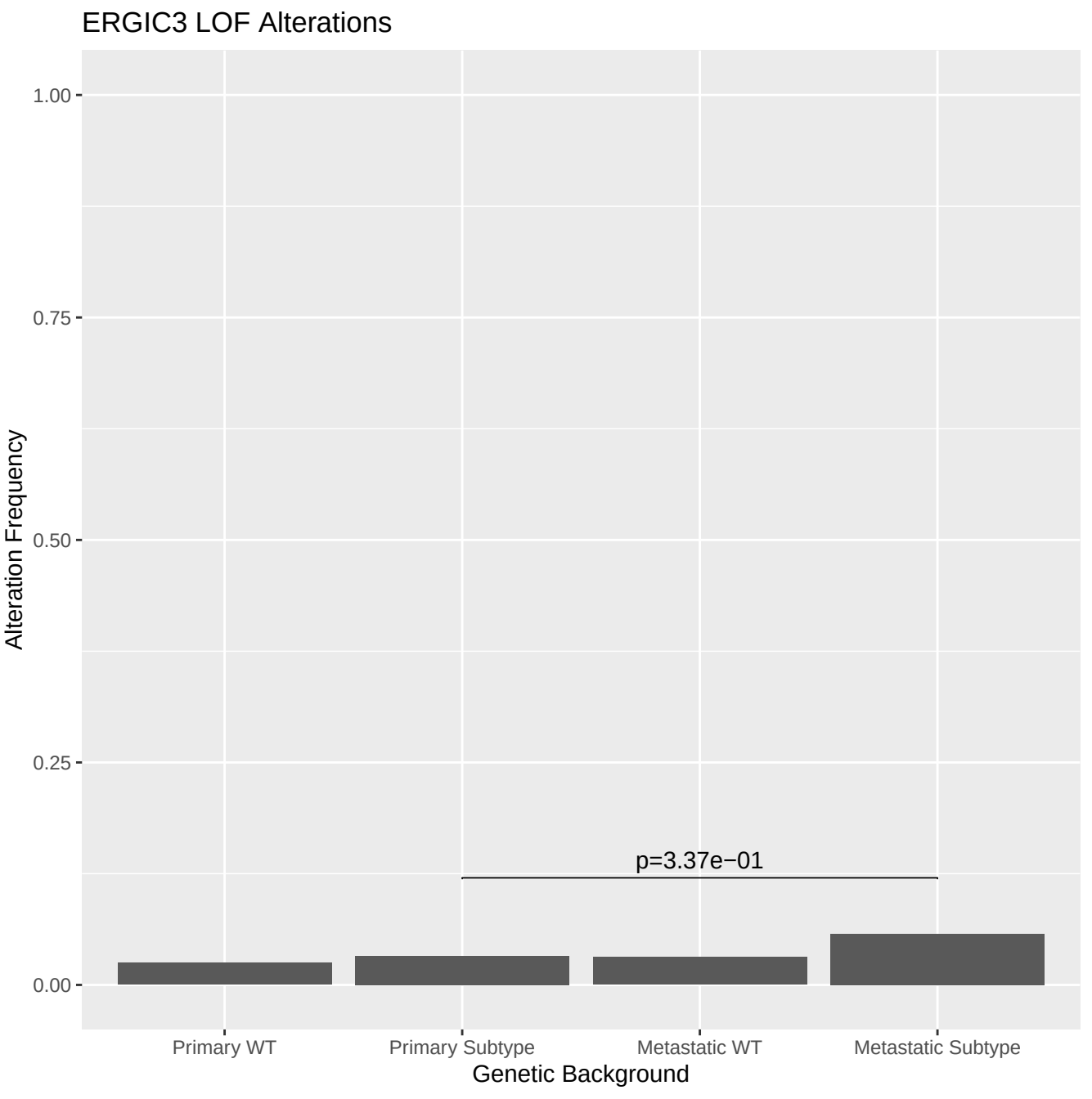

FAM134C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

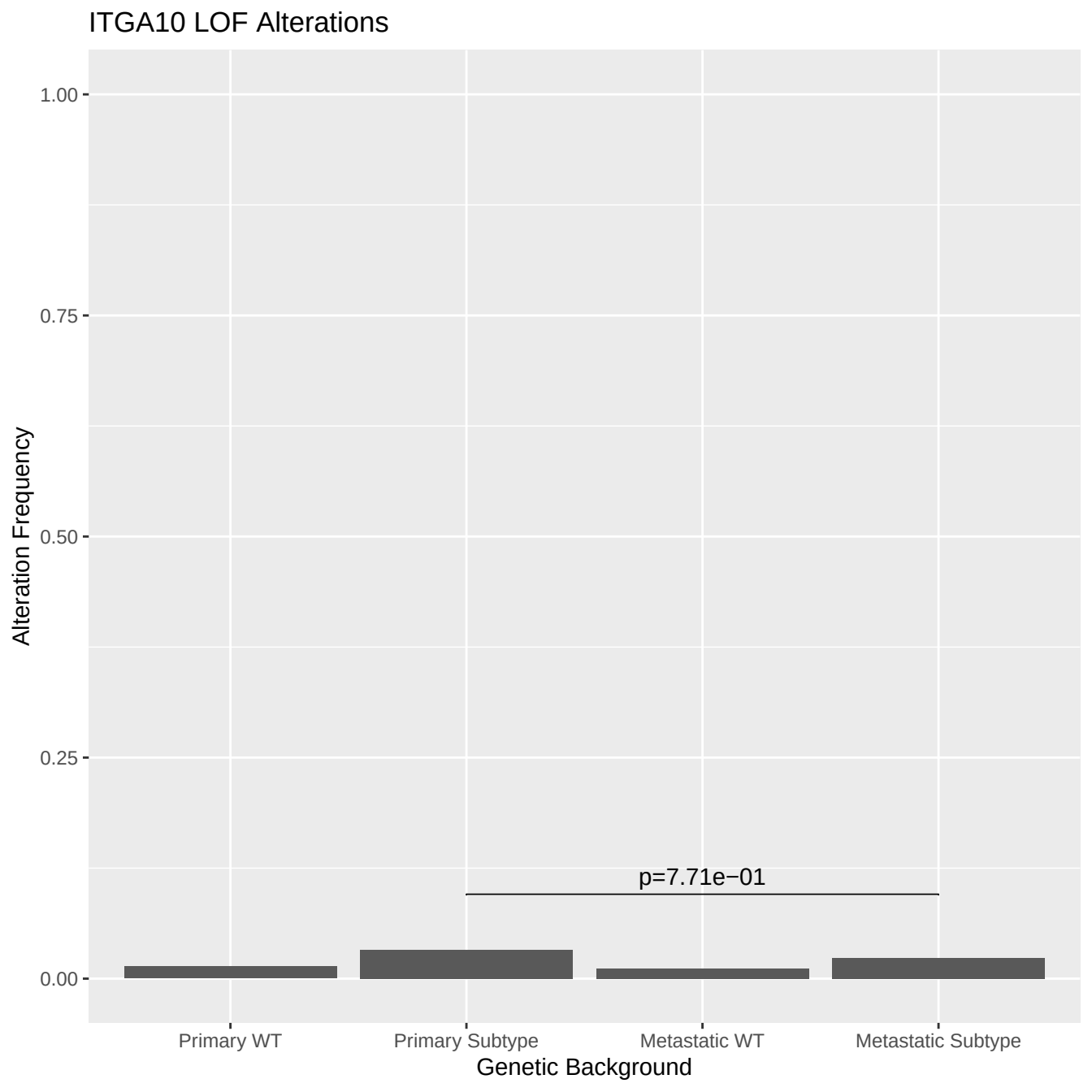

PSME3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

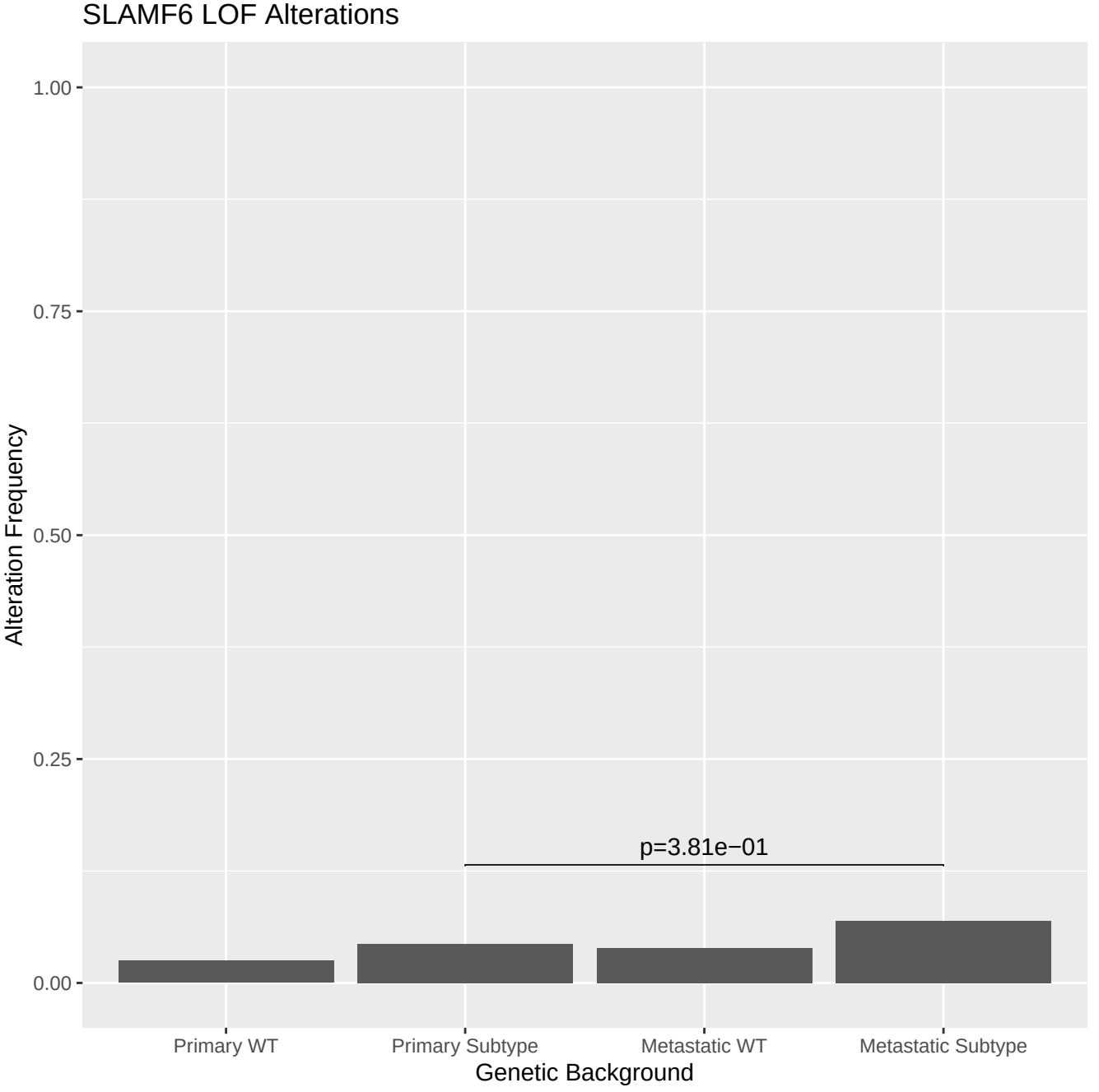

PTPN2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.24e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

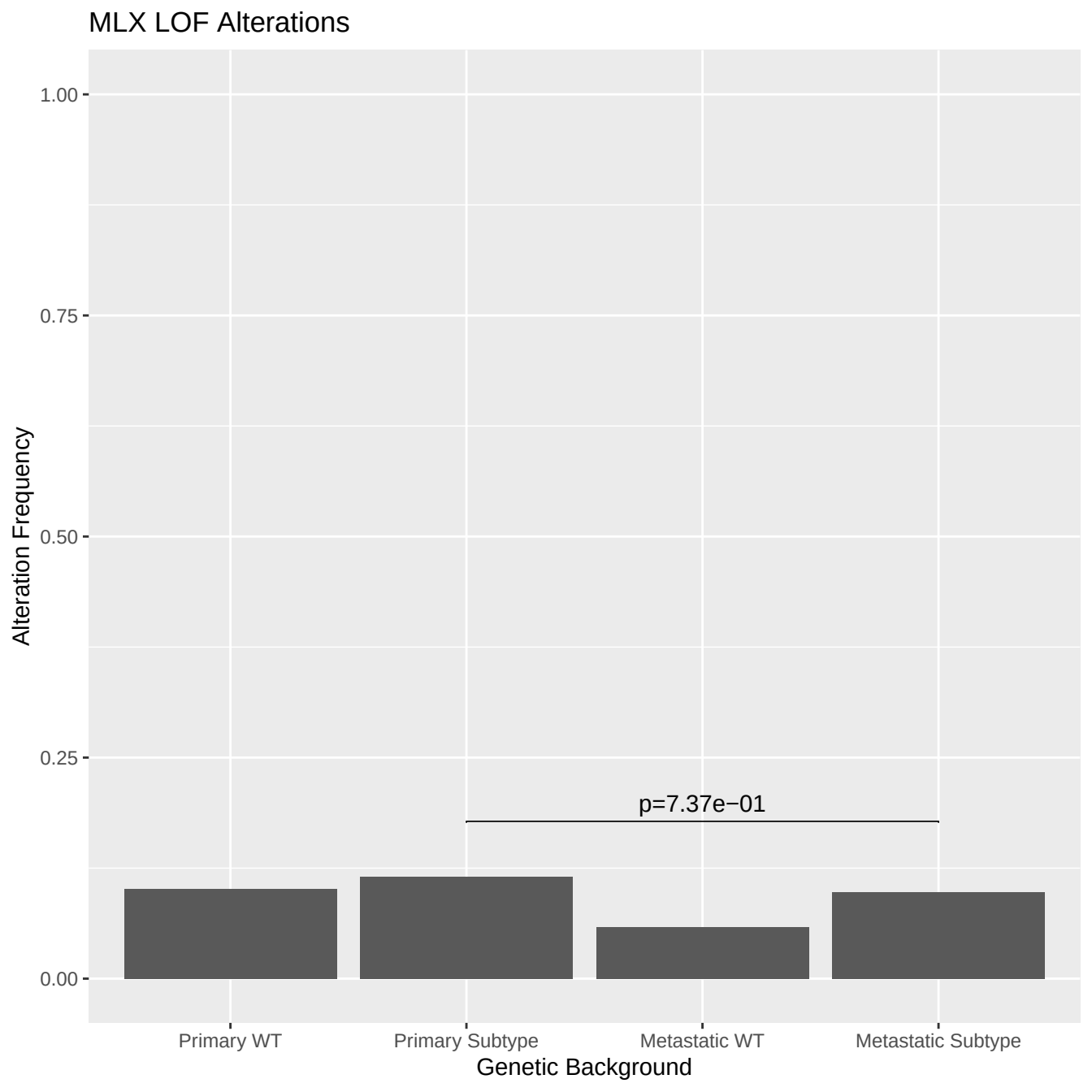

ARHGEF11 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

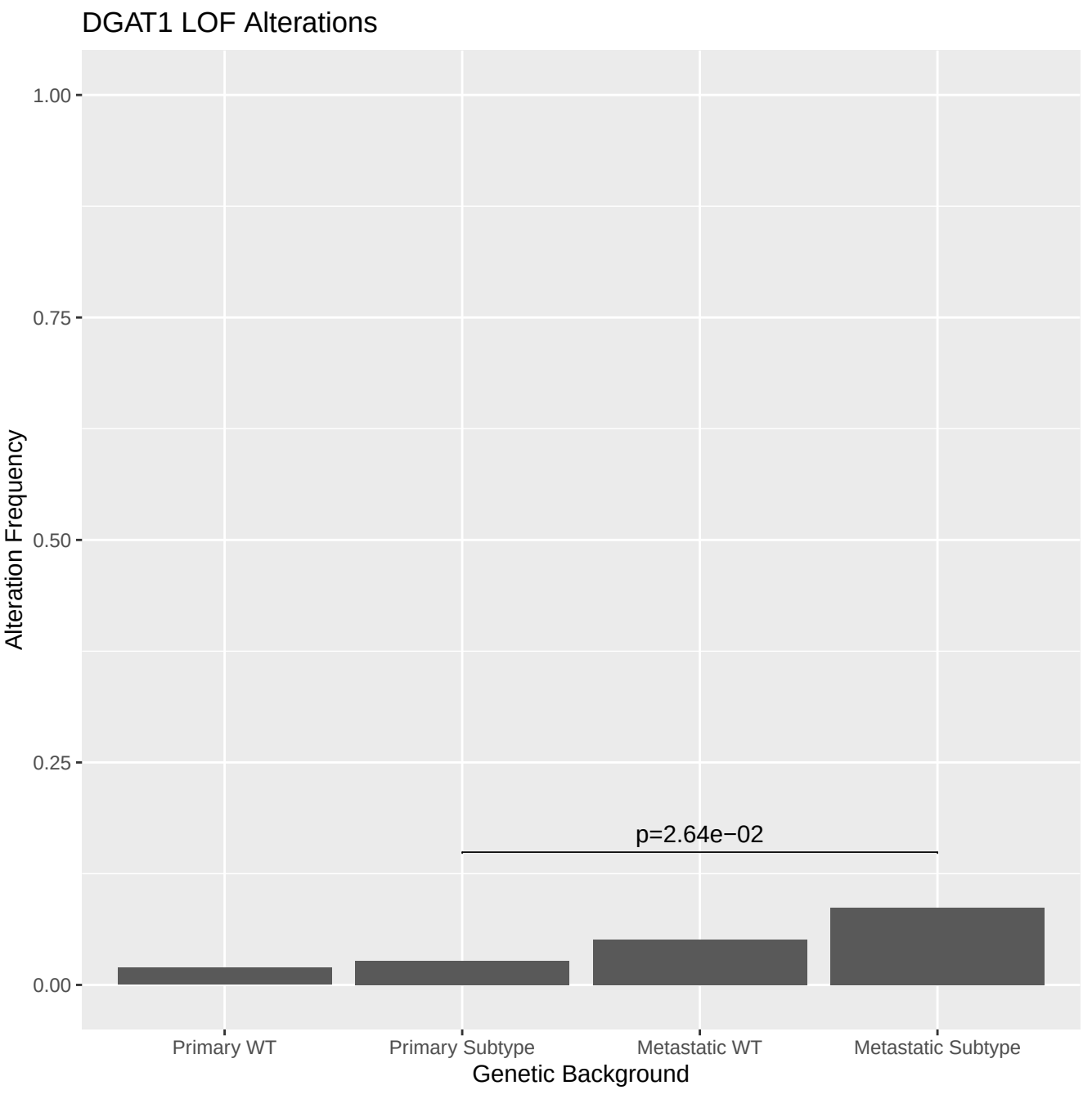

PLAC9 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.52e−03
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

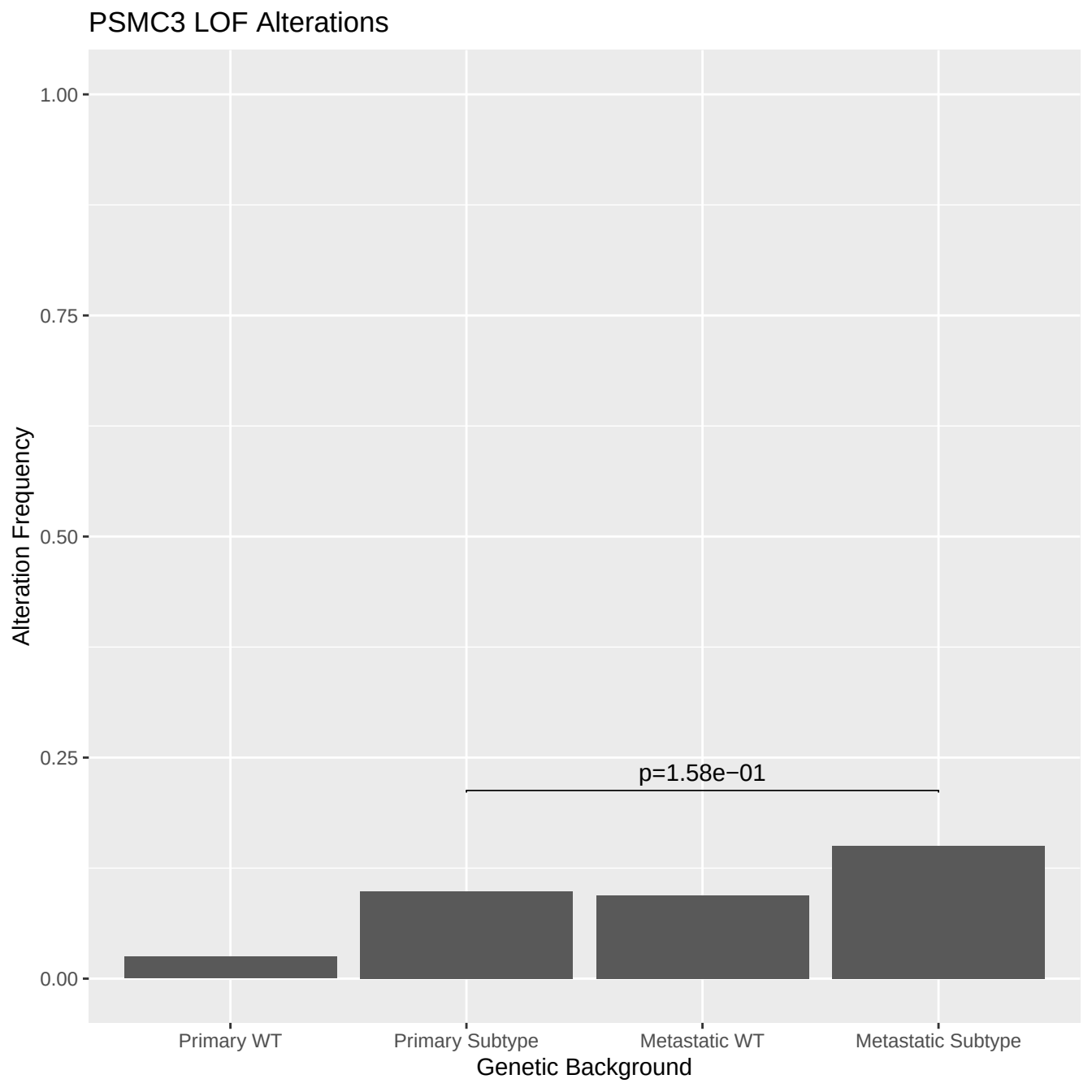

ERGIC3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

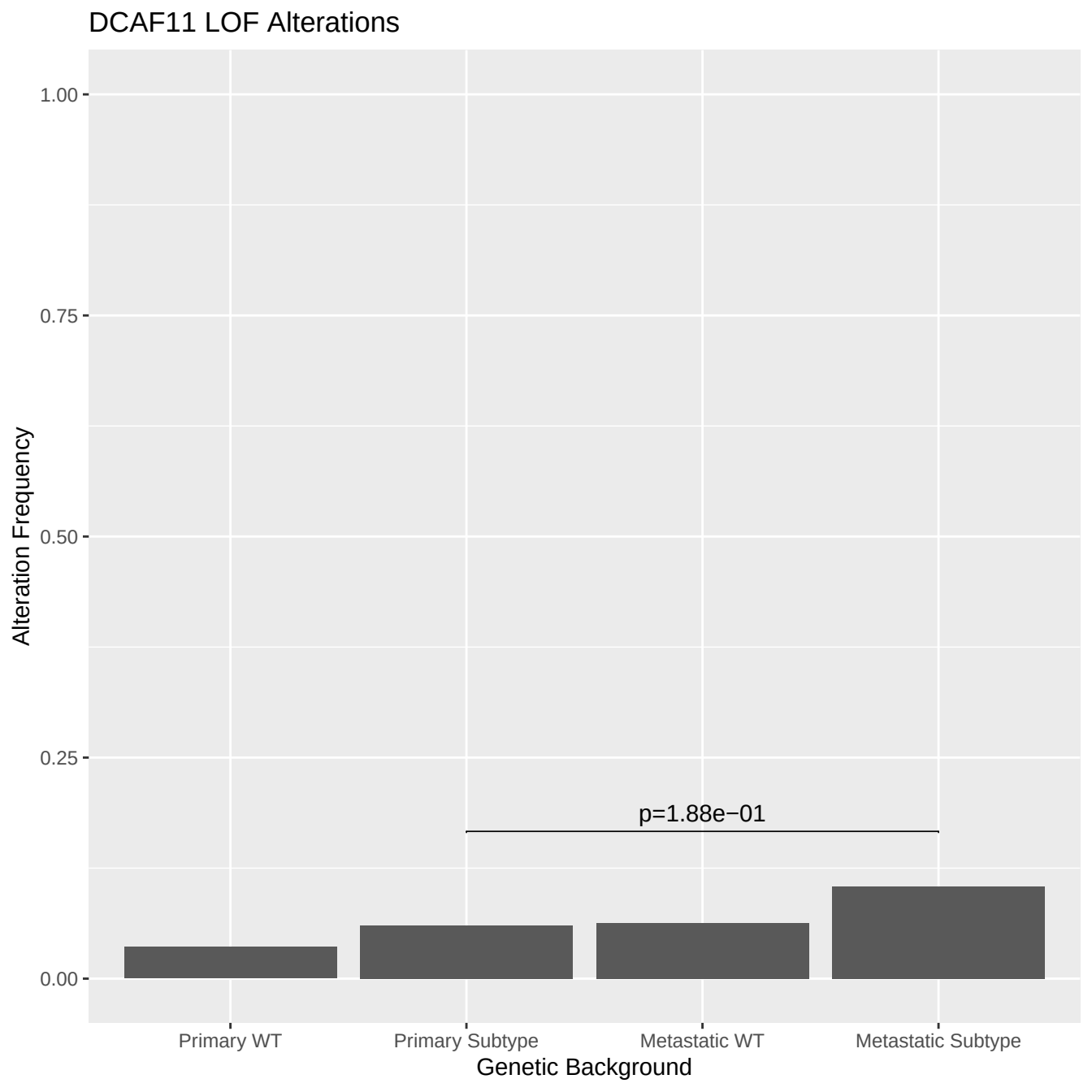

ITGA10 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

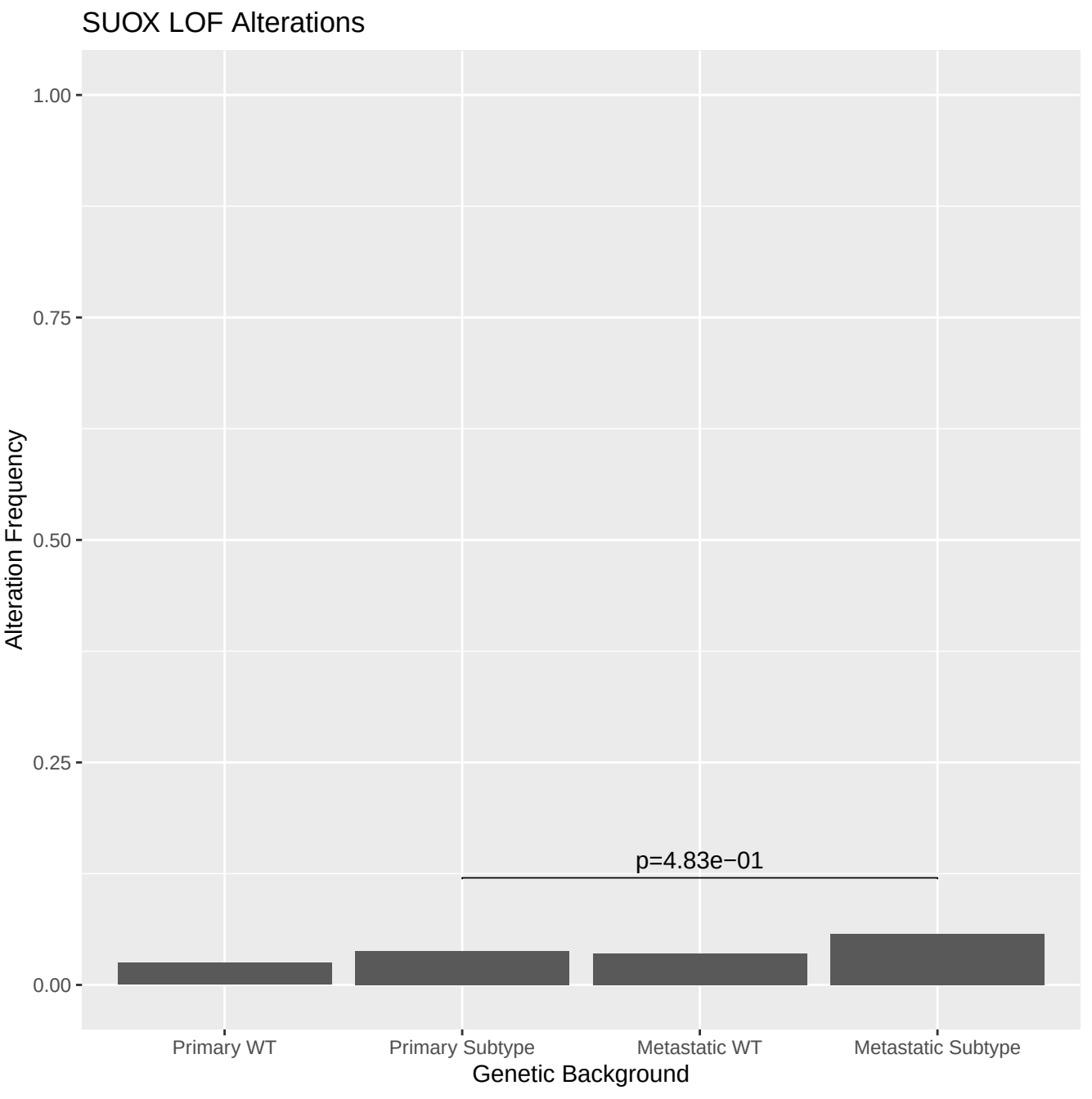

SLAMF6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

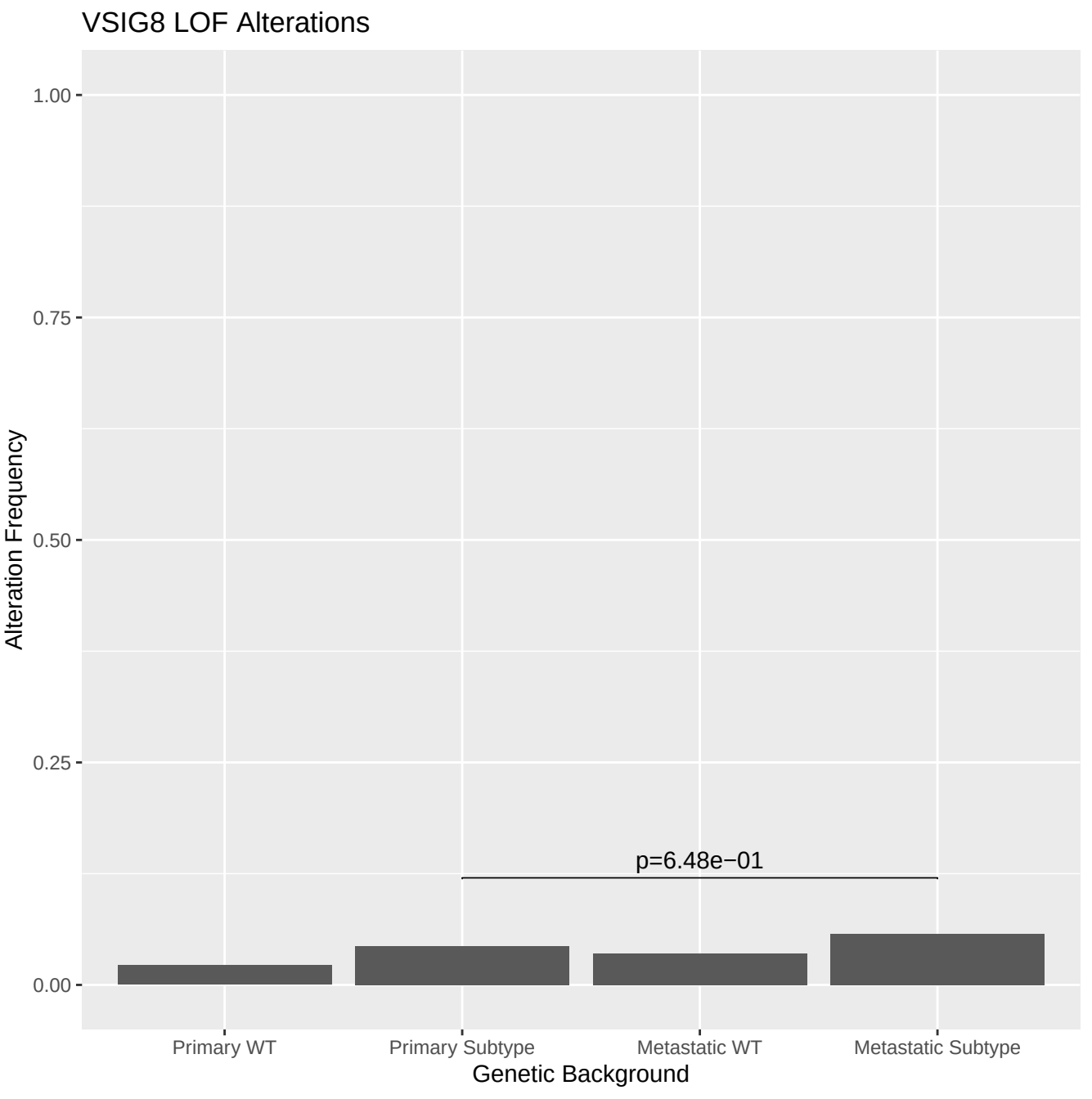

MLX LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

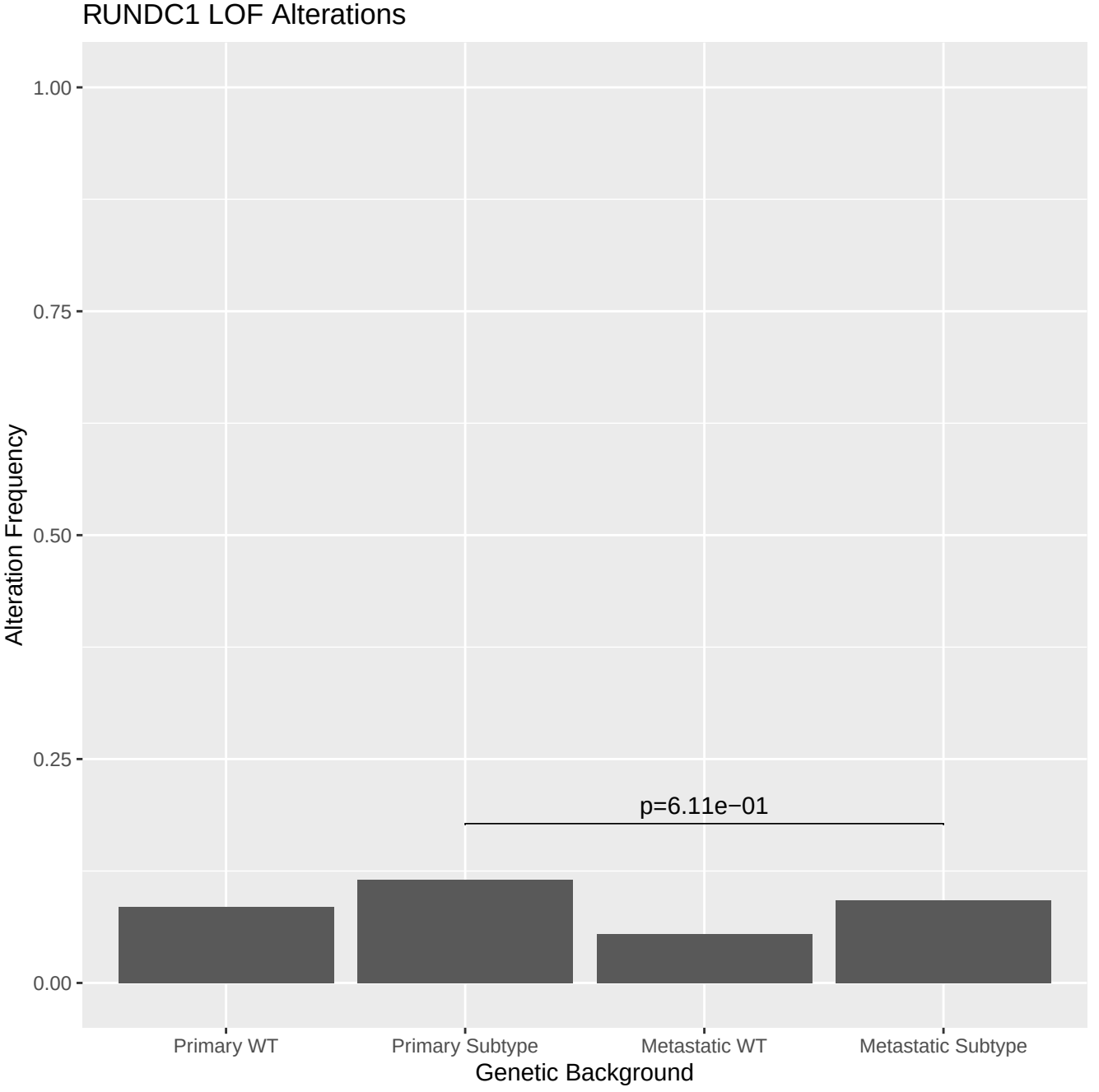

DGAT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

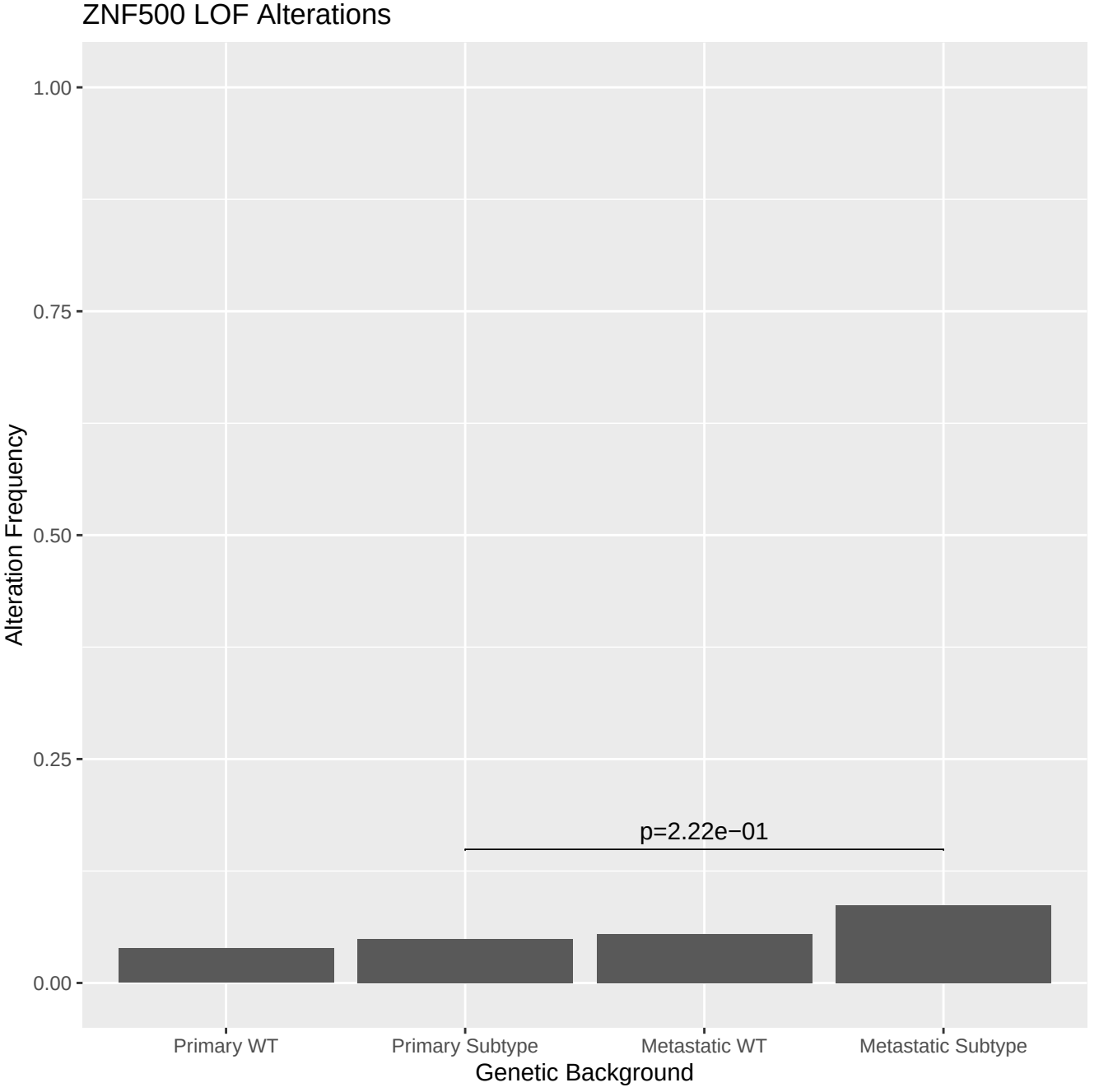

PSMC3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.58e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

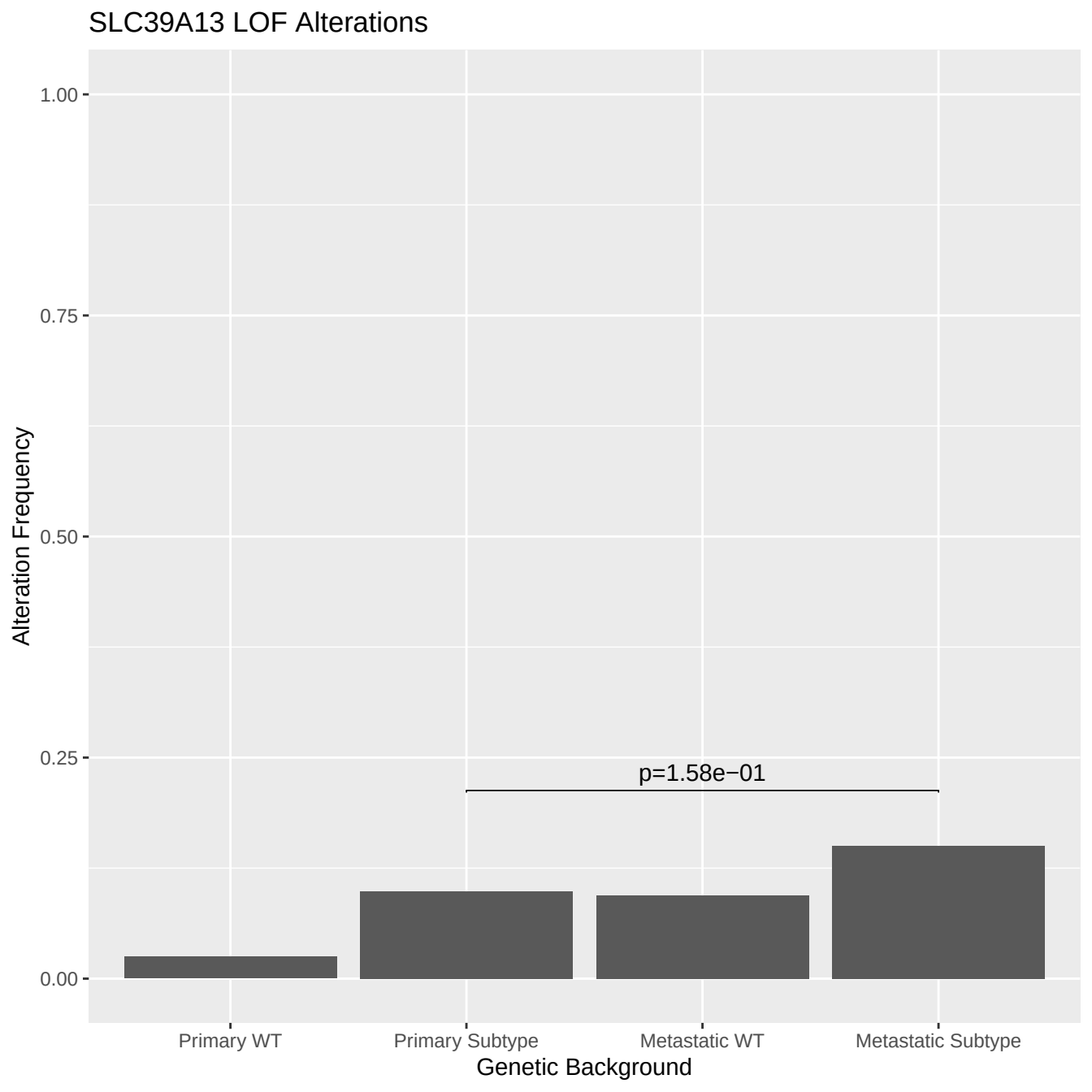

DCAF11 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

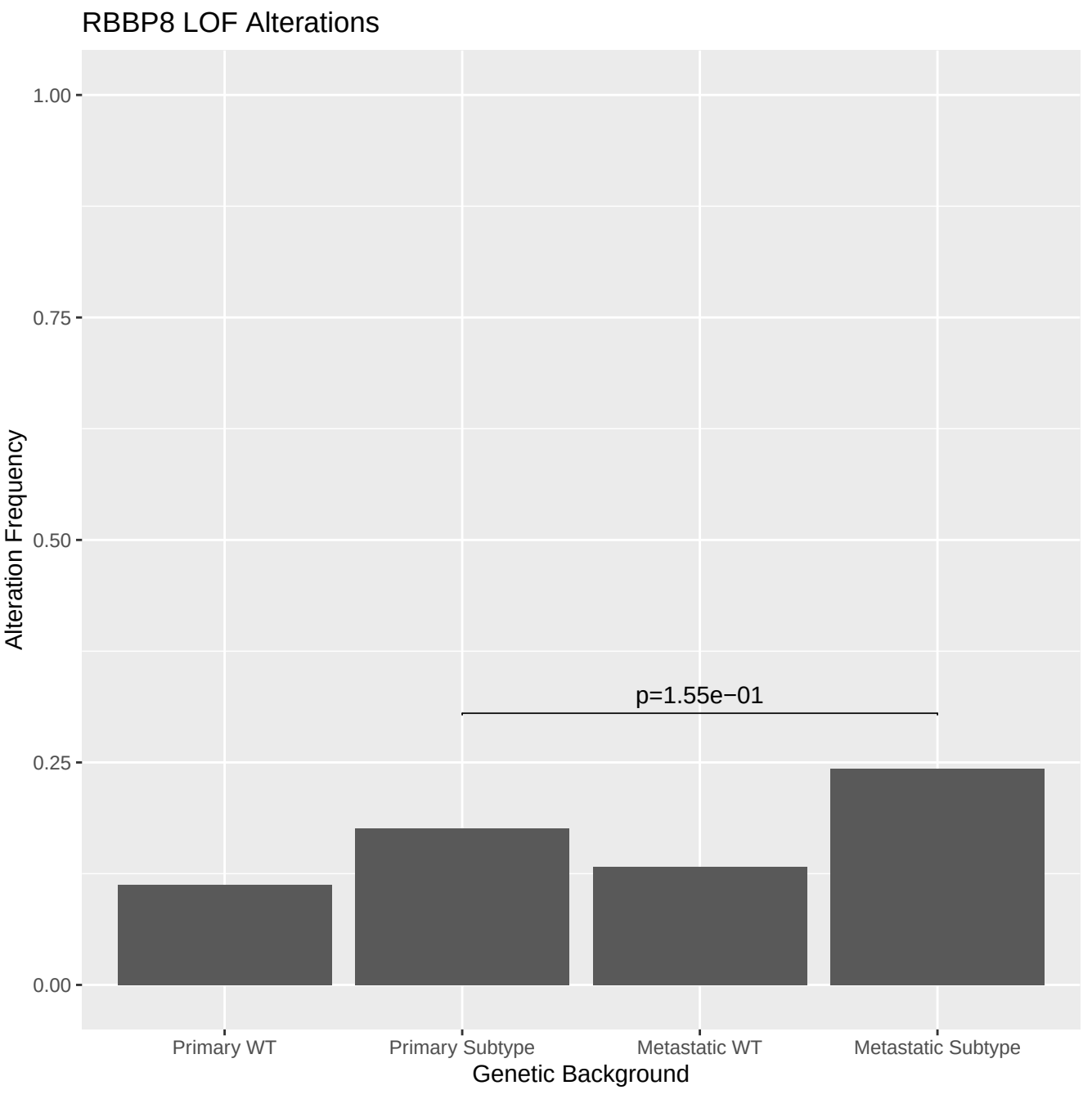

SUOX LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

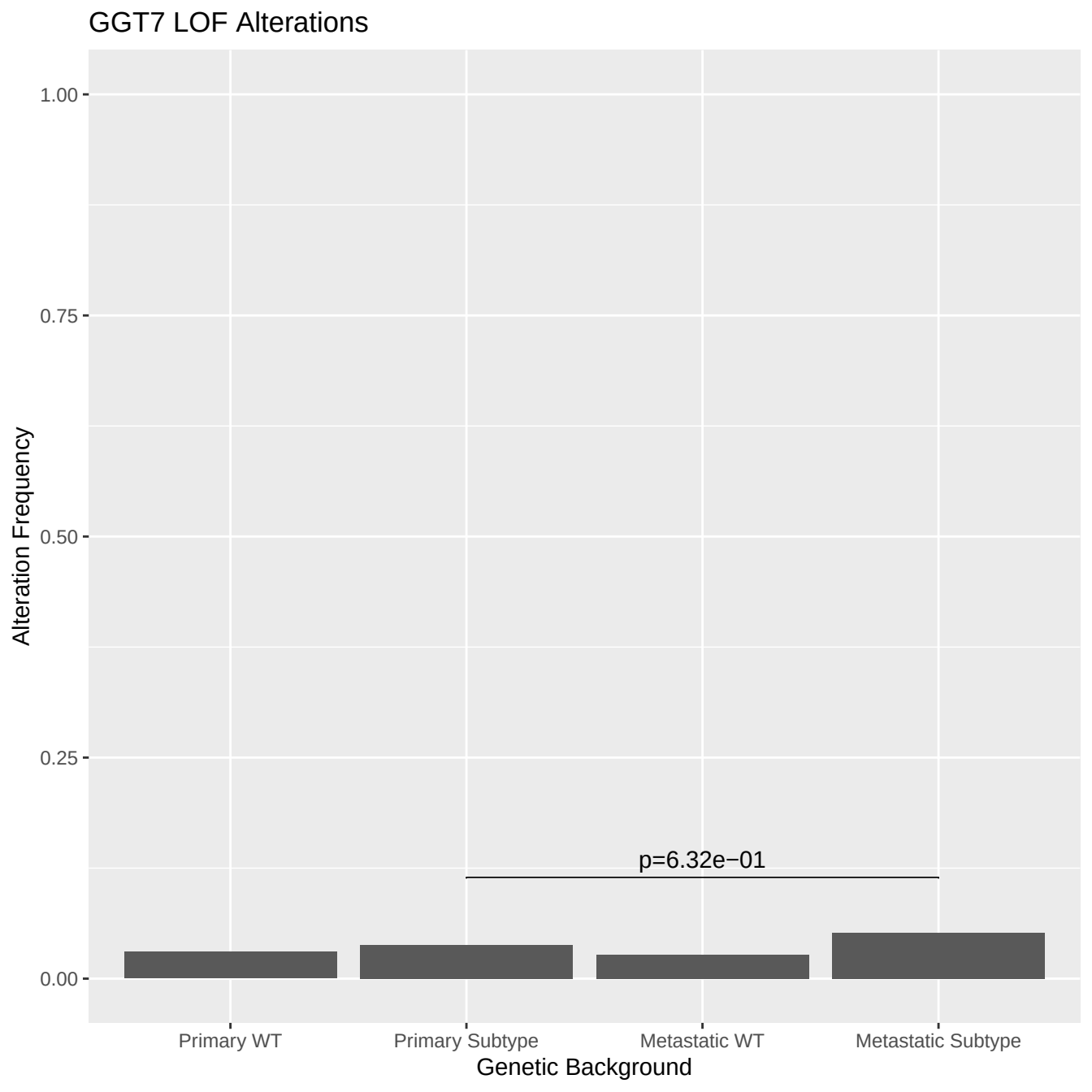

VSIG8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


RUNDC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


ZNF500 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.22e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


SLC39A13 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.58e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


RBBP8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.55e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


GGT7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

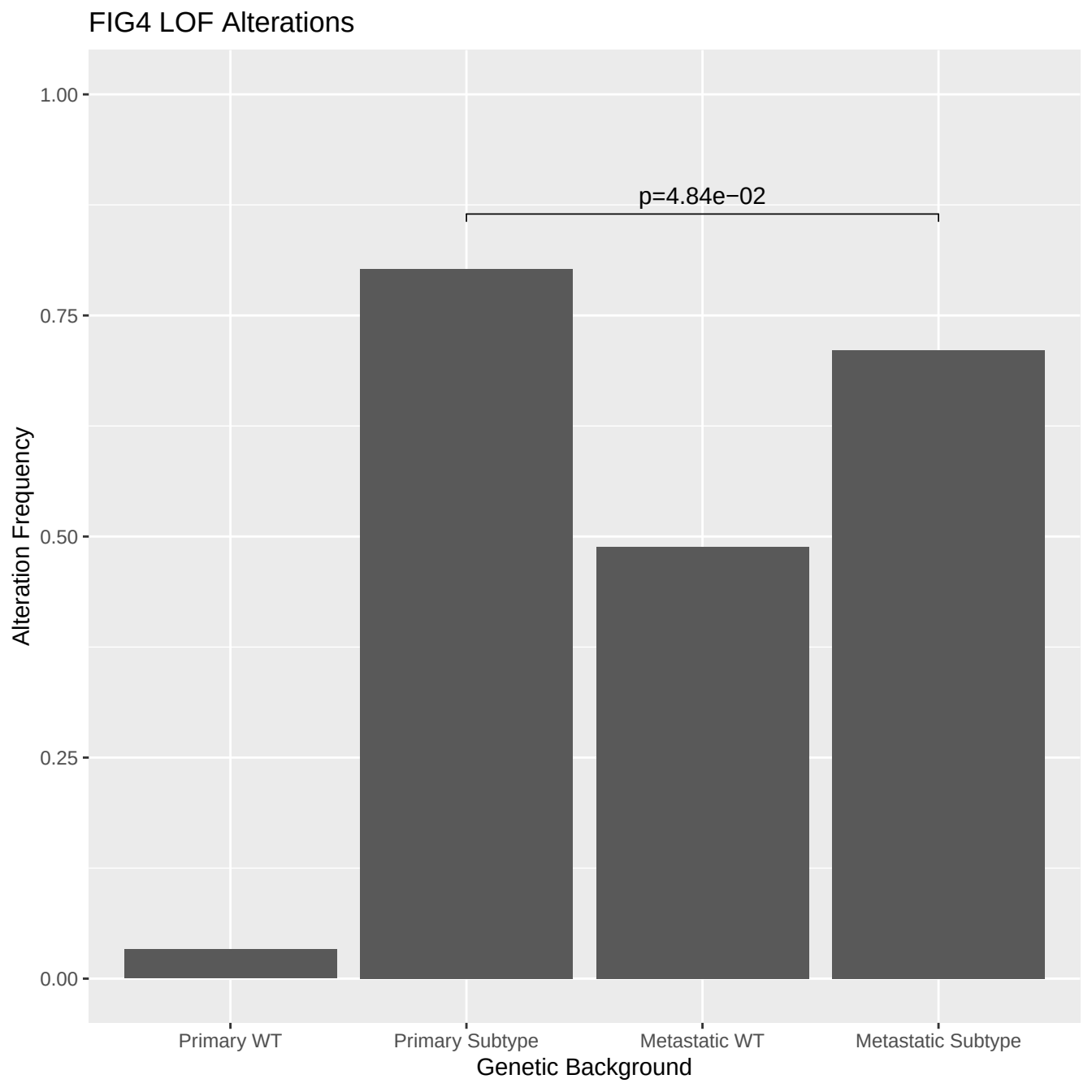
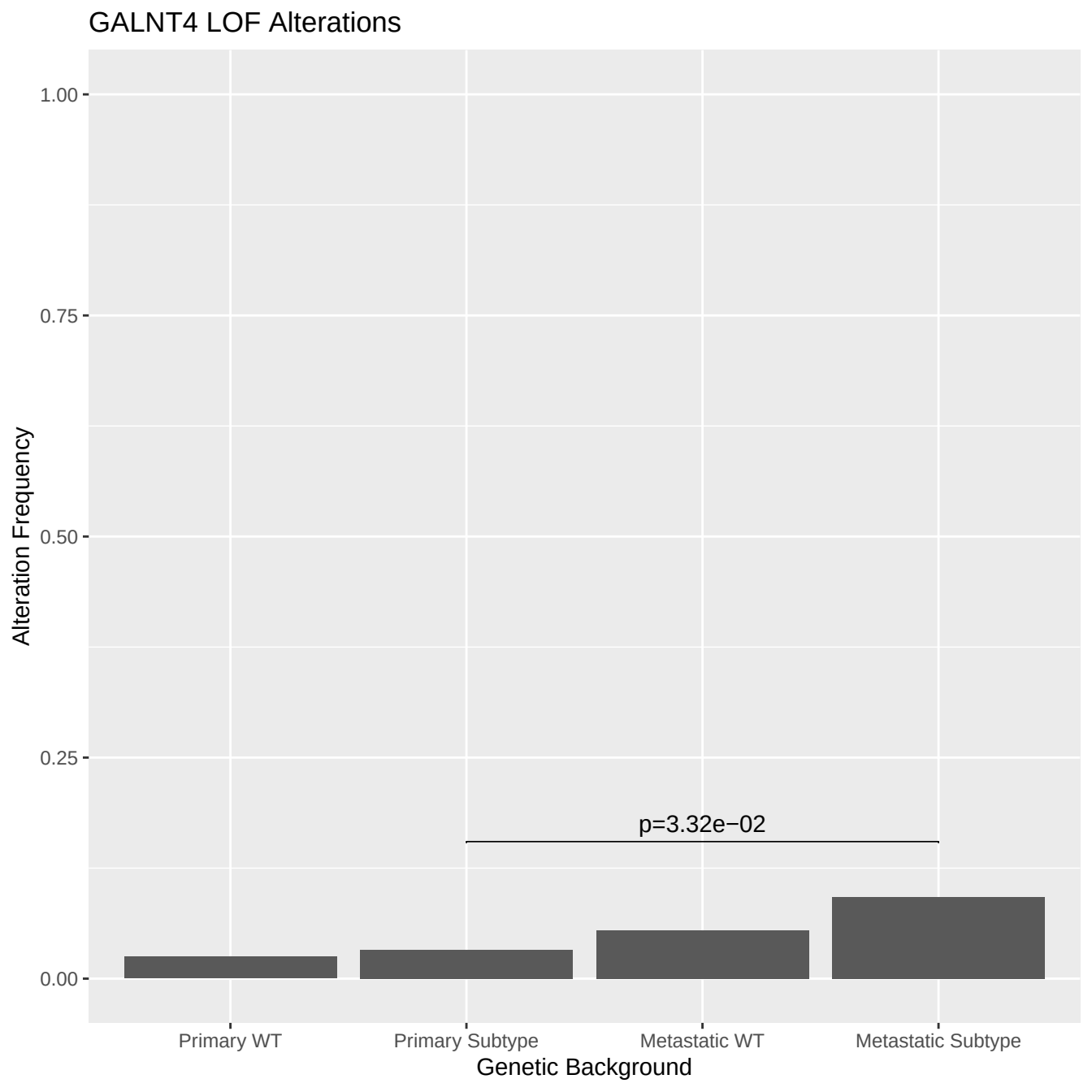
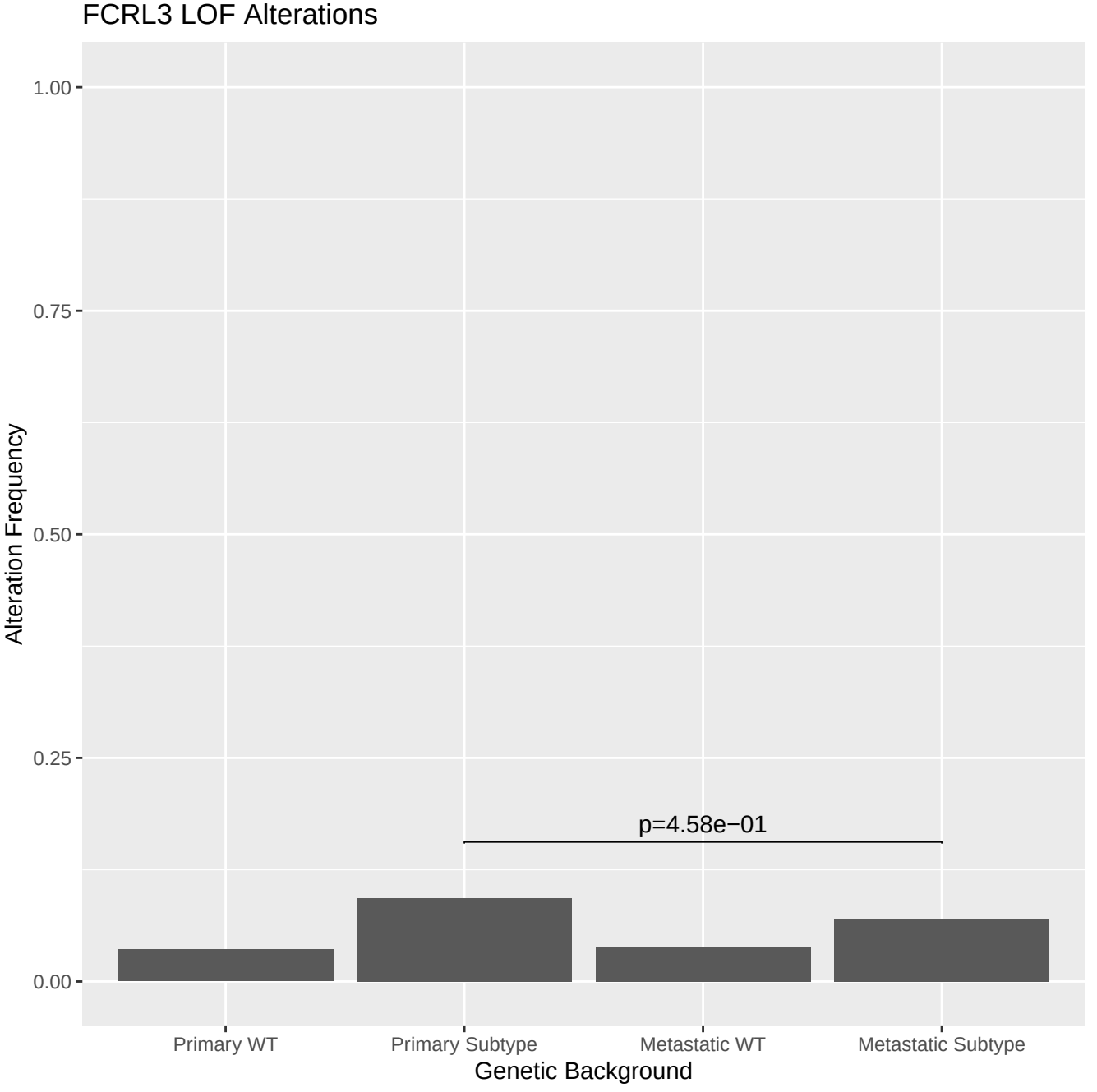
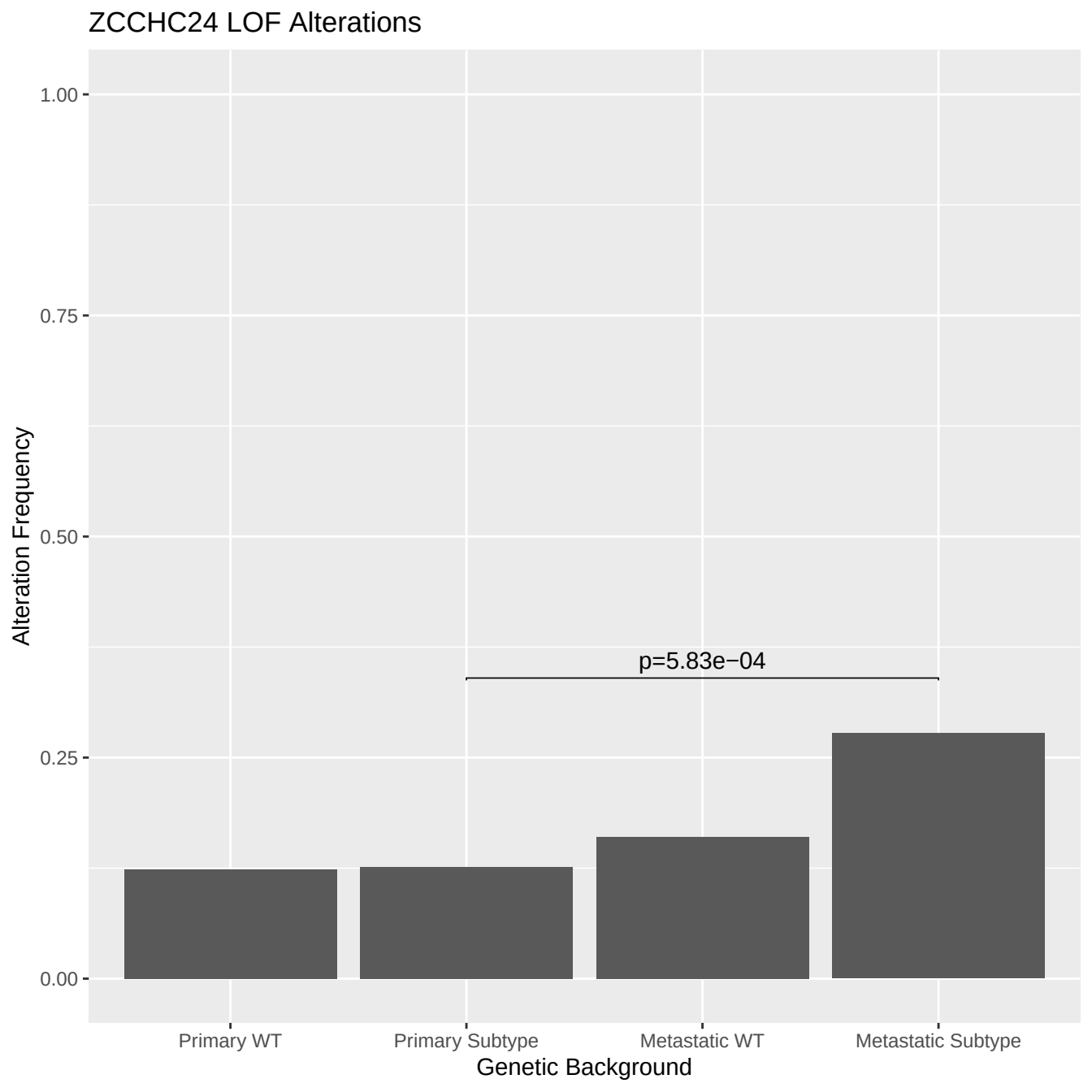
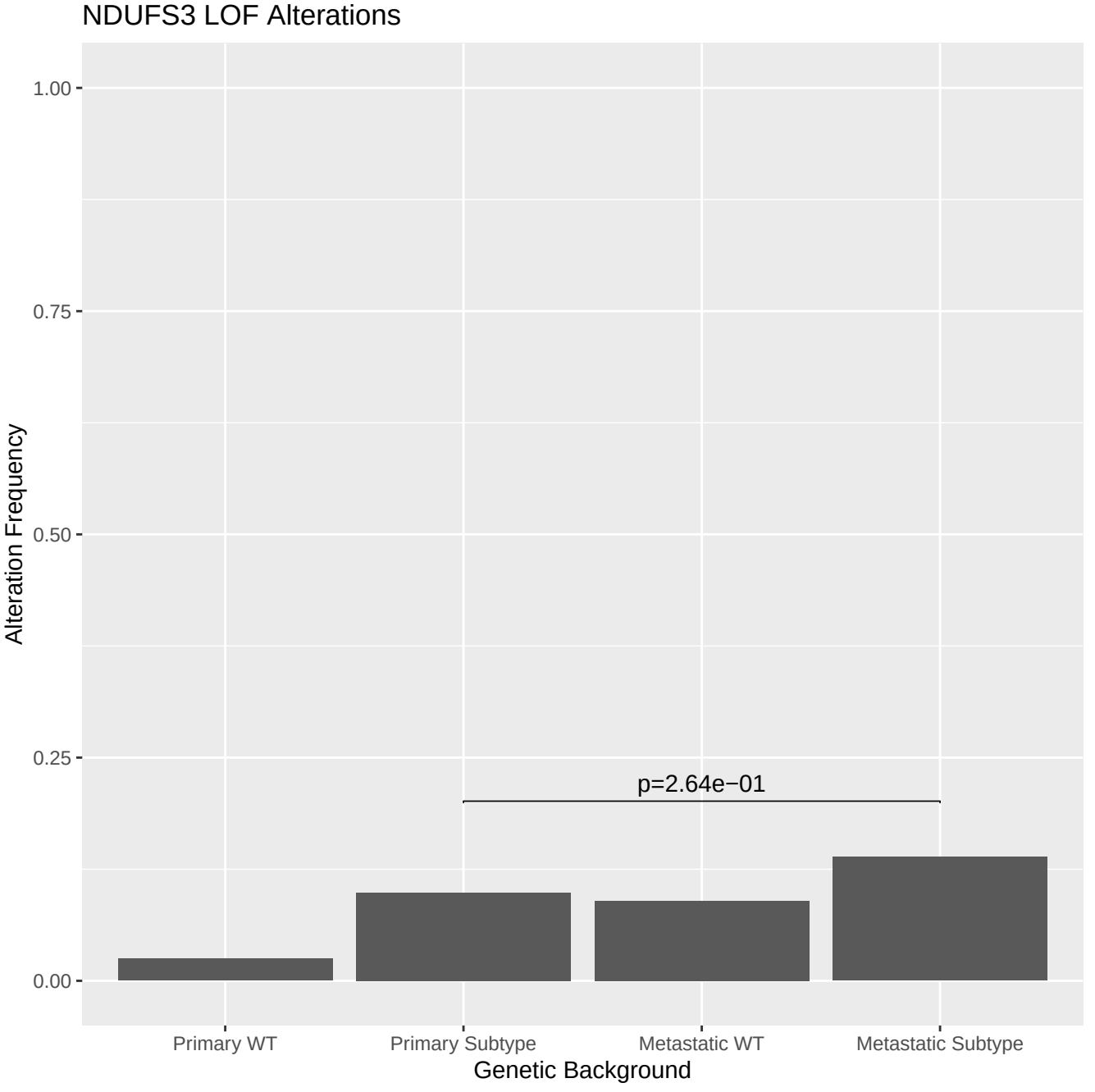


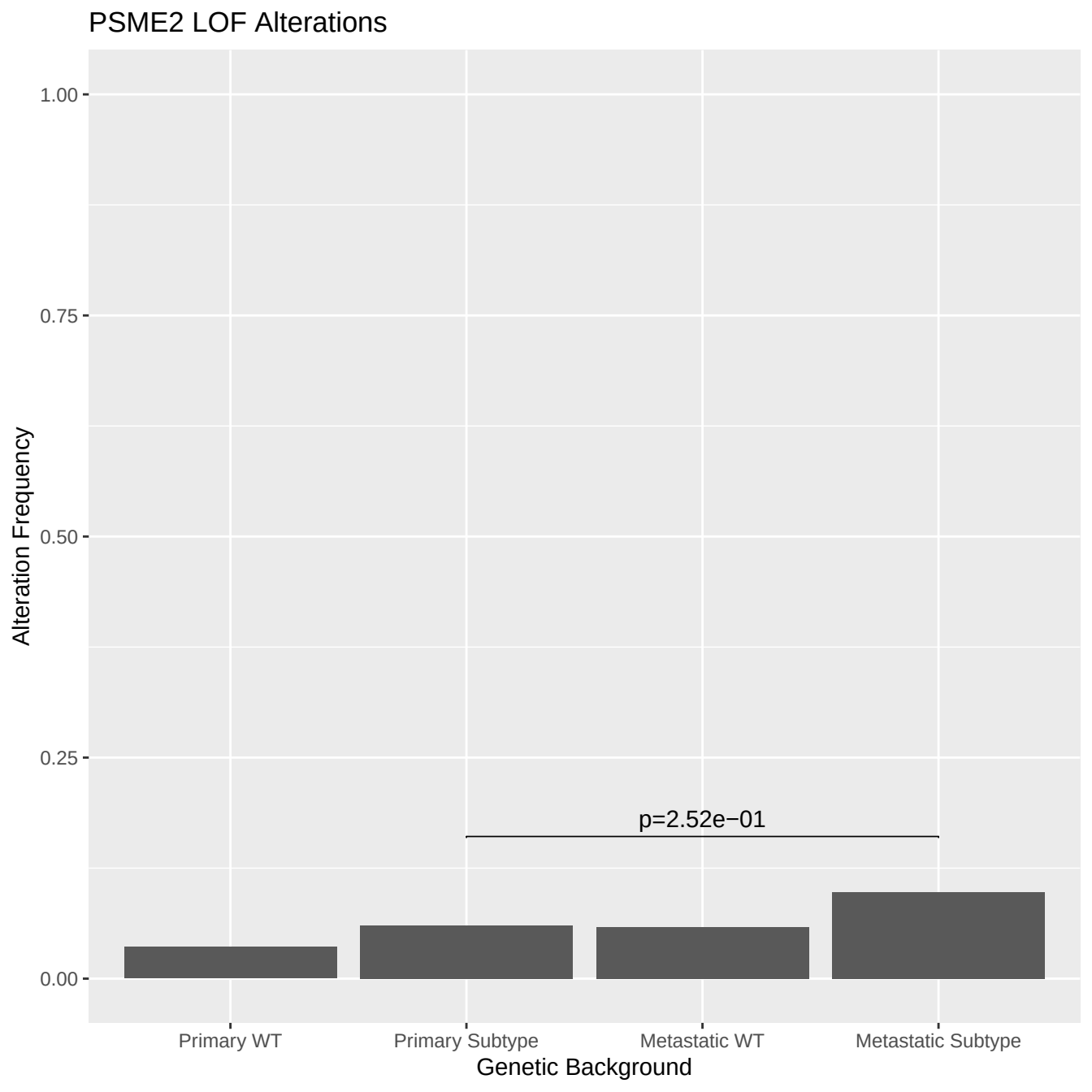
FIG4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.84e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

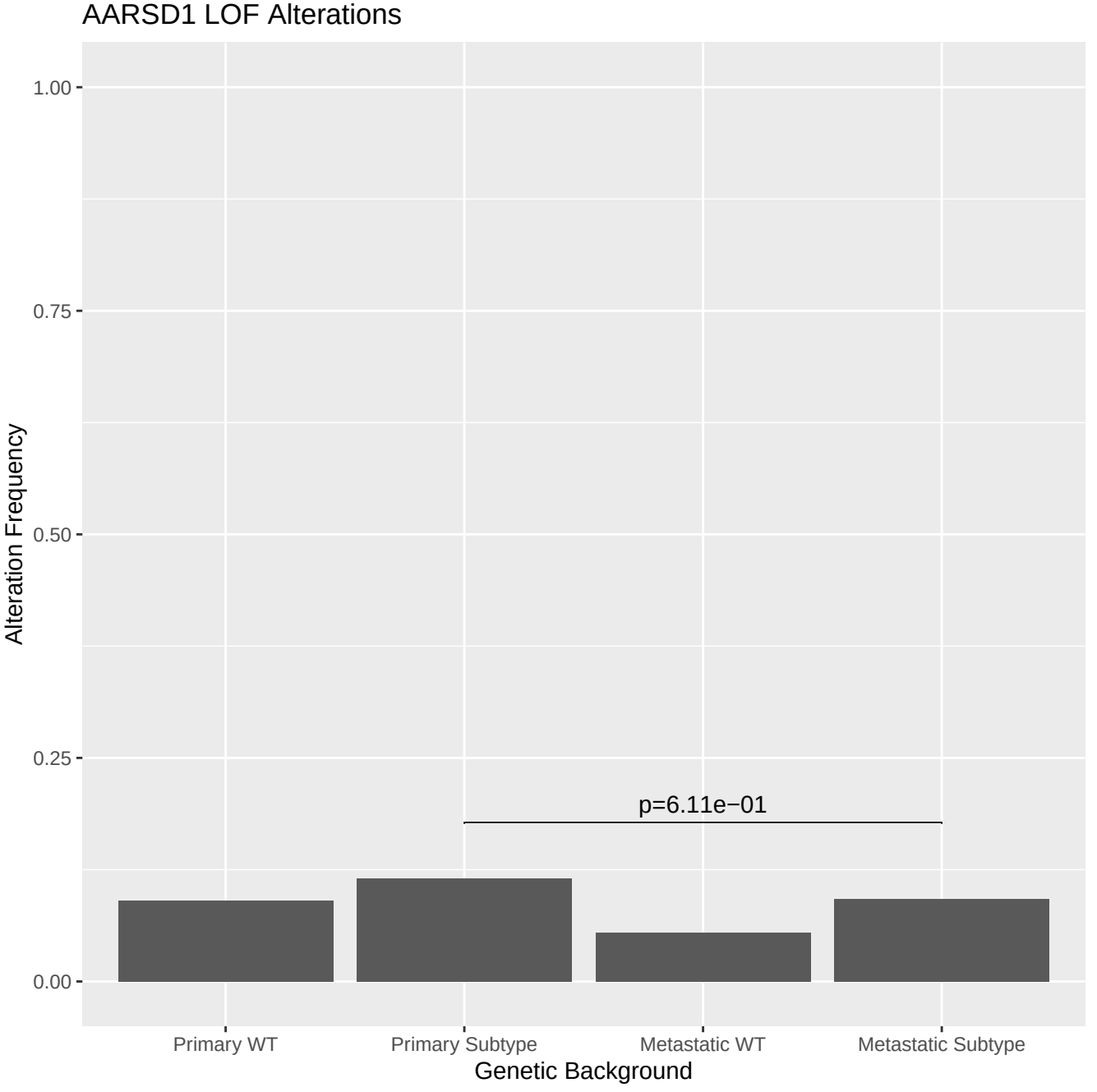

GALNT4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.32e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

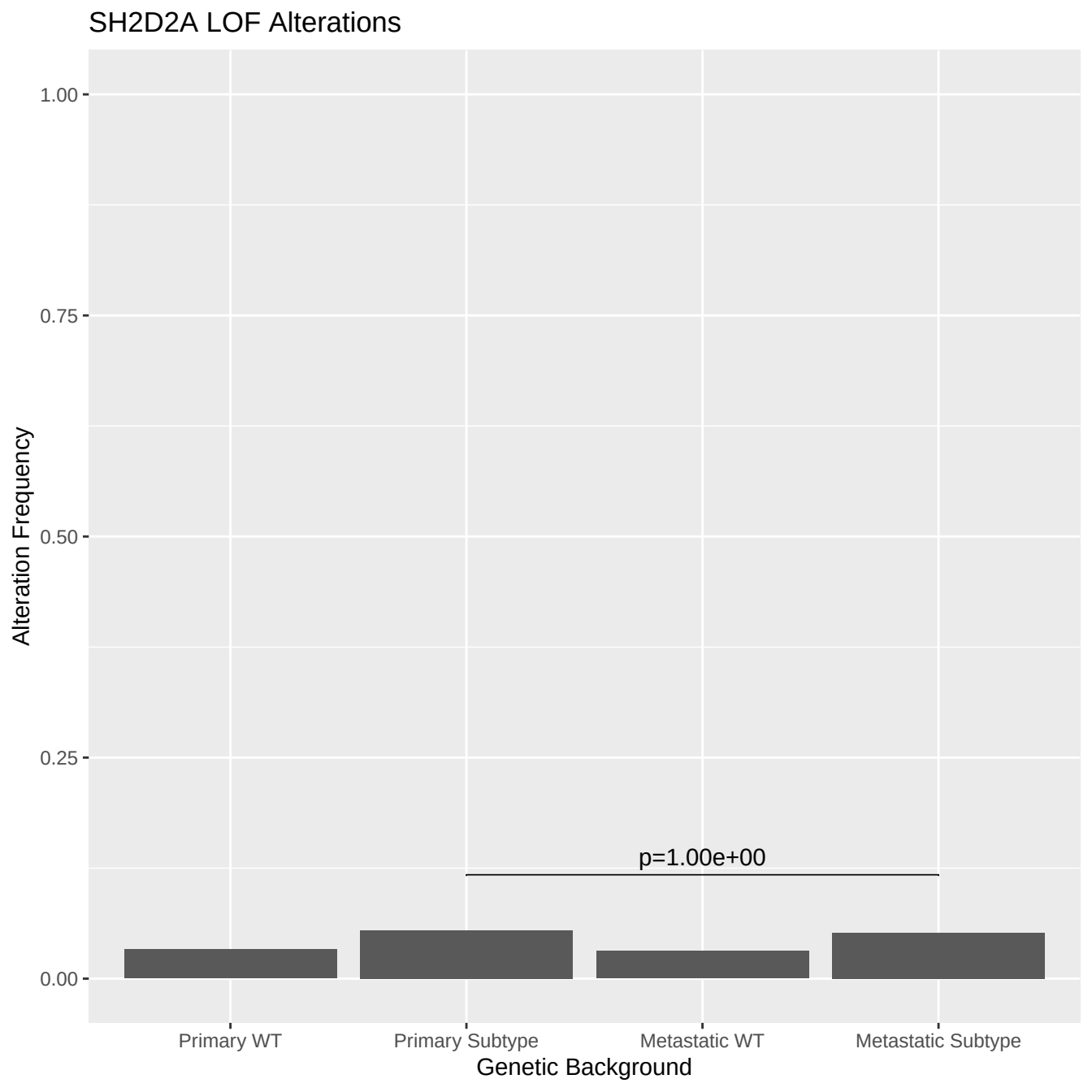

FCRL3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.58e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

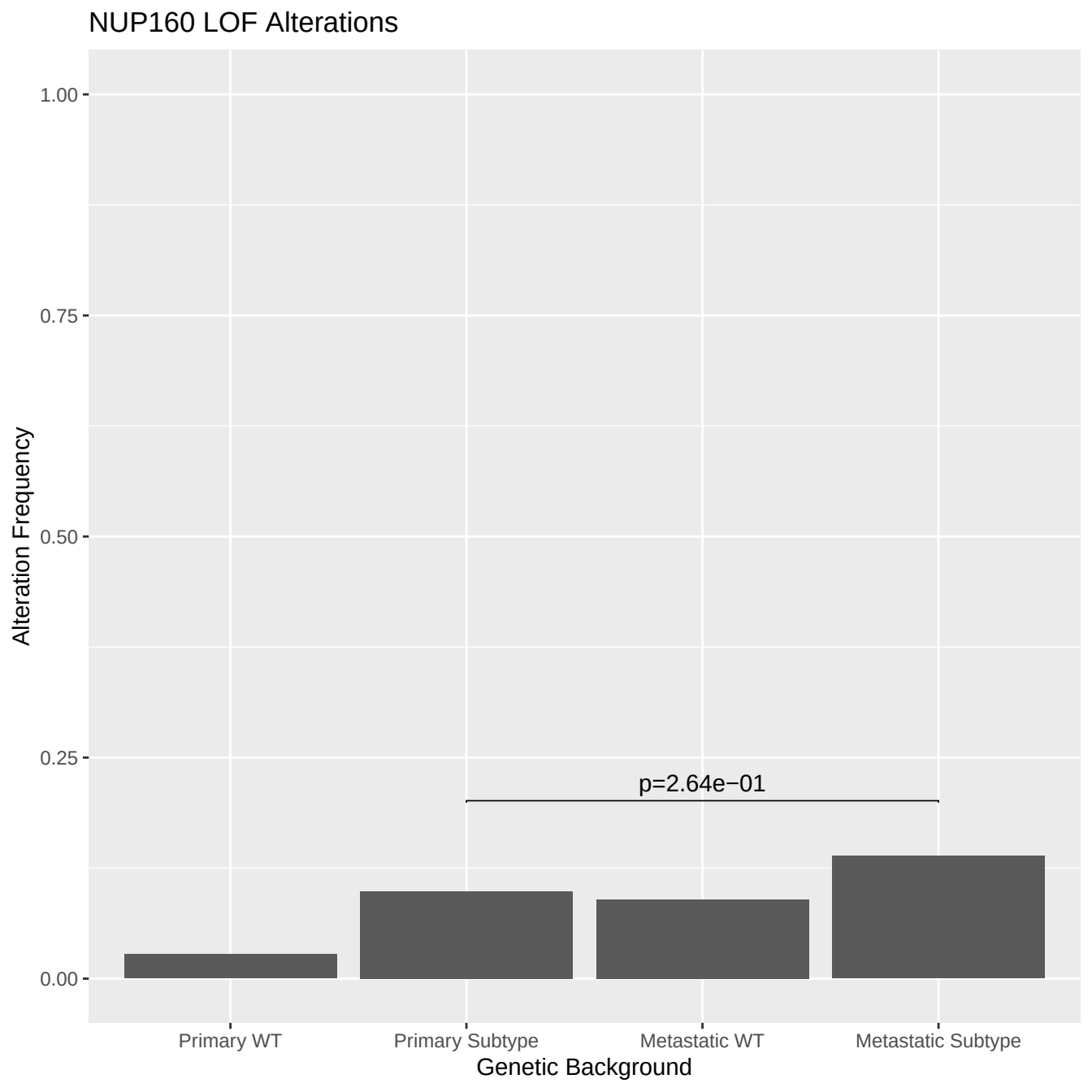

ZCCHC24 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.83e−04
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

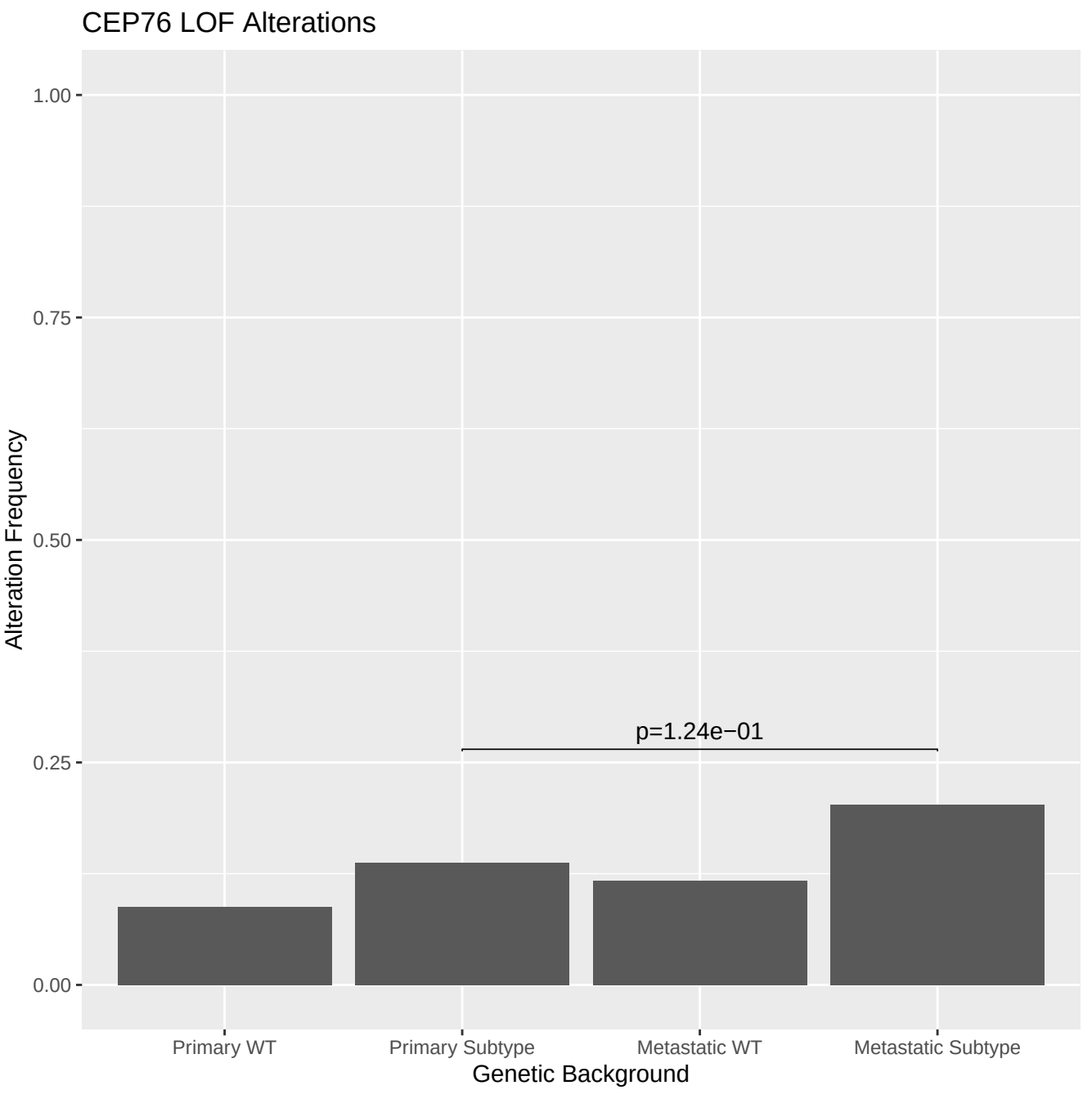

NDUFS3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

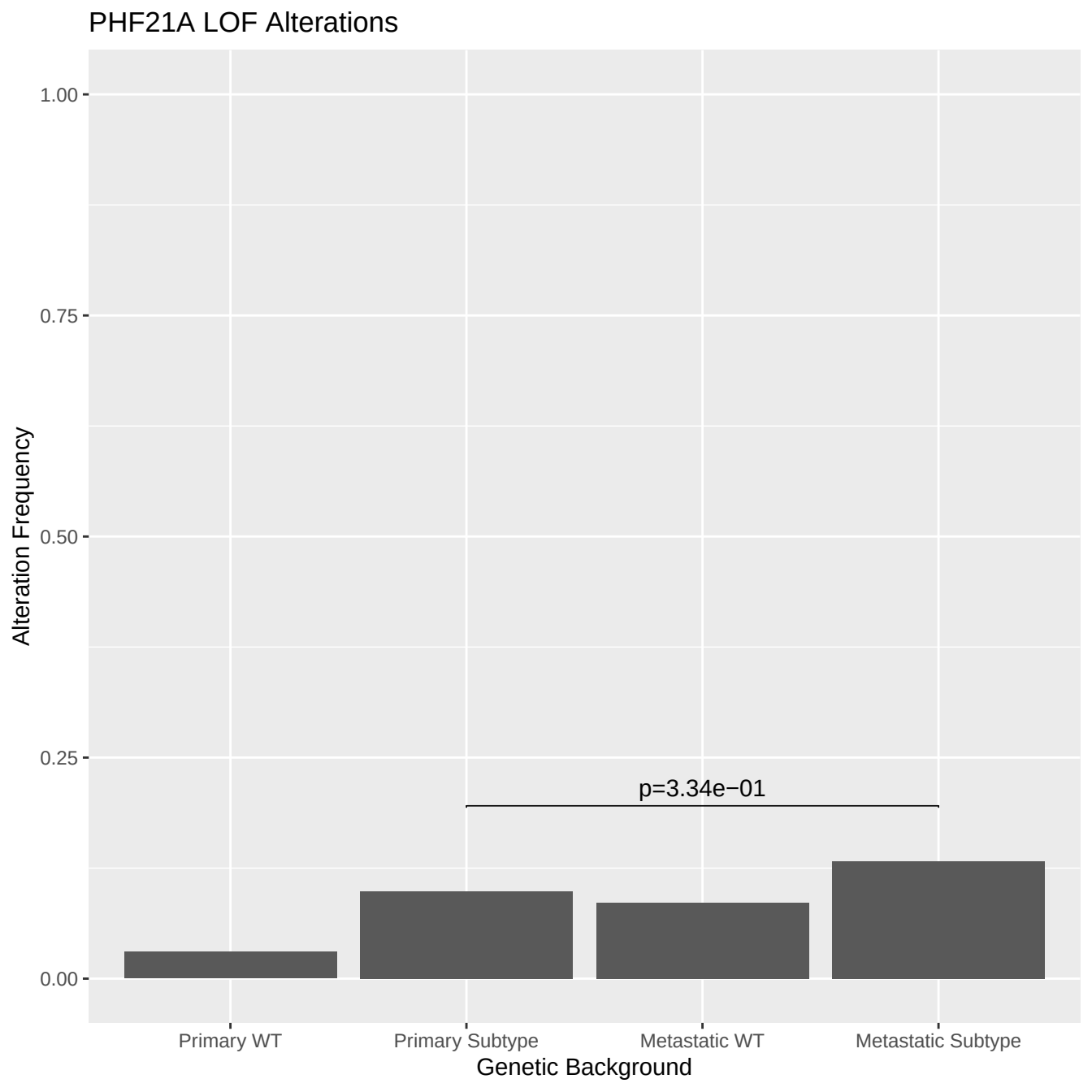

PSME2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.52e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

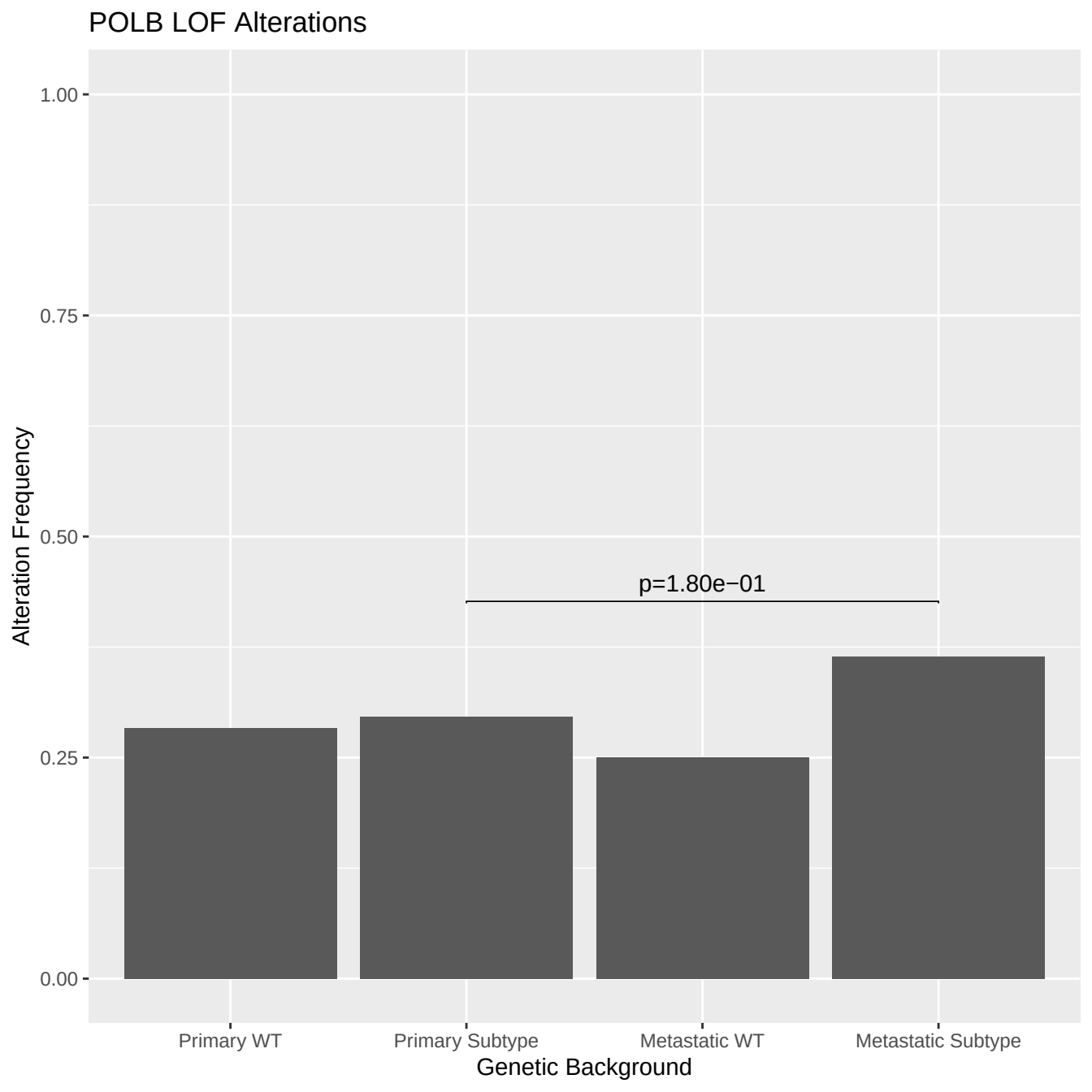

AARSD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

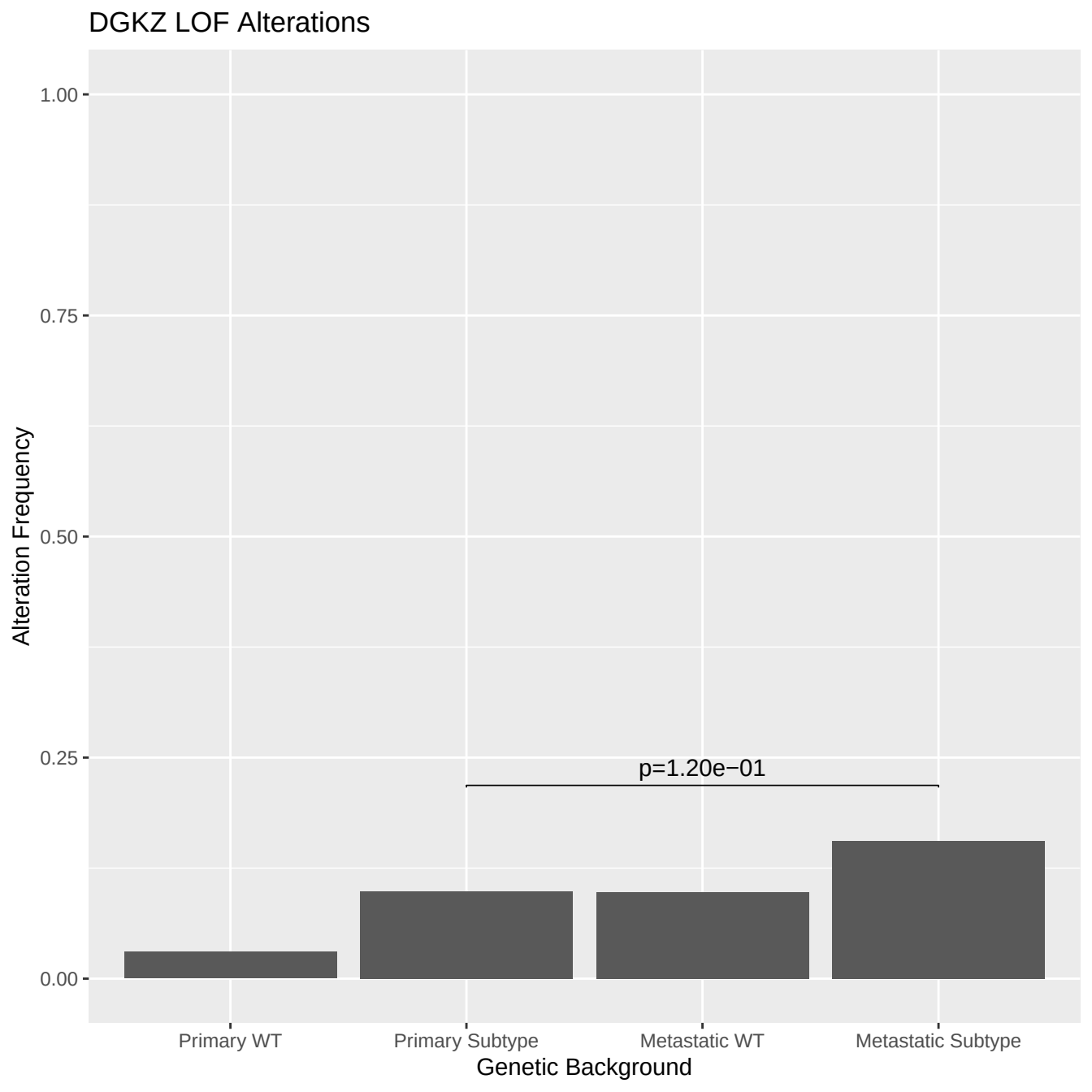

SH2D2A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

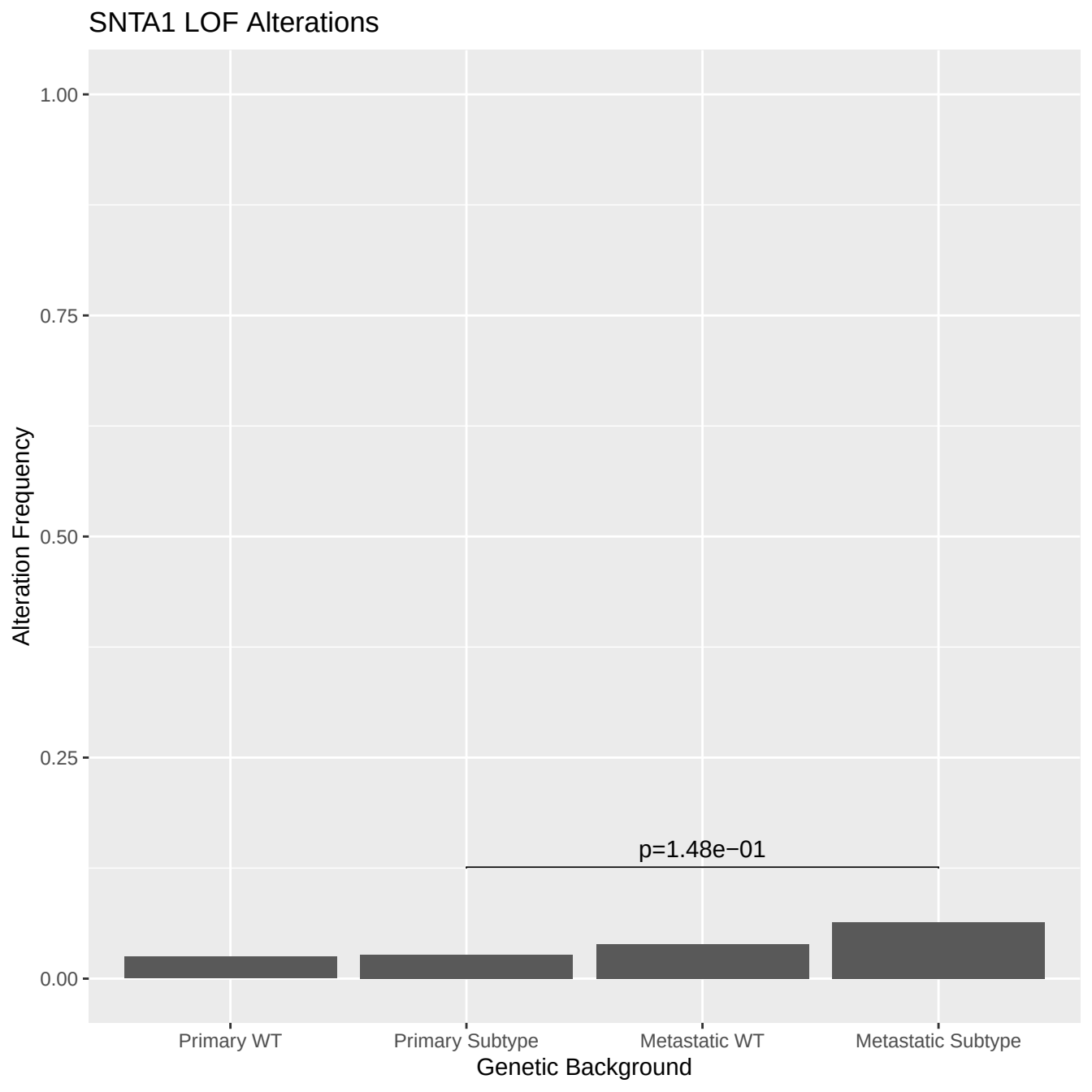

NUP160 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

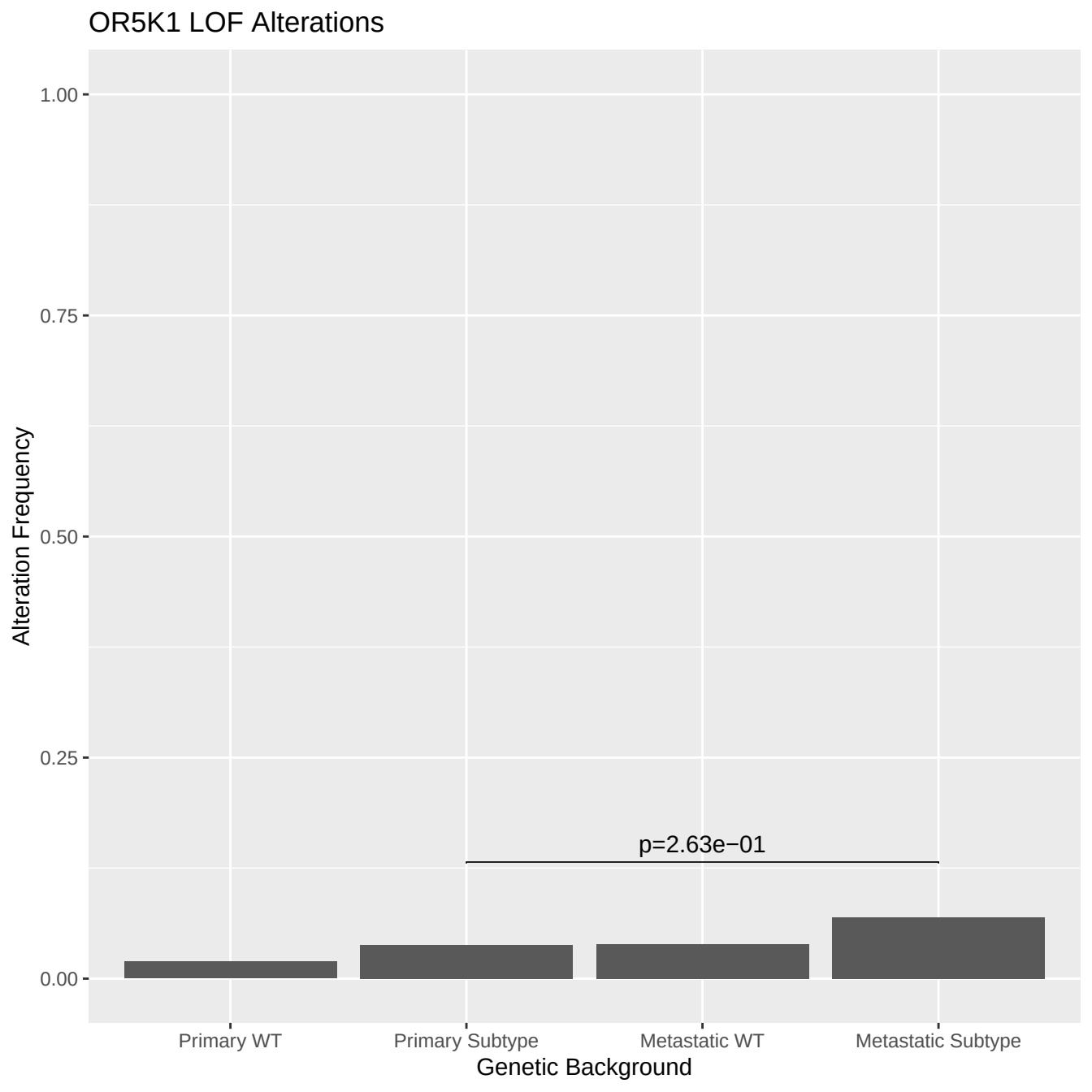

CEP76 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.24e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

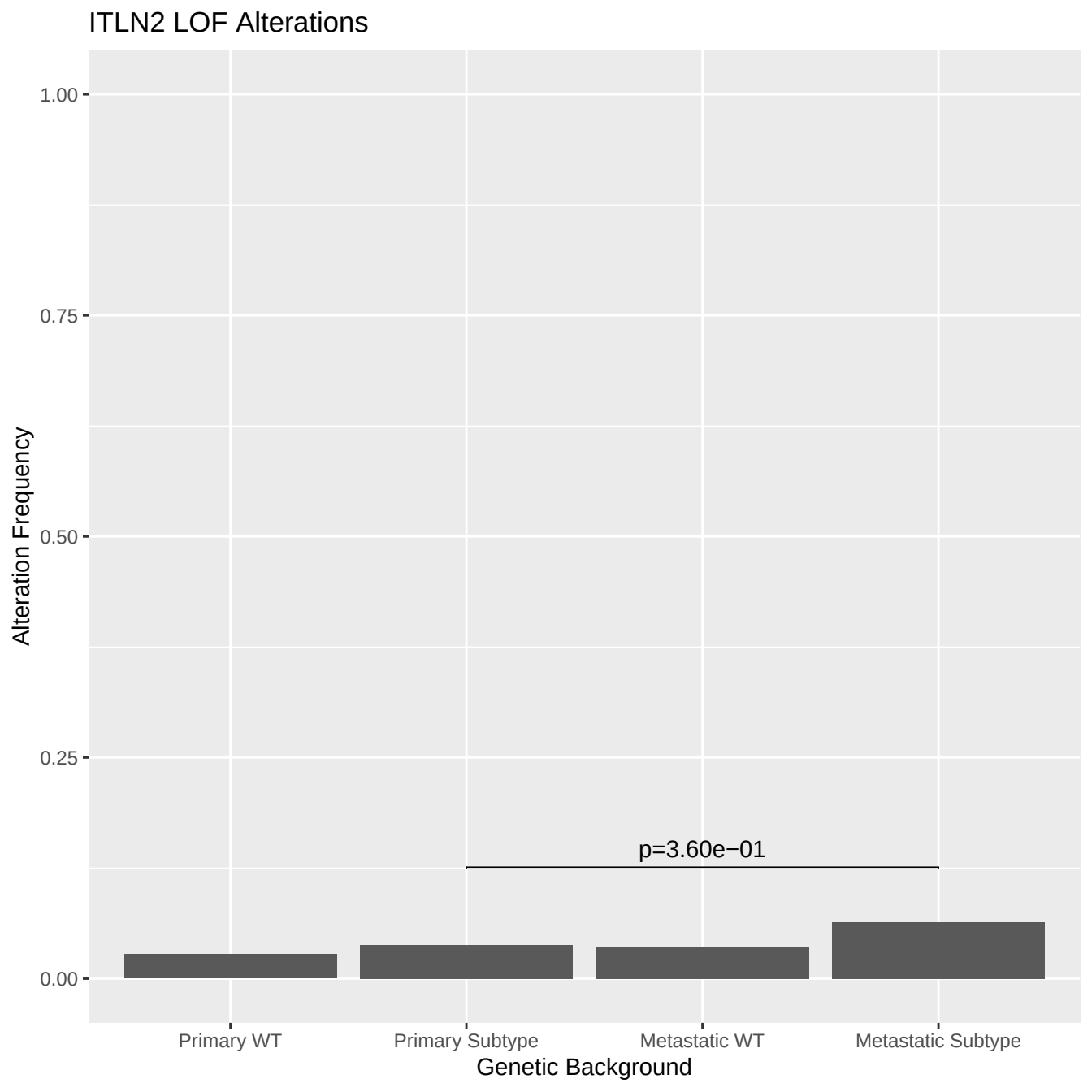

PHF21A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.34e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

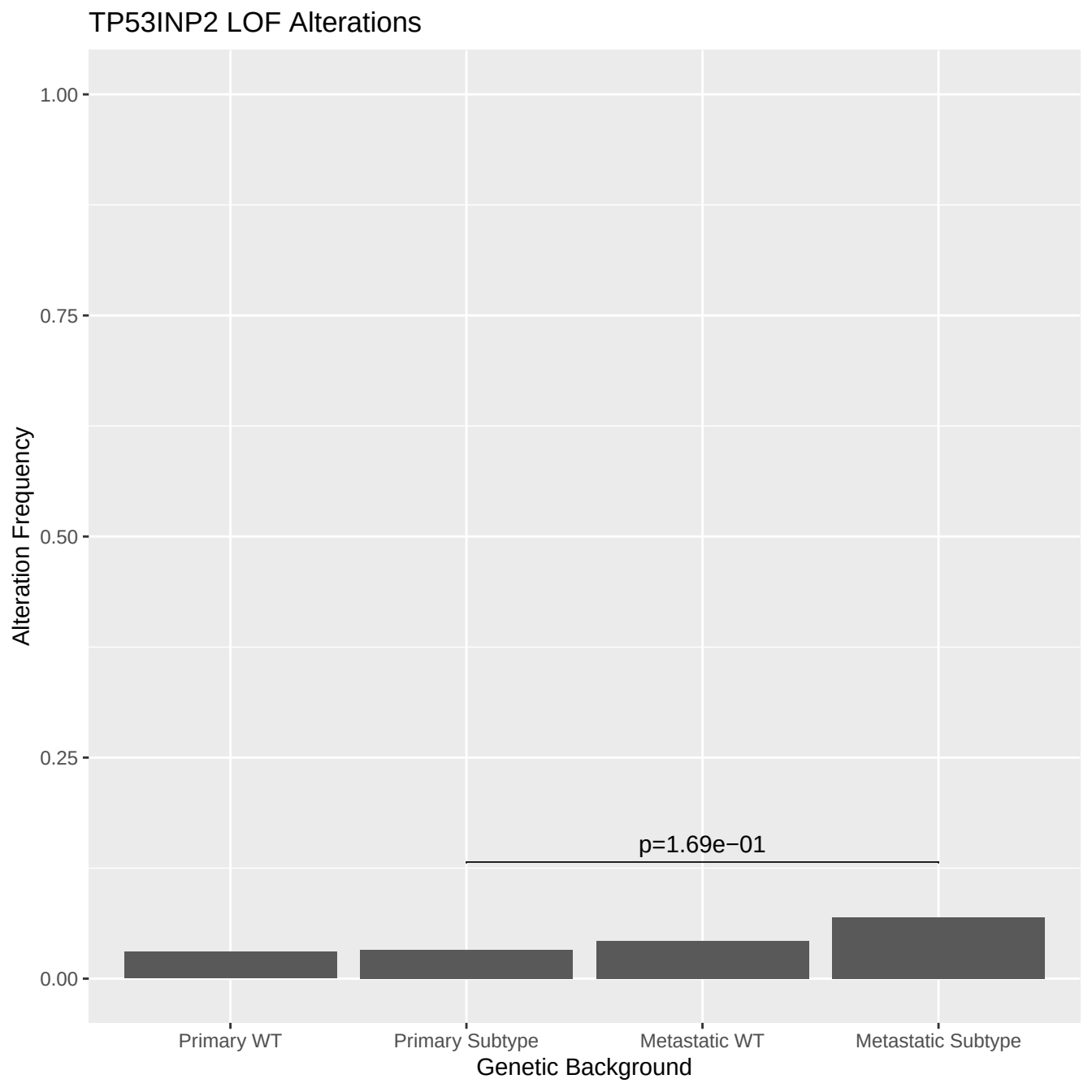

POLB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.80e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

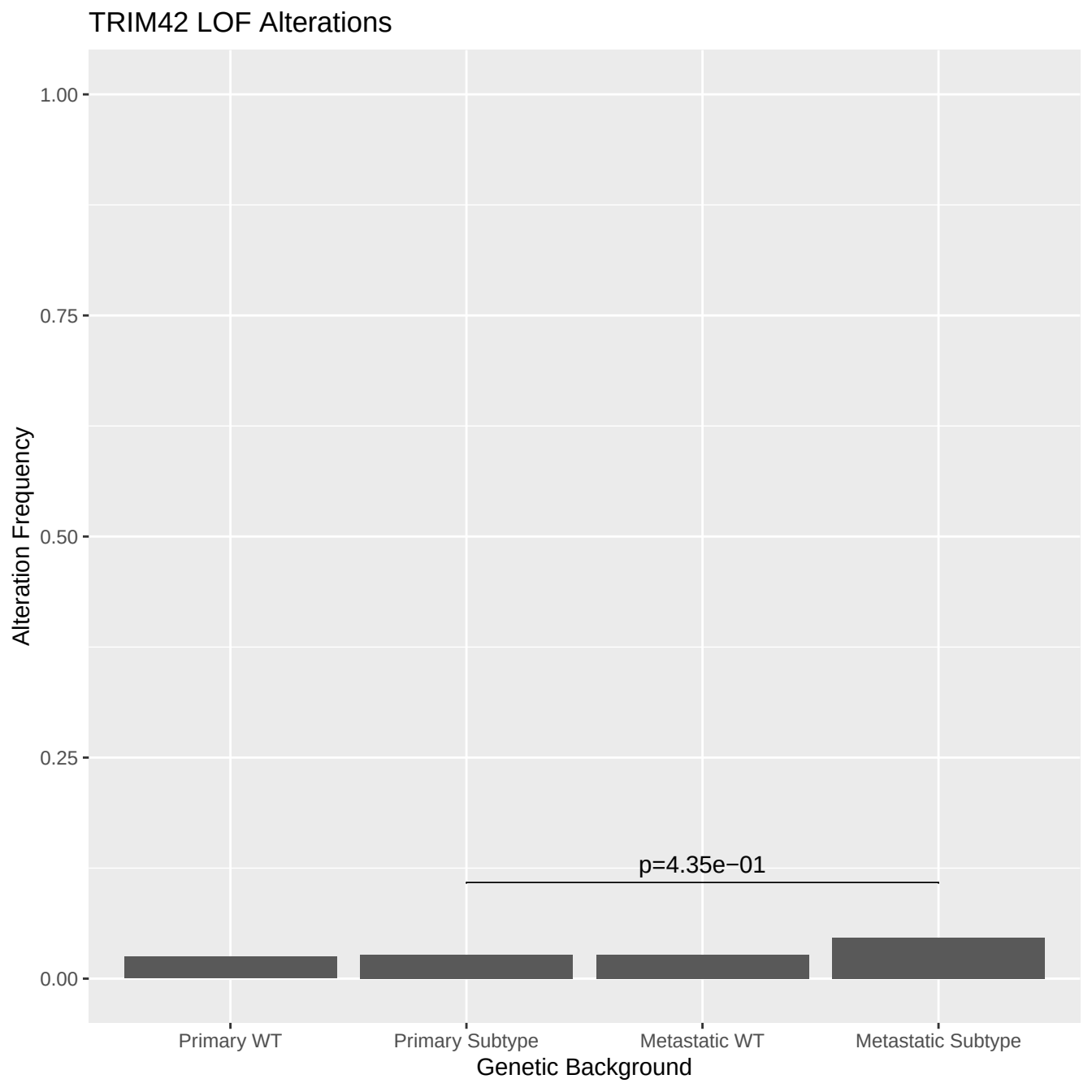

DGKZ LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.20e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

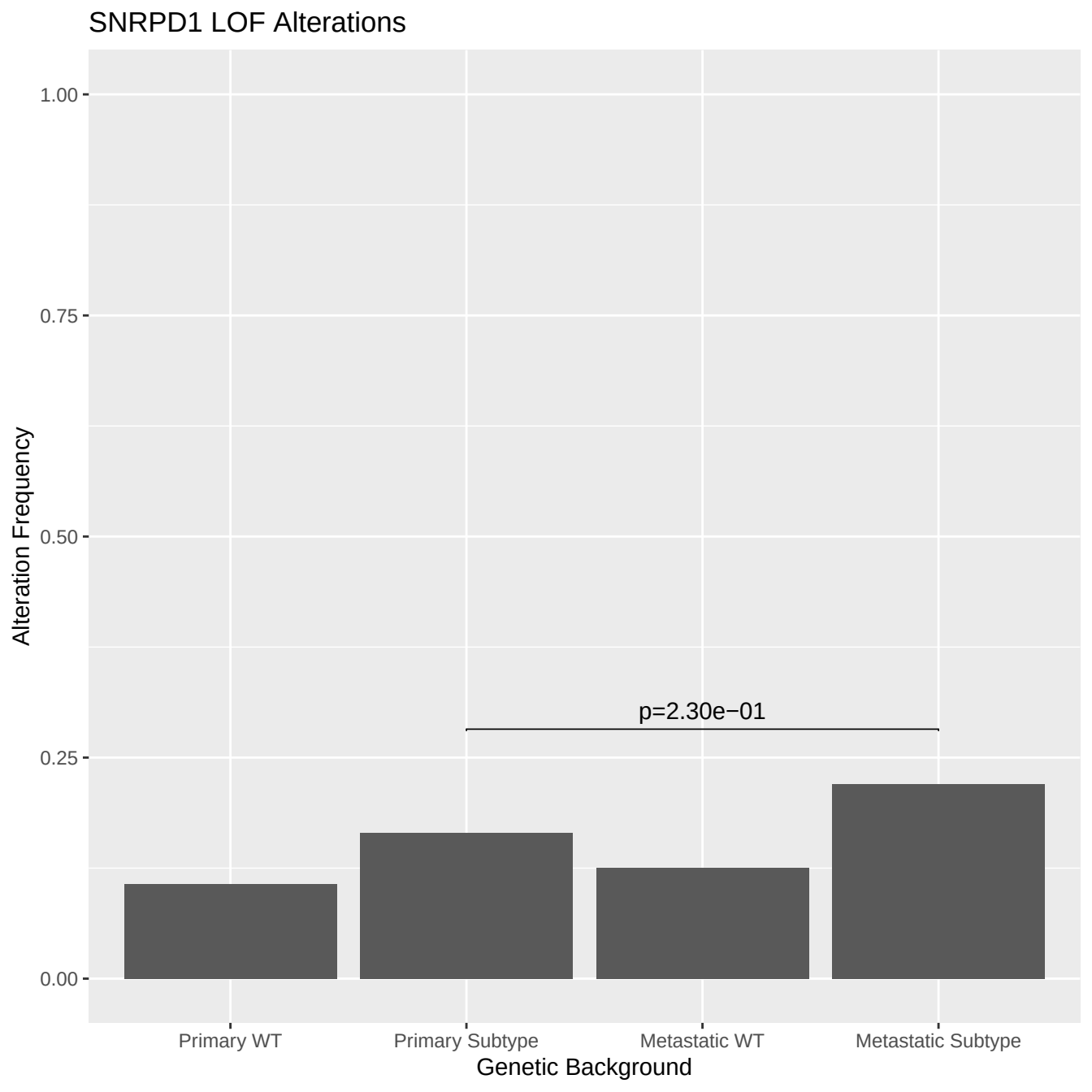

SNTA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

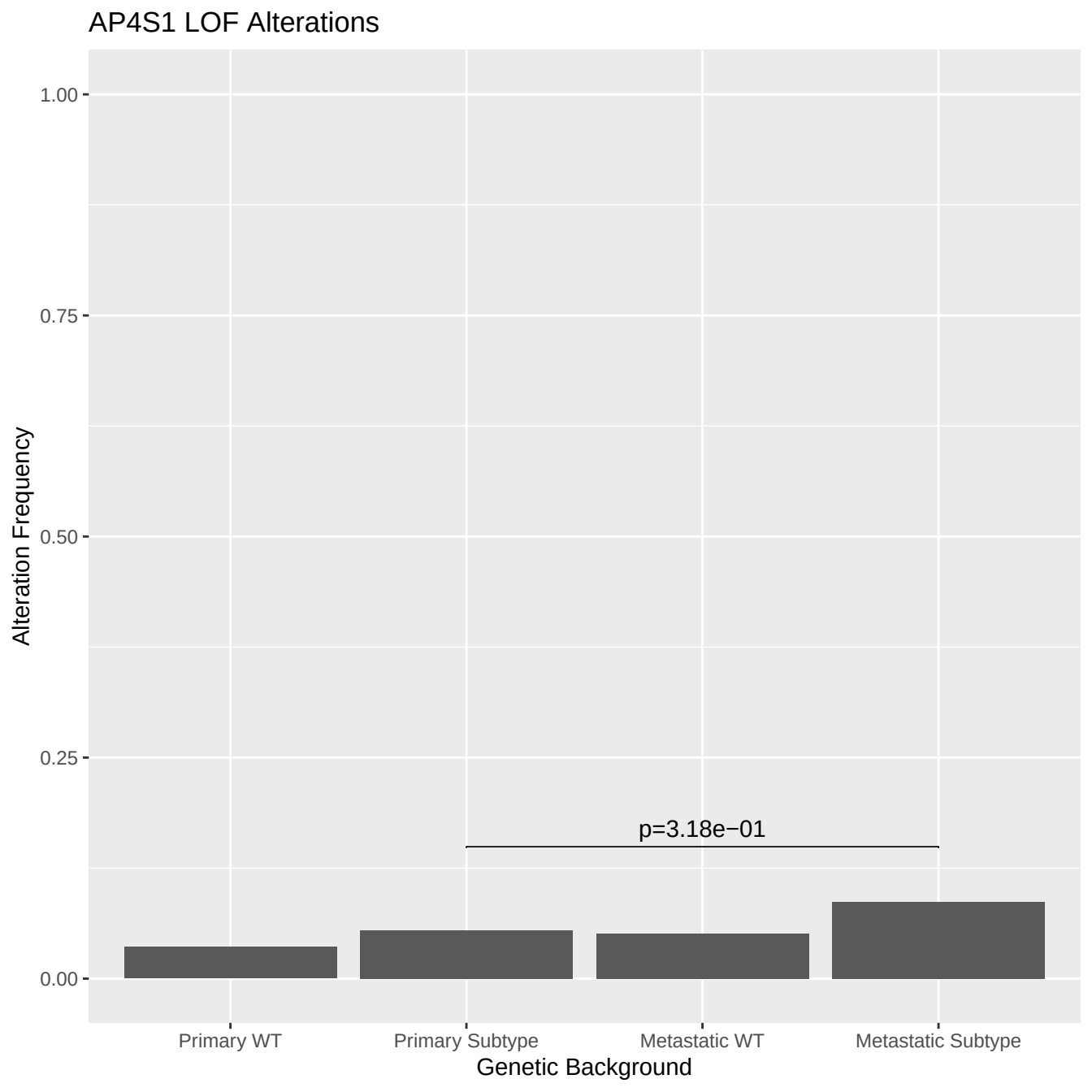

OR5K1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.63e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

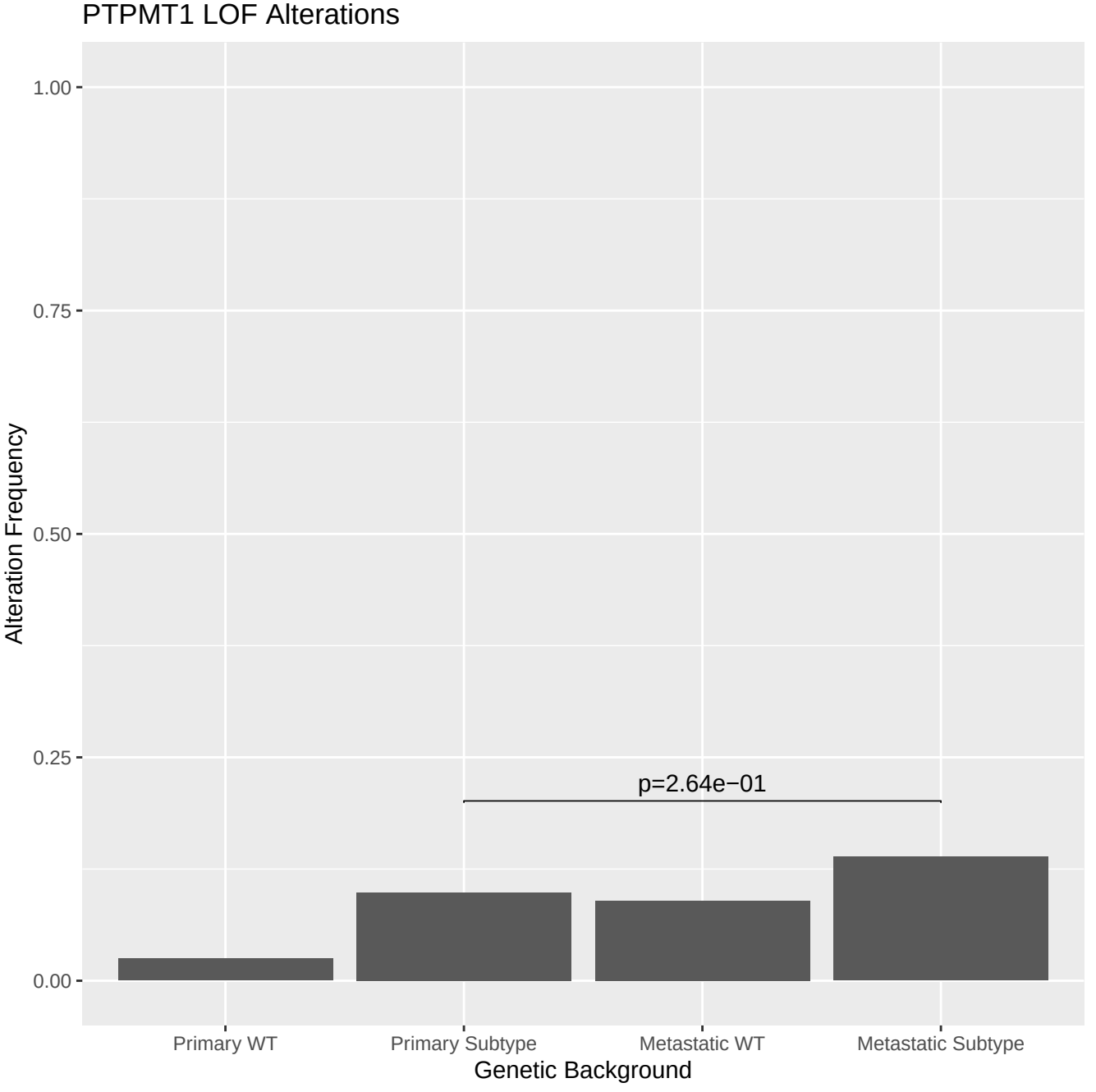

ITLN2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.60e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

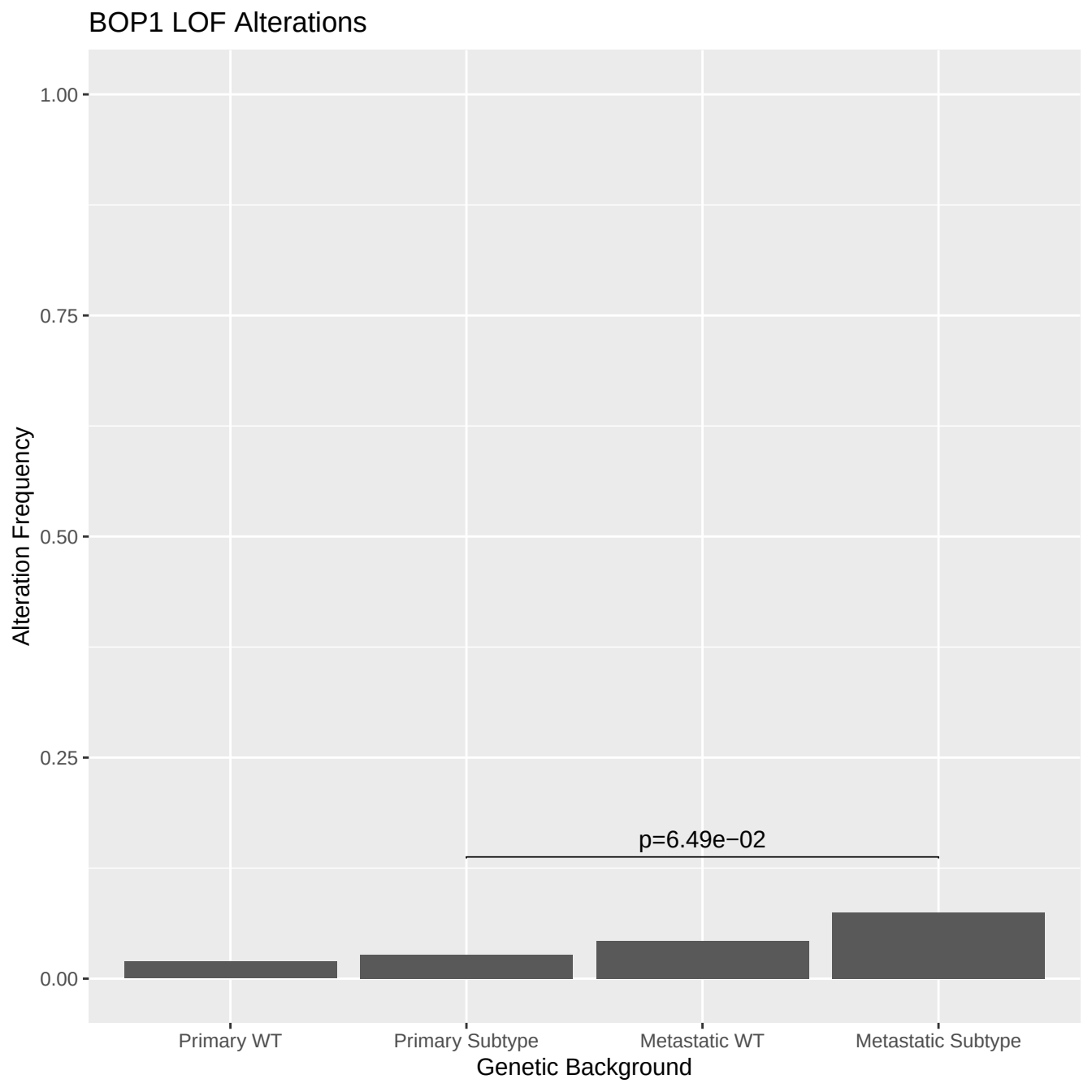

TP53INP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.69e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

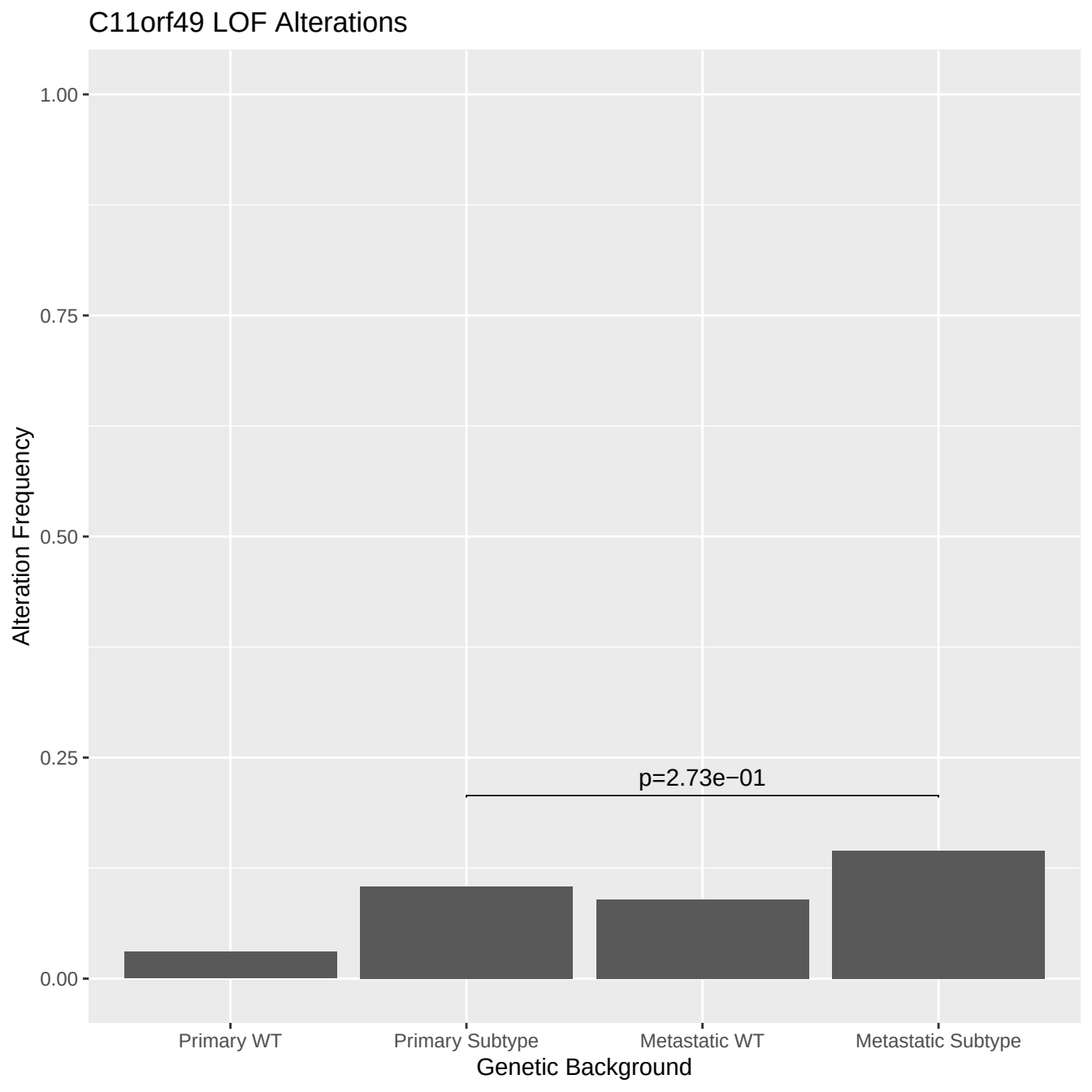

TRIM42 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

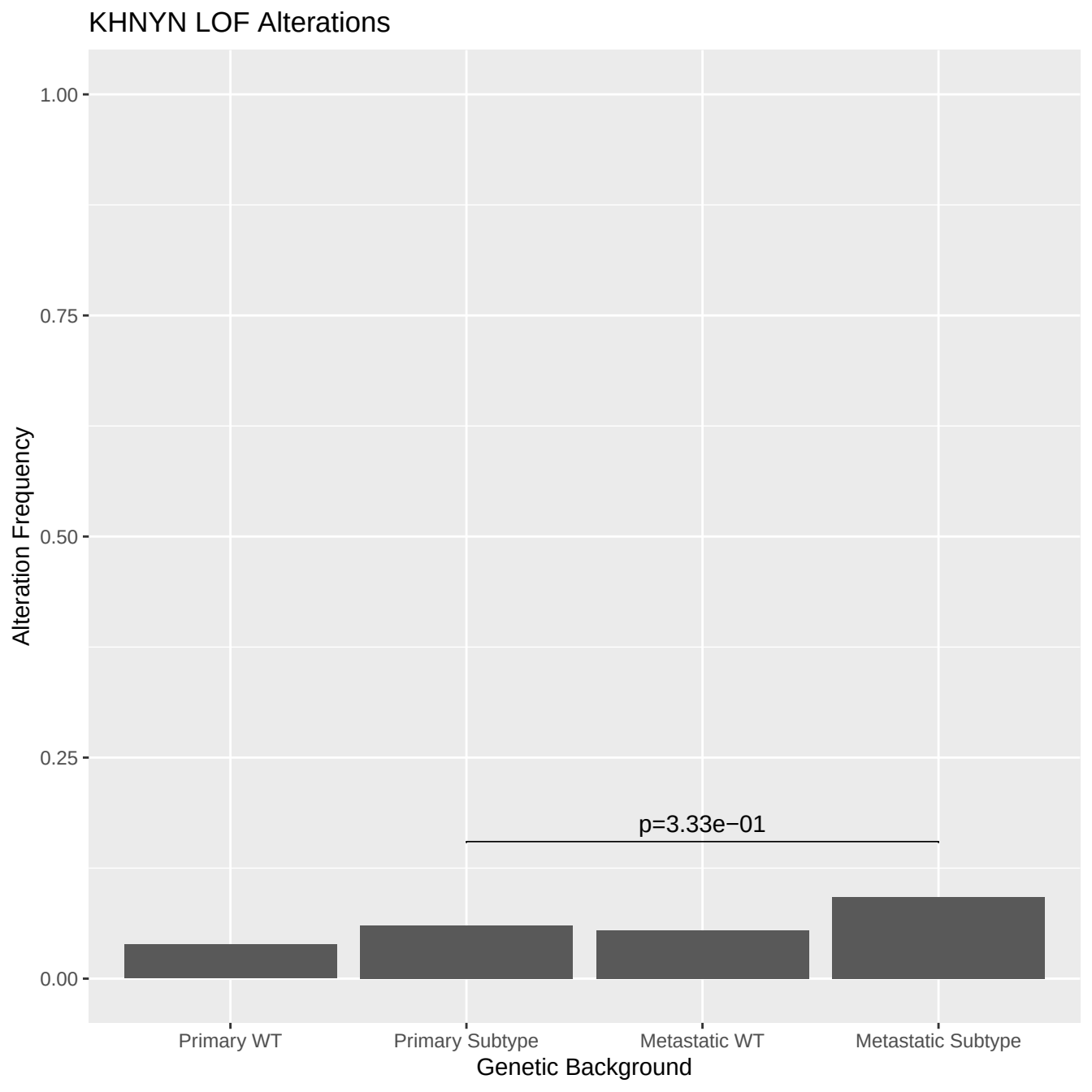

SNRPD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

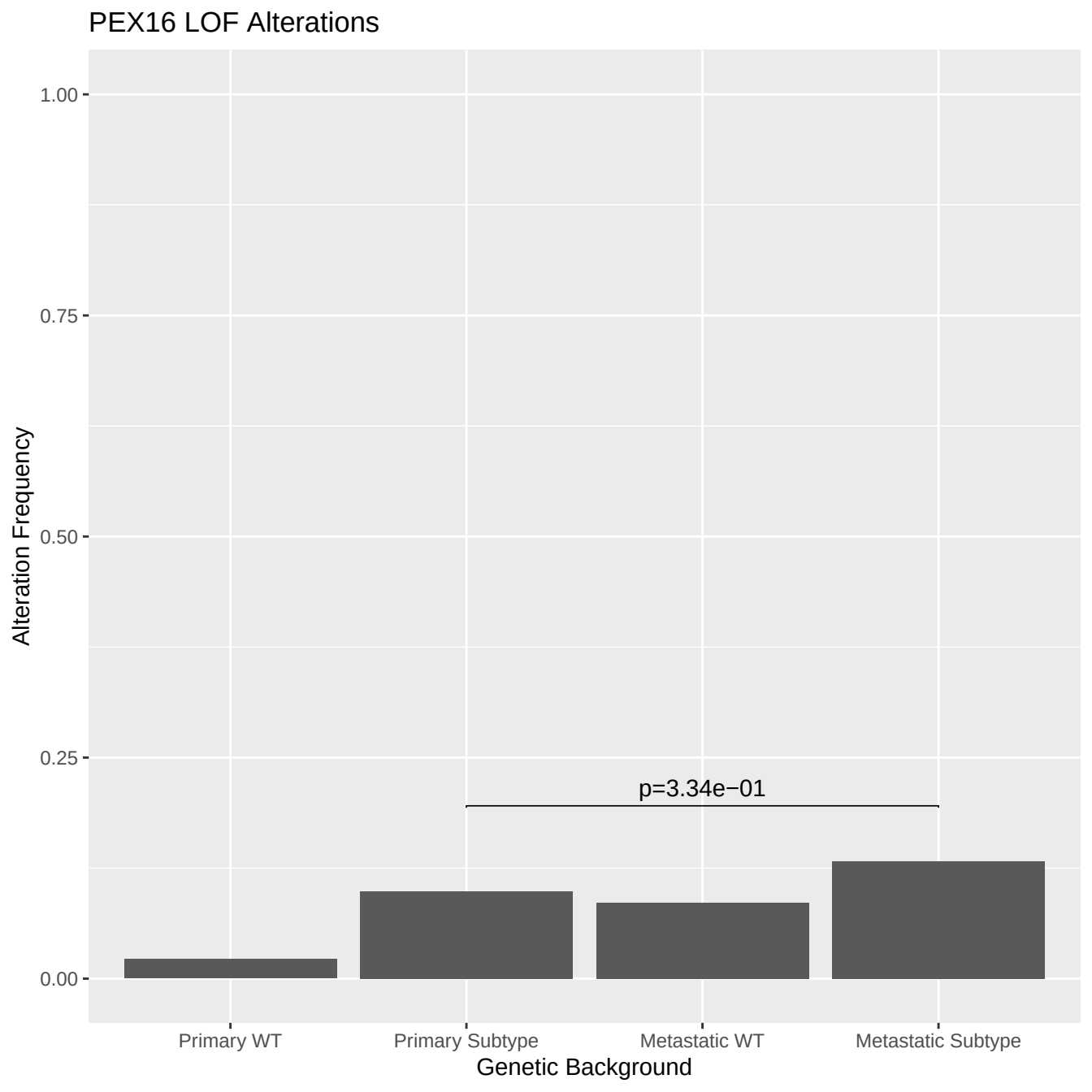

AP4S1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

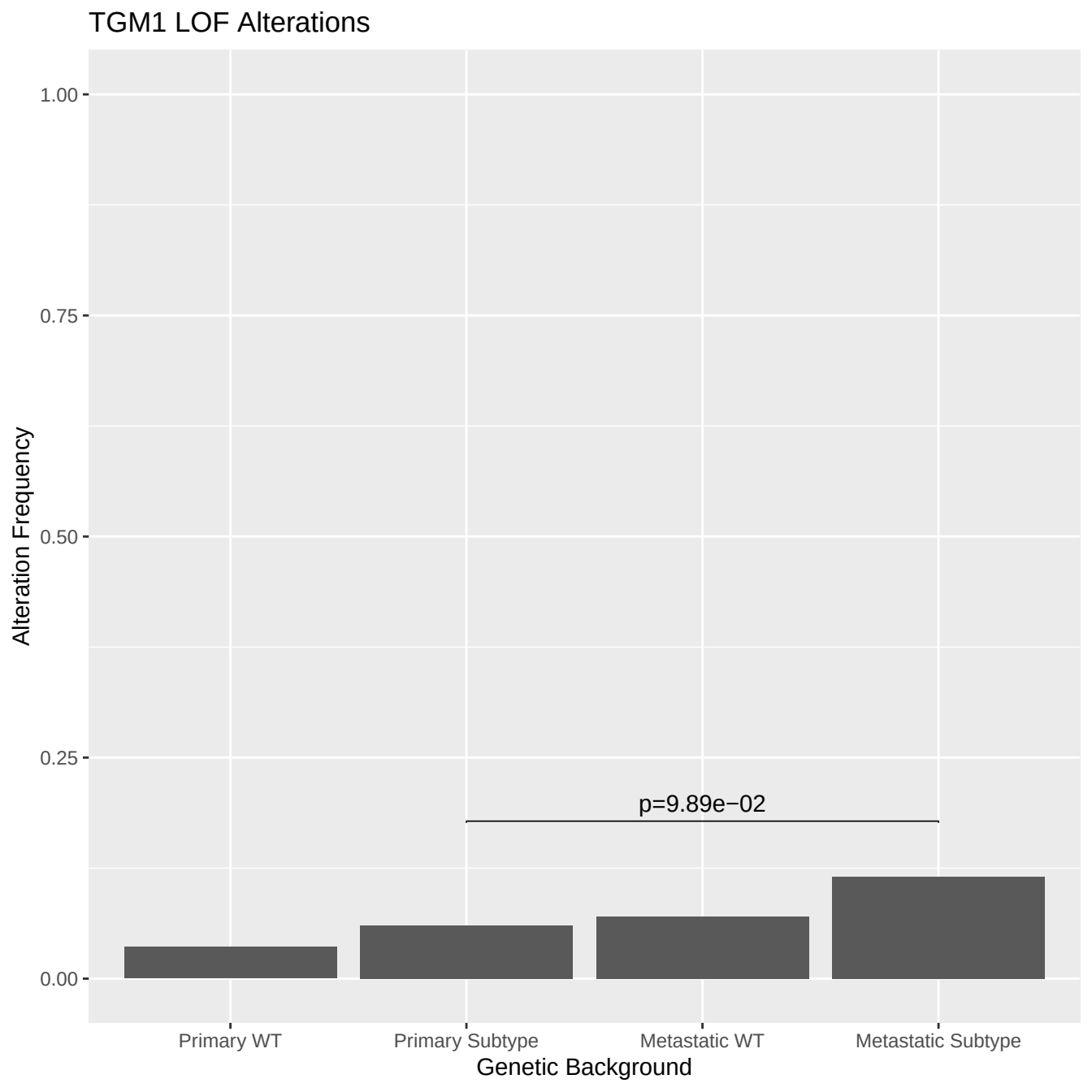

PTPMT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

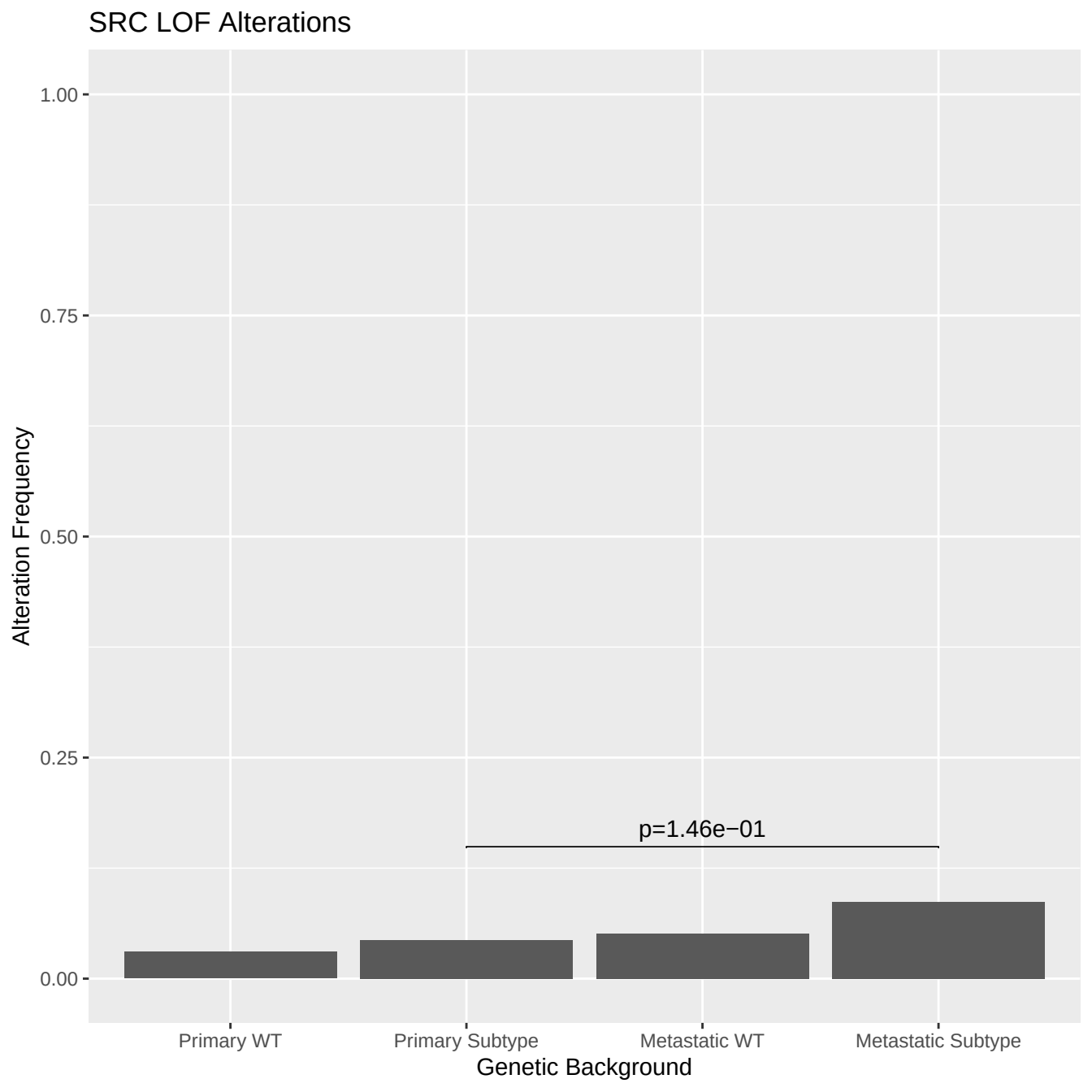

BOP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

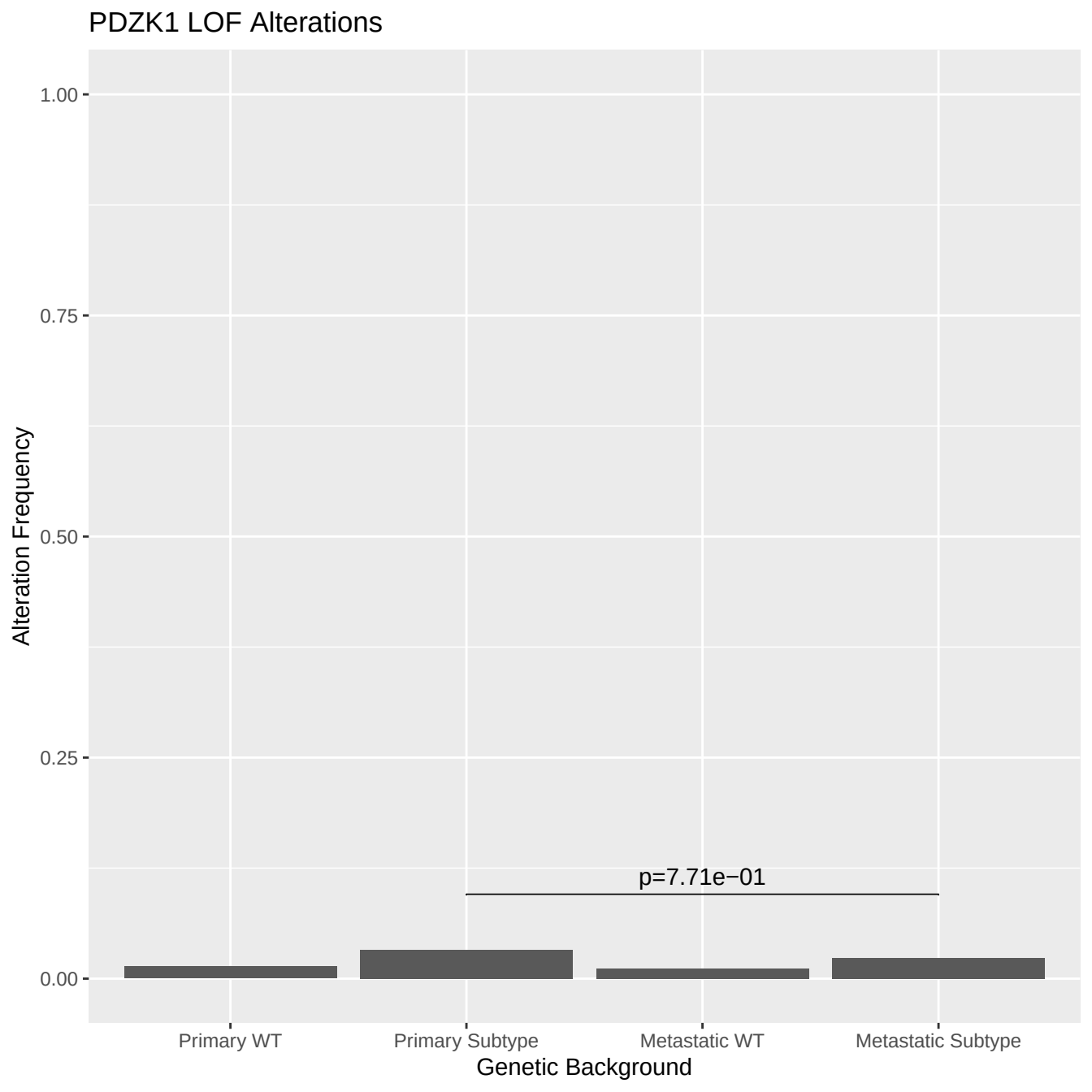

C11orf49 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.73e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

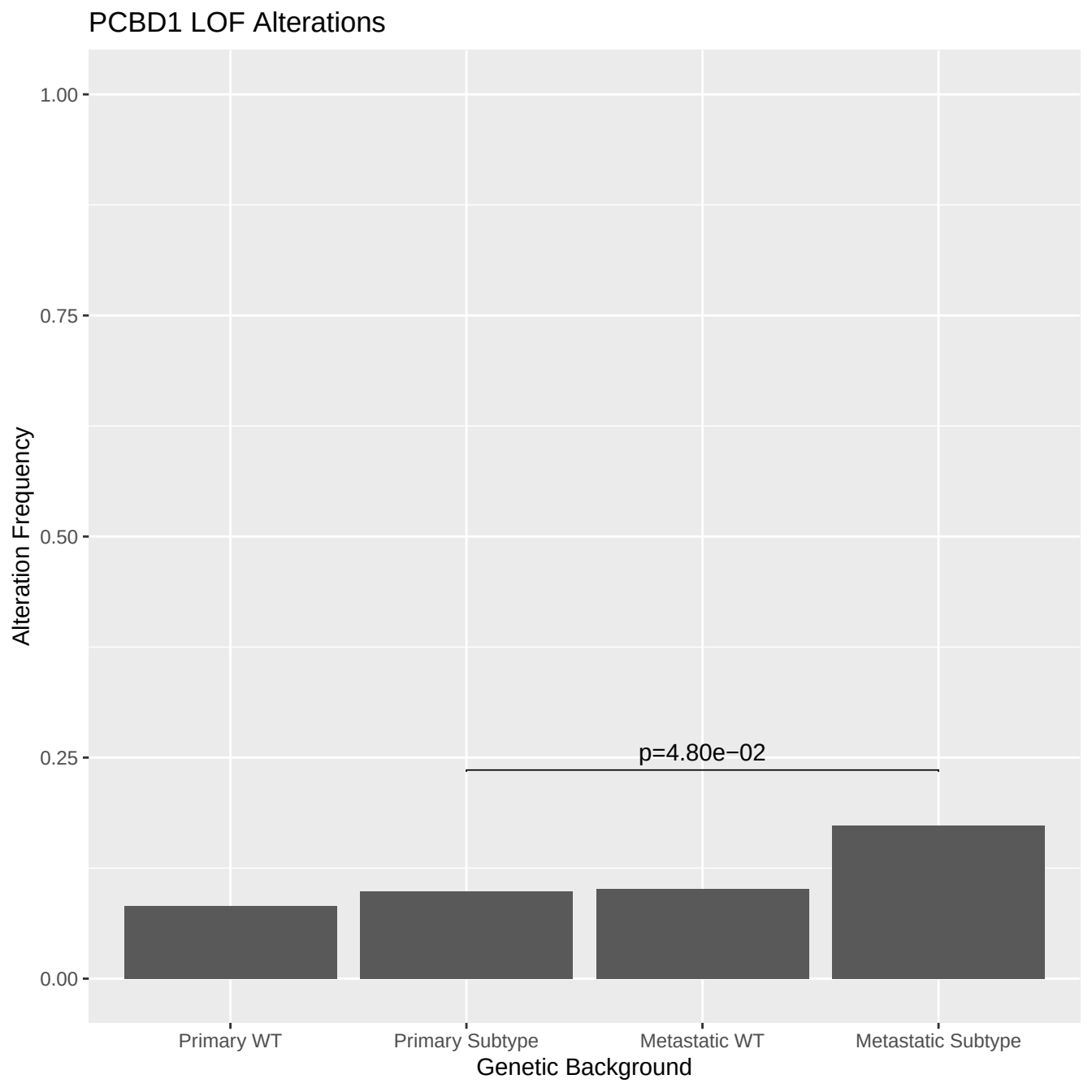

KHNYN LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

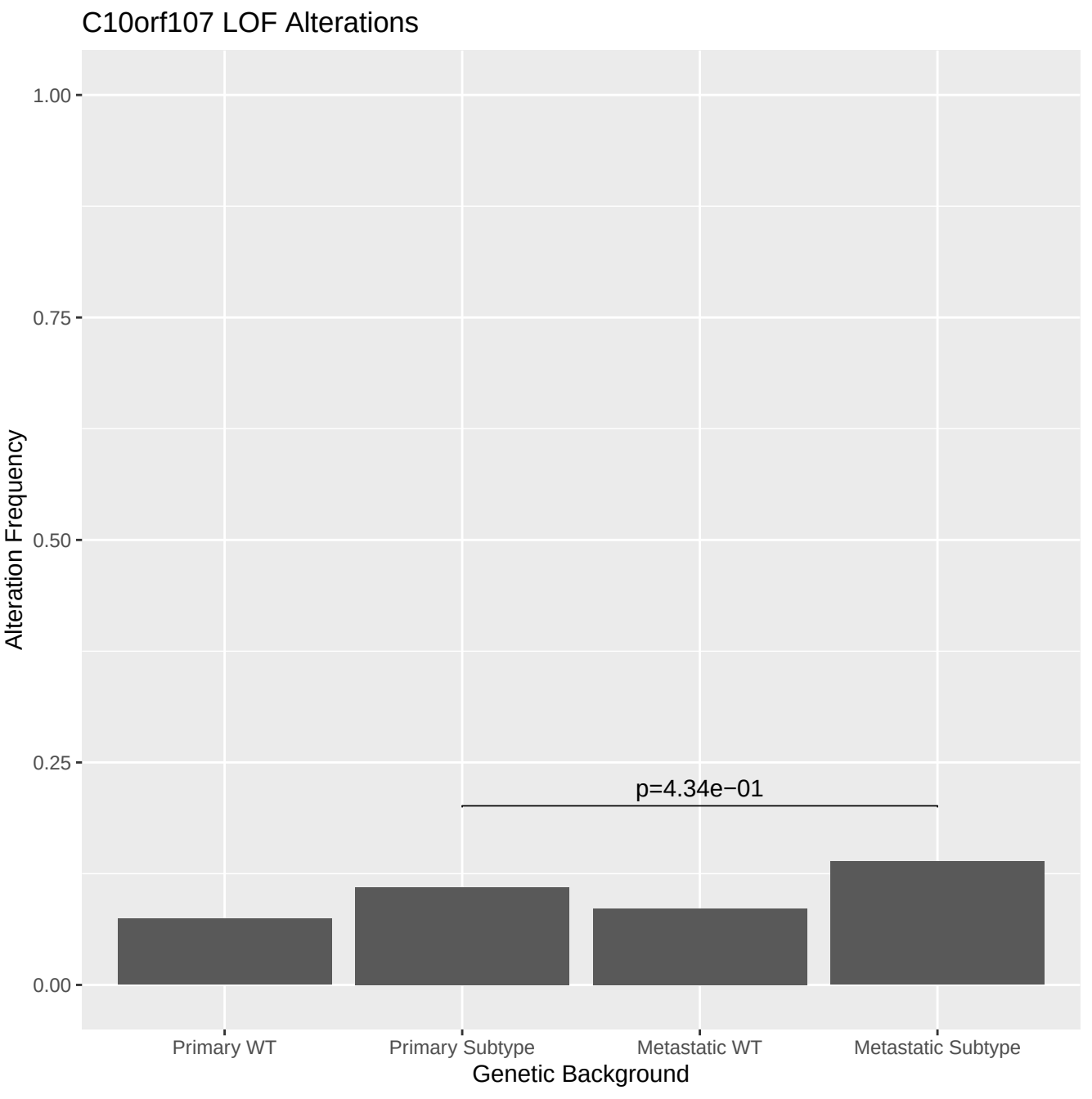

PEX16 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.34e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

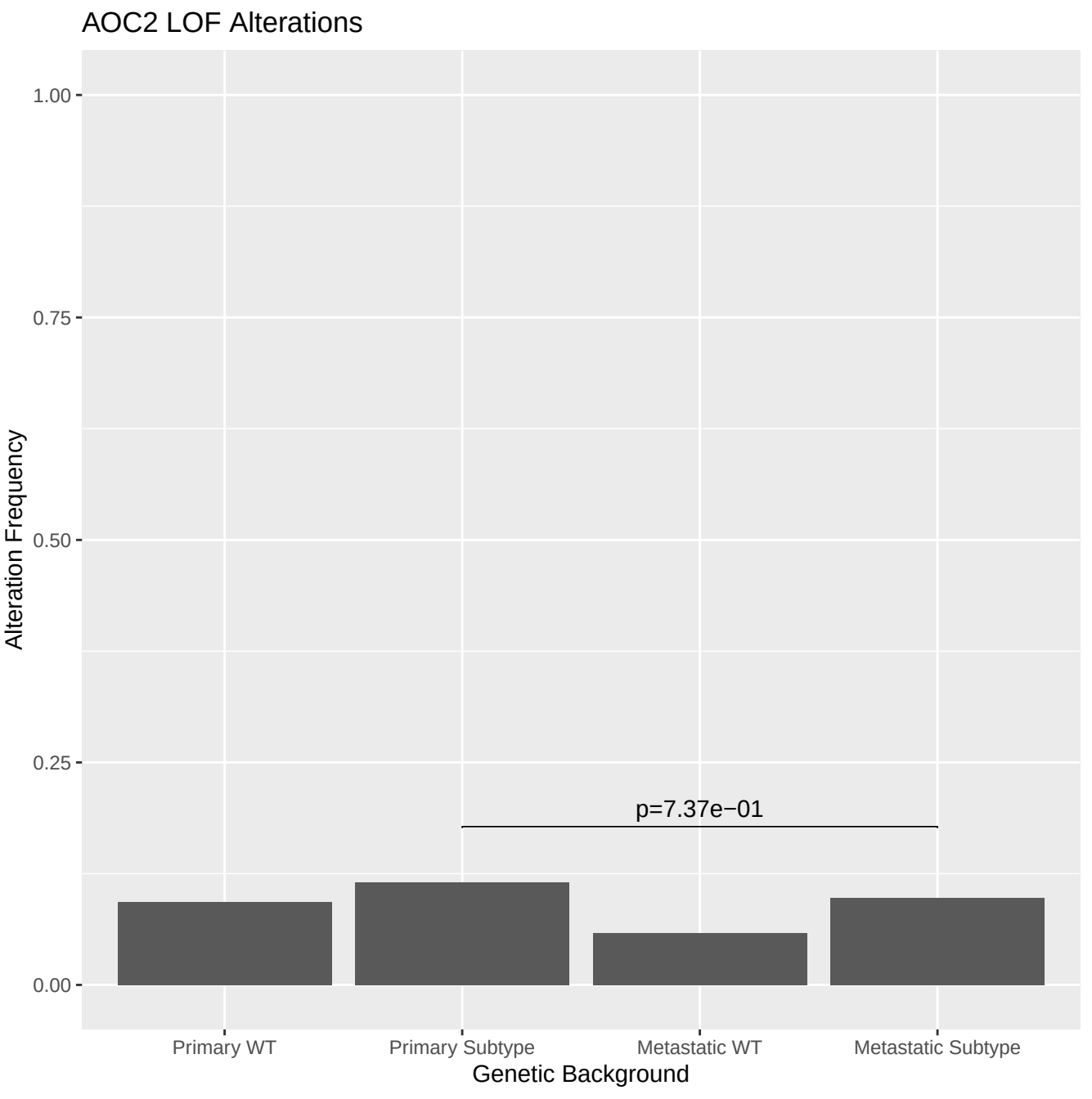

TGM1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=9.89e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

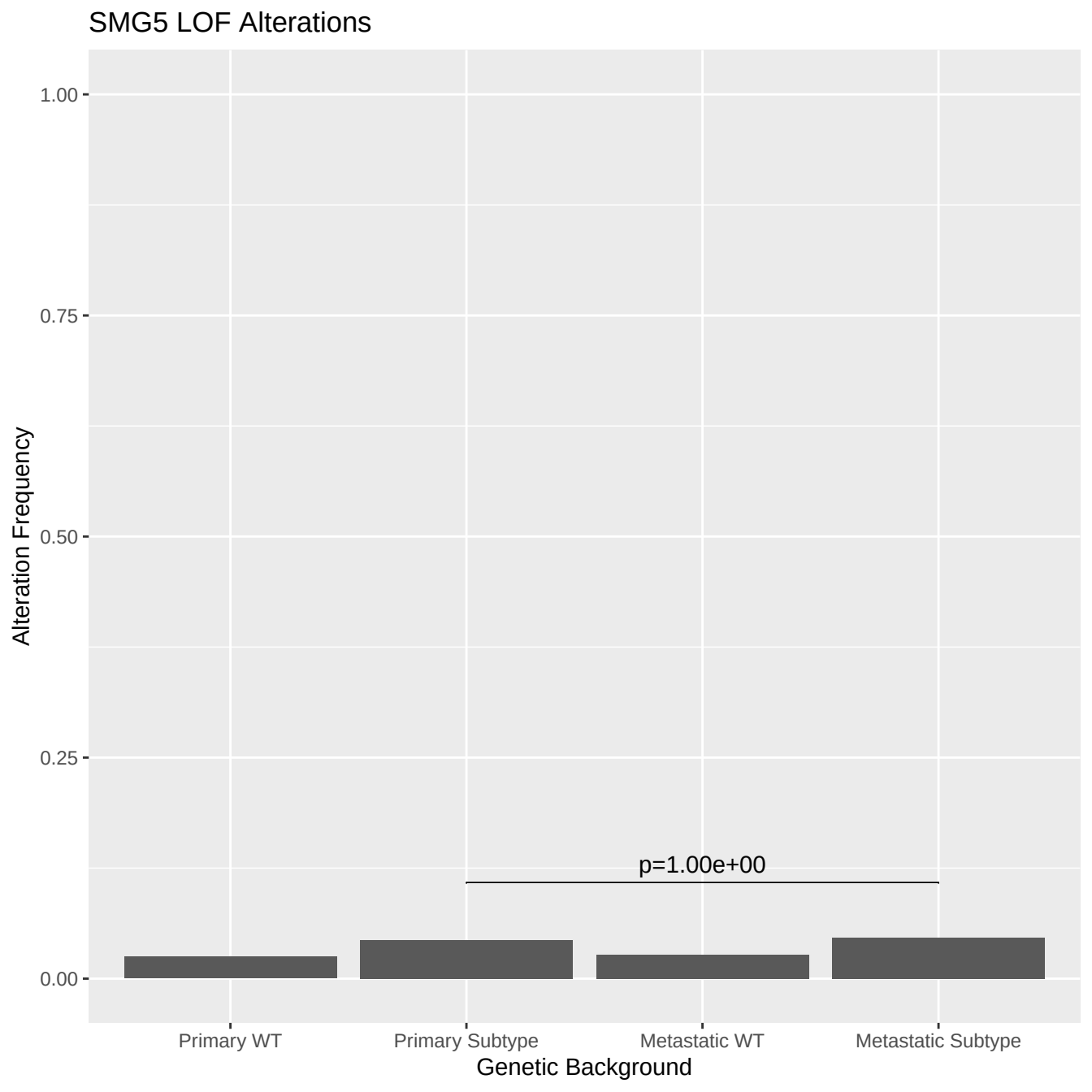

SRC LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.46e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

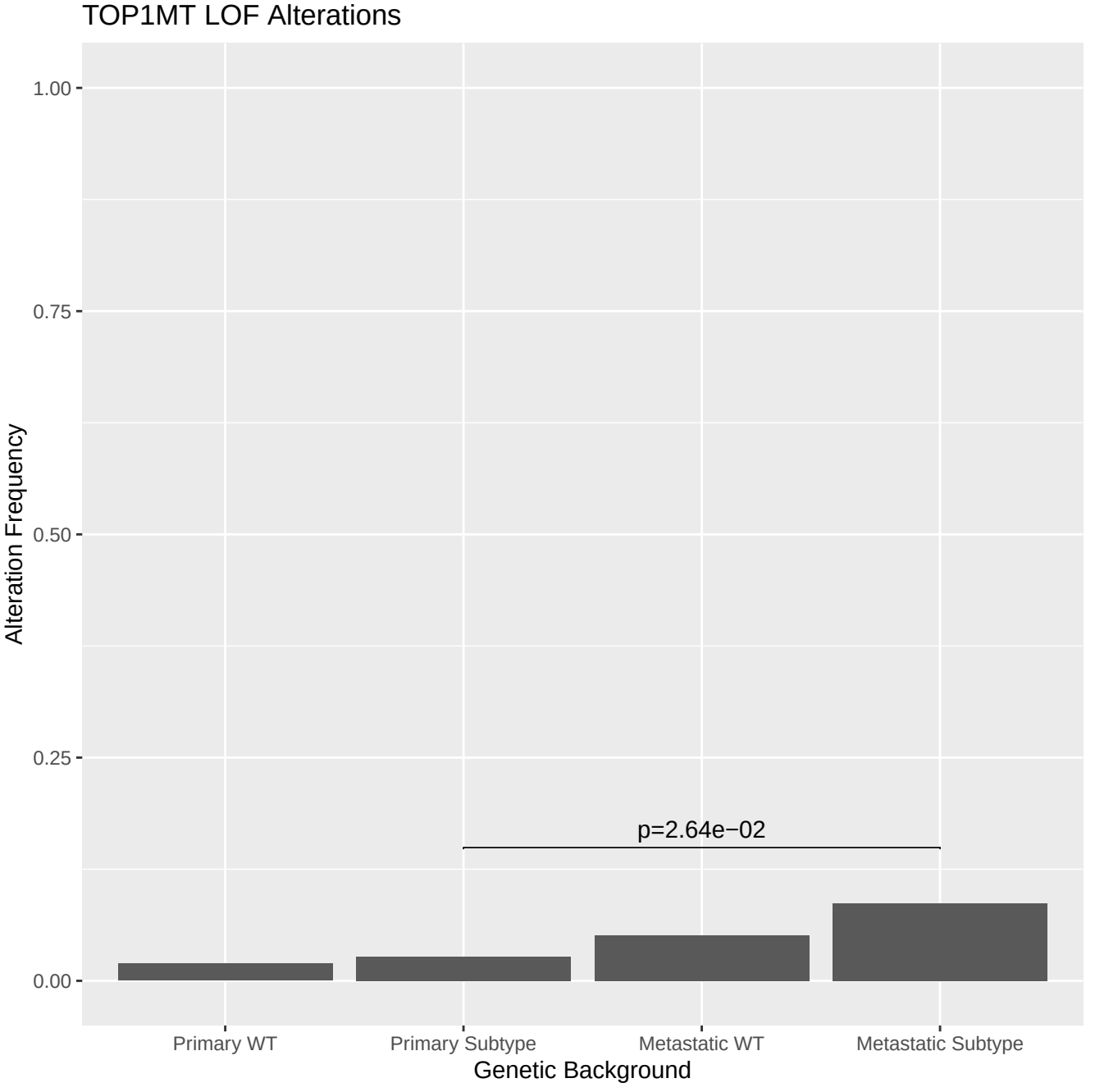

PDZK1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

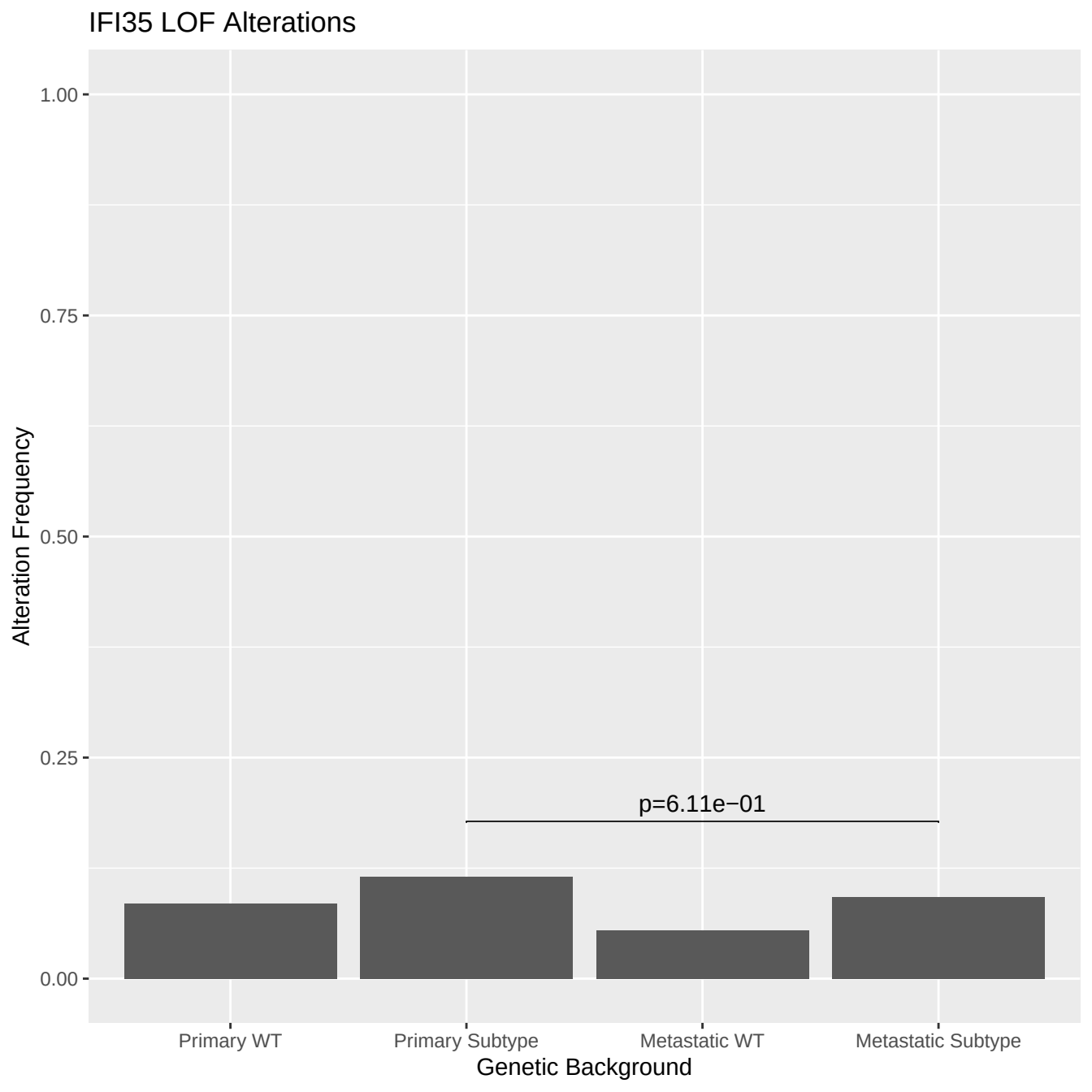

PCBD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.80e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

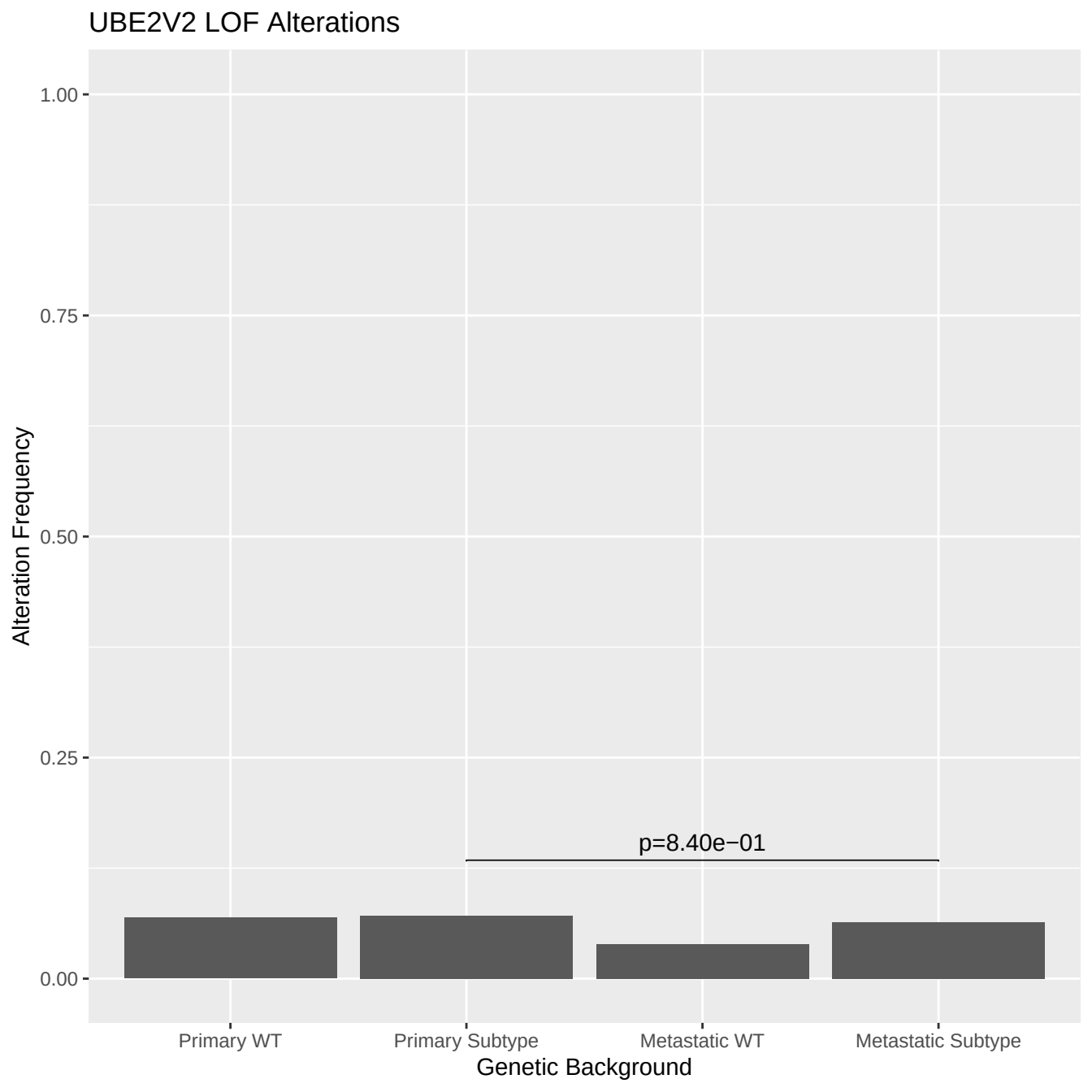

C10orf107 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.34e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

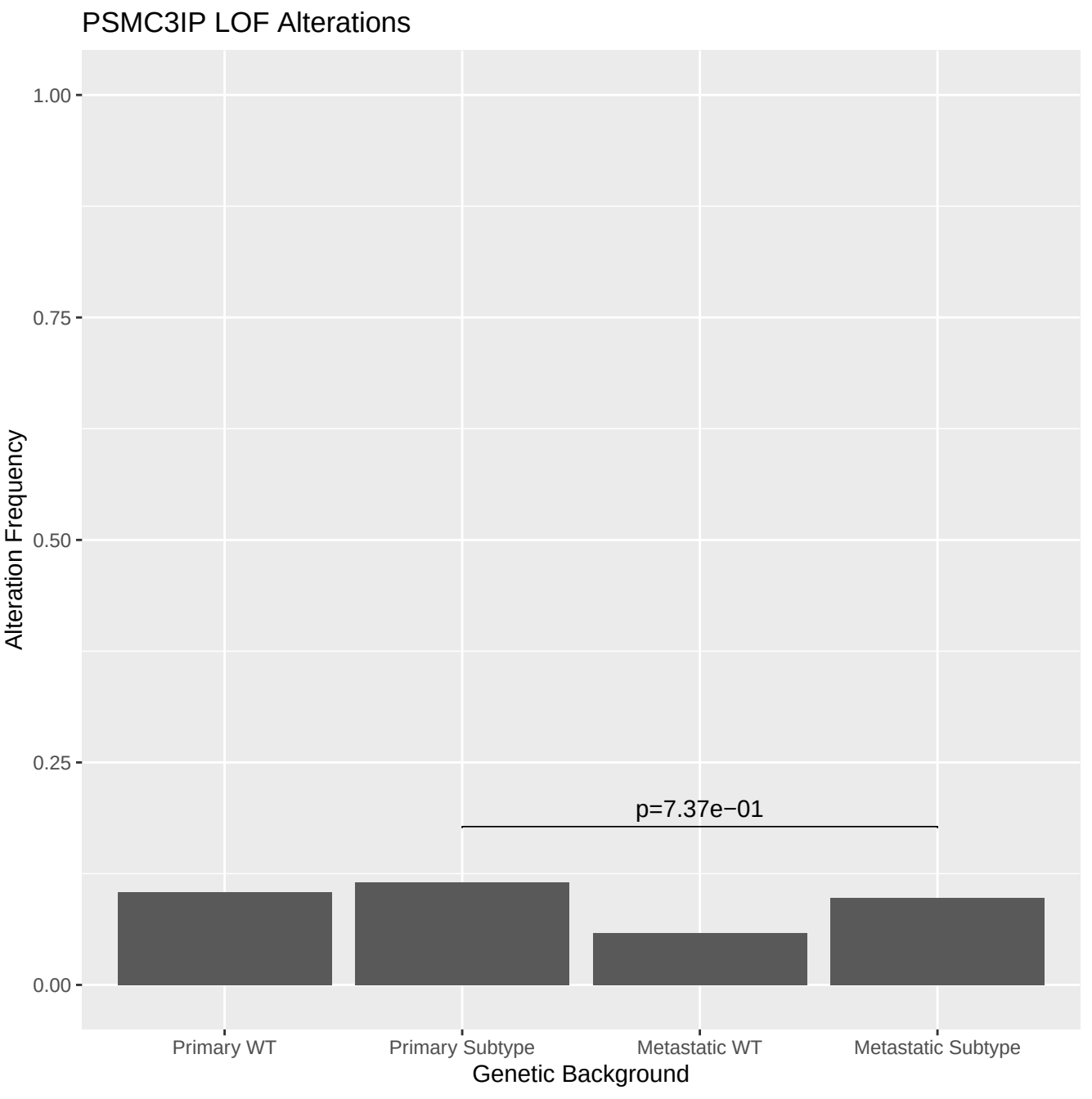

AOC2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

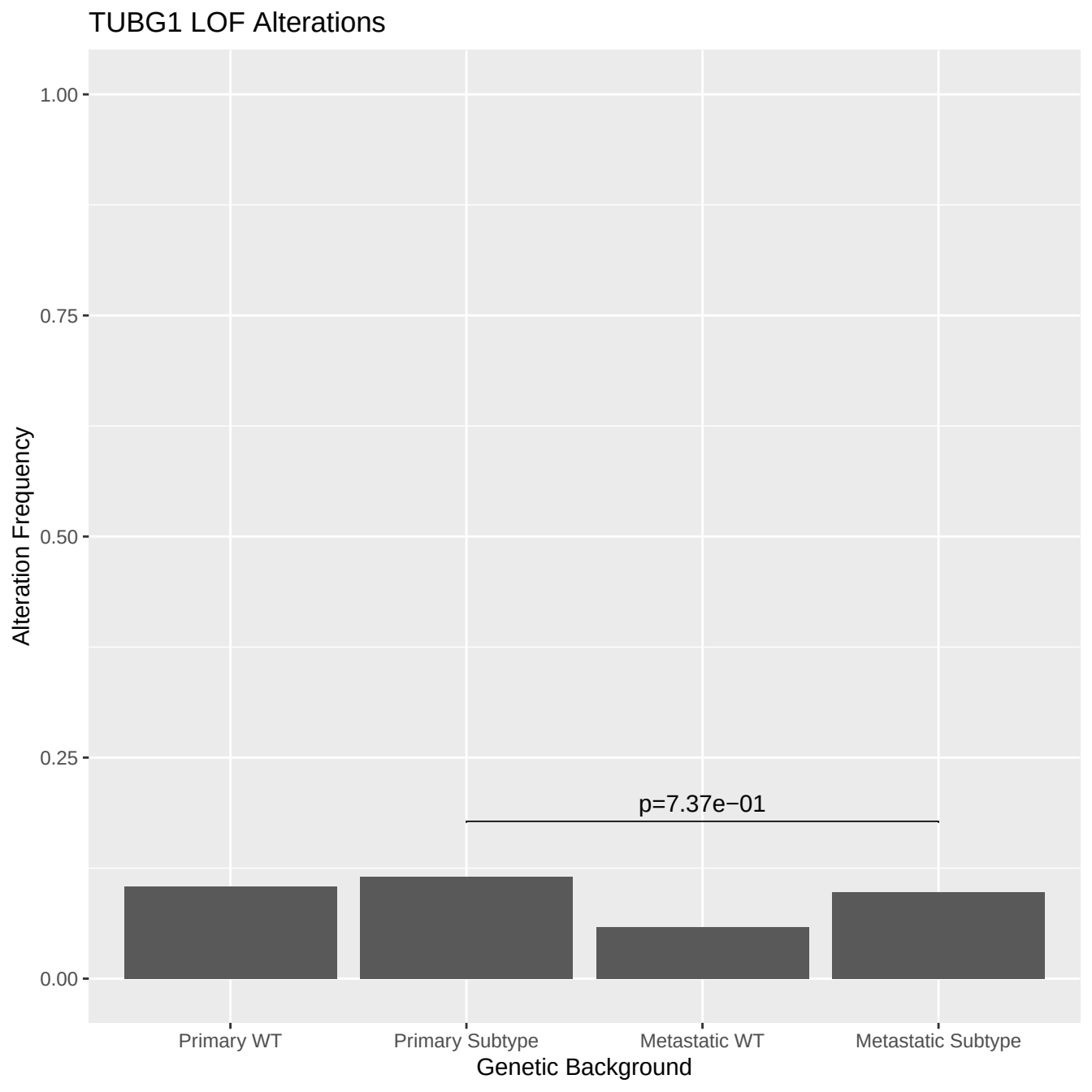

SMG5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

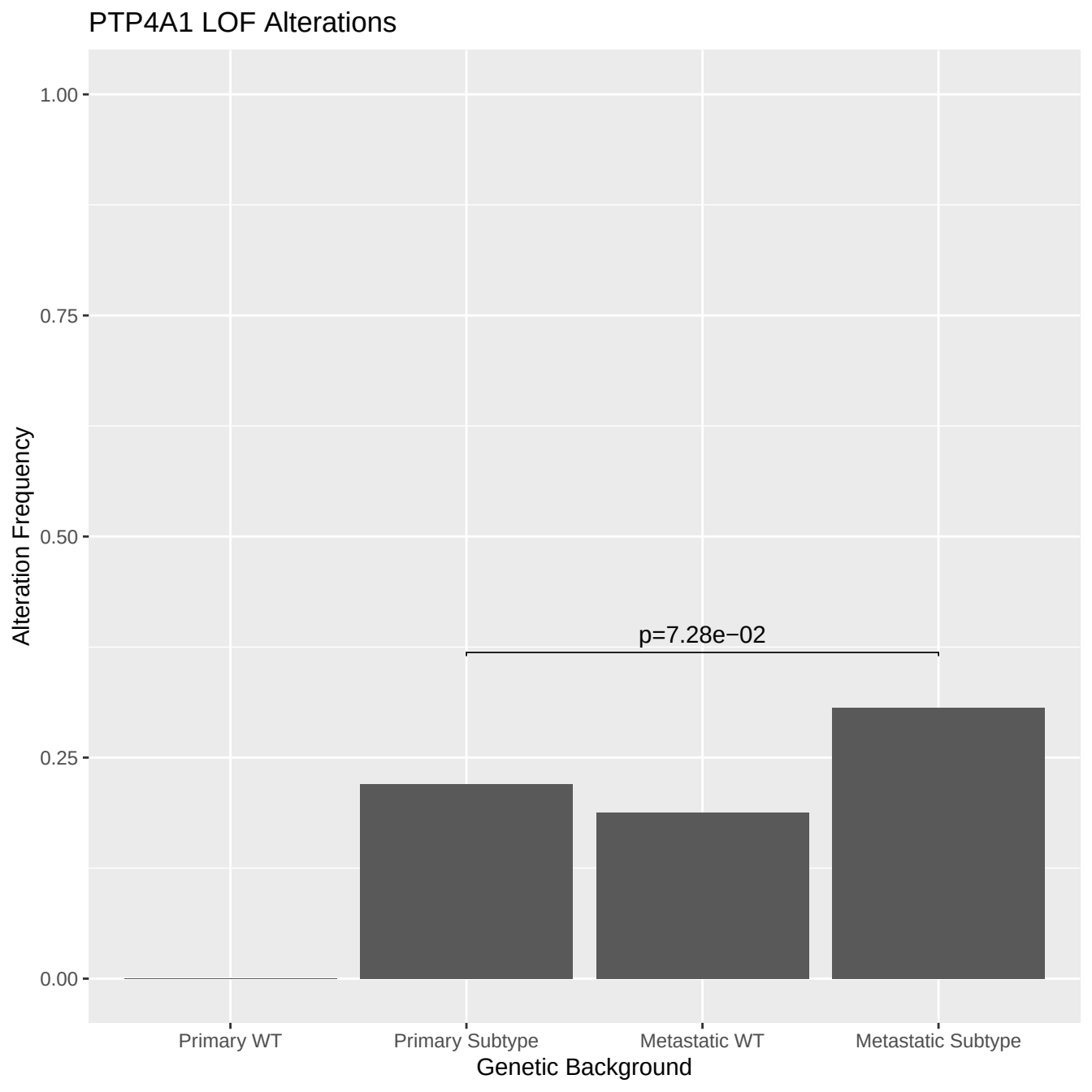

TOP1MT LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

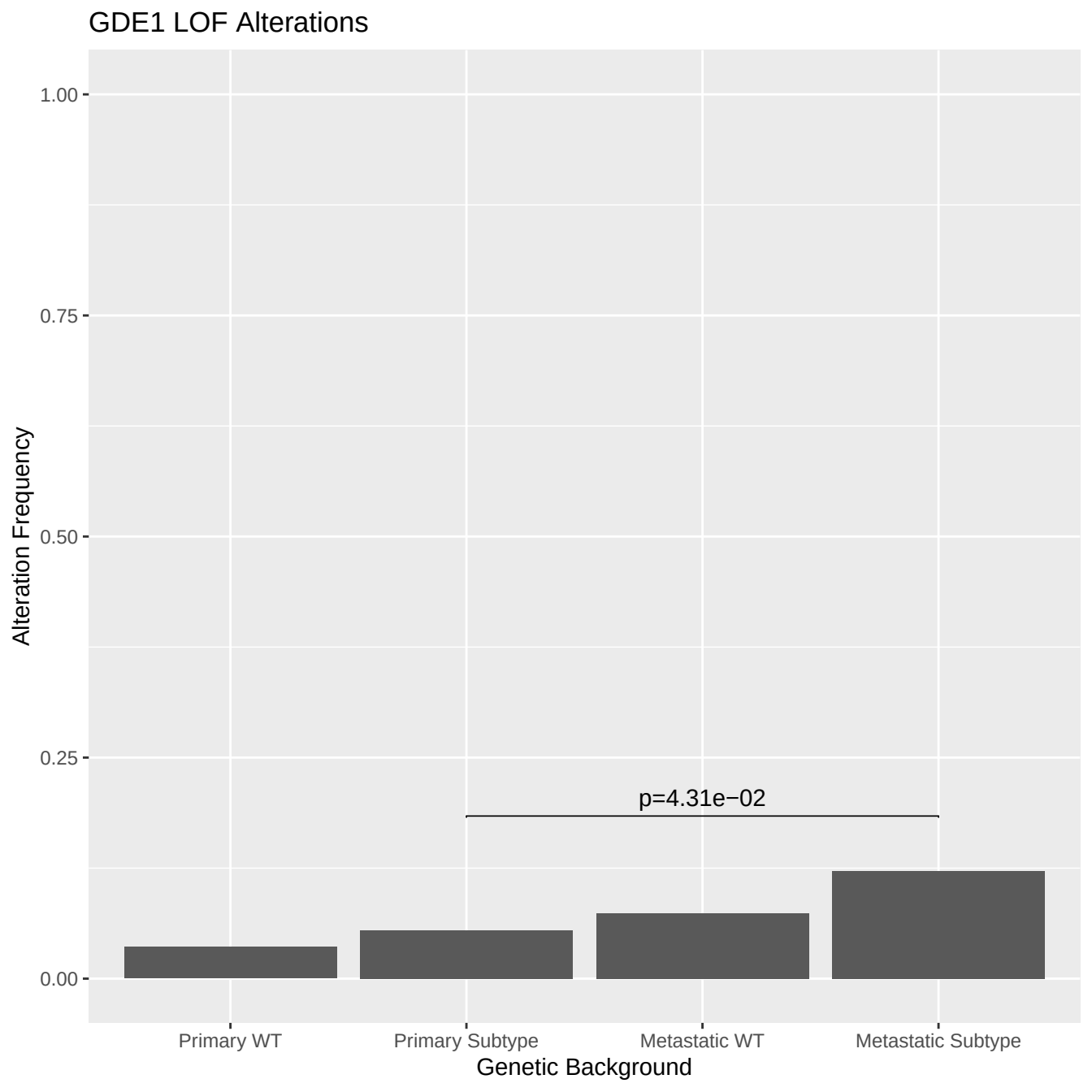

IFI35 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

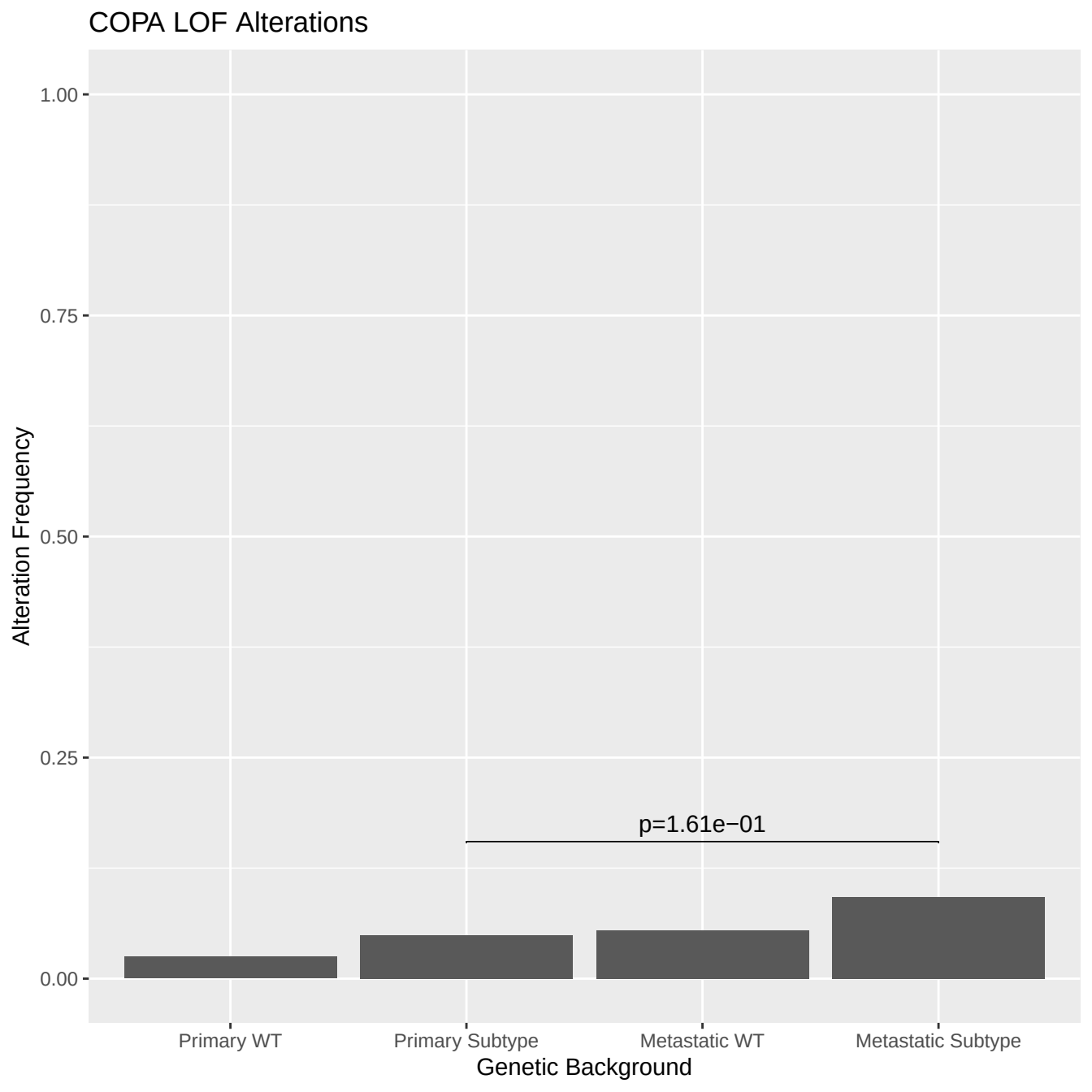

UBE2V2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.40e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

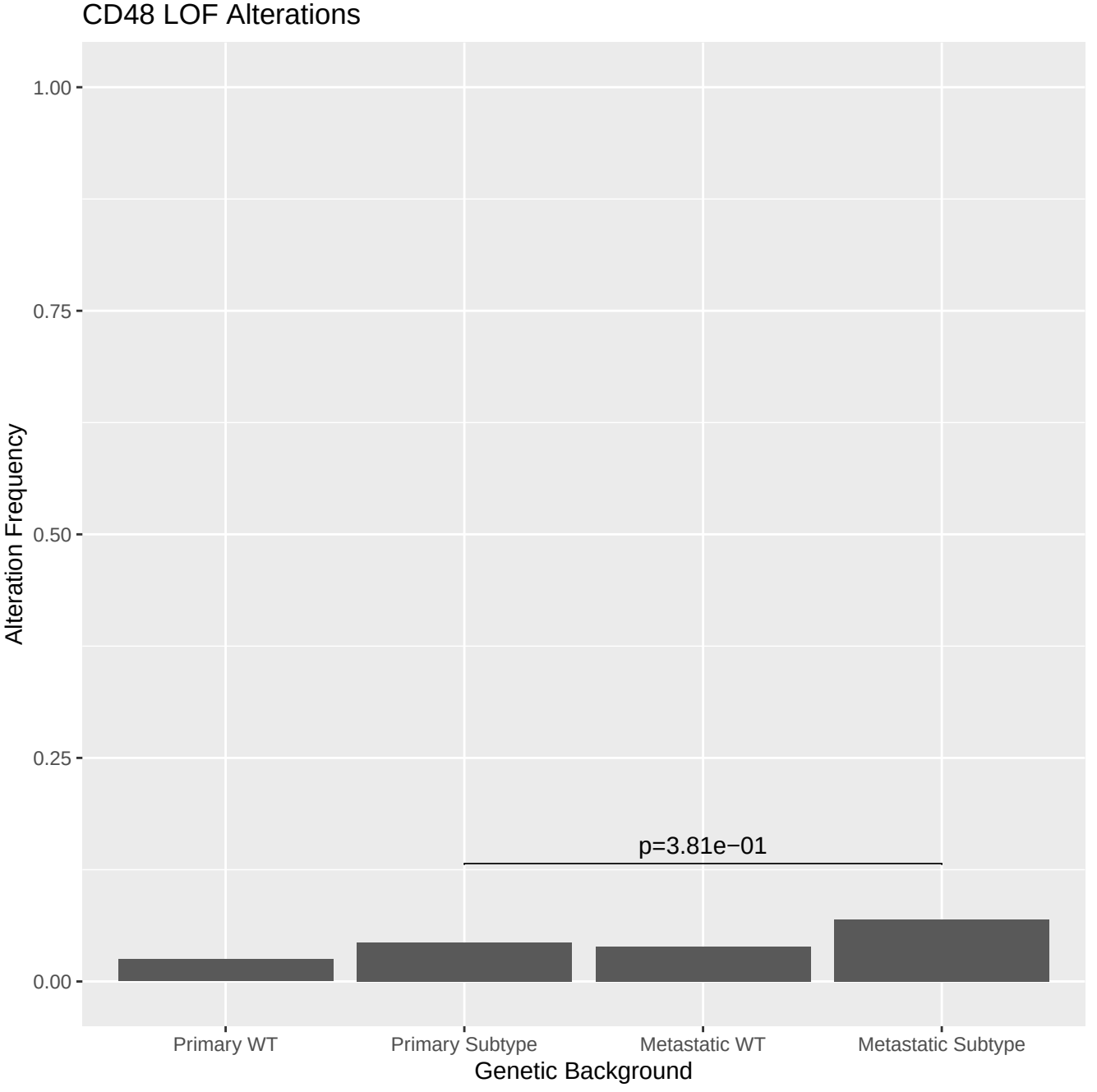

PSMC3IP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

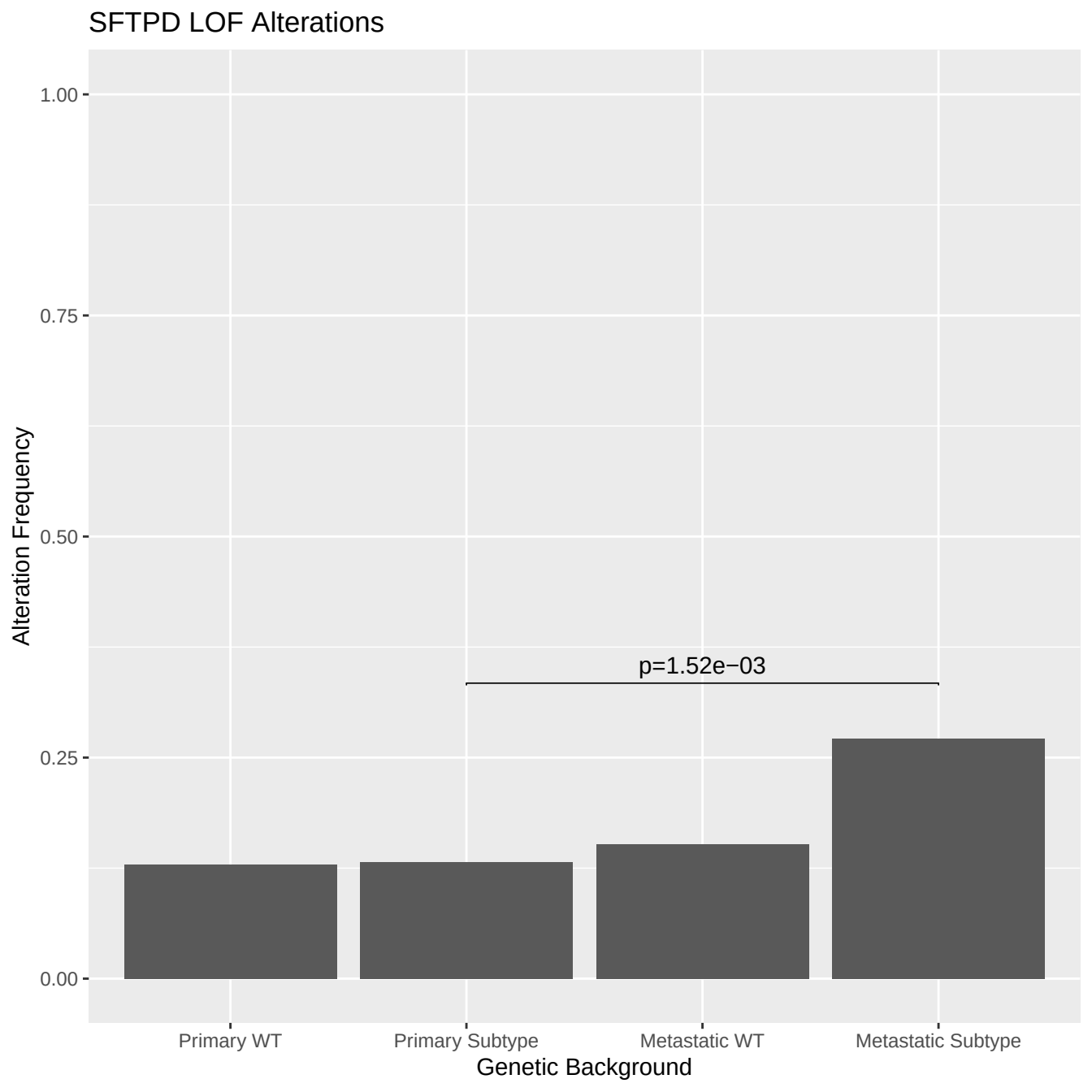

TUBG1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

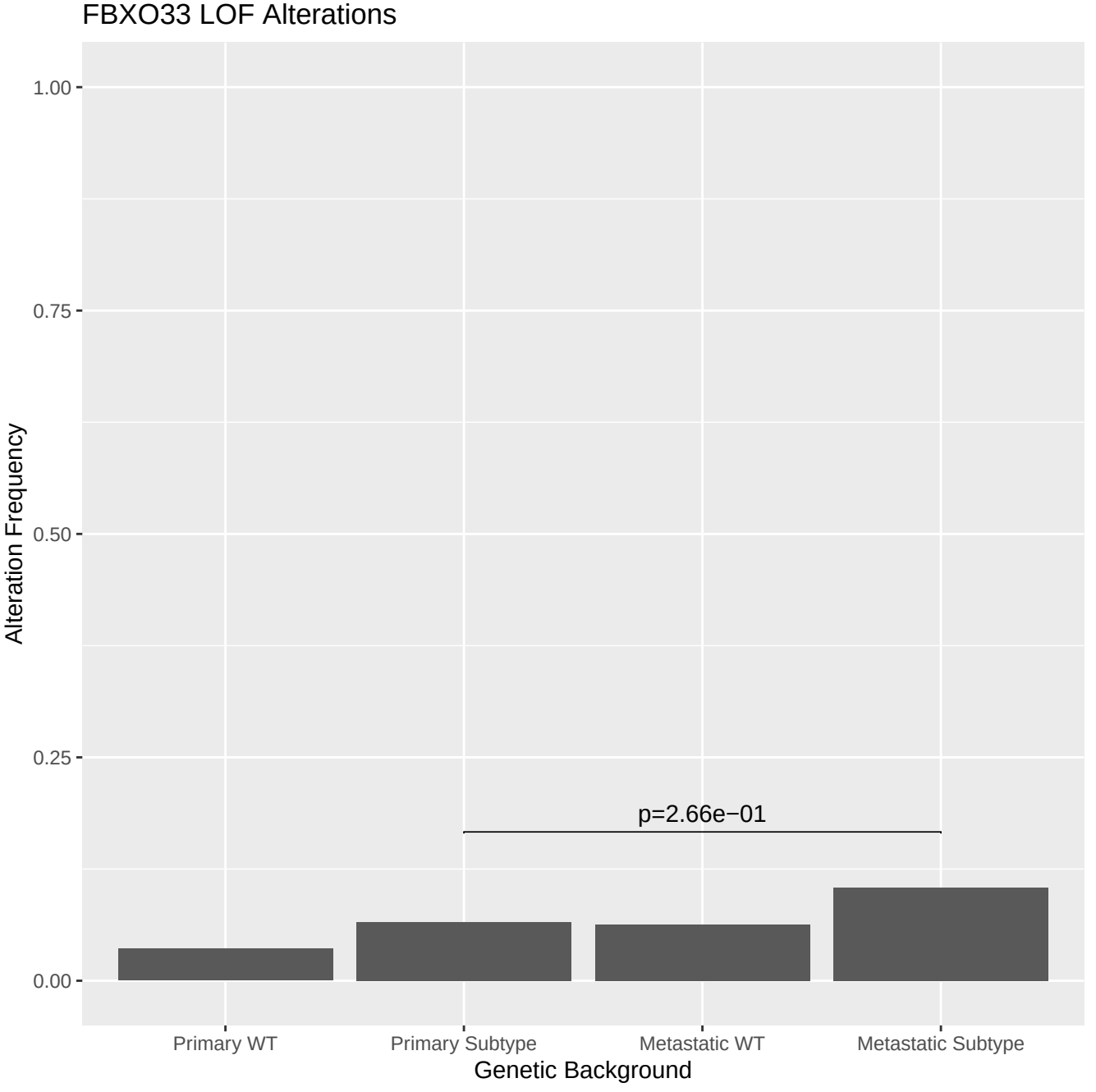

PTP4A1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.28e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

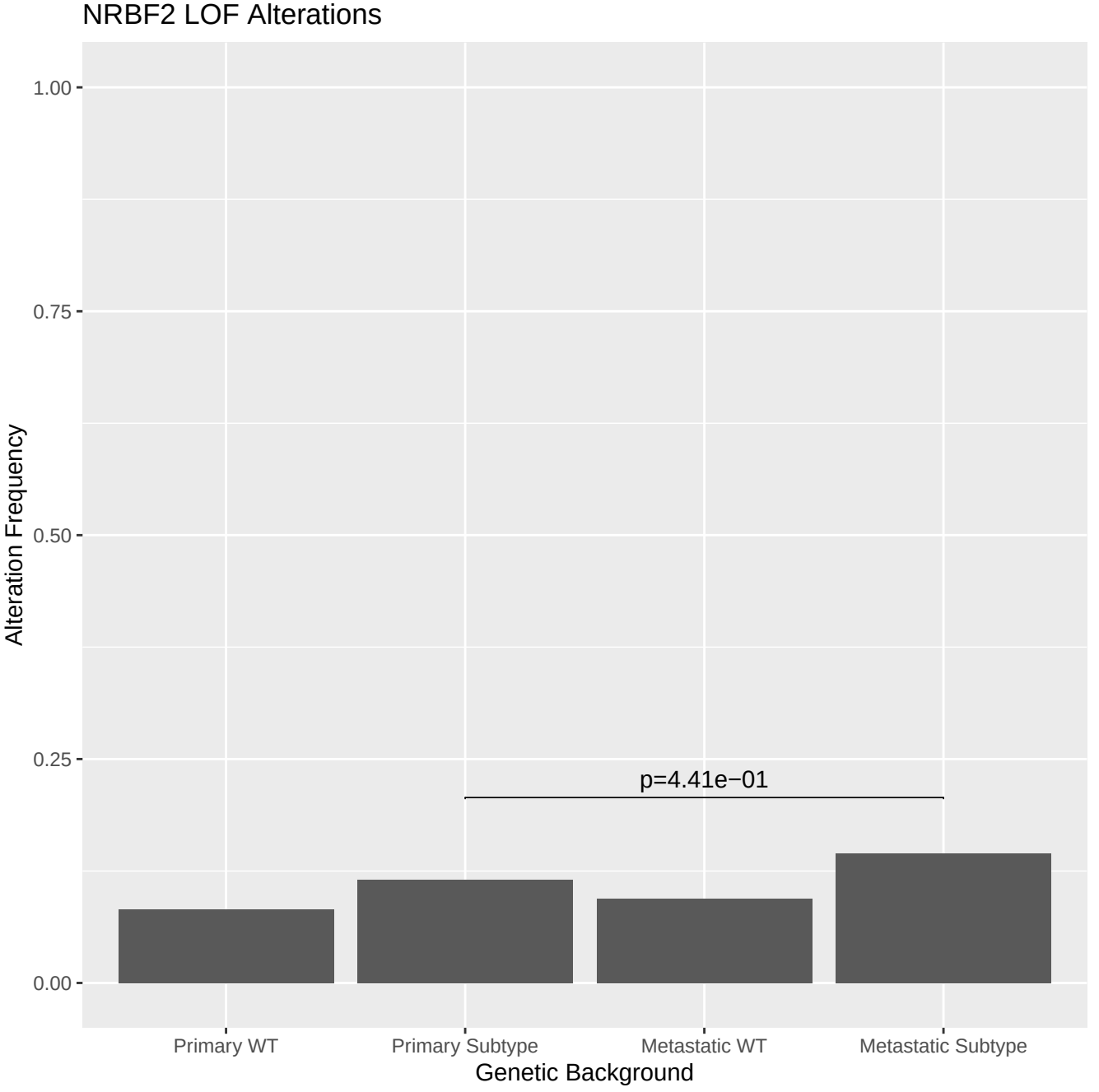

GDE1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.31e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

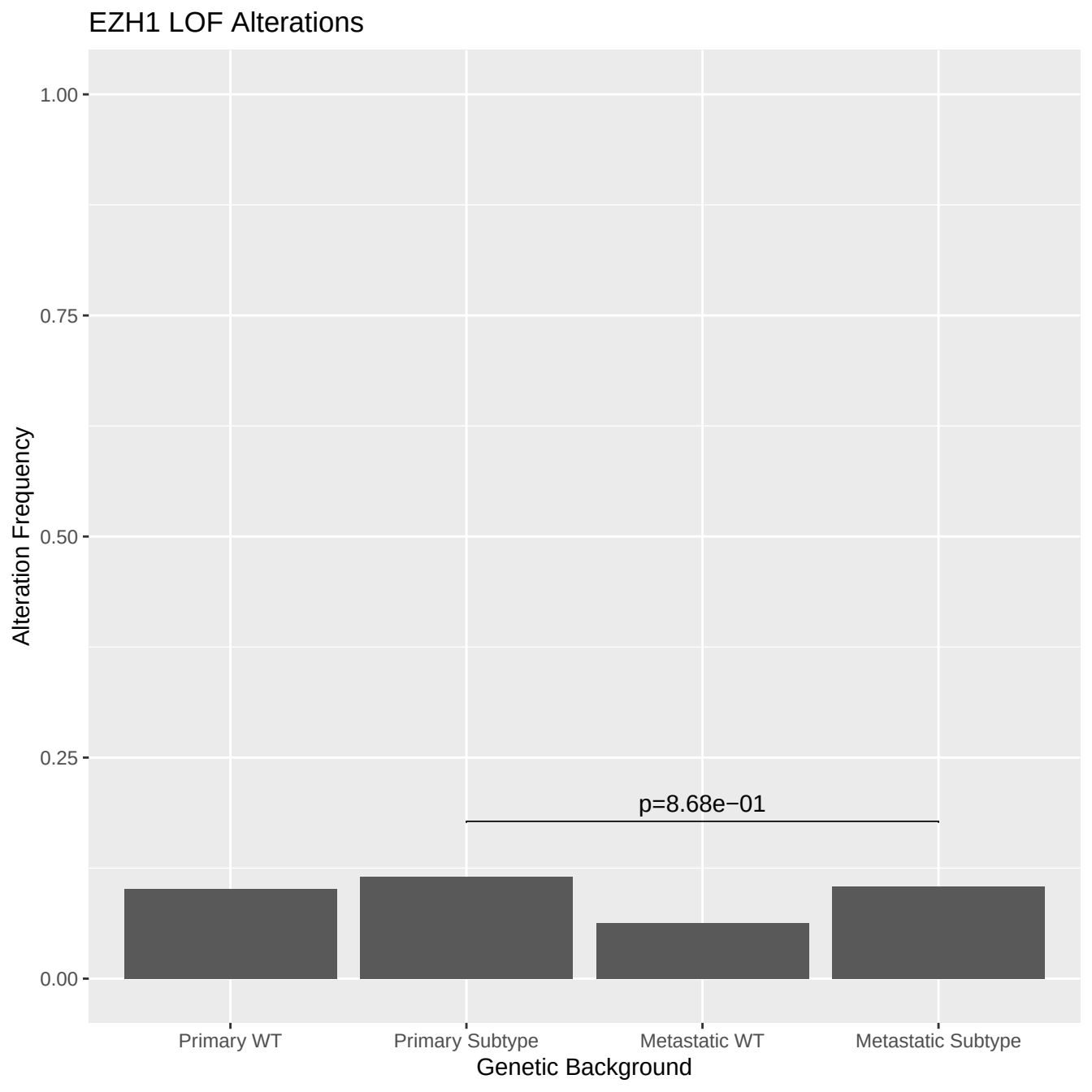

COPA LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.61e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

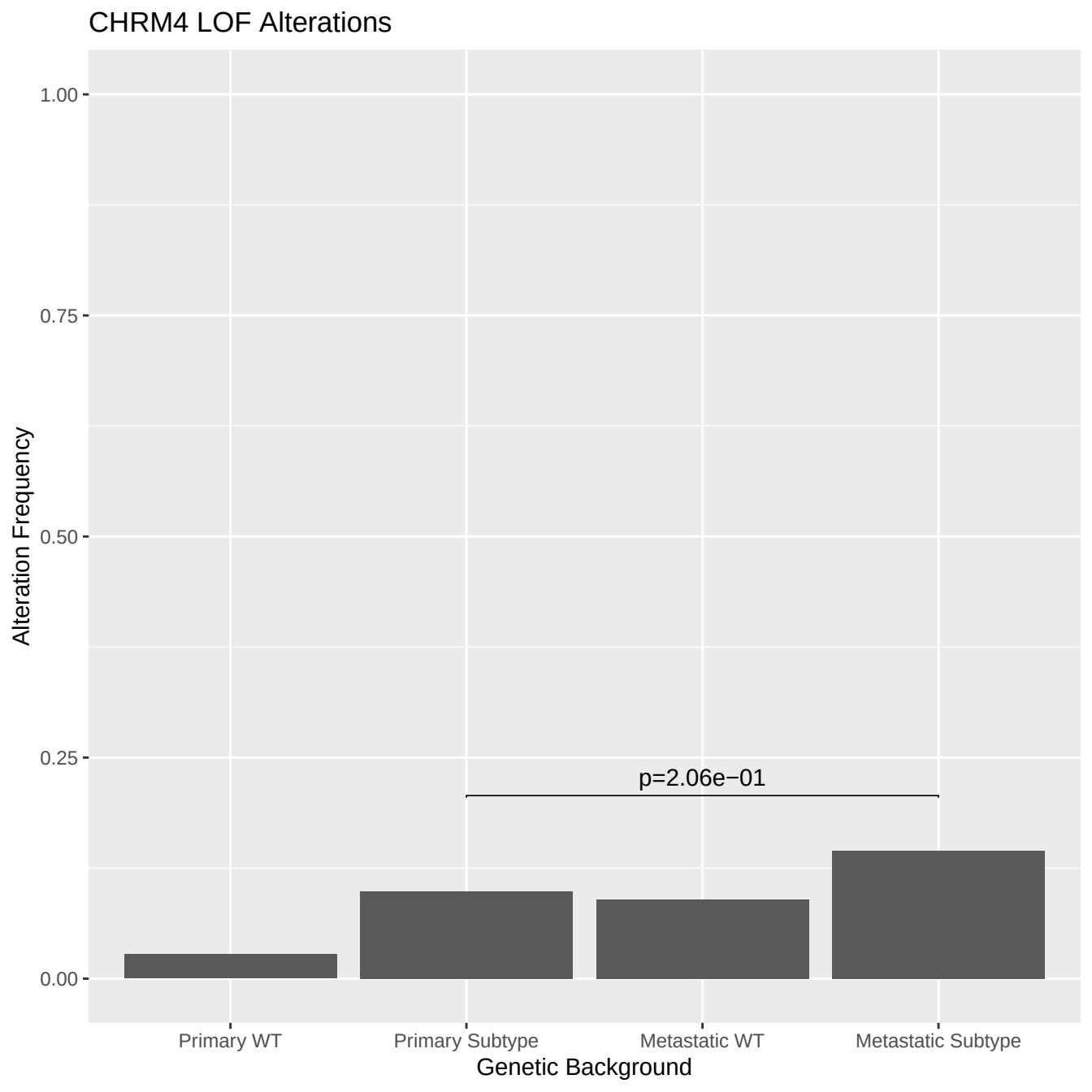

CD48 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

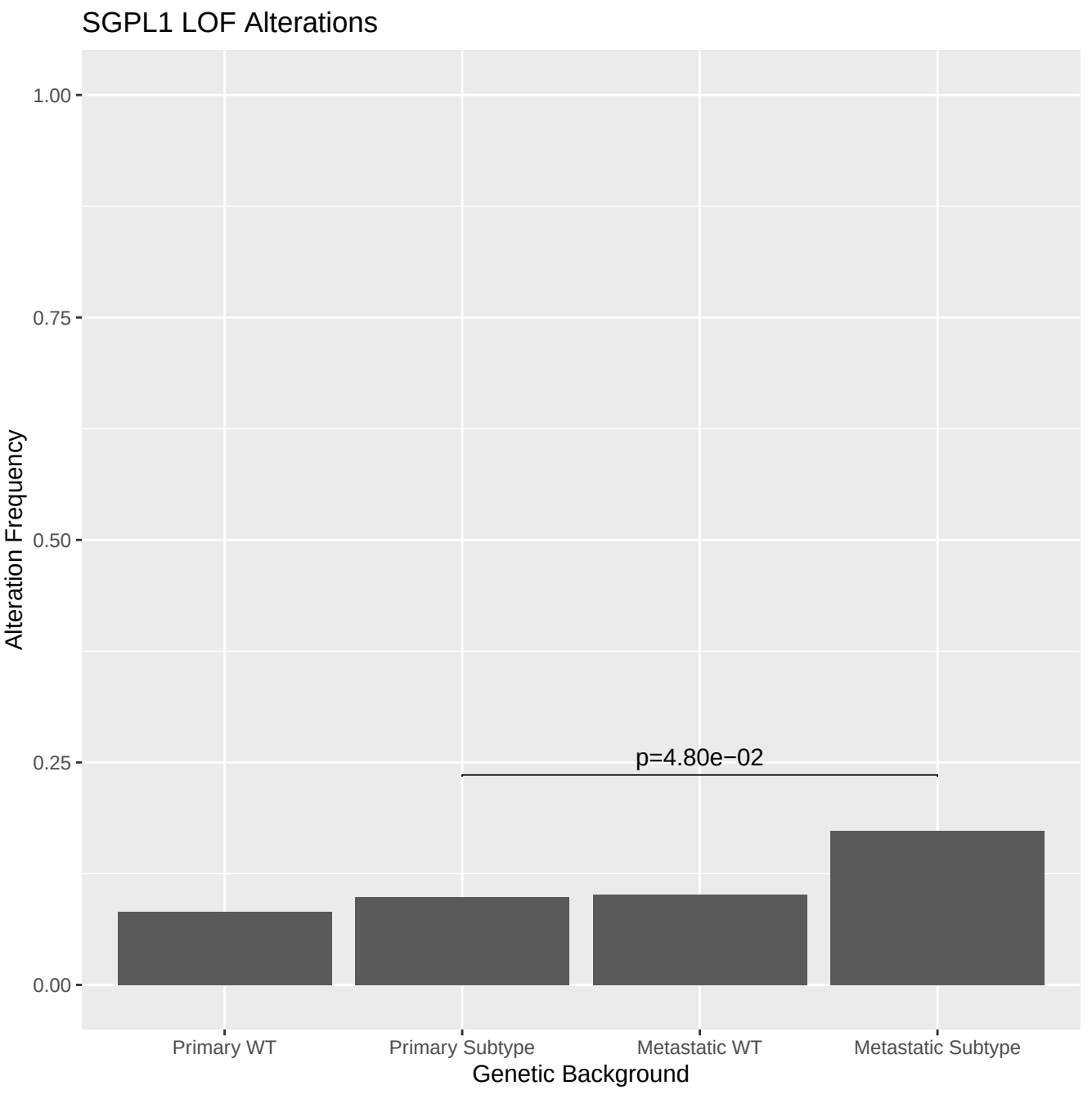

SFTPD LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.52e−03
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

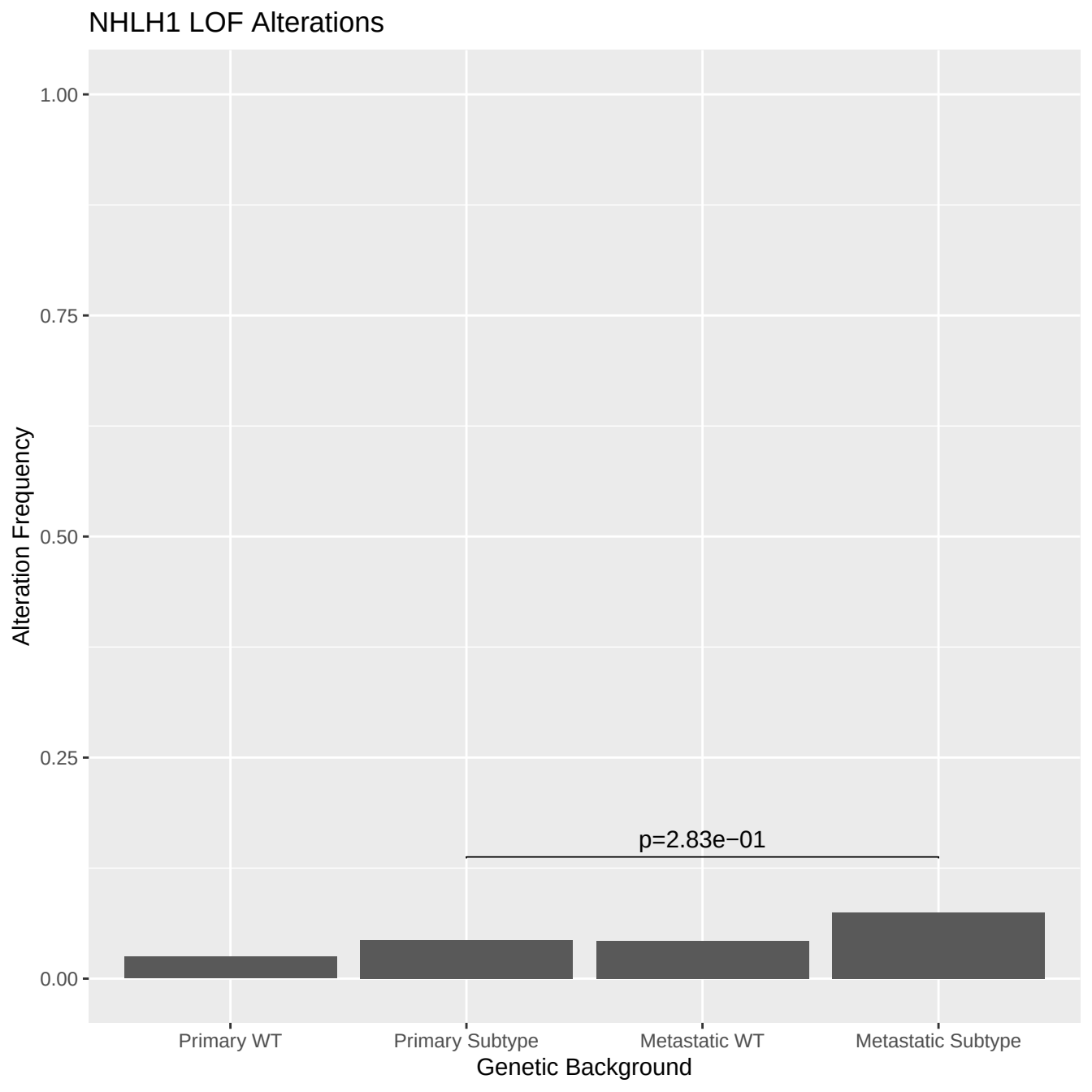

FBXO33 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

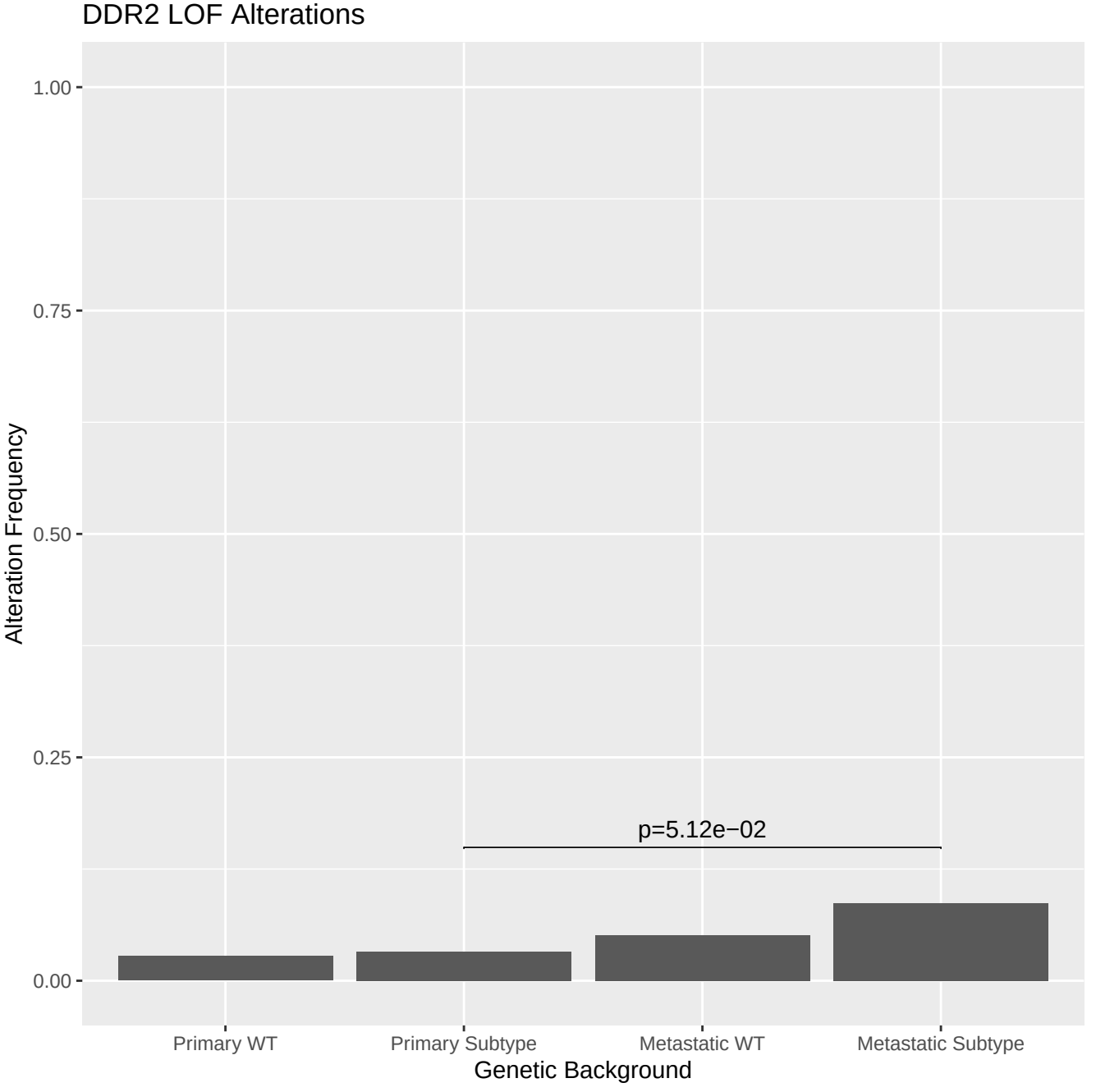

NRBF2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

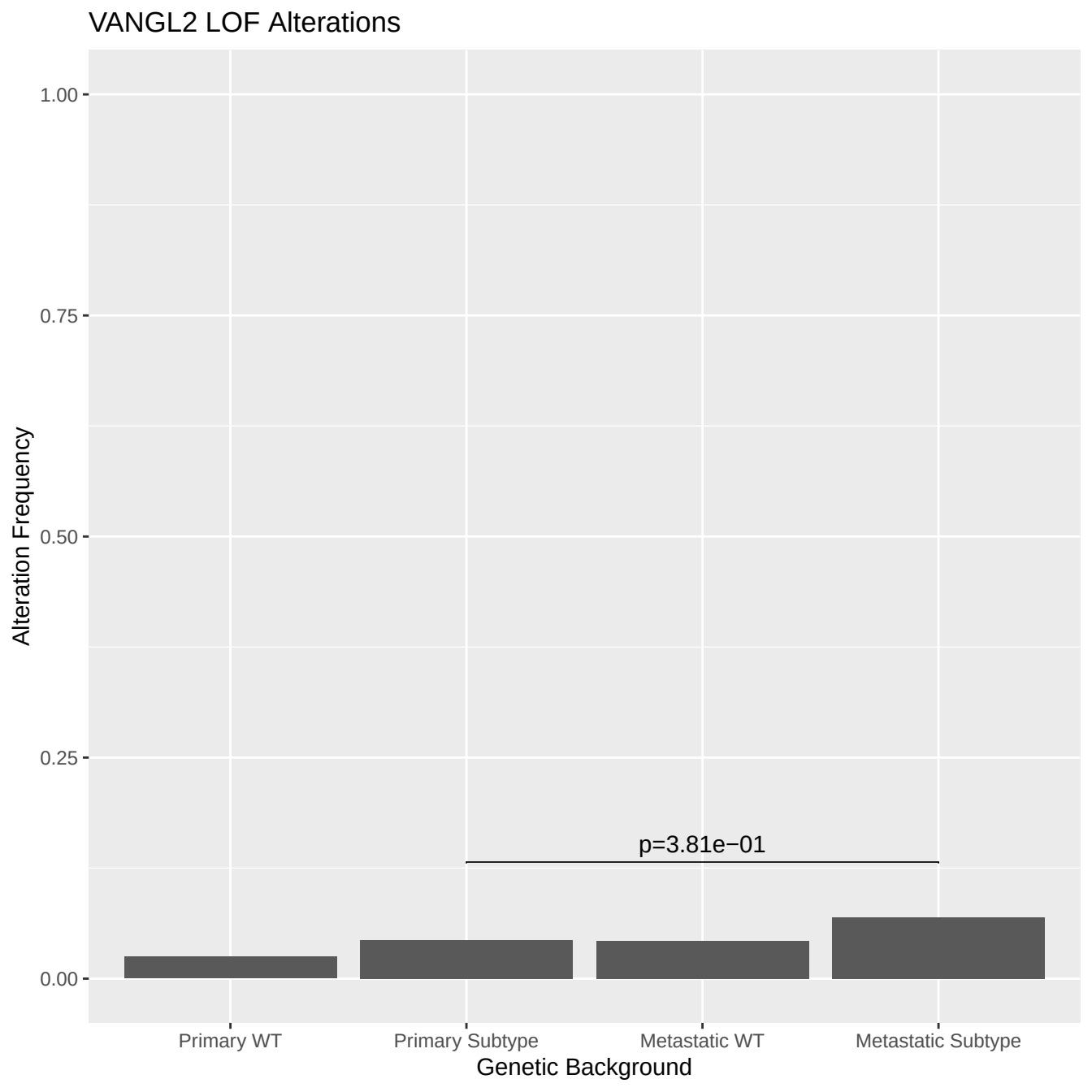

EZH1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.68e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

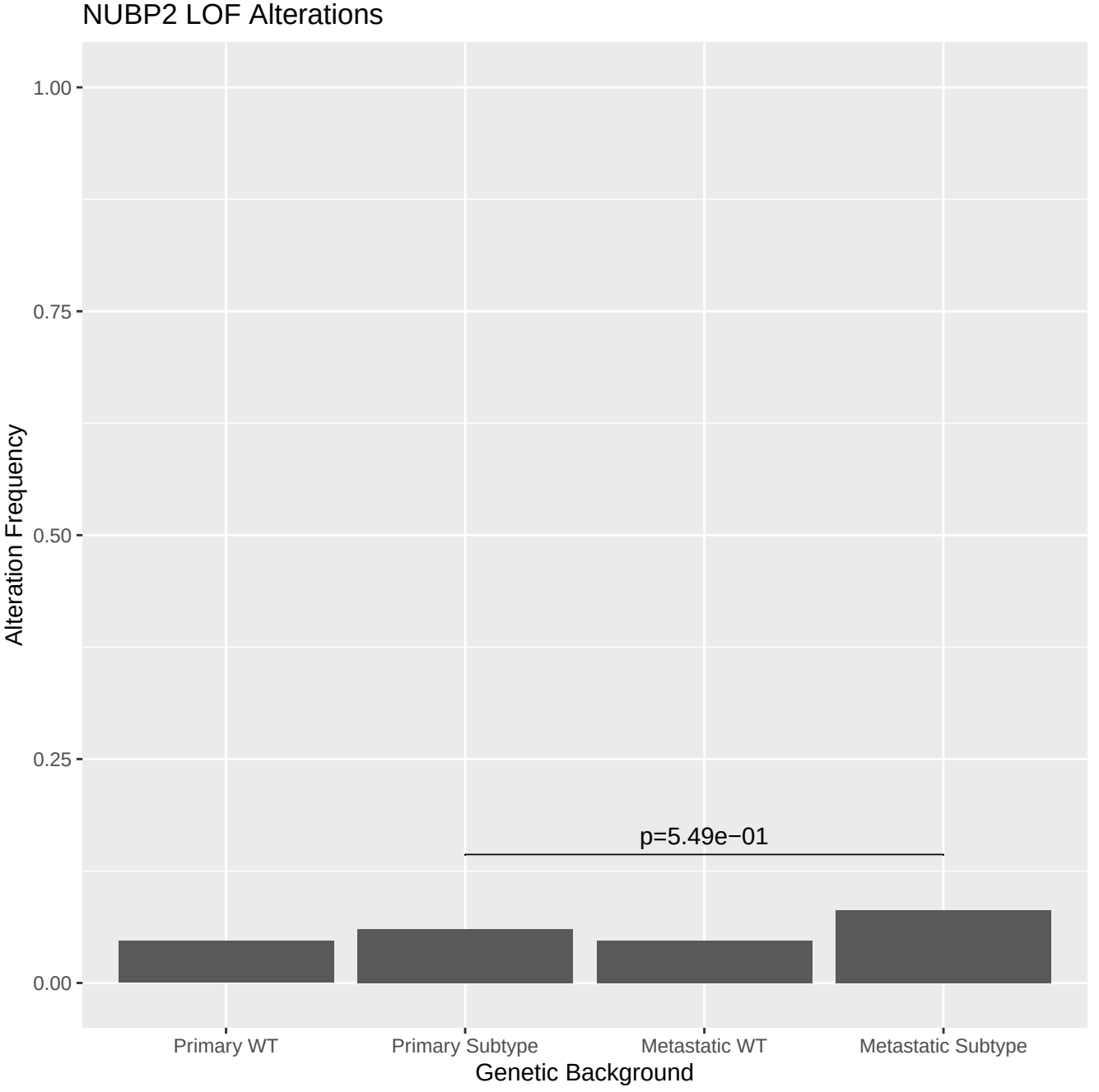

CHRM4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

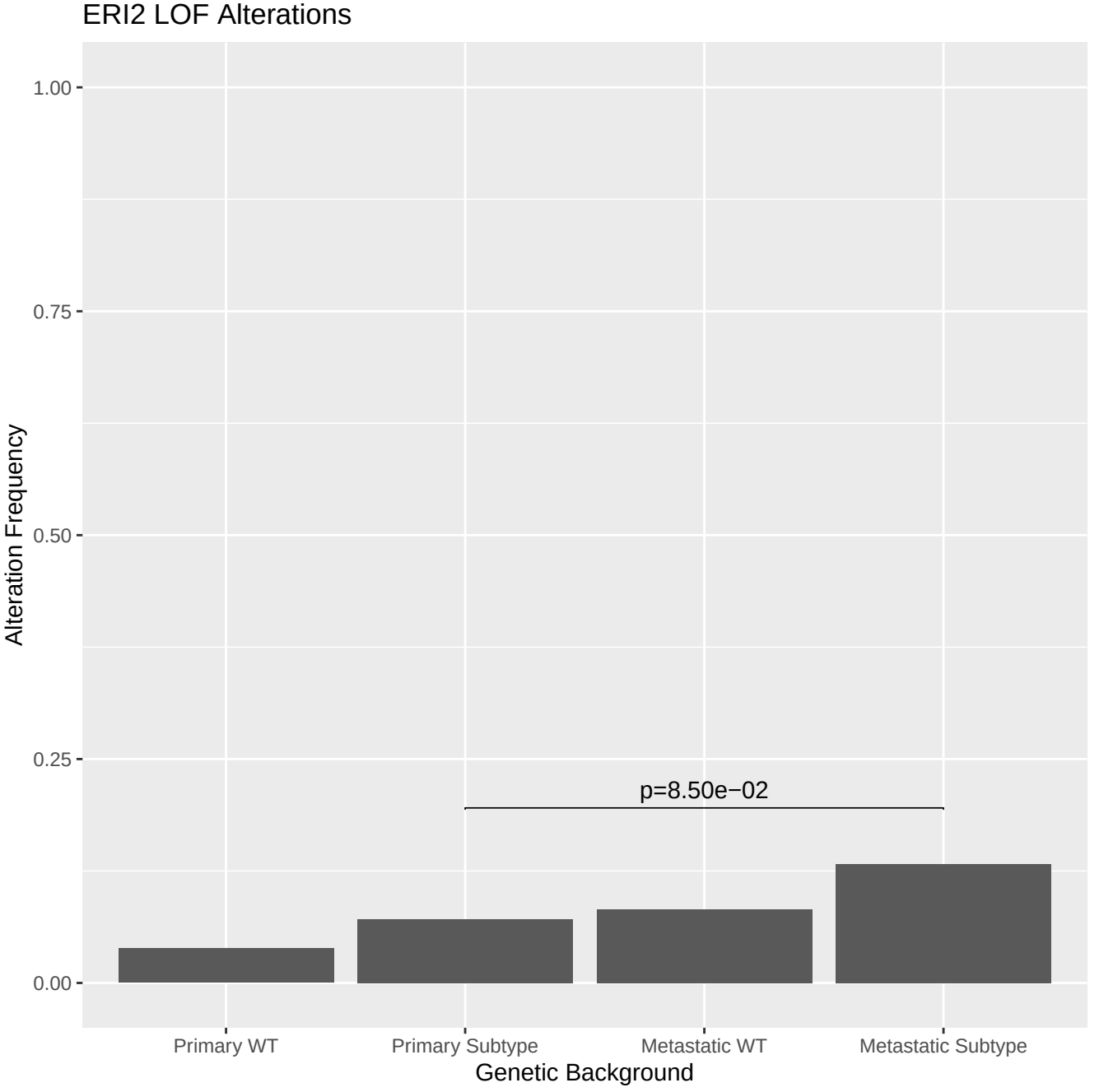

SGPL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.80e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

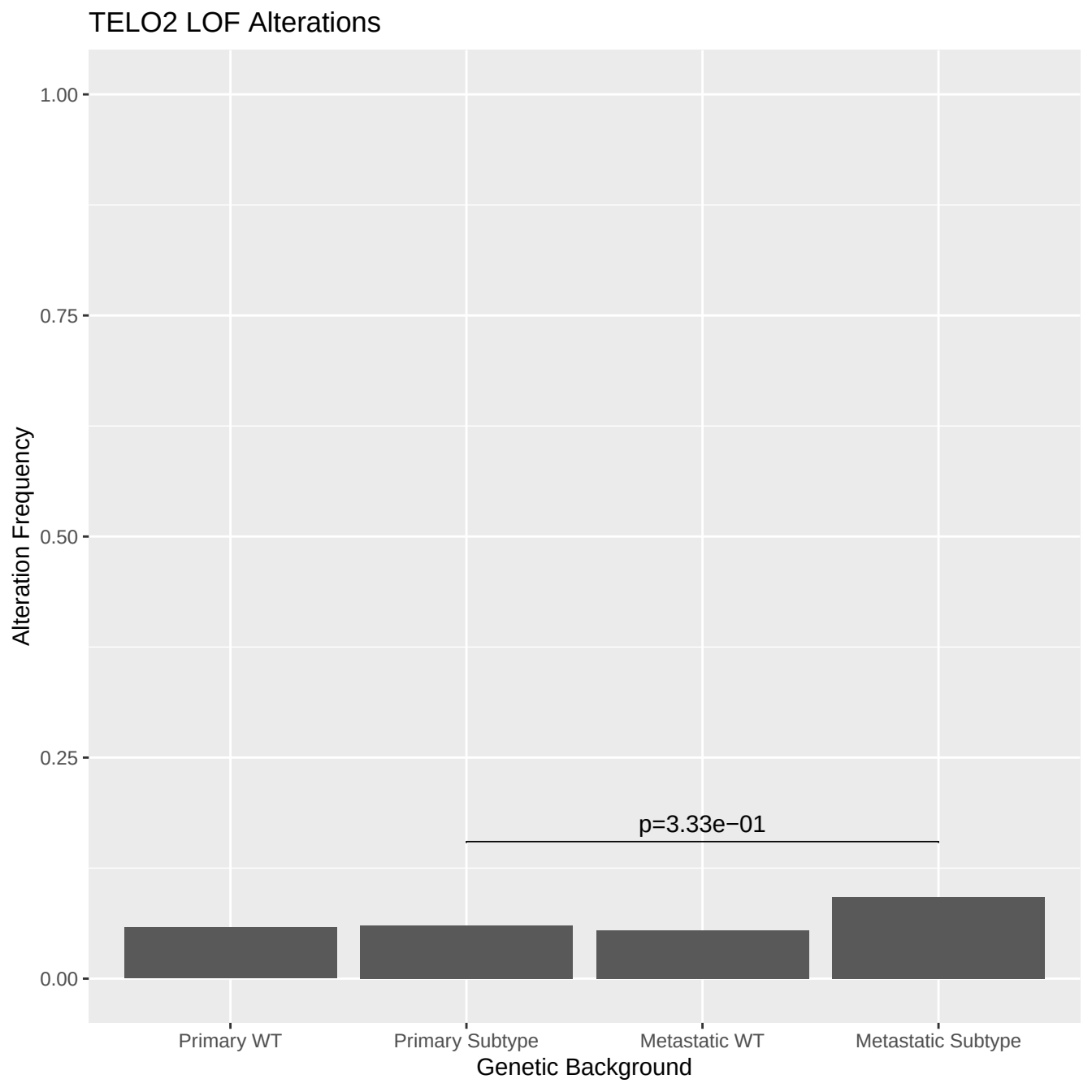

NHLH1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

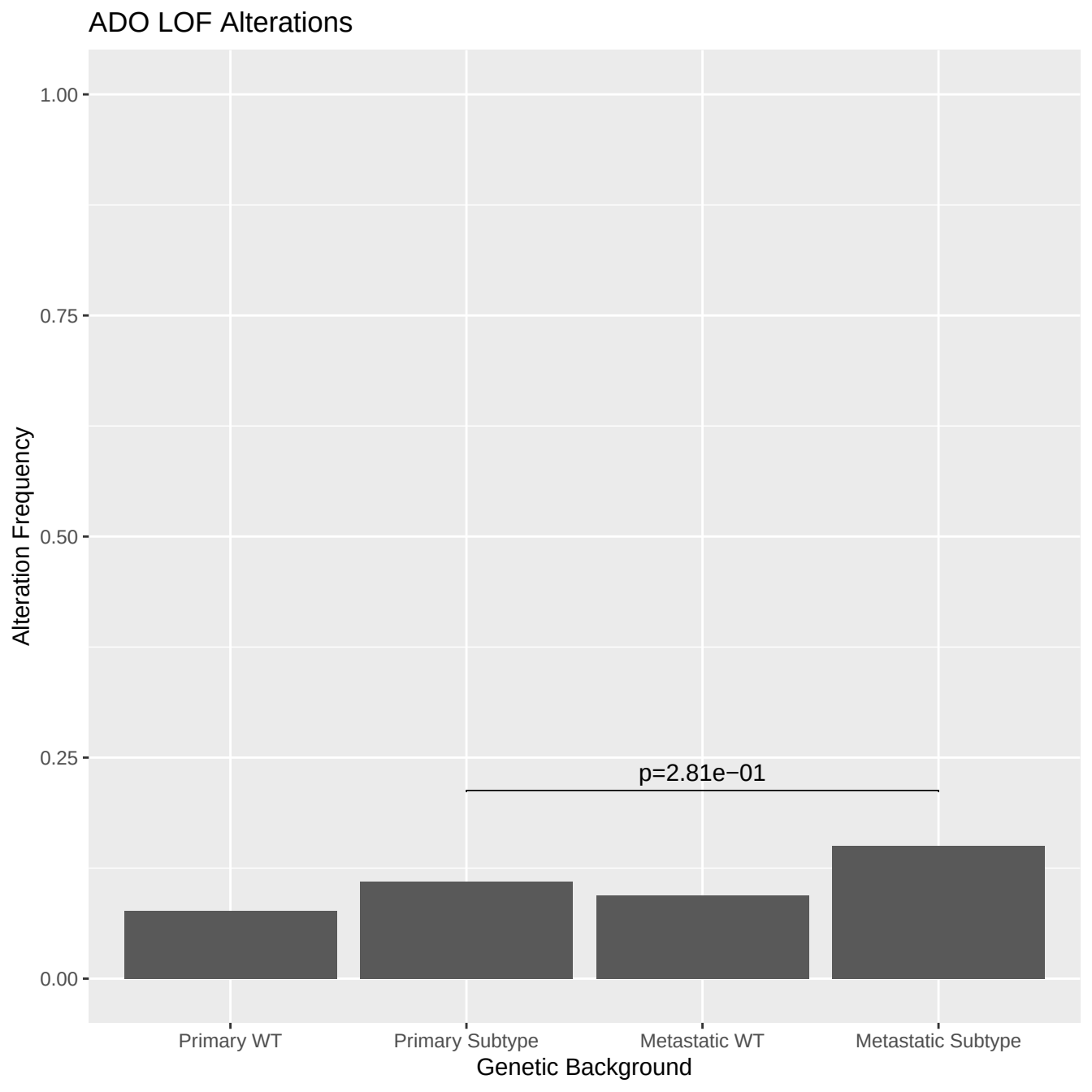

DDR2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.12e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

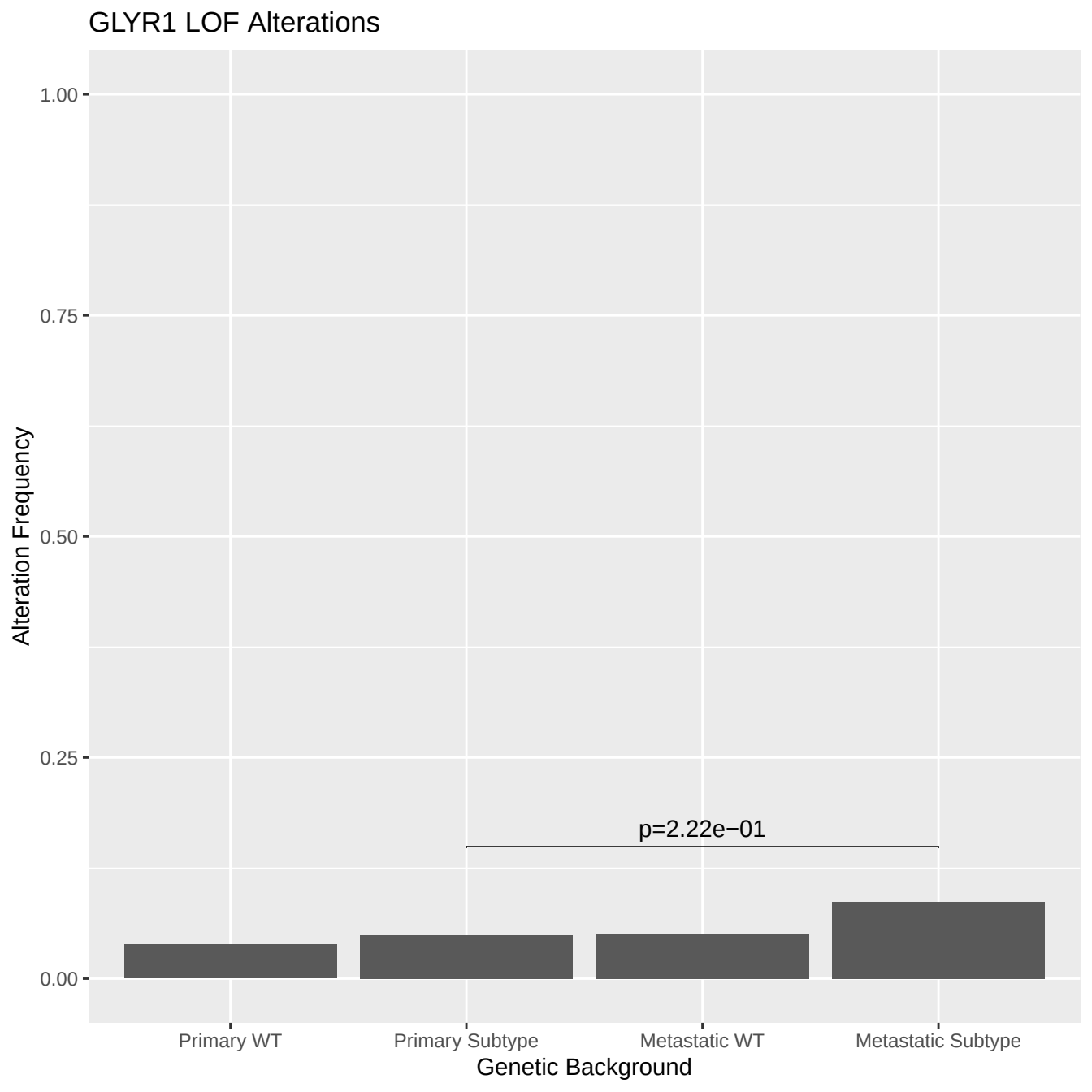

VANGL2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

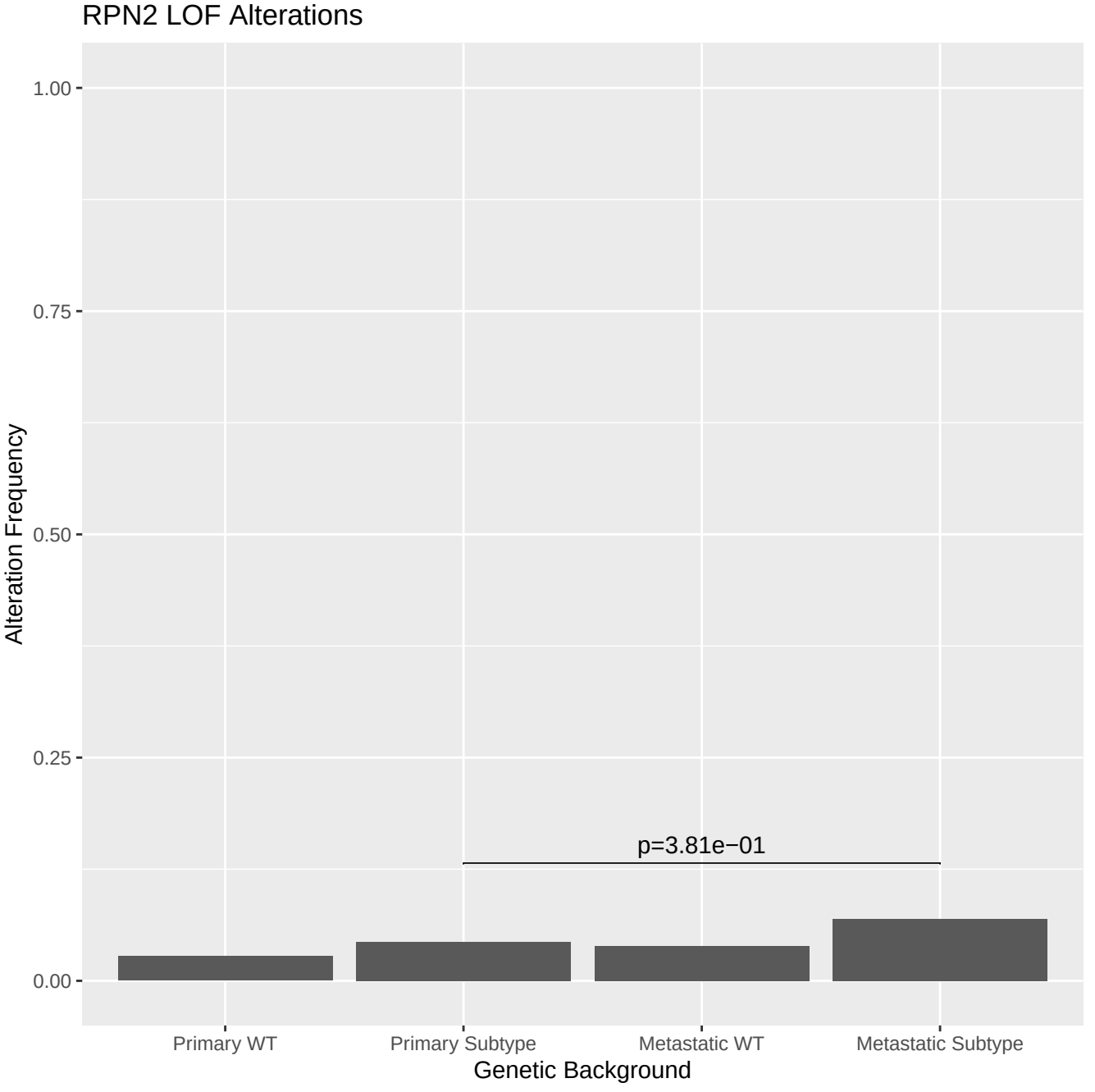

NUBP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

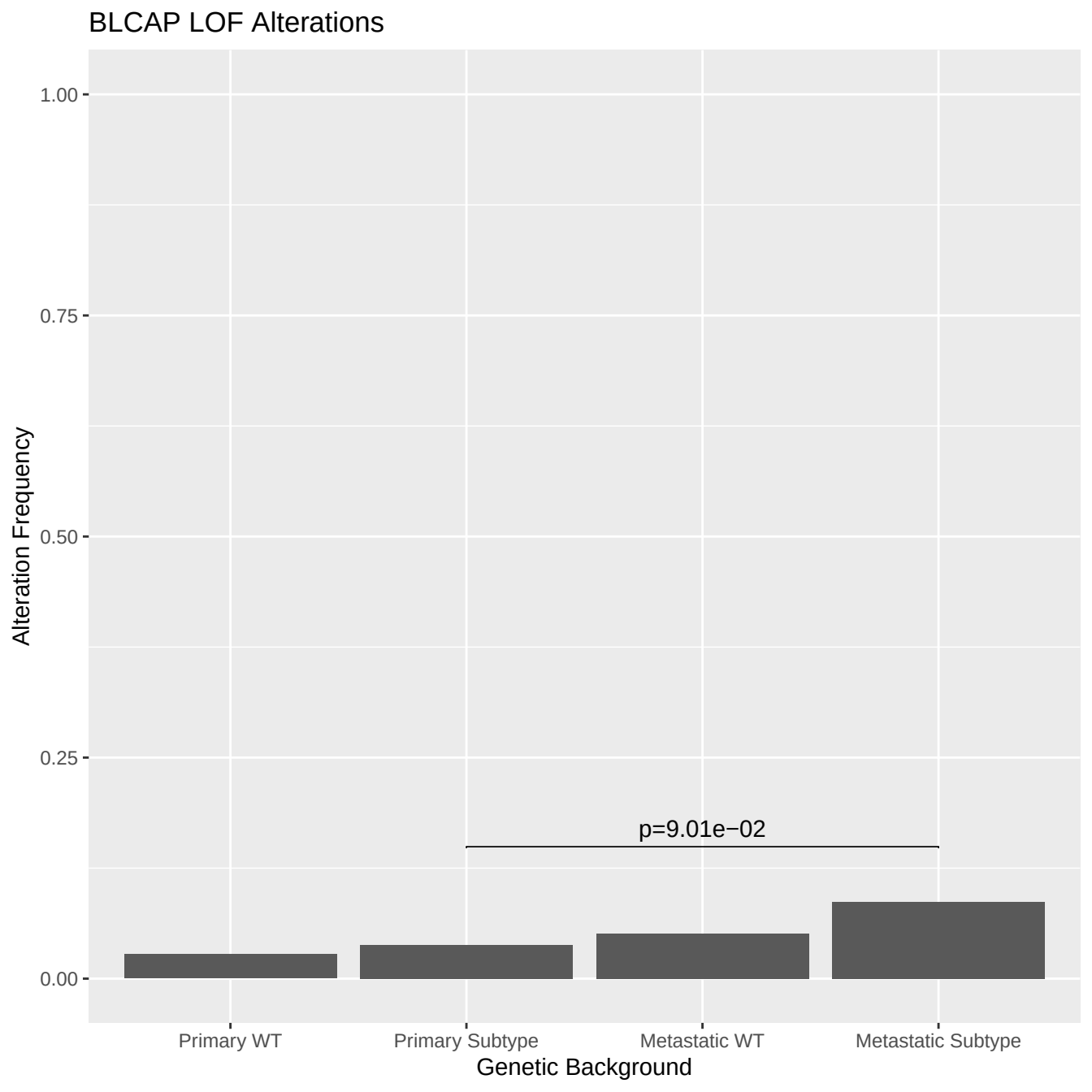

ERI2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.50e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

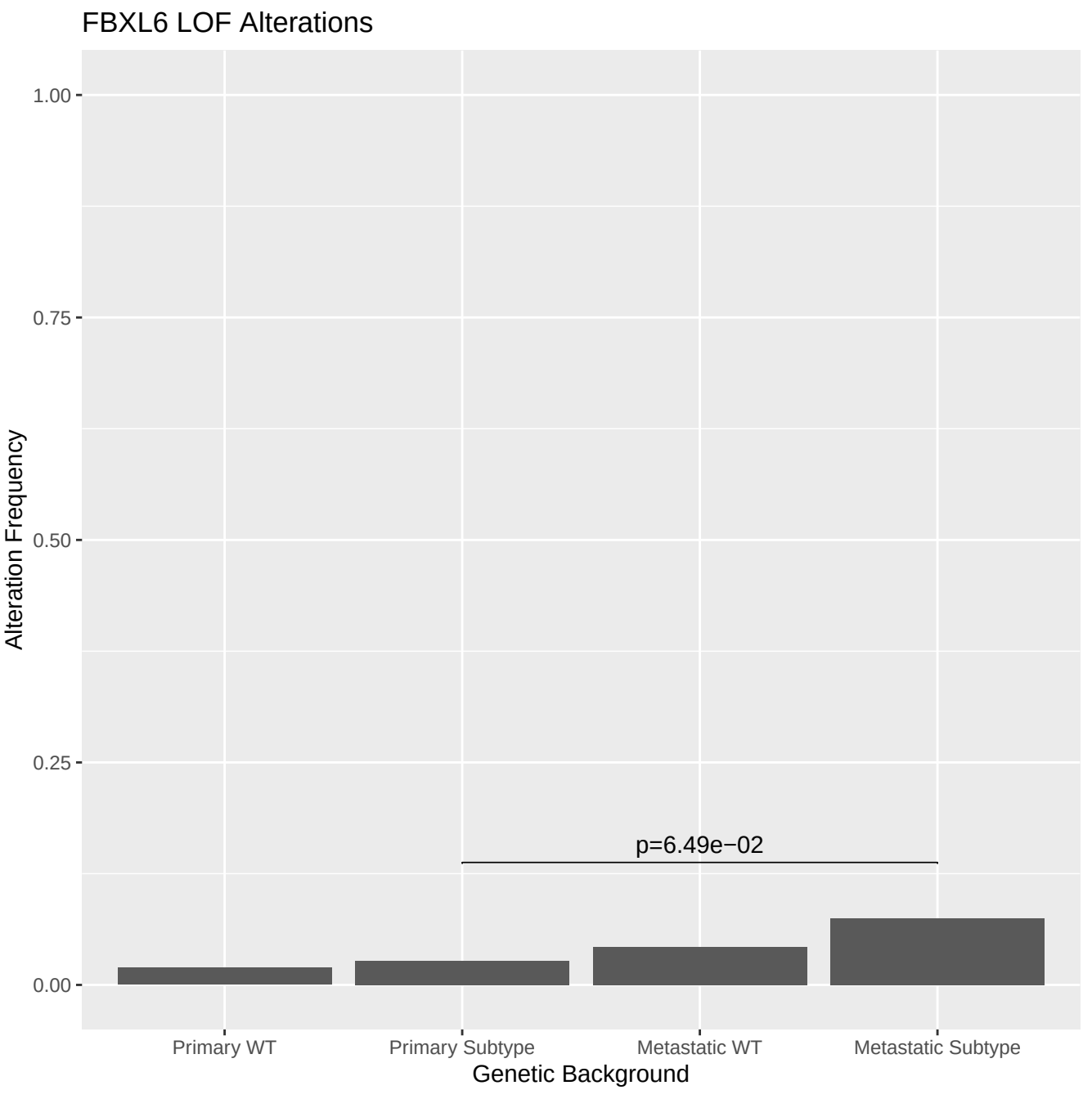

TELO2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

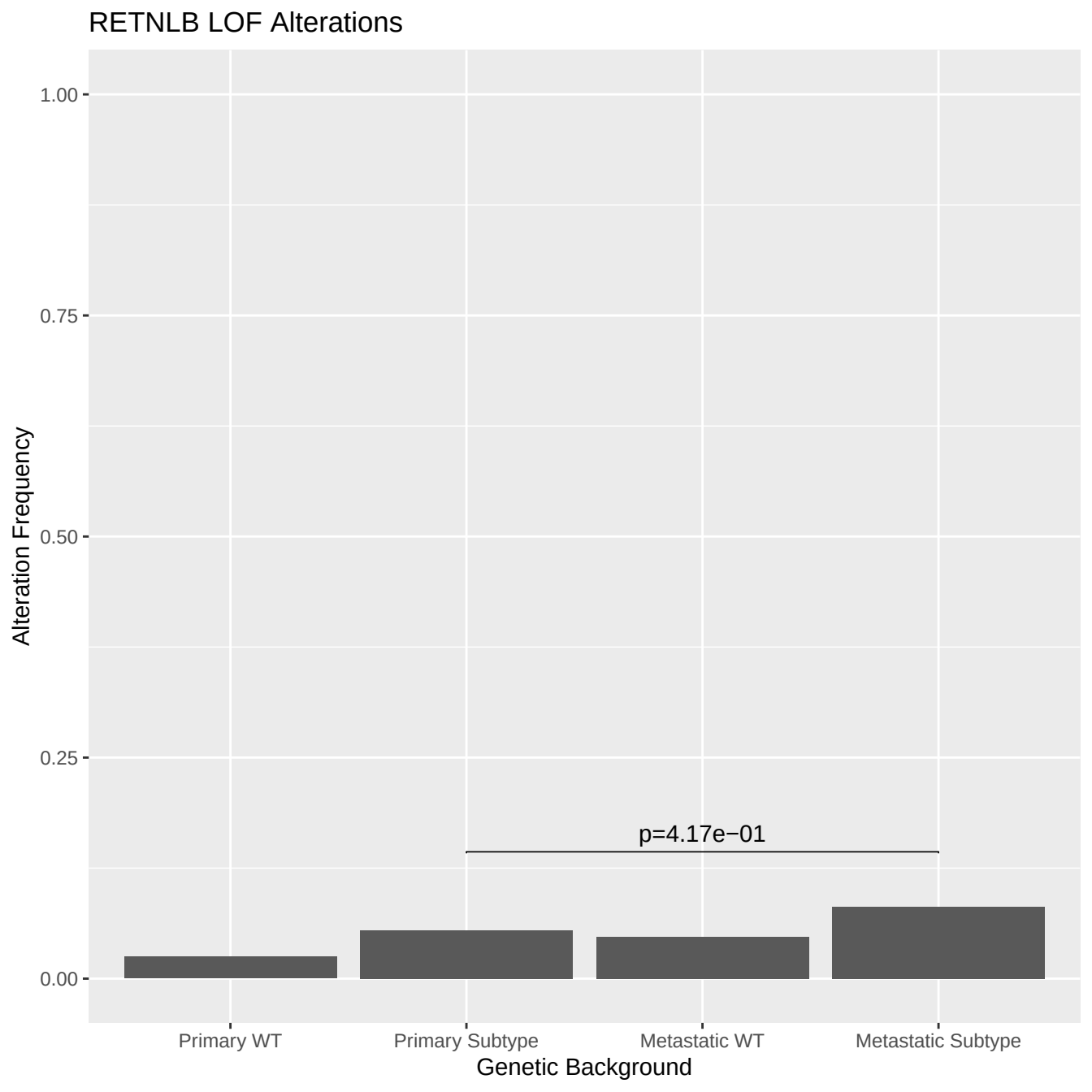

ADO LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

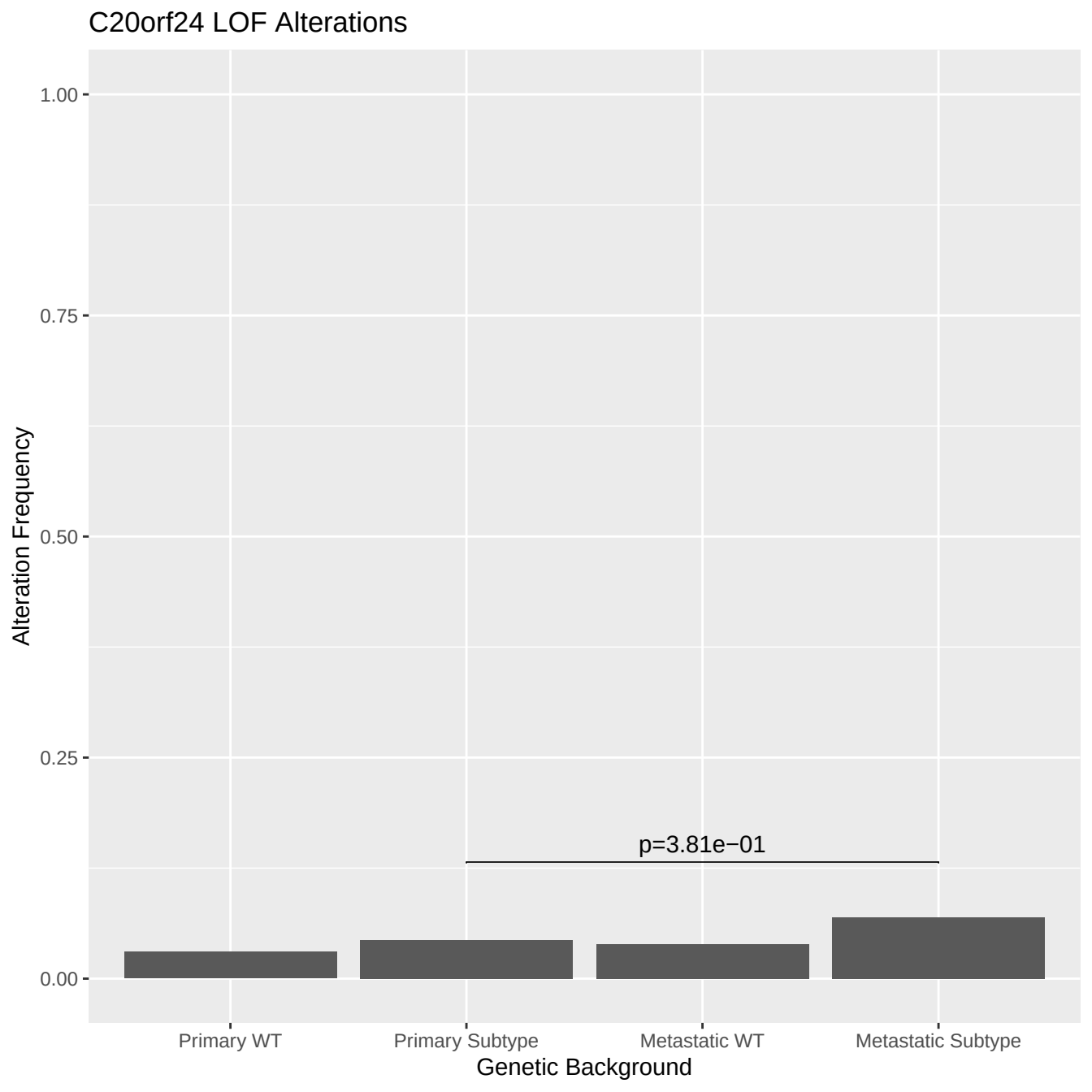

GLYR1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.22e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

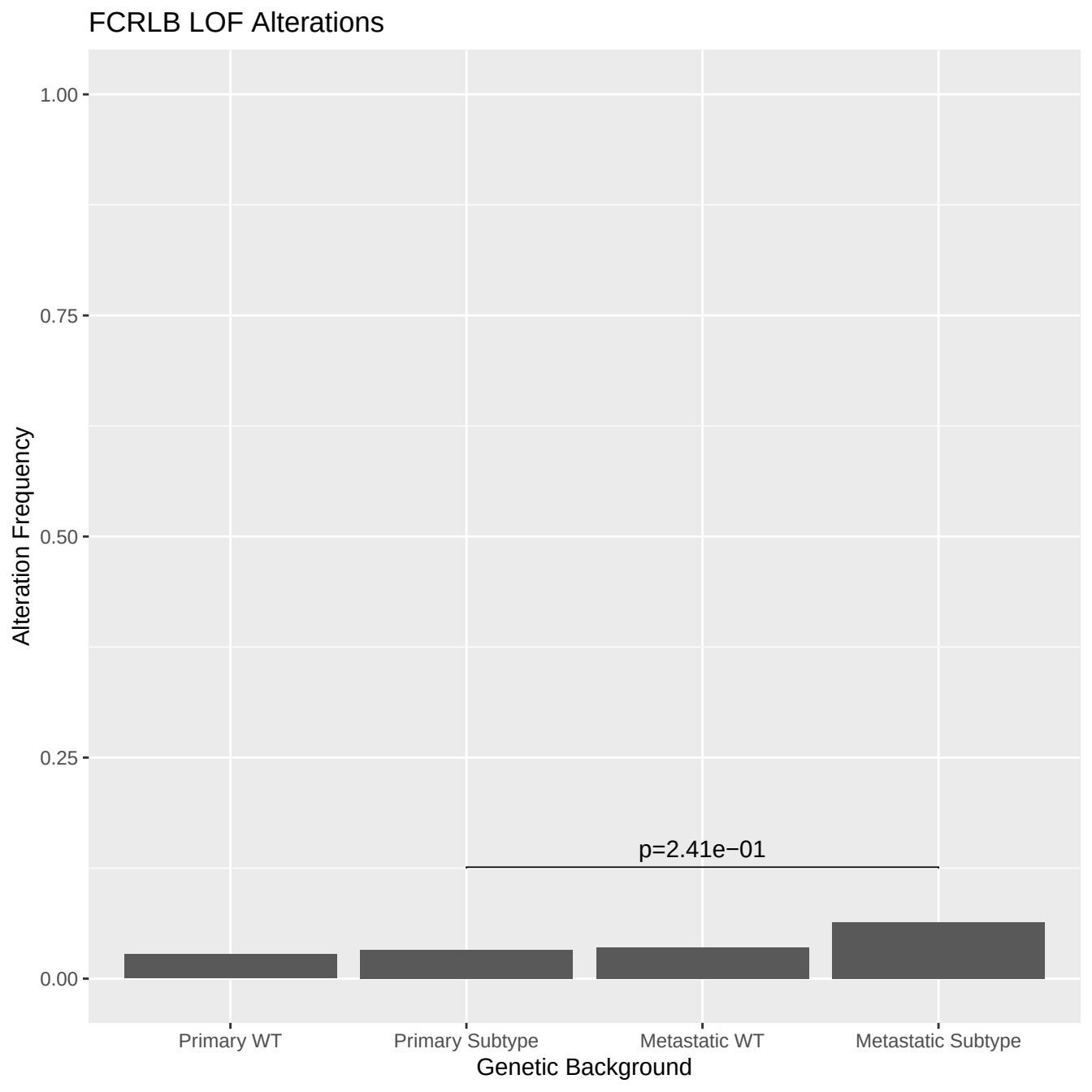

RPN2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

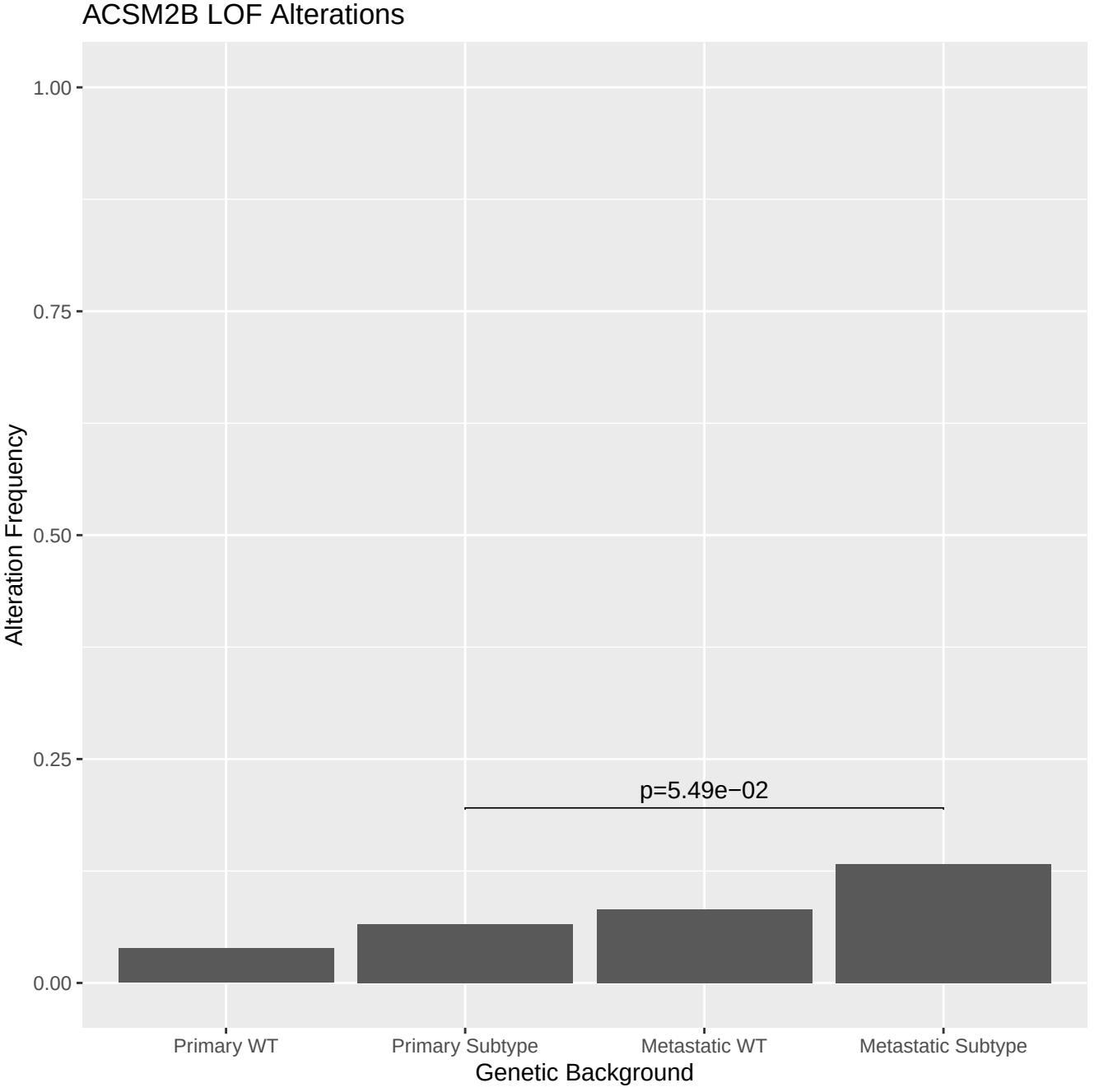

BLCAP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=9.01e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

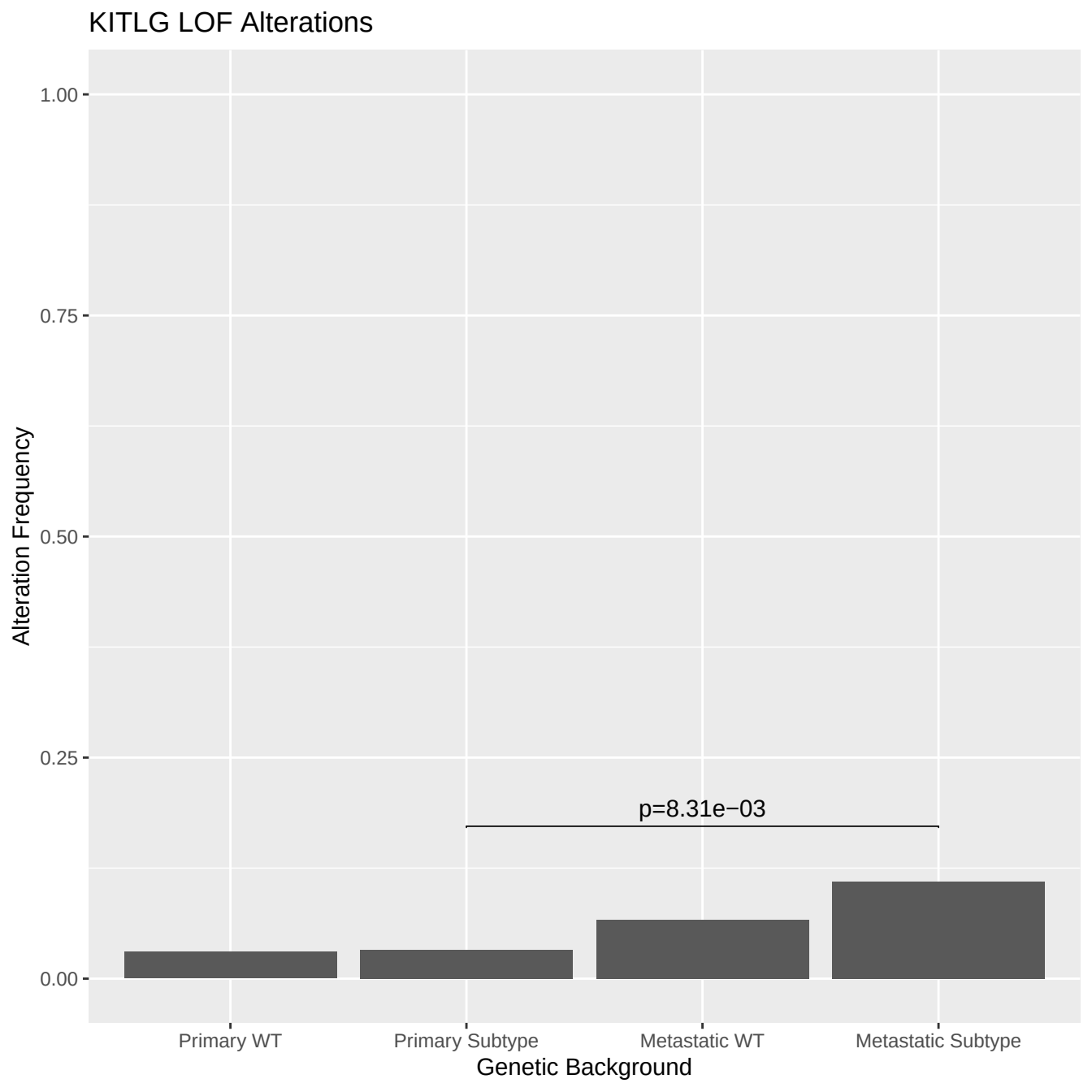

FBXL6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

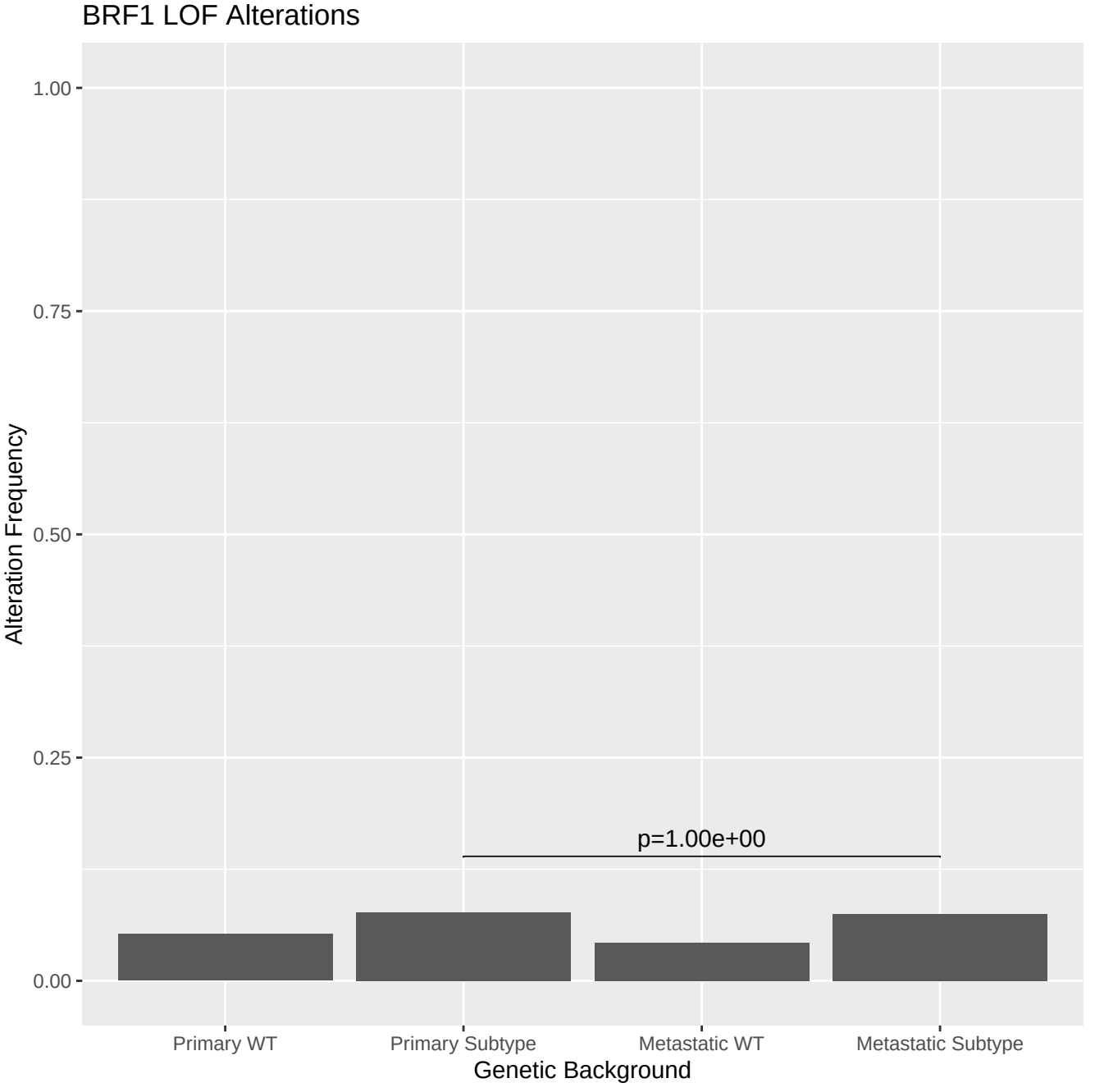

RETNLB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

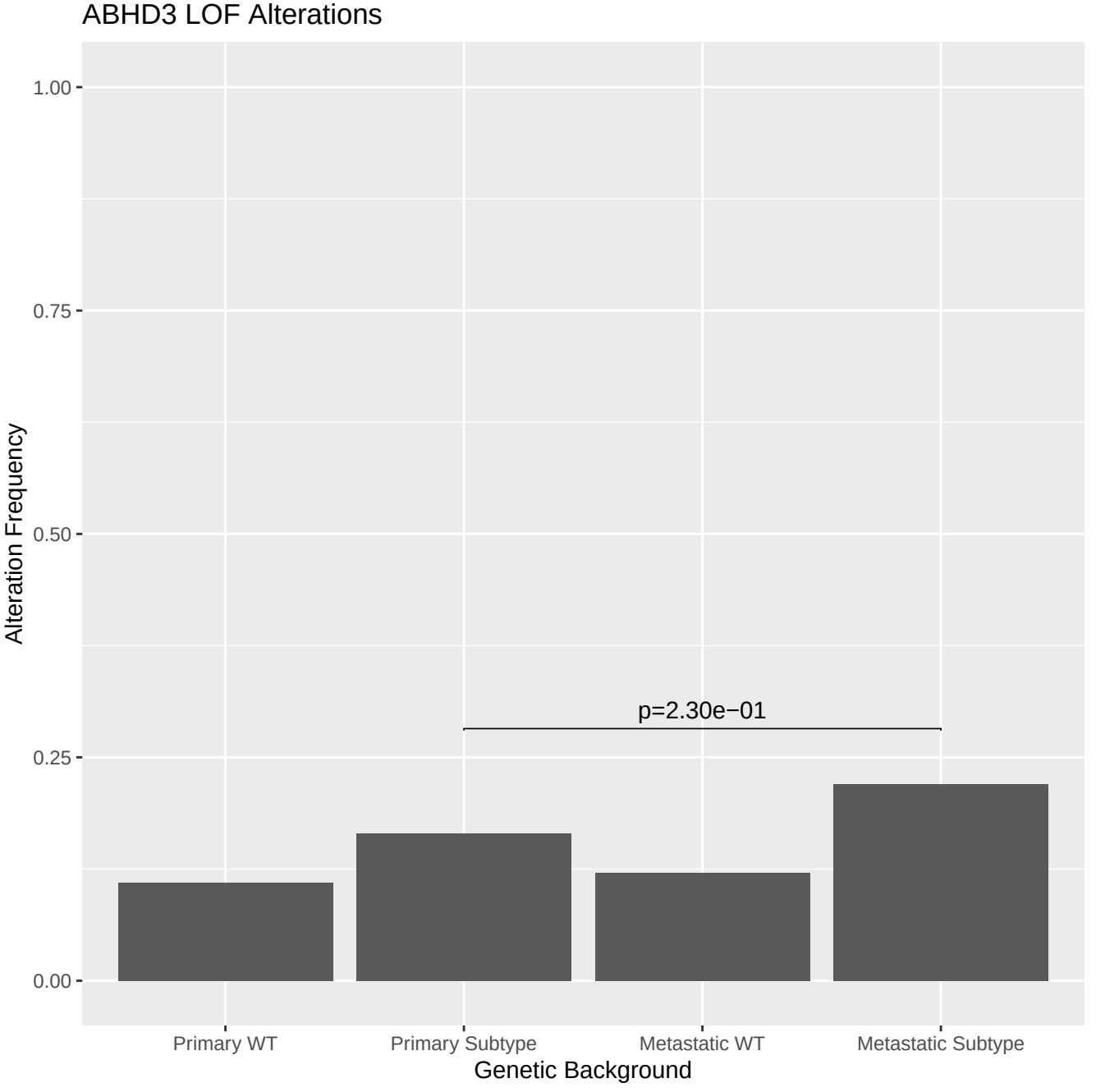

C20orf24 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

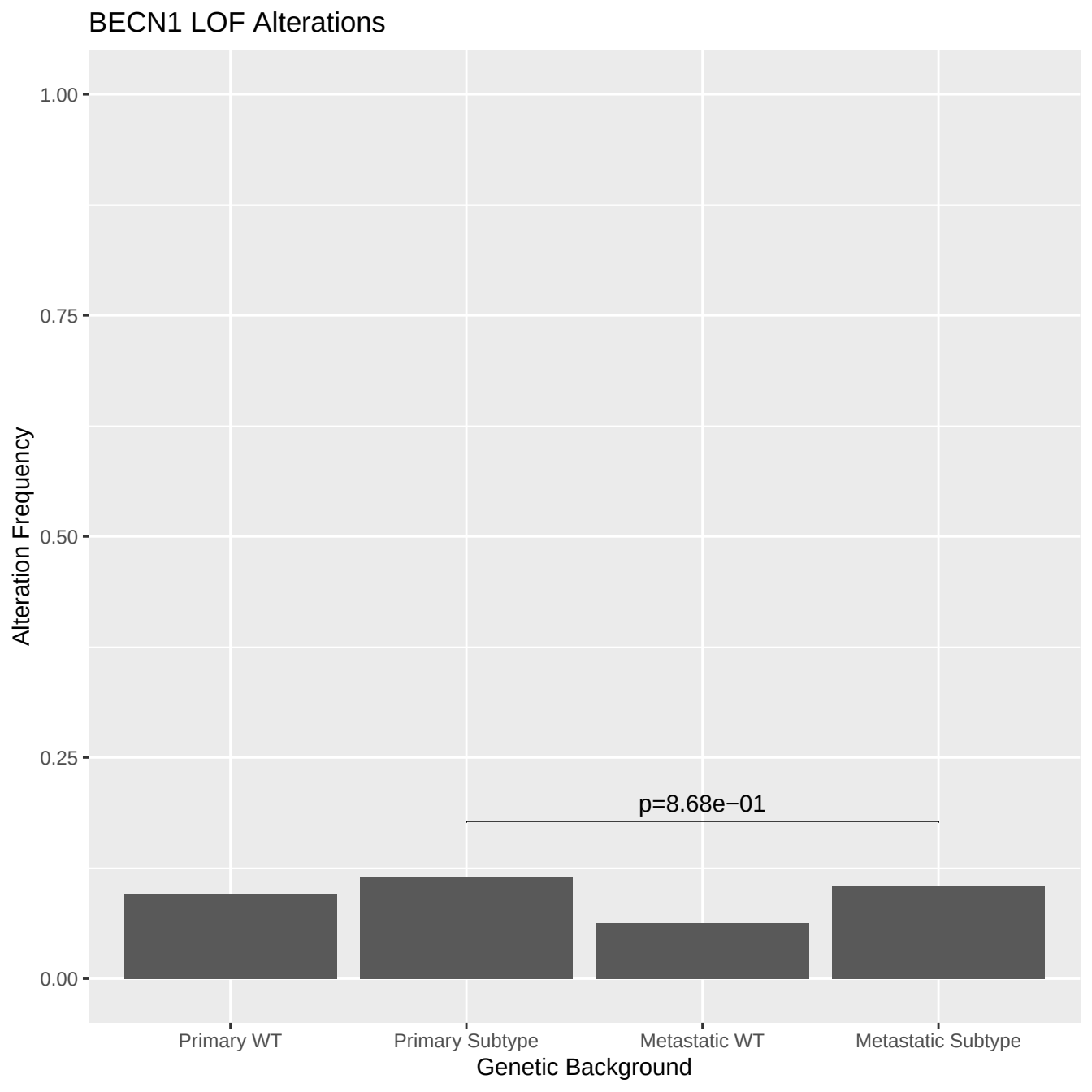

FCRLB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

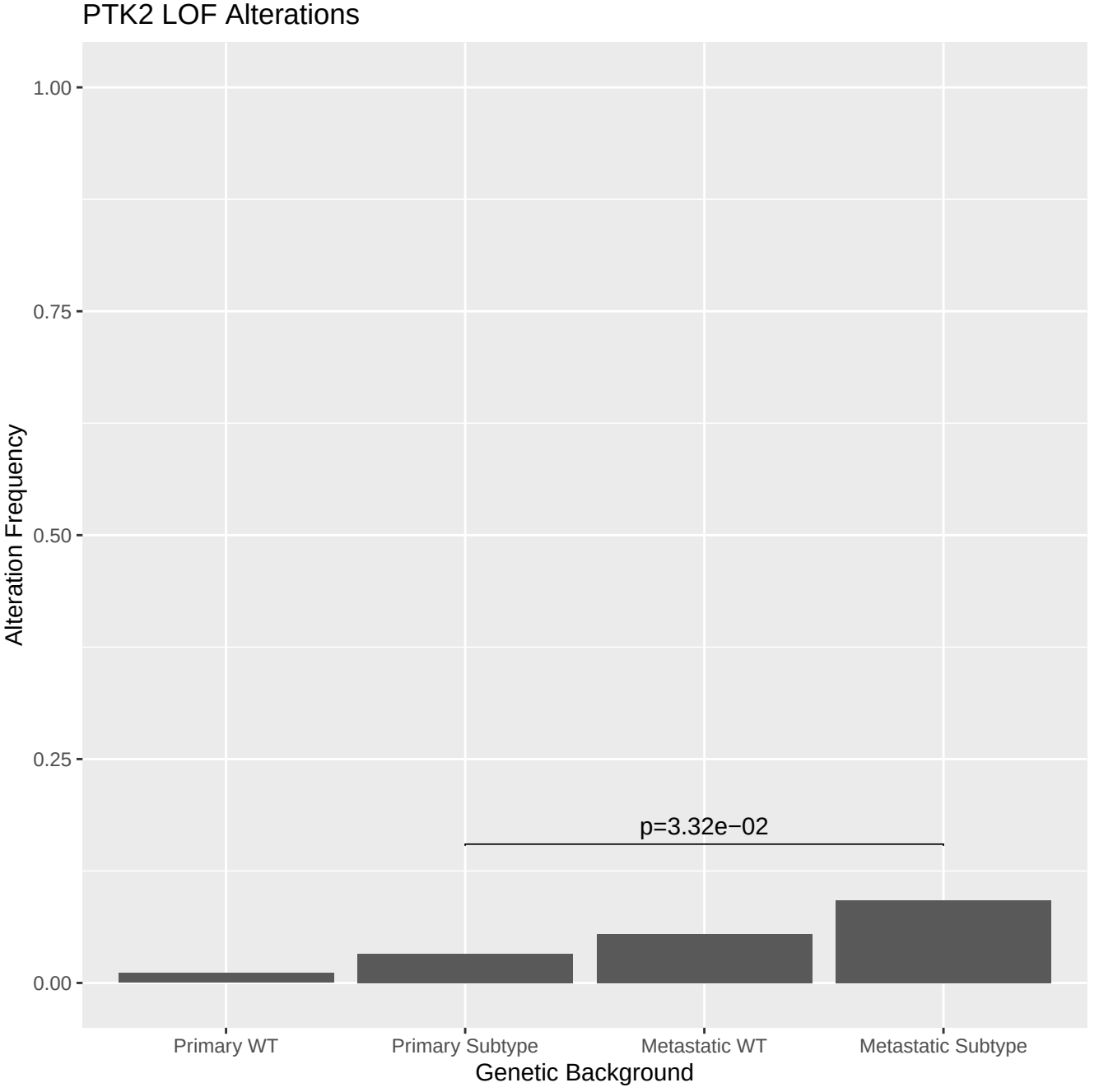

ACSM2B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

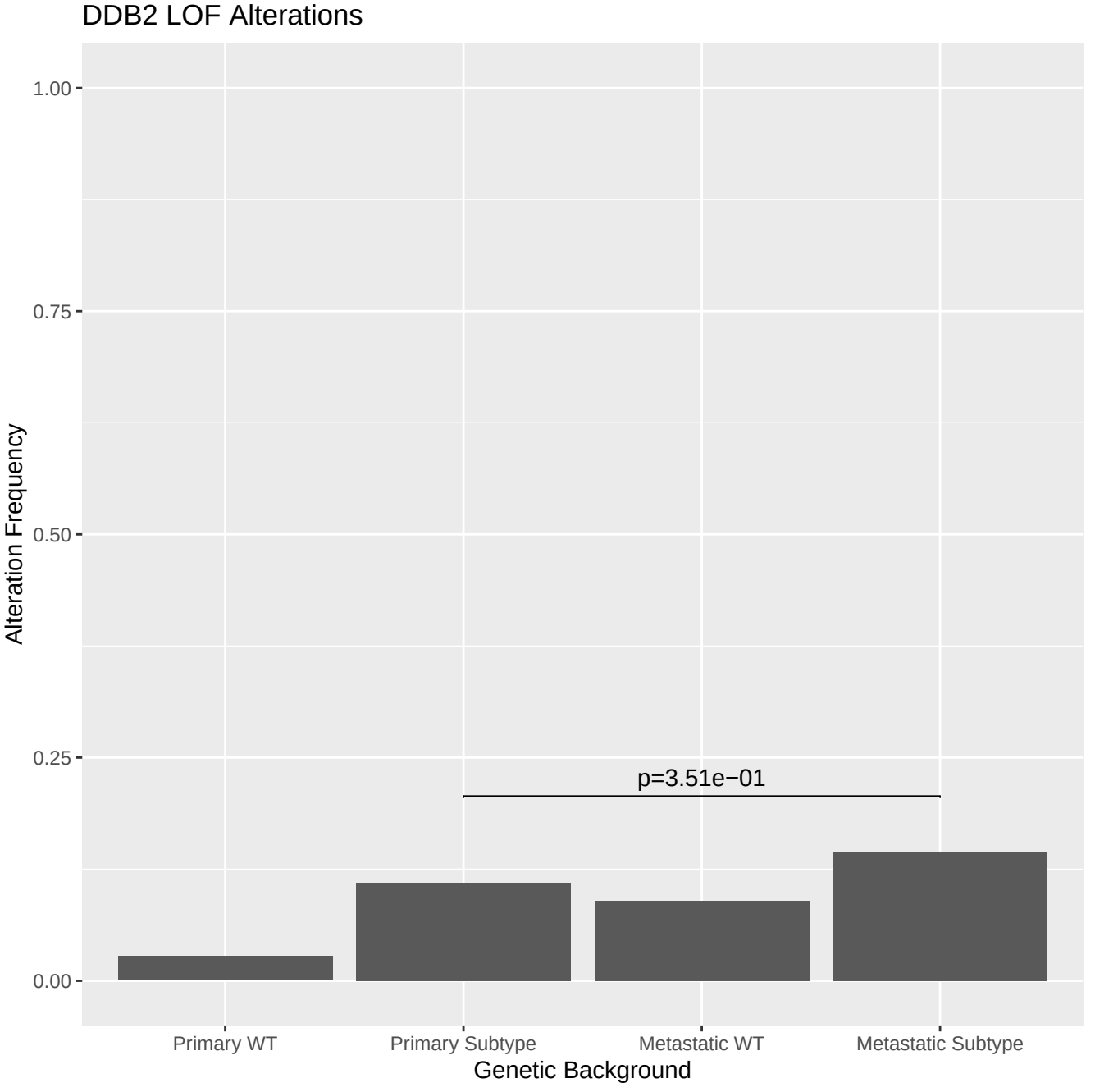

KITLG LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.31e−03
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

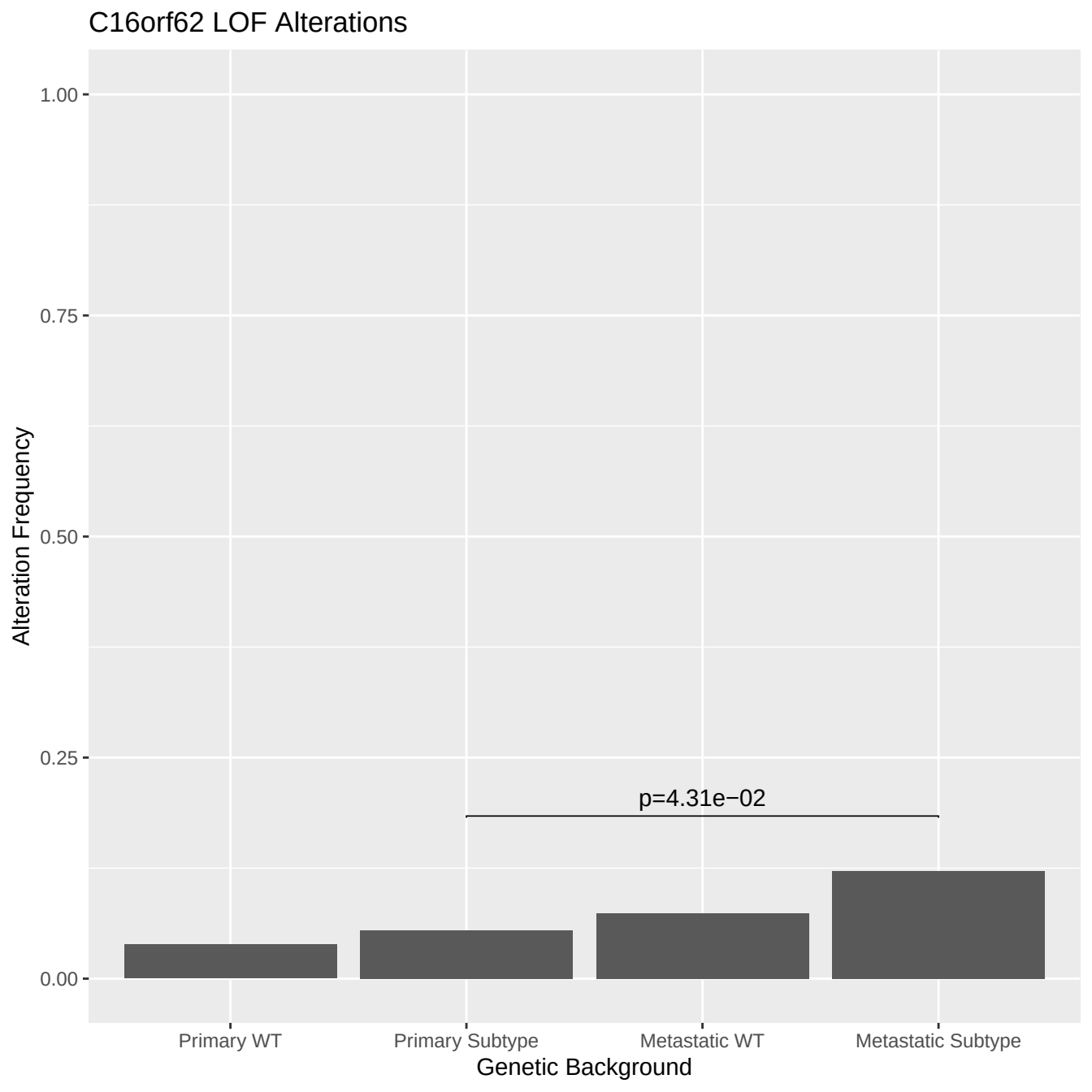

BRF1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

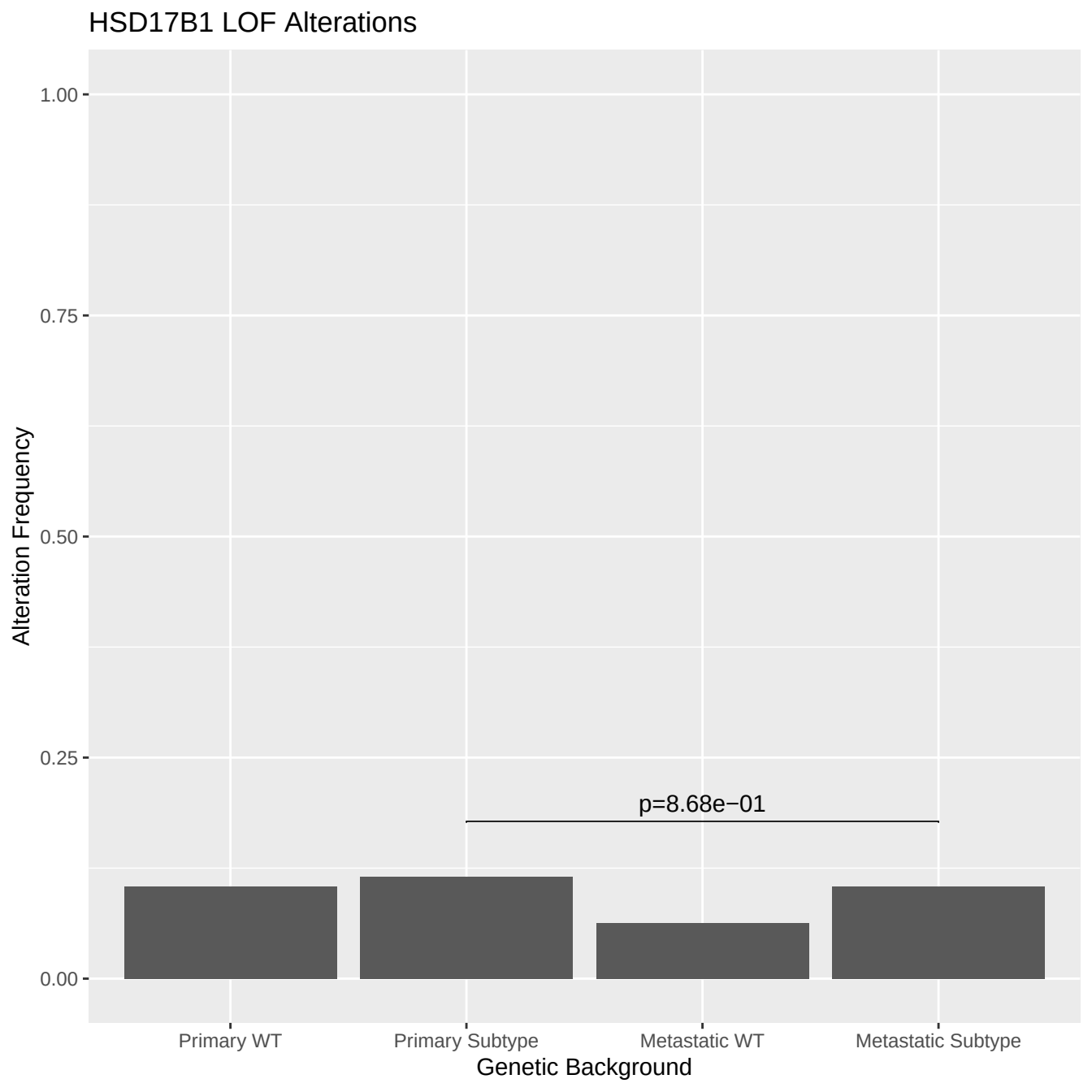

ABHD3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

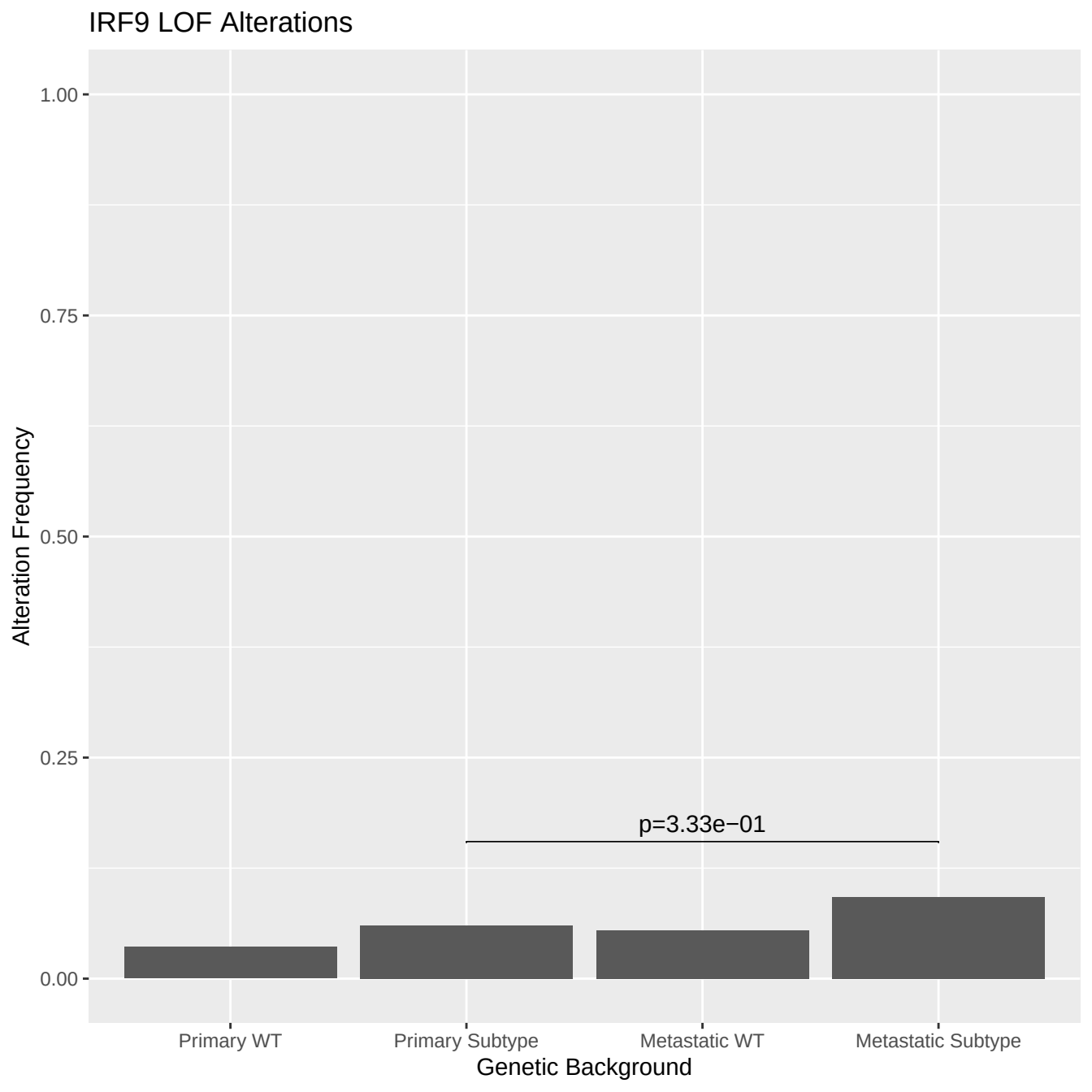

BECN1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.68e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

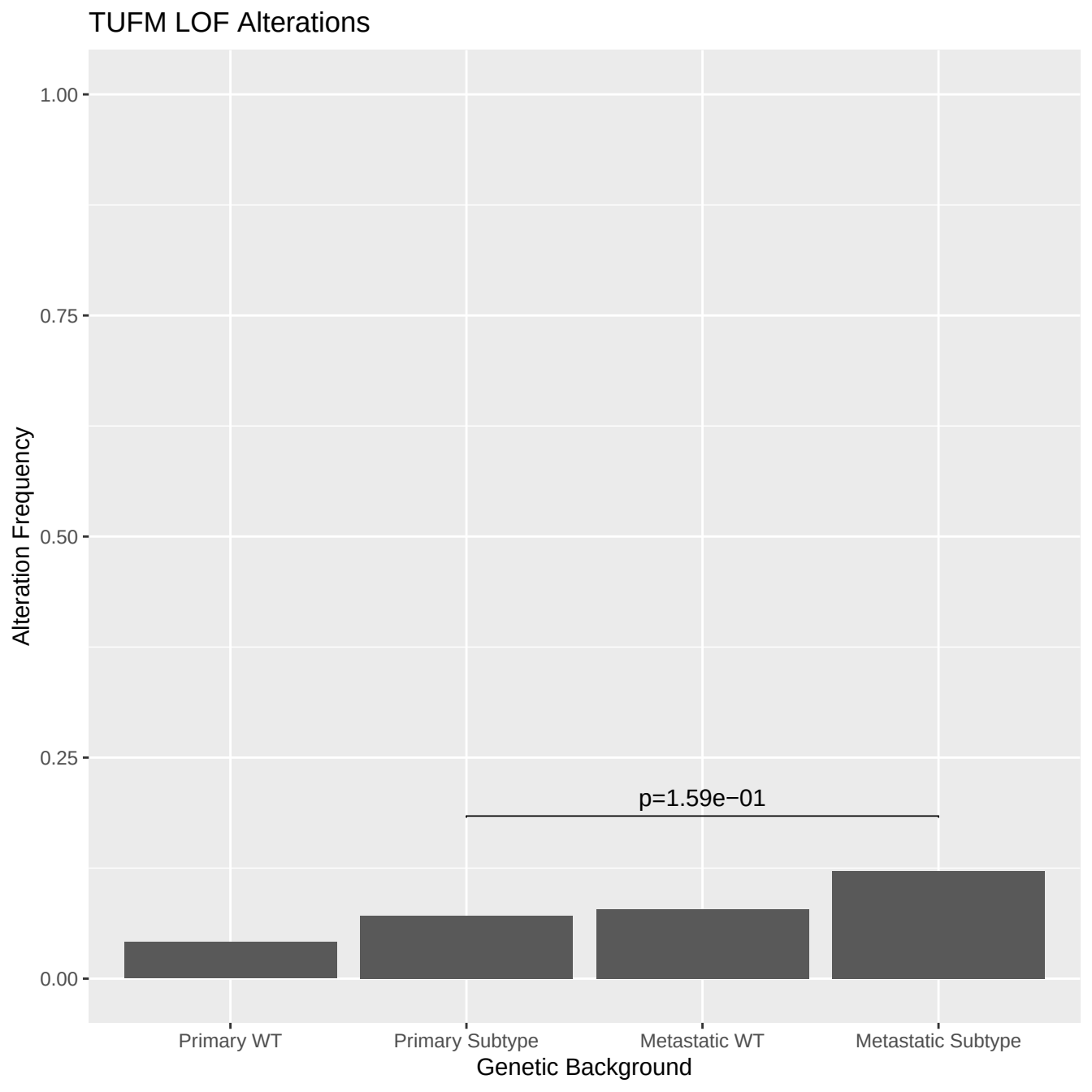

PTK2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.32e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

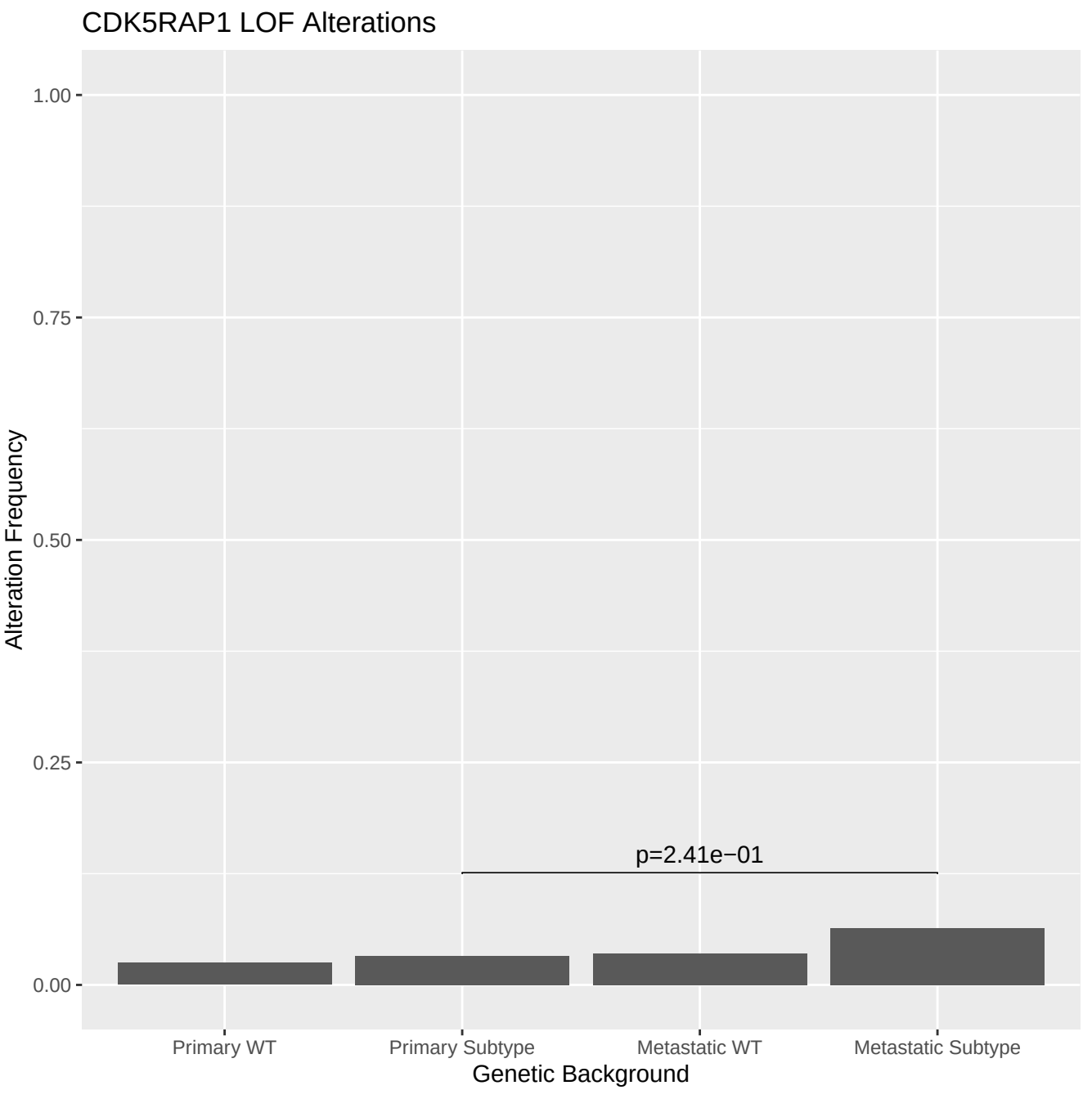

DDB2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

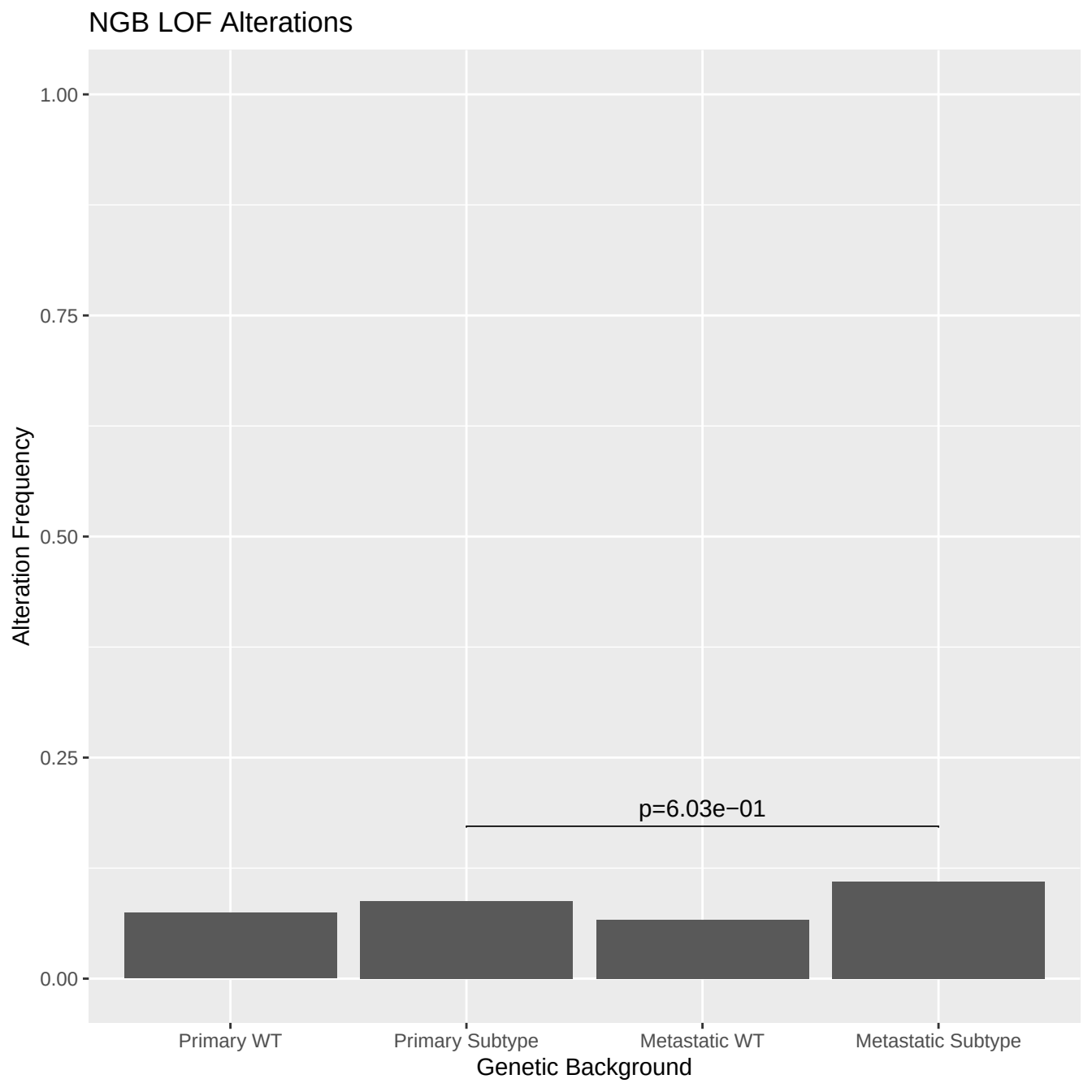

C16orf62 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.31e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

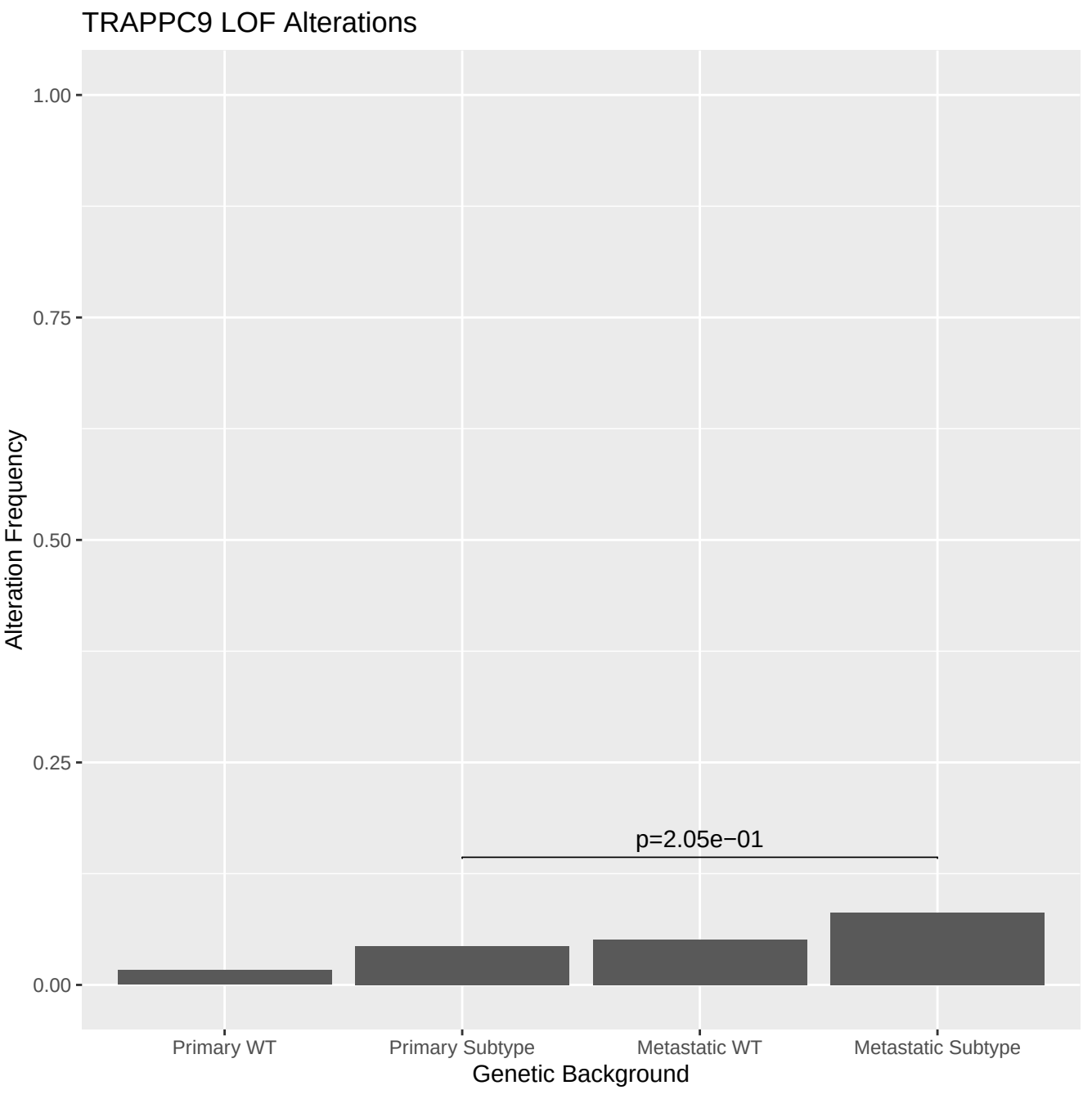

HSD17B1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.68e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

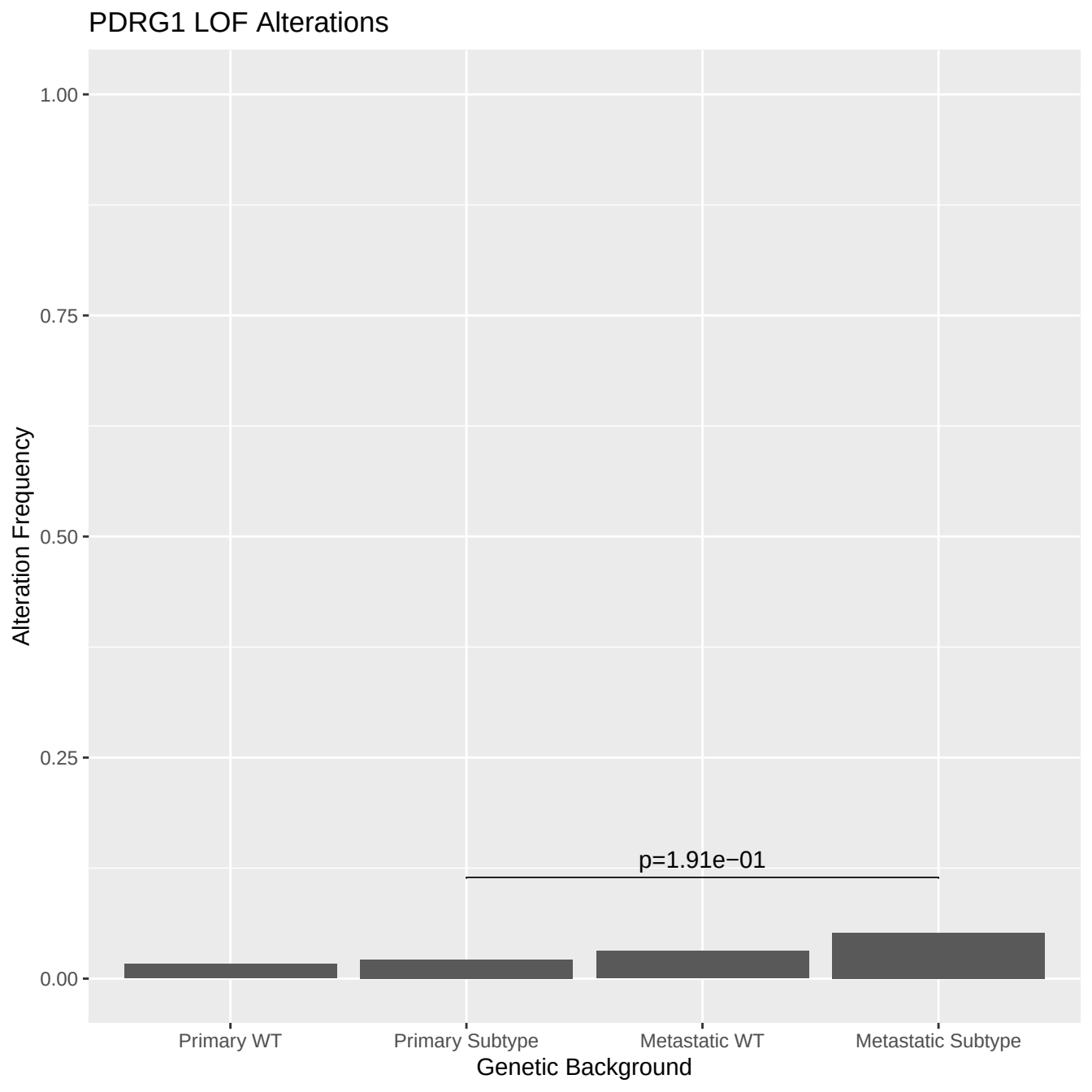

IRF9 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

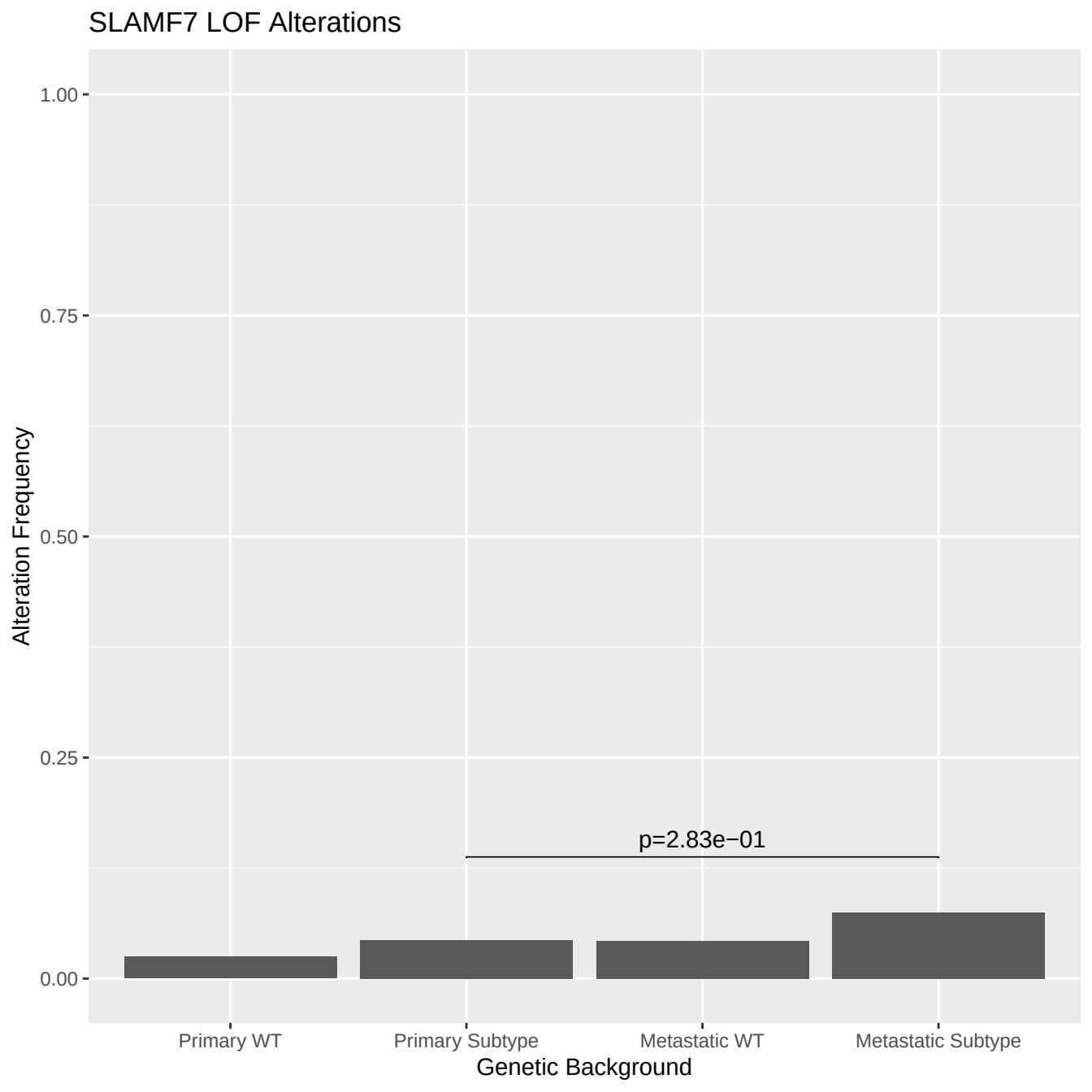

TUFM LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.59e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

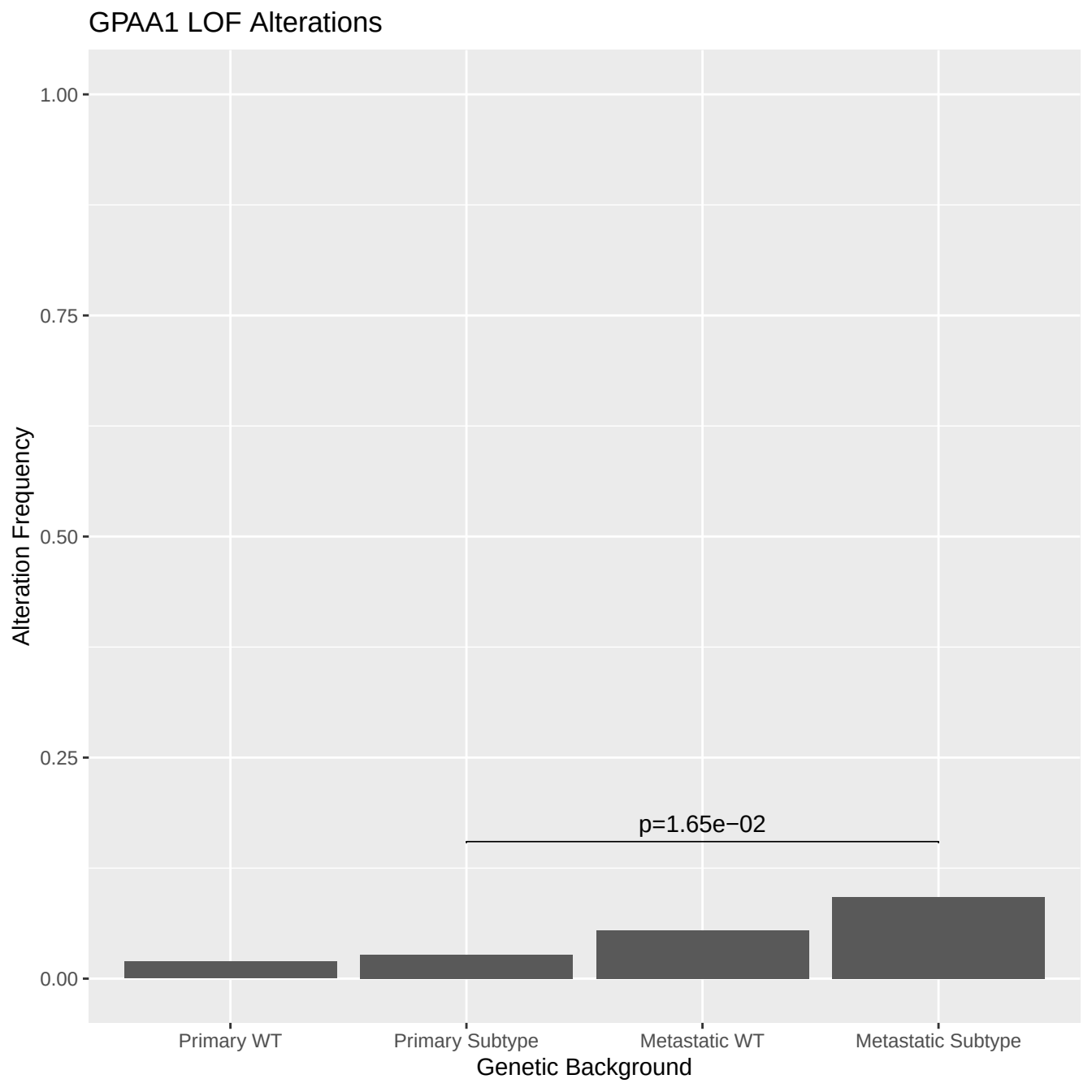

CDK5RAP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

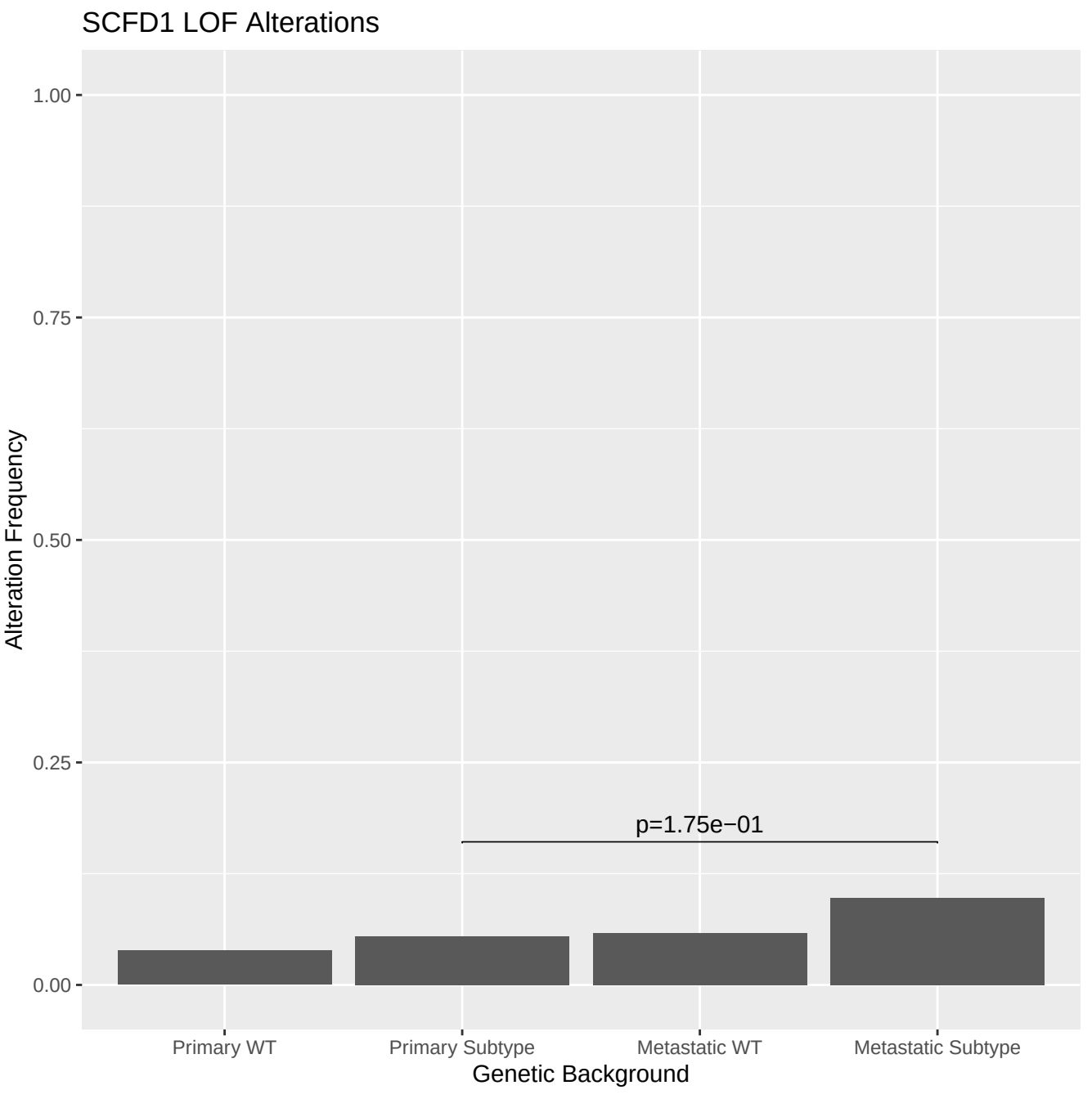

NGB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

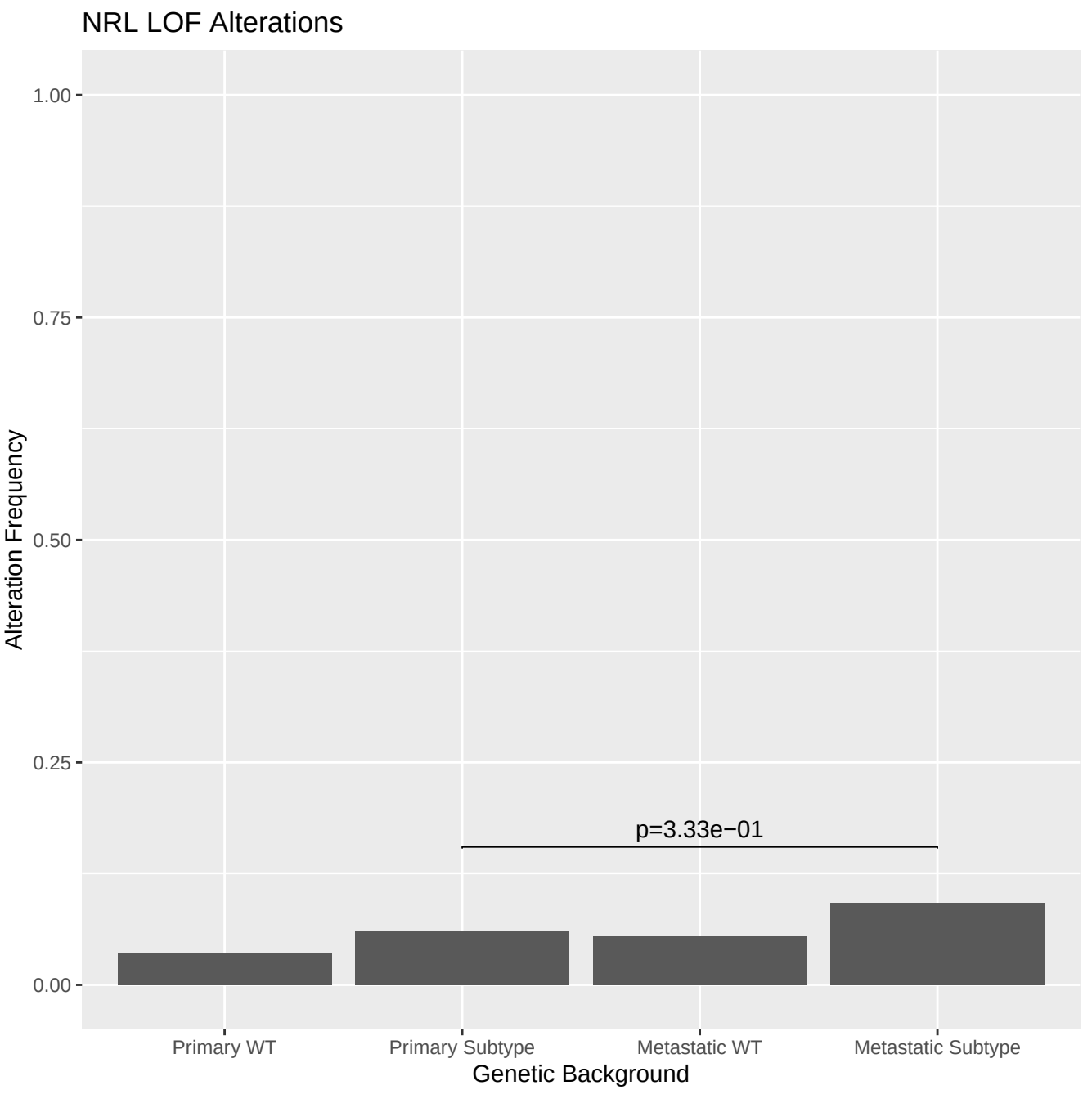

TRAPPC9 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.05e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

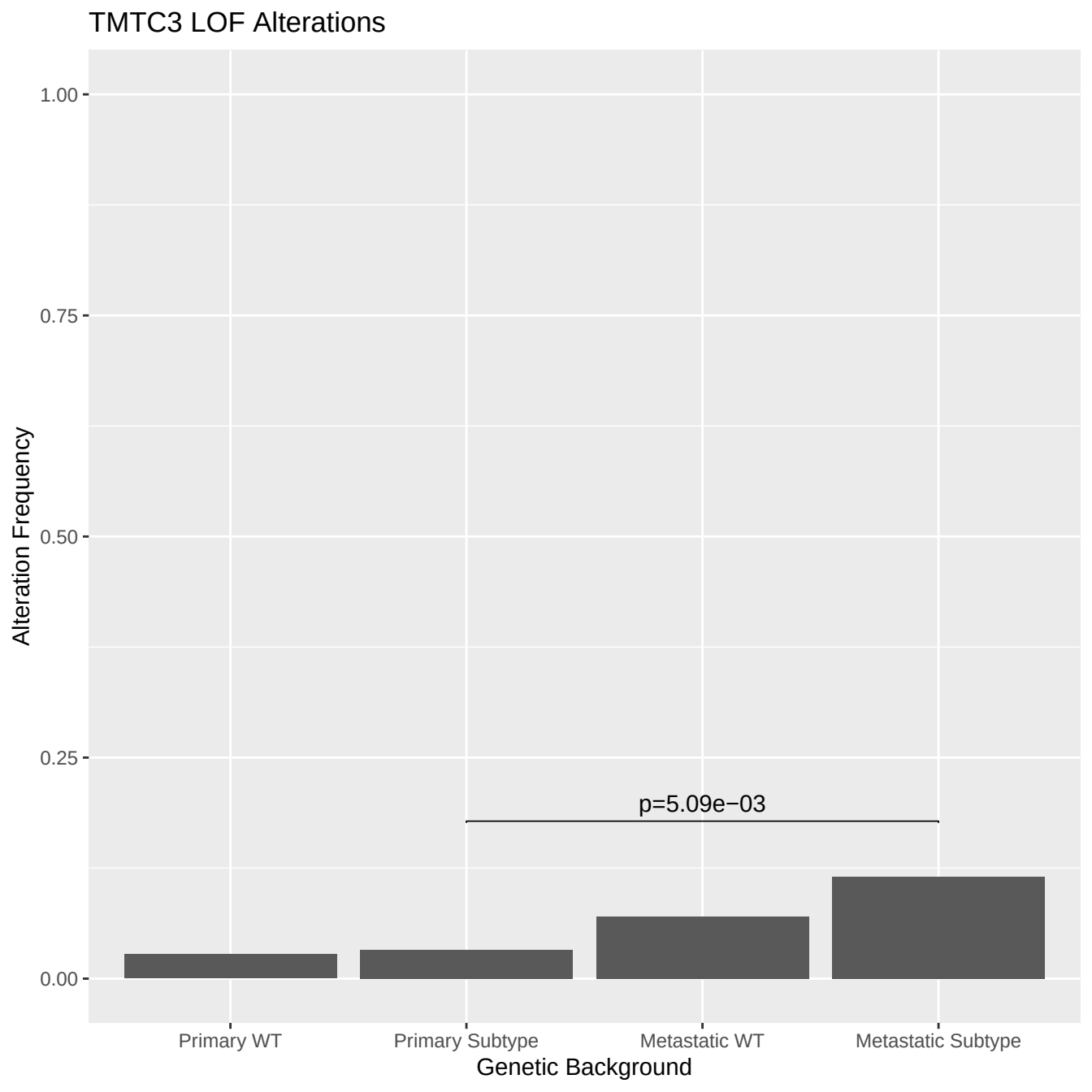

PDRG1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.91e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

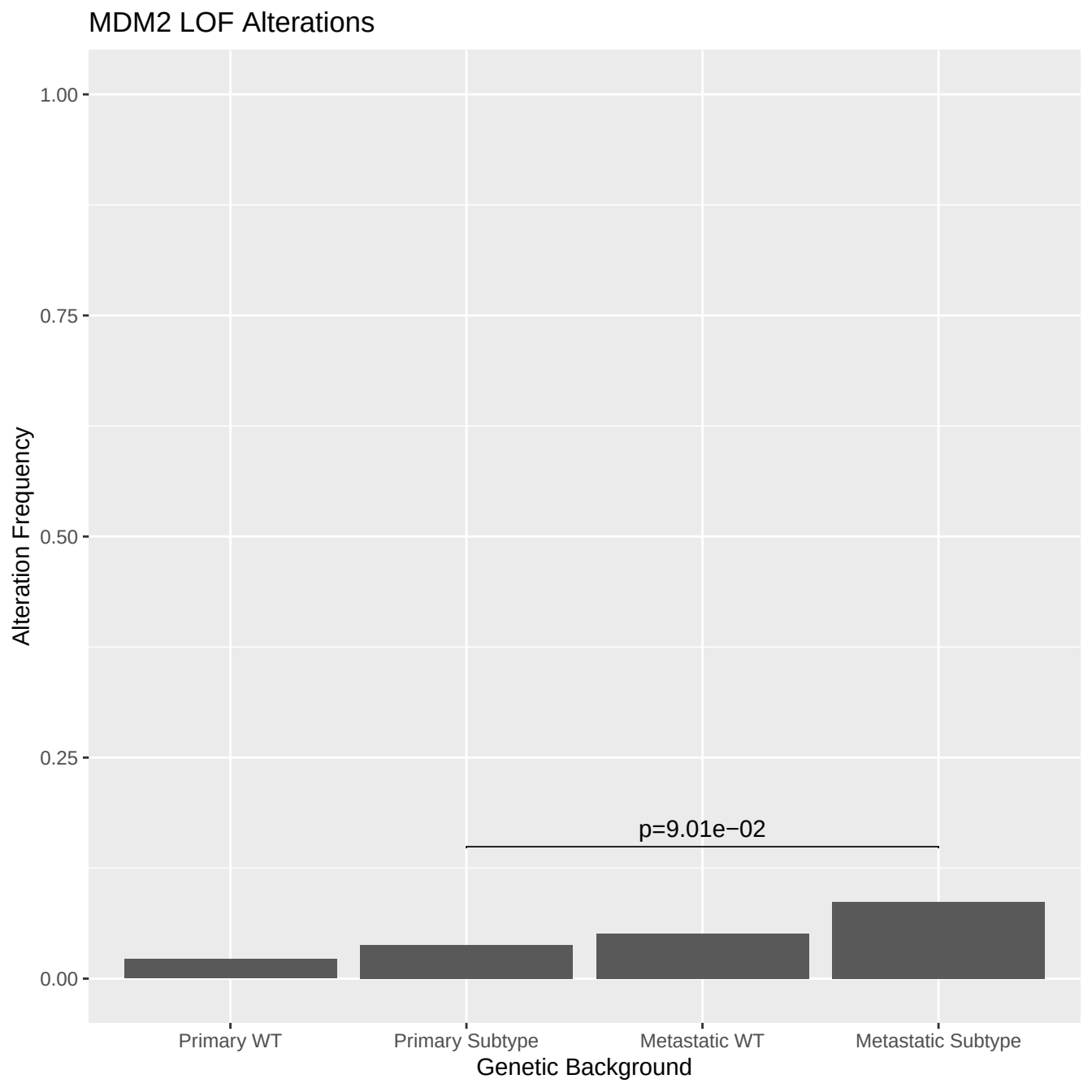

SLAMF7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

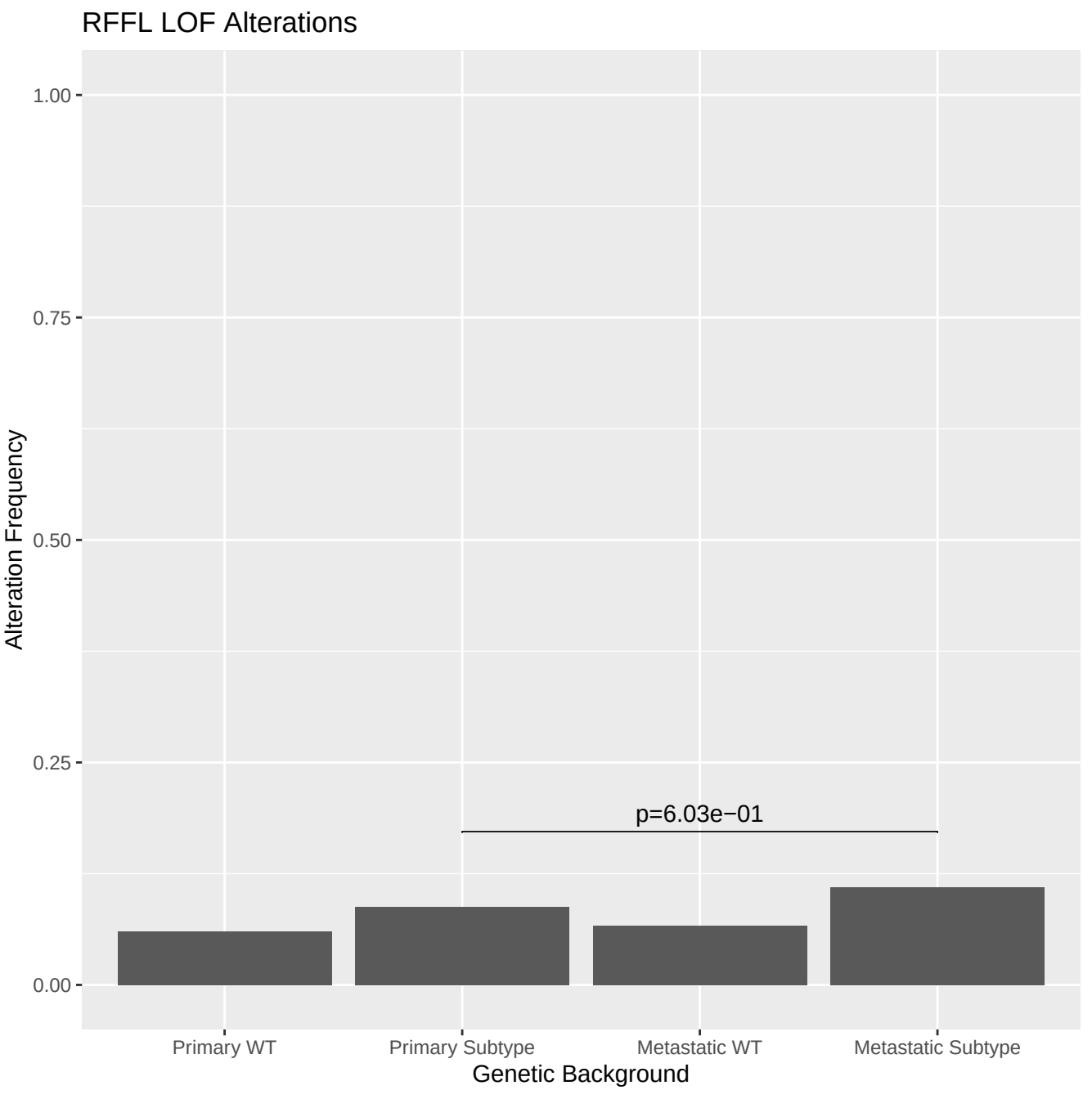

GPAA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.65e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

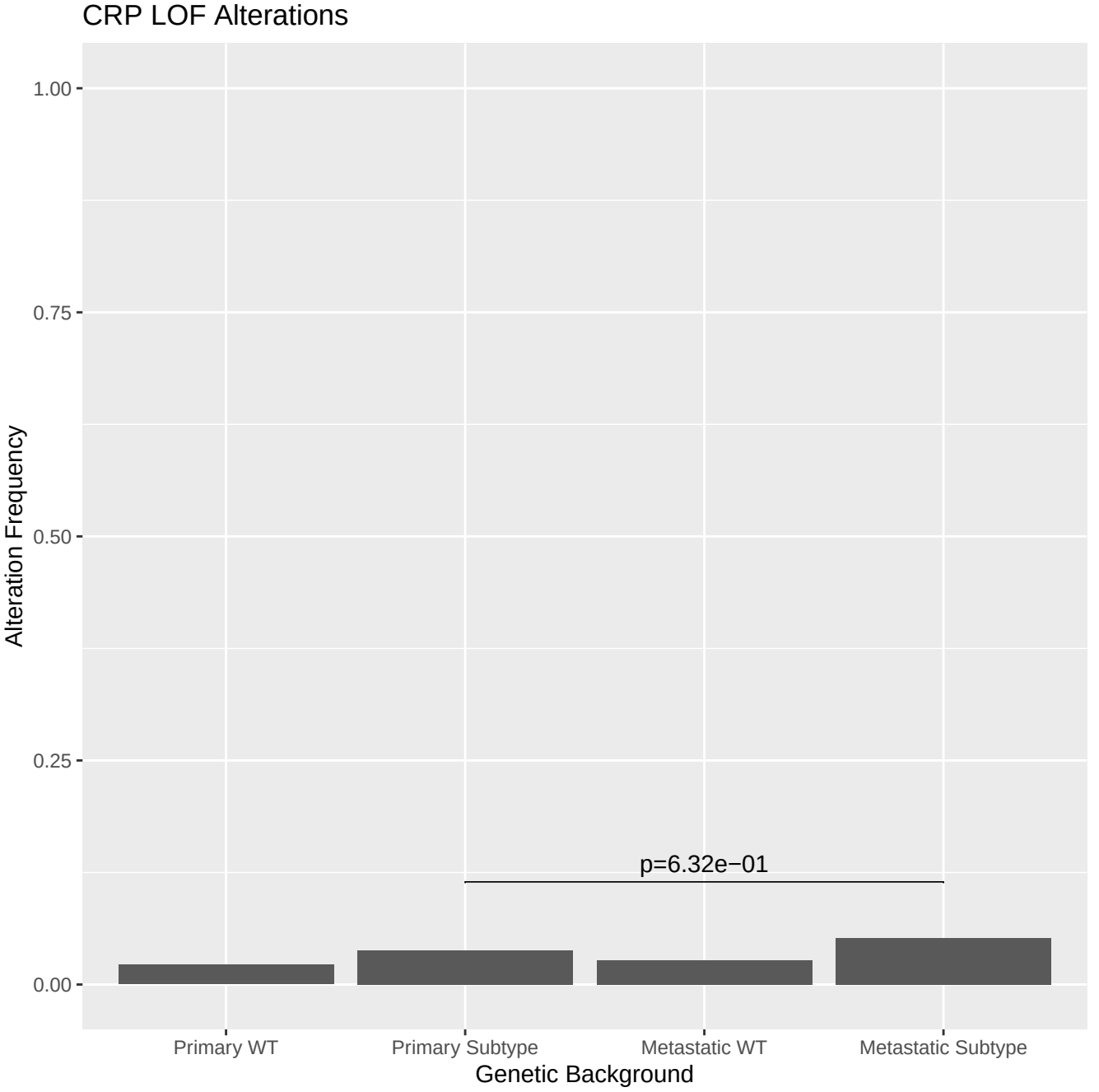

SCFD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.75e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

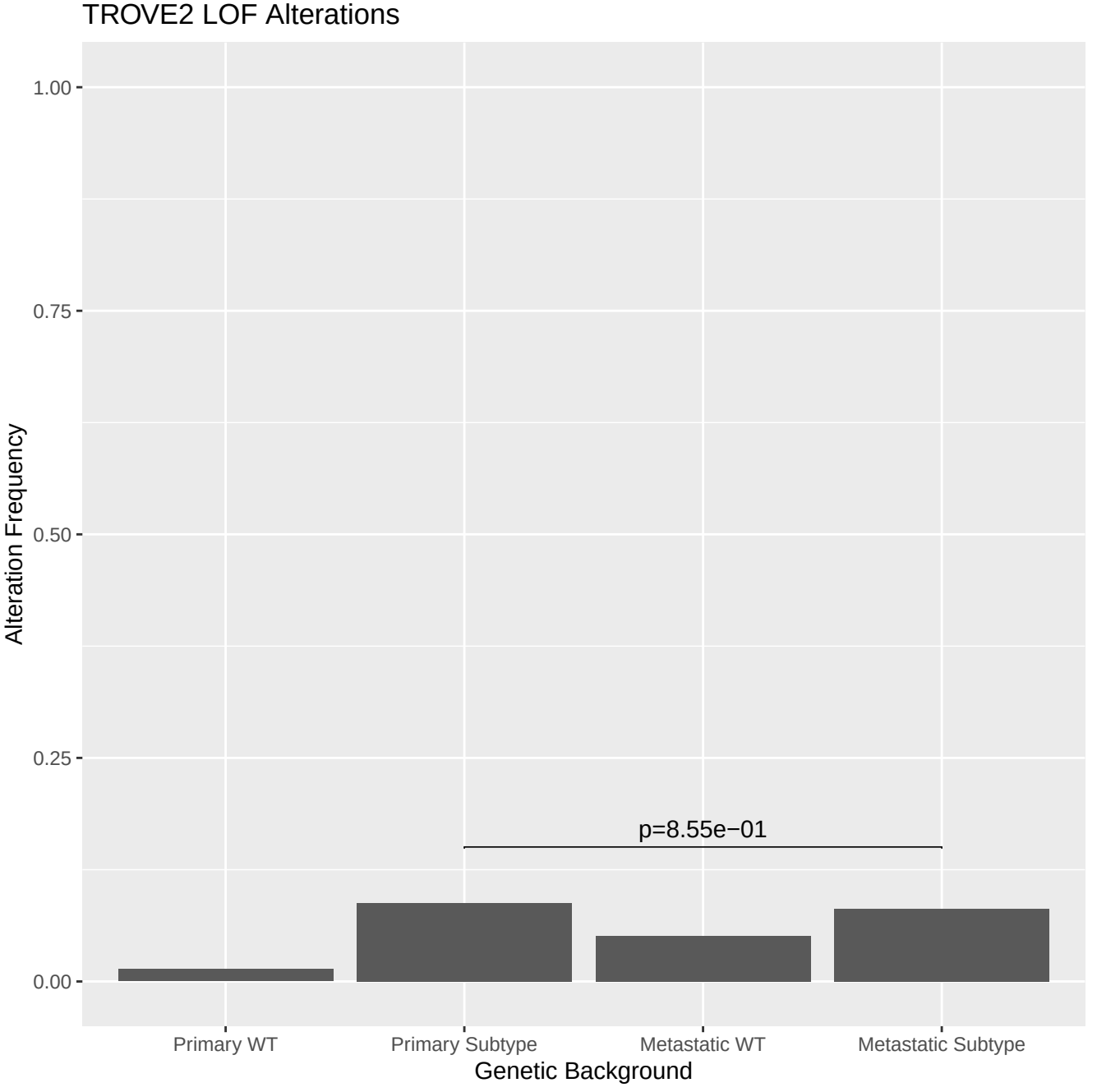

NRL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

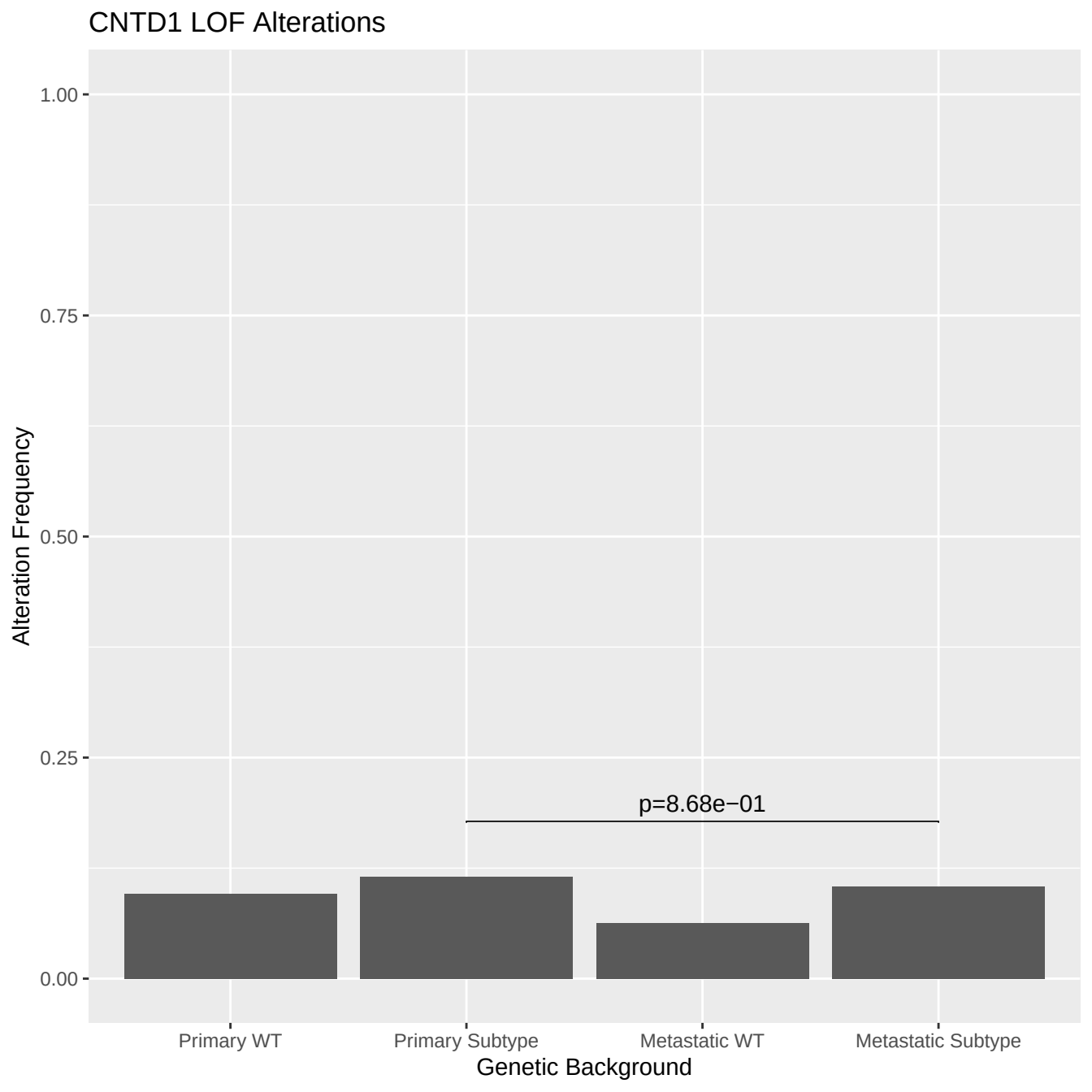

TMTC3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.09e−03
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

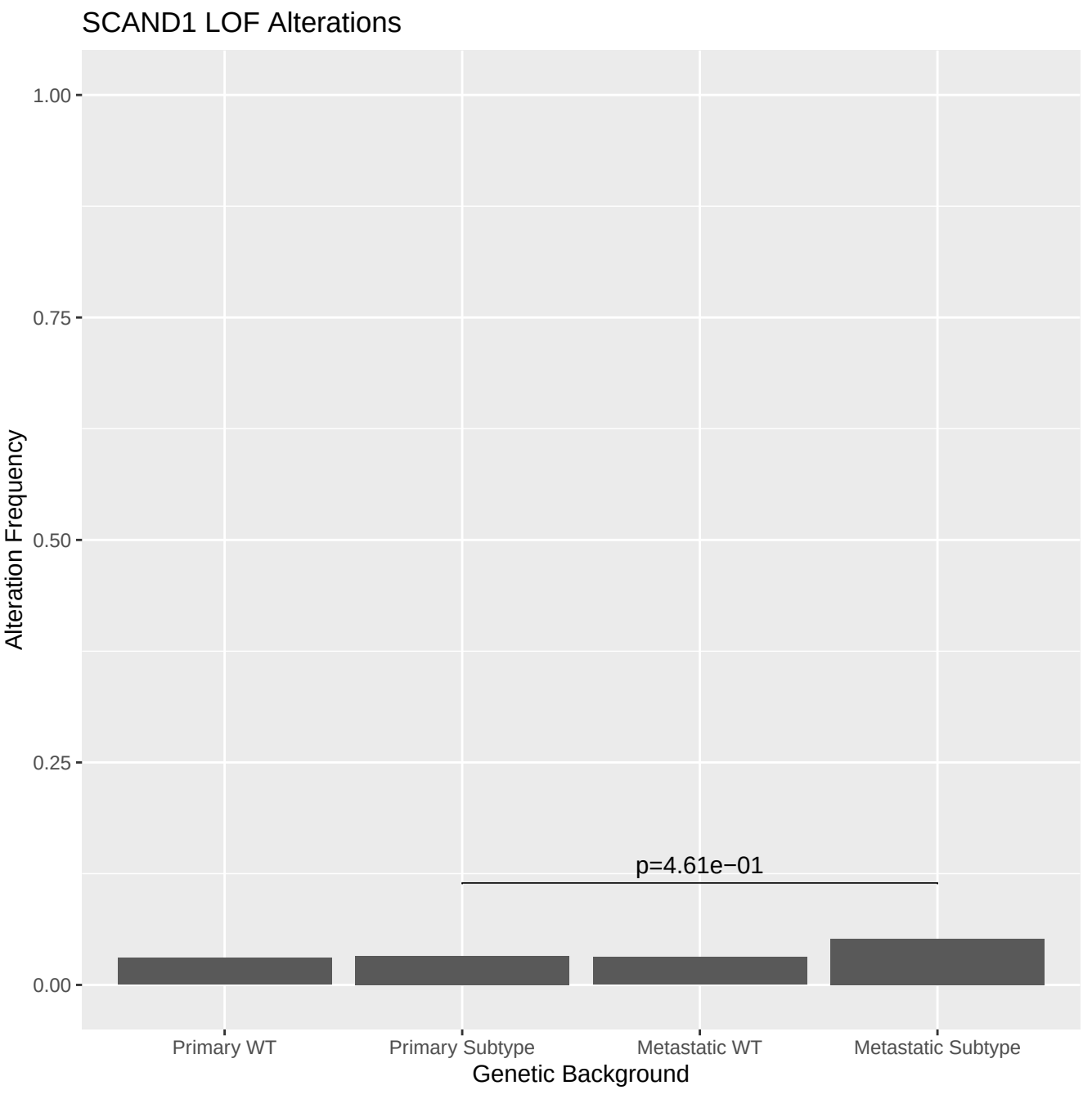

MDM2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=9.01e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

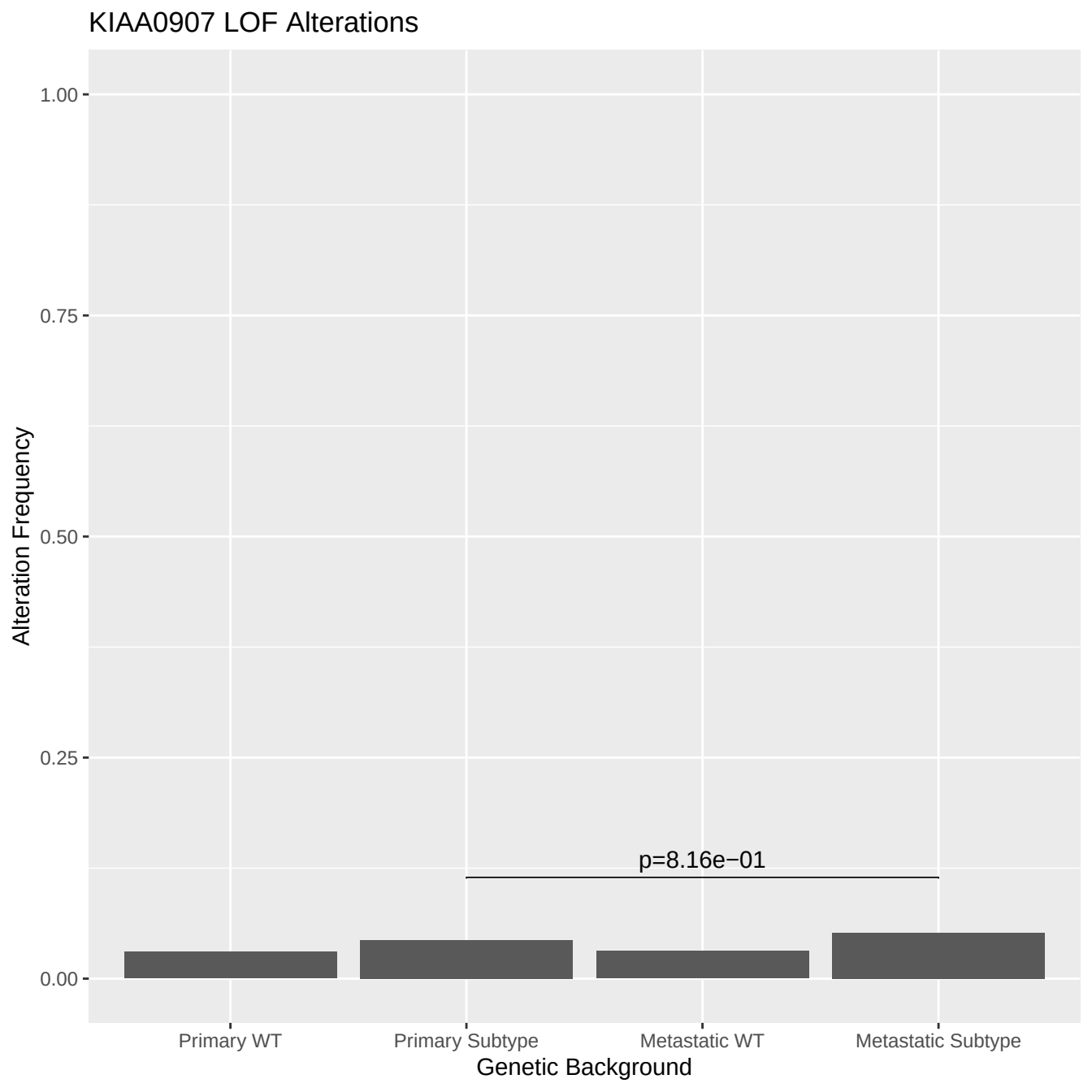

RFFL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

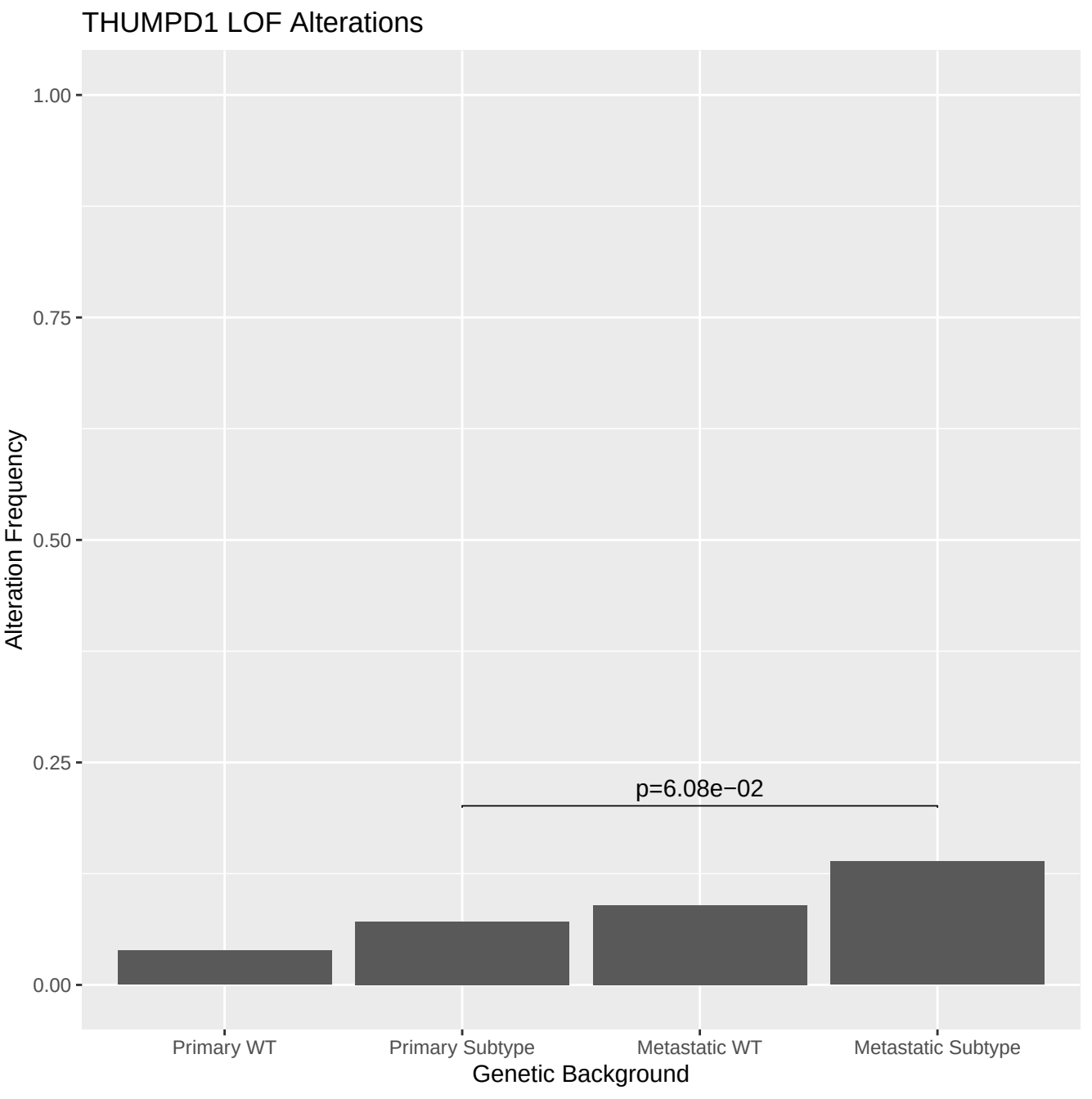

CRP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

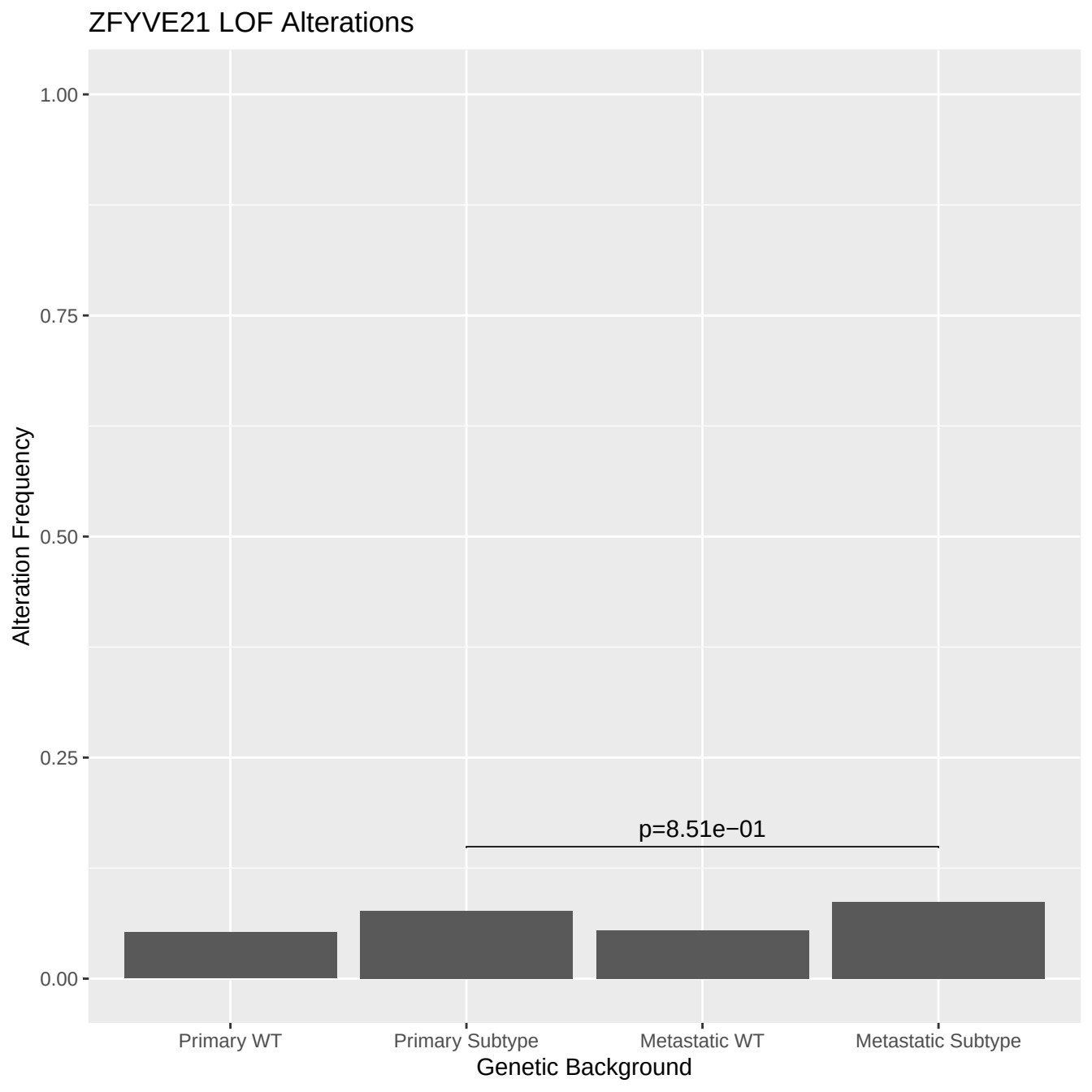

TROVE2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.55e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

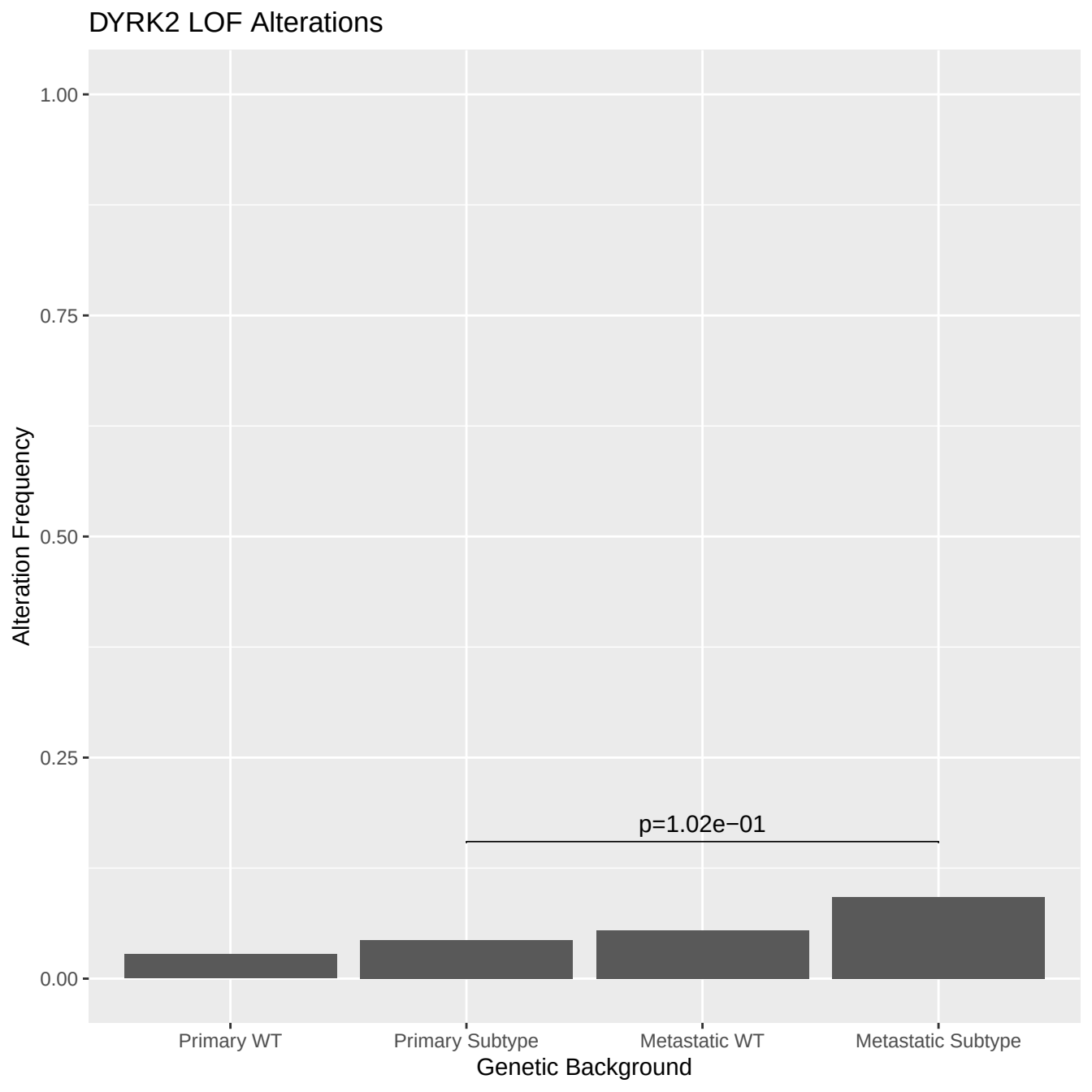

CNTD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.68e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

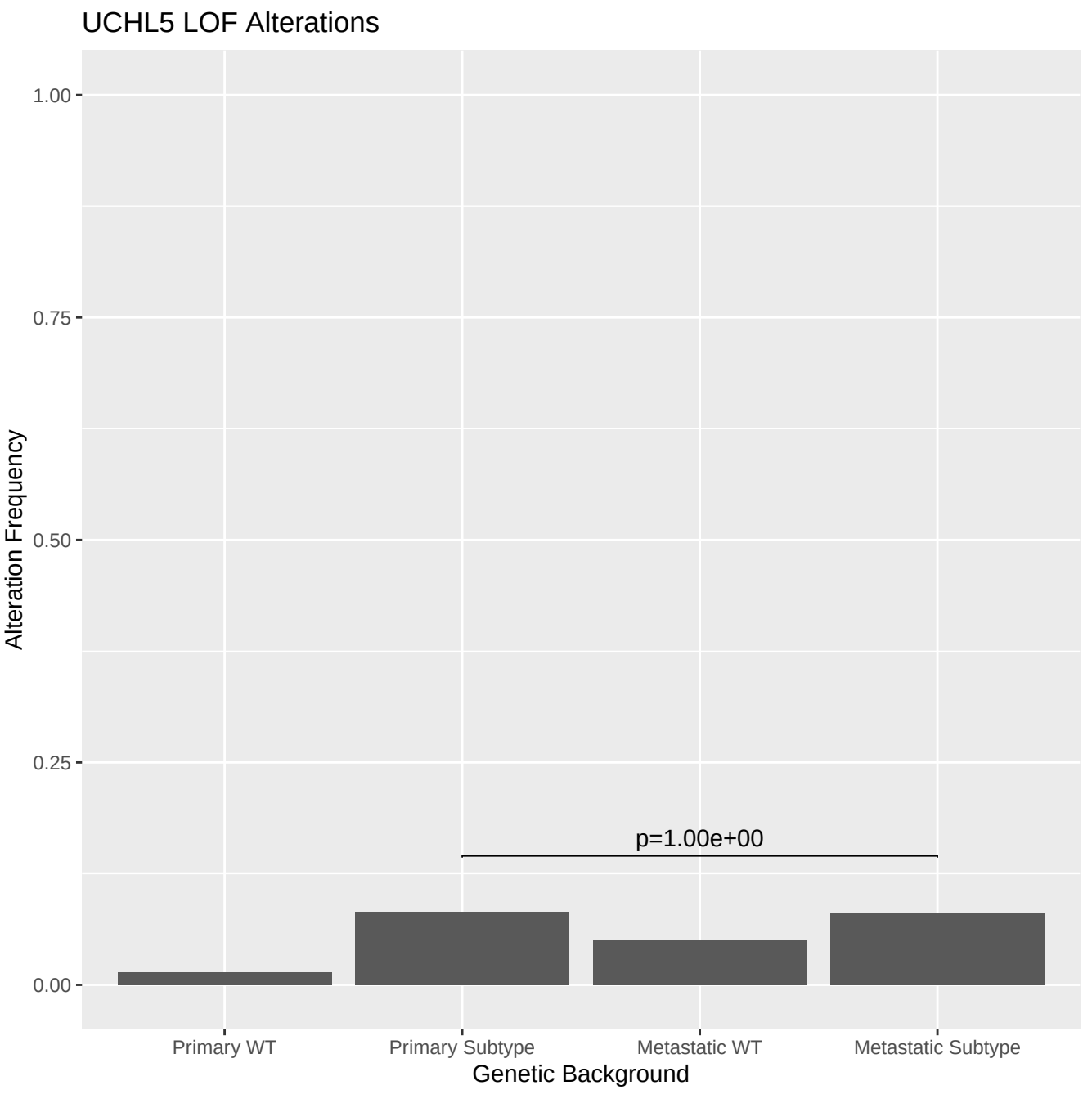

SCAND1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.61e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

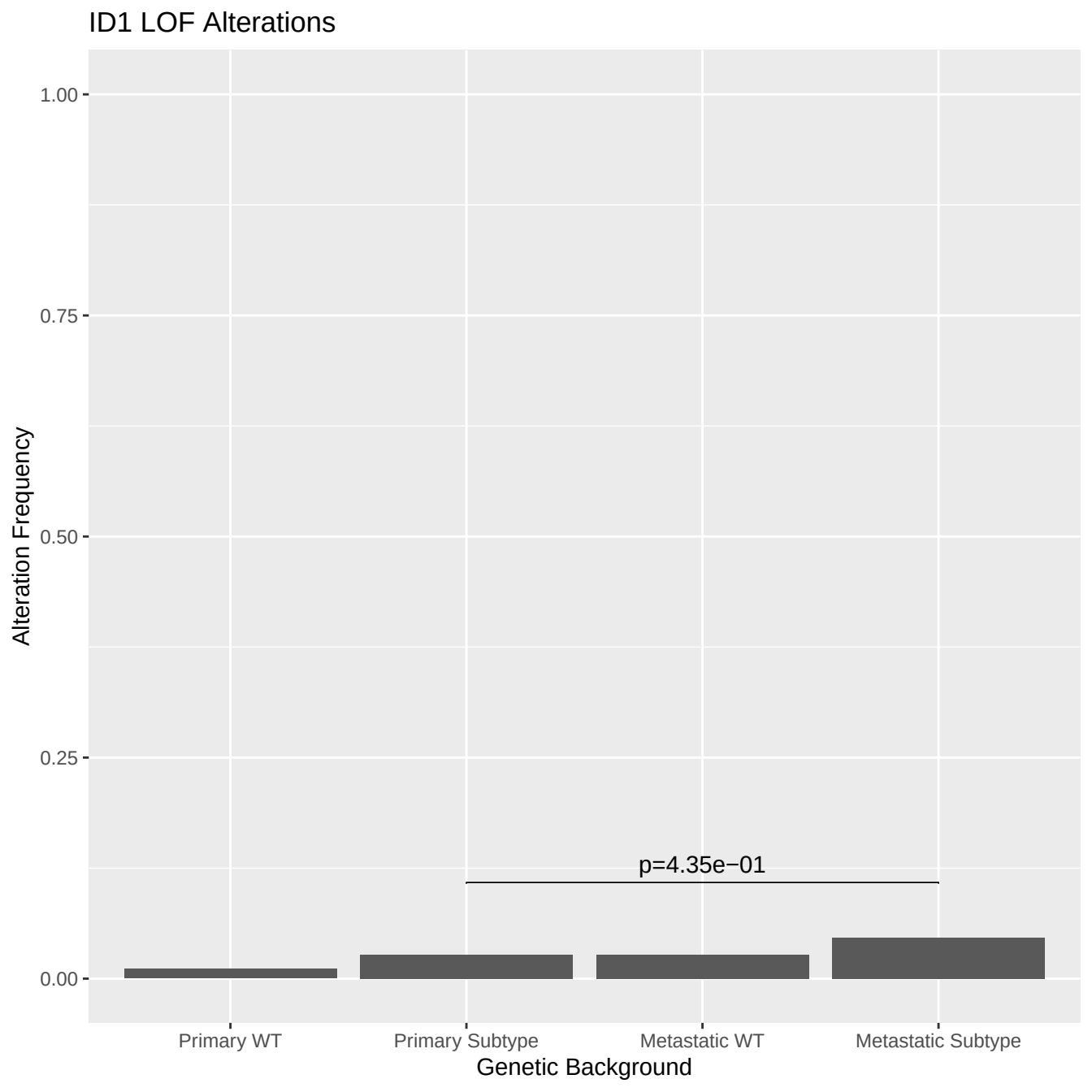

KIAA0907 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.16e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

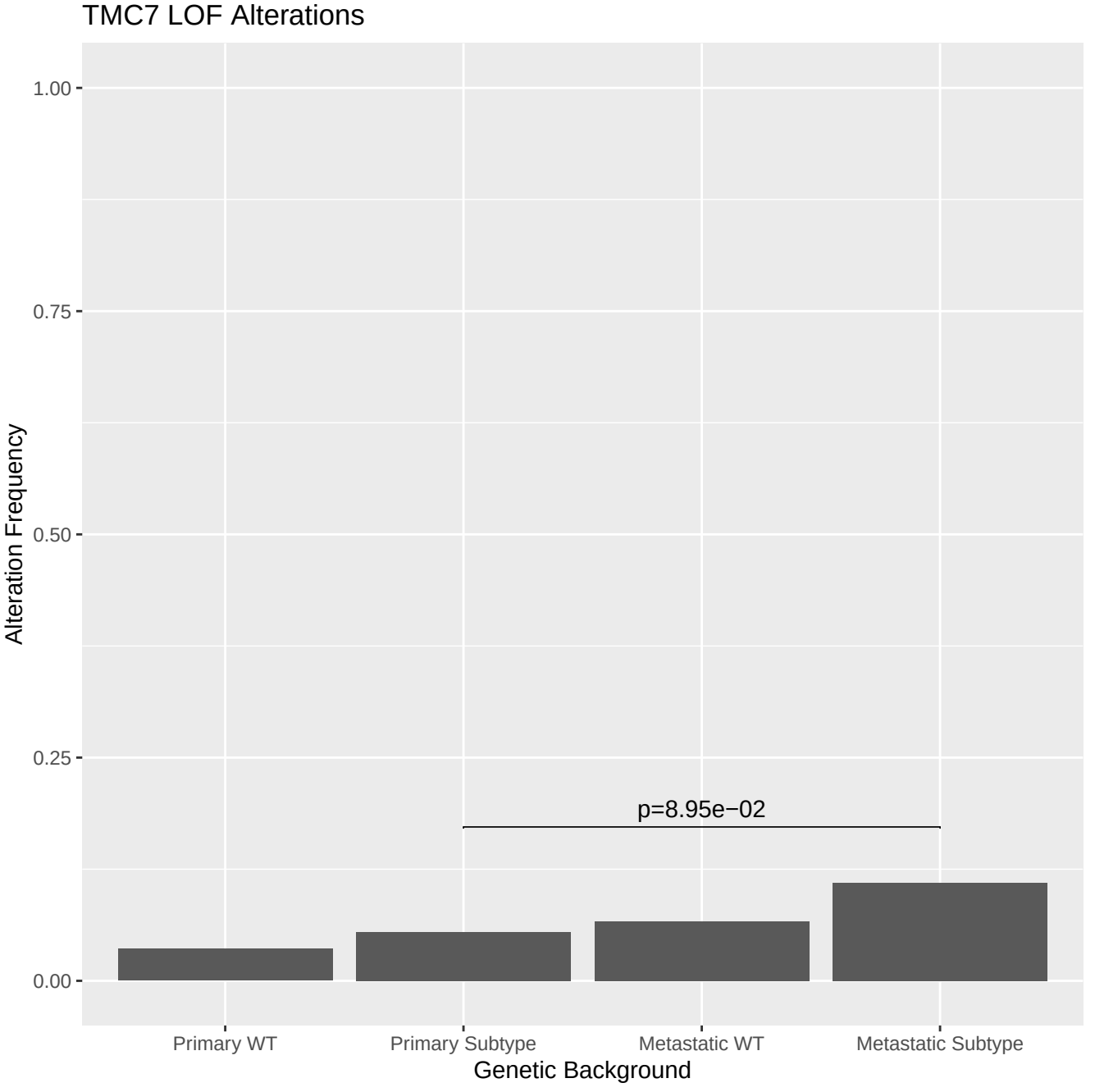

THUMPD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.08e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

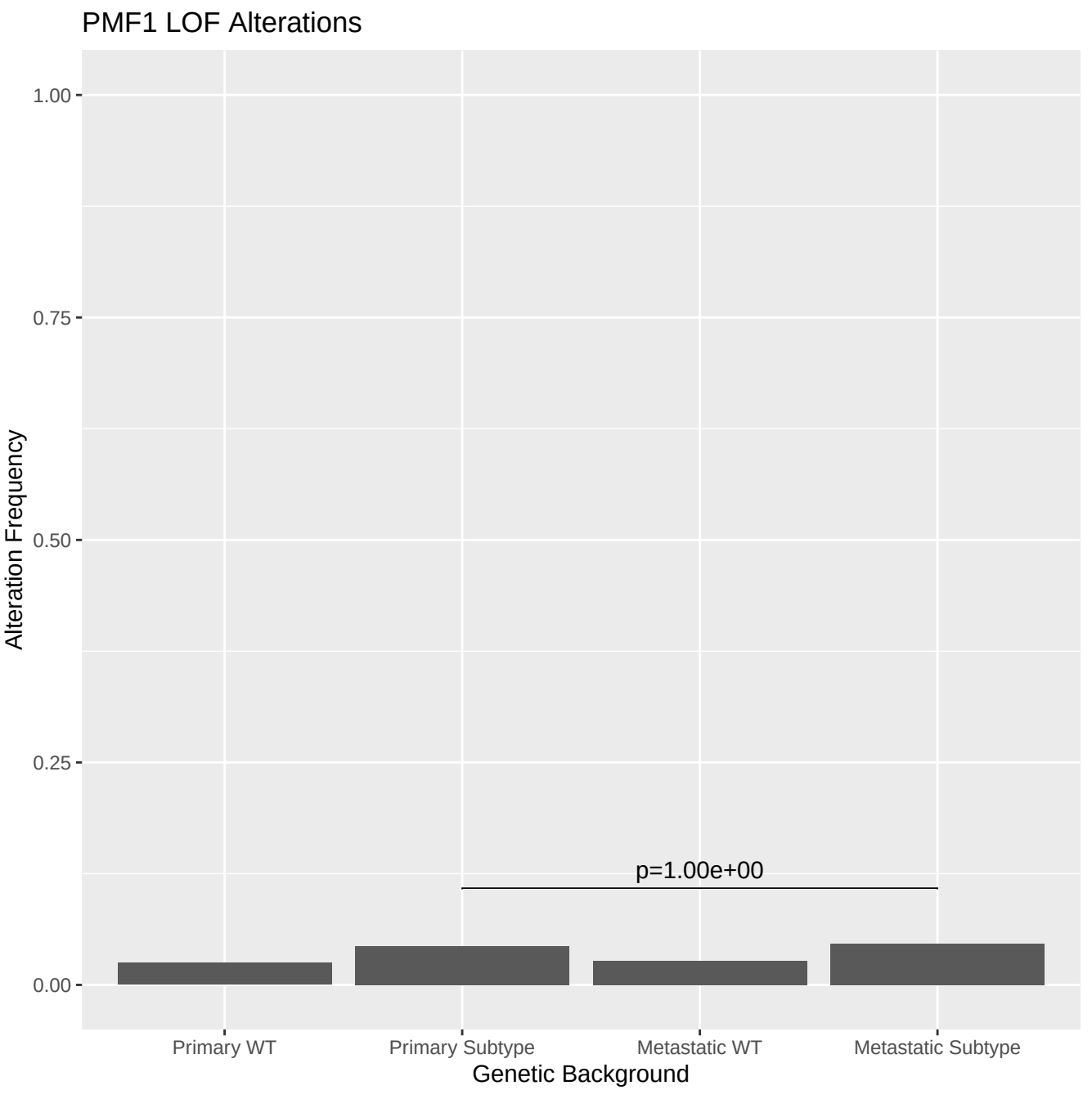

ZFYVE21 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

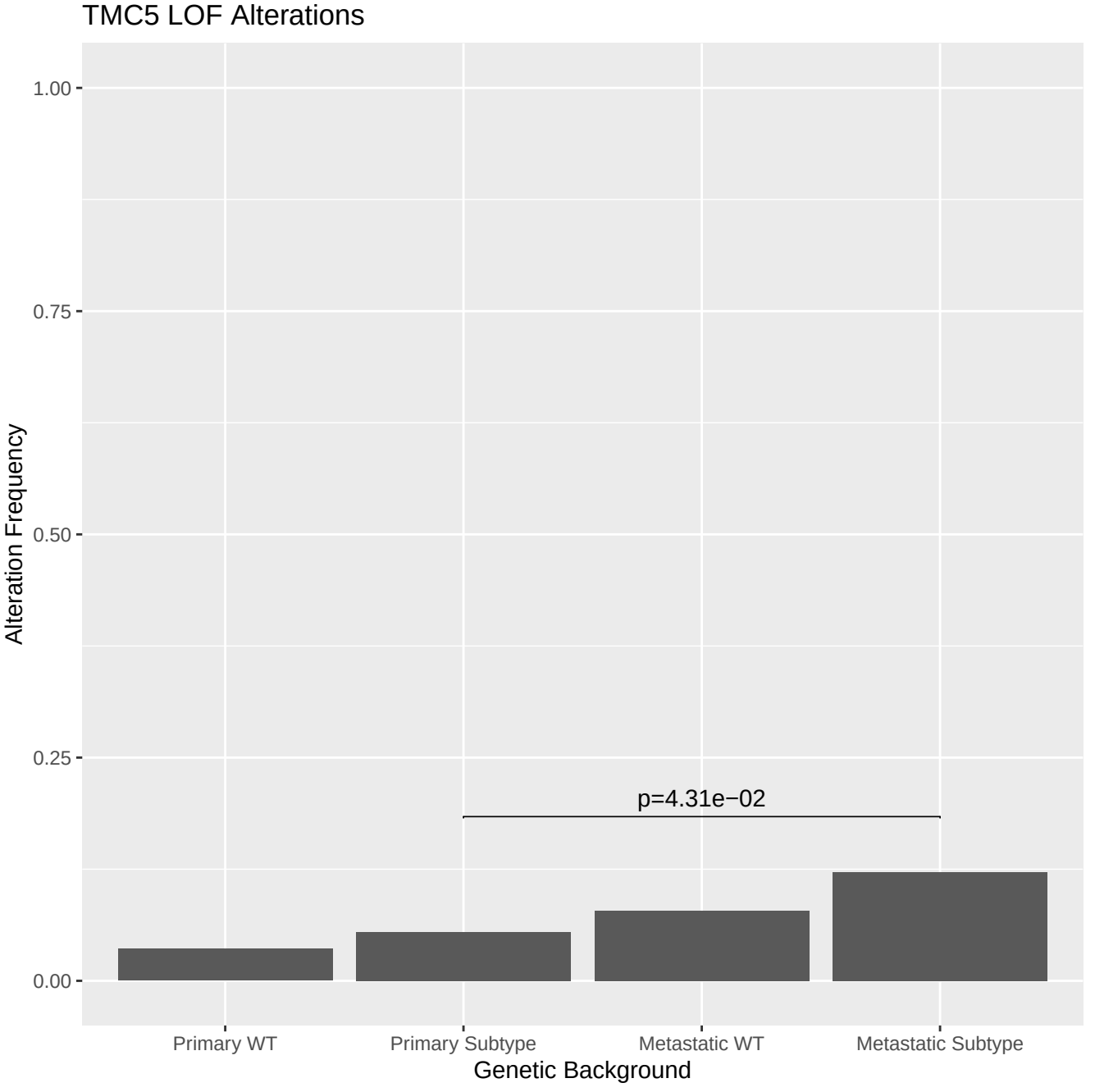

DYRK2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.02e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

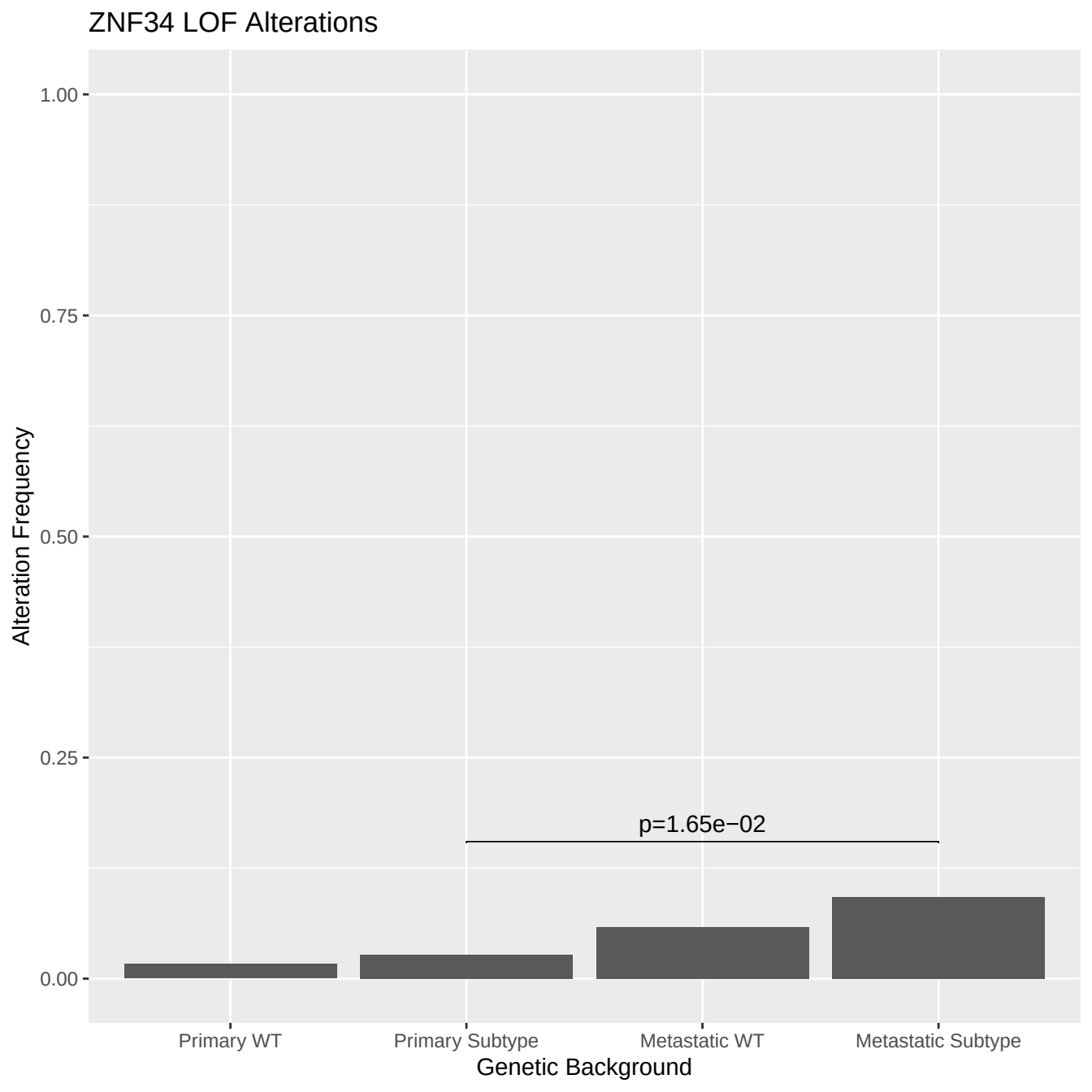

UCHL5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

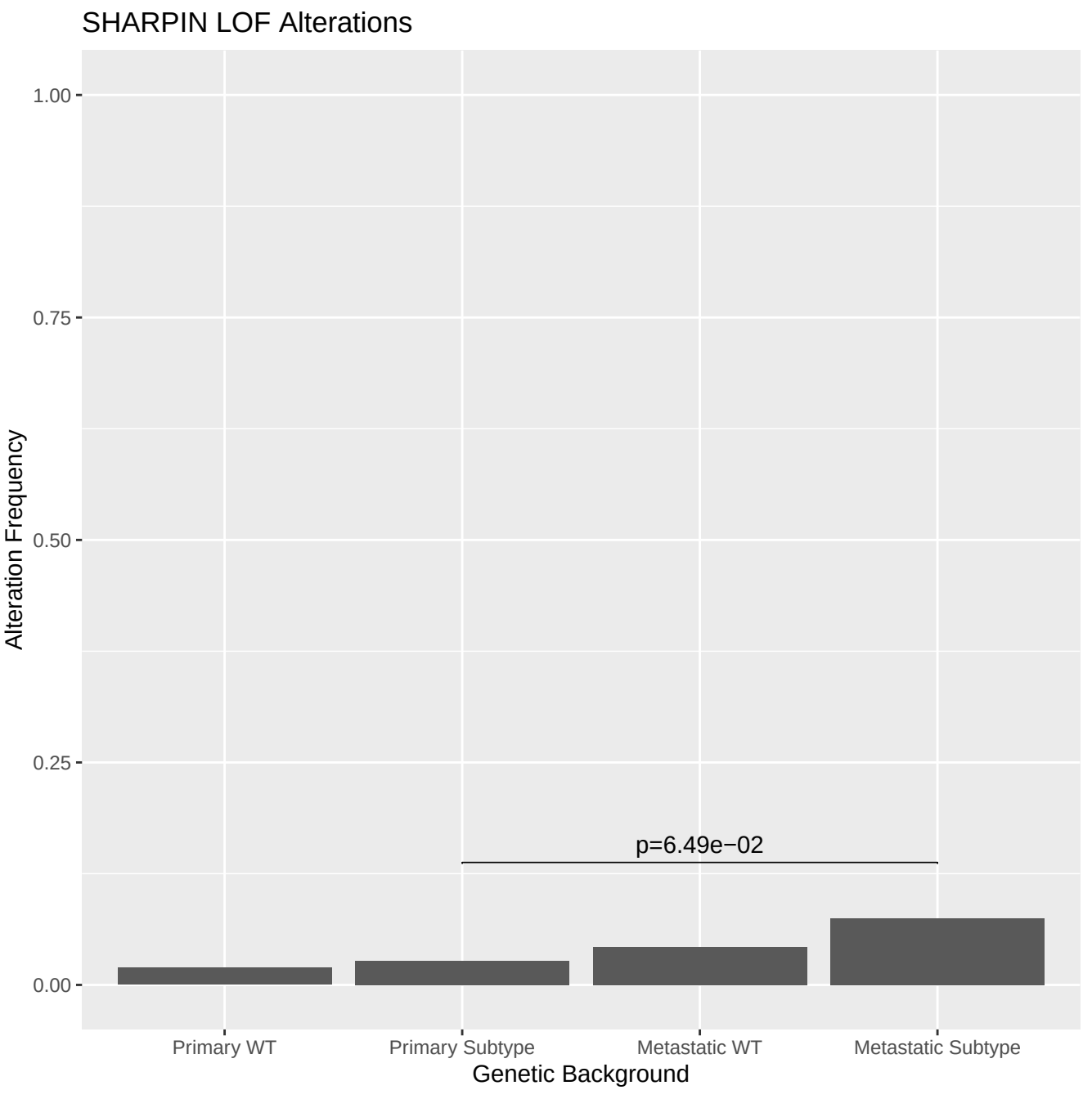

ID1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

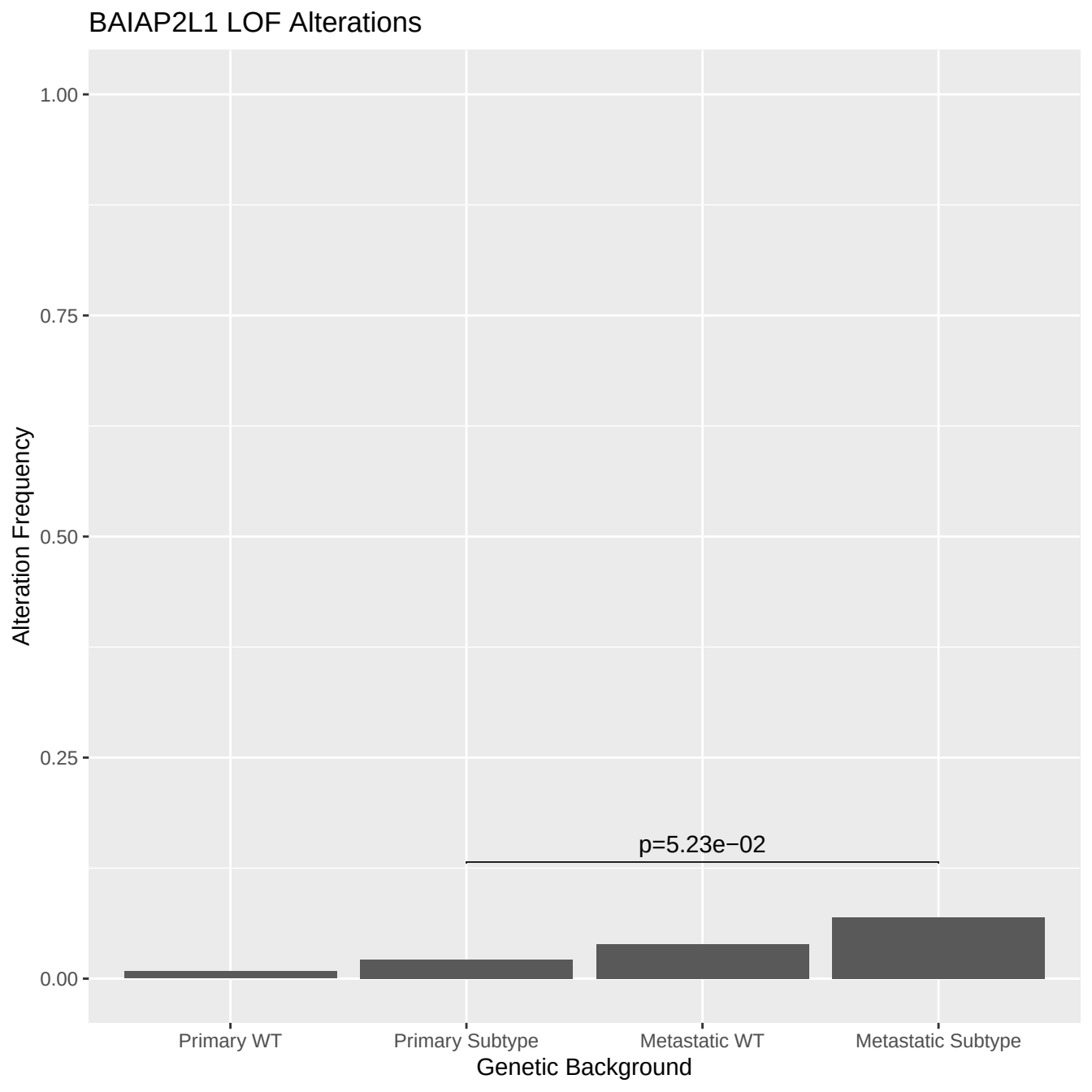

TMC7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.95e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

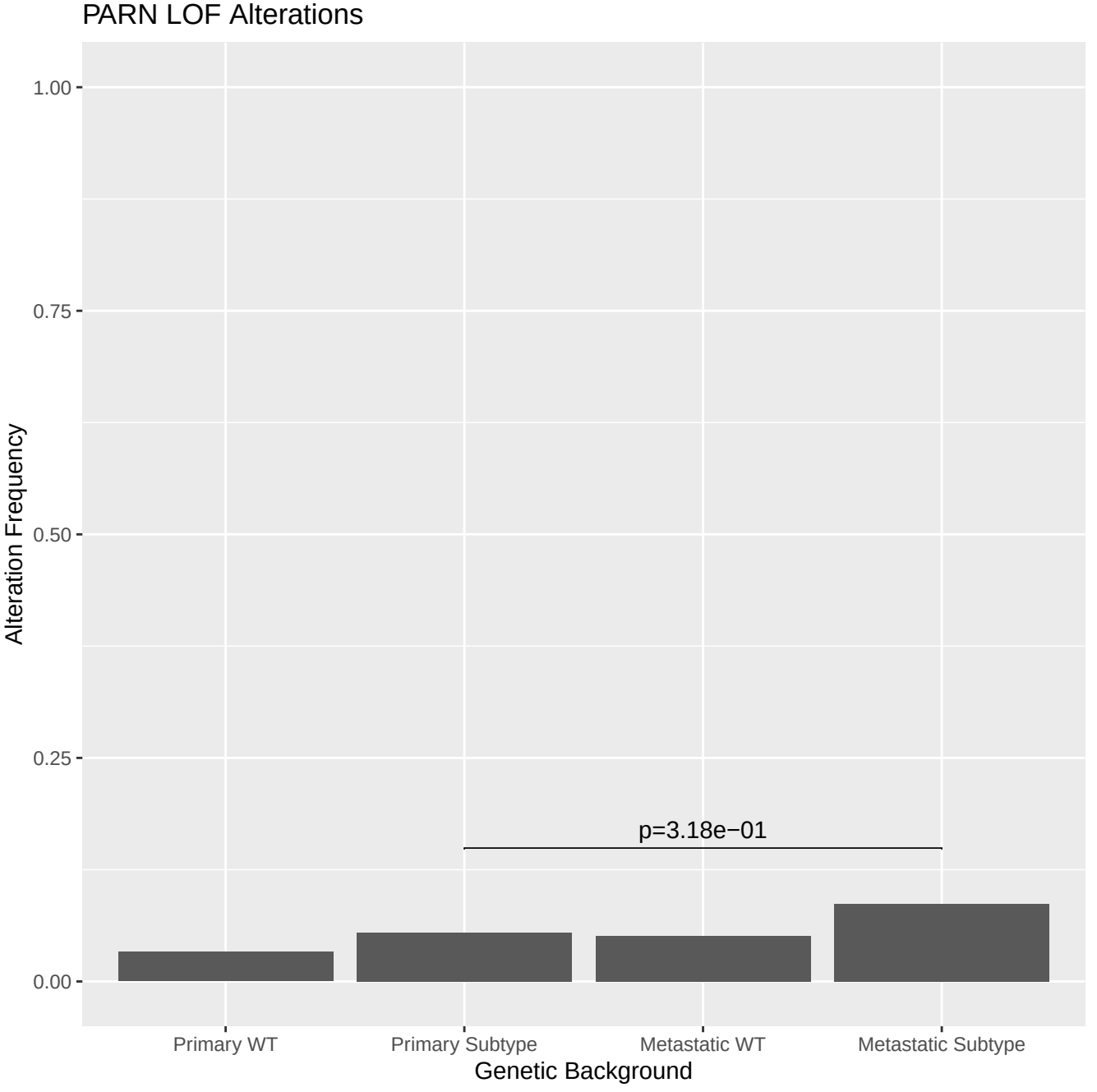

PMF1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

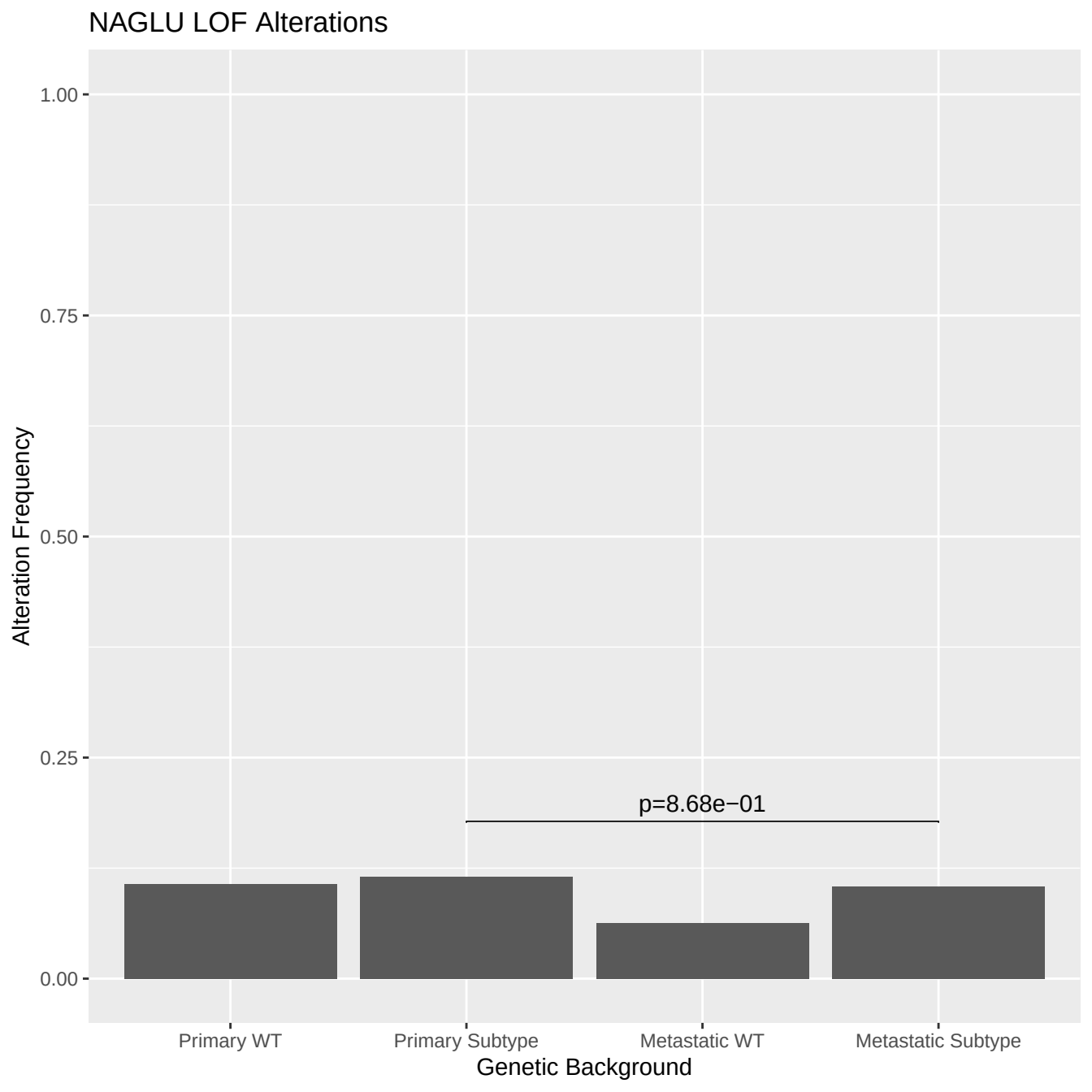

TMC5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.31e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

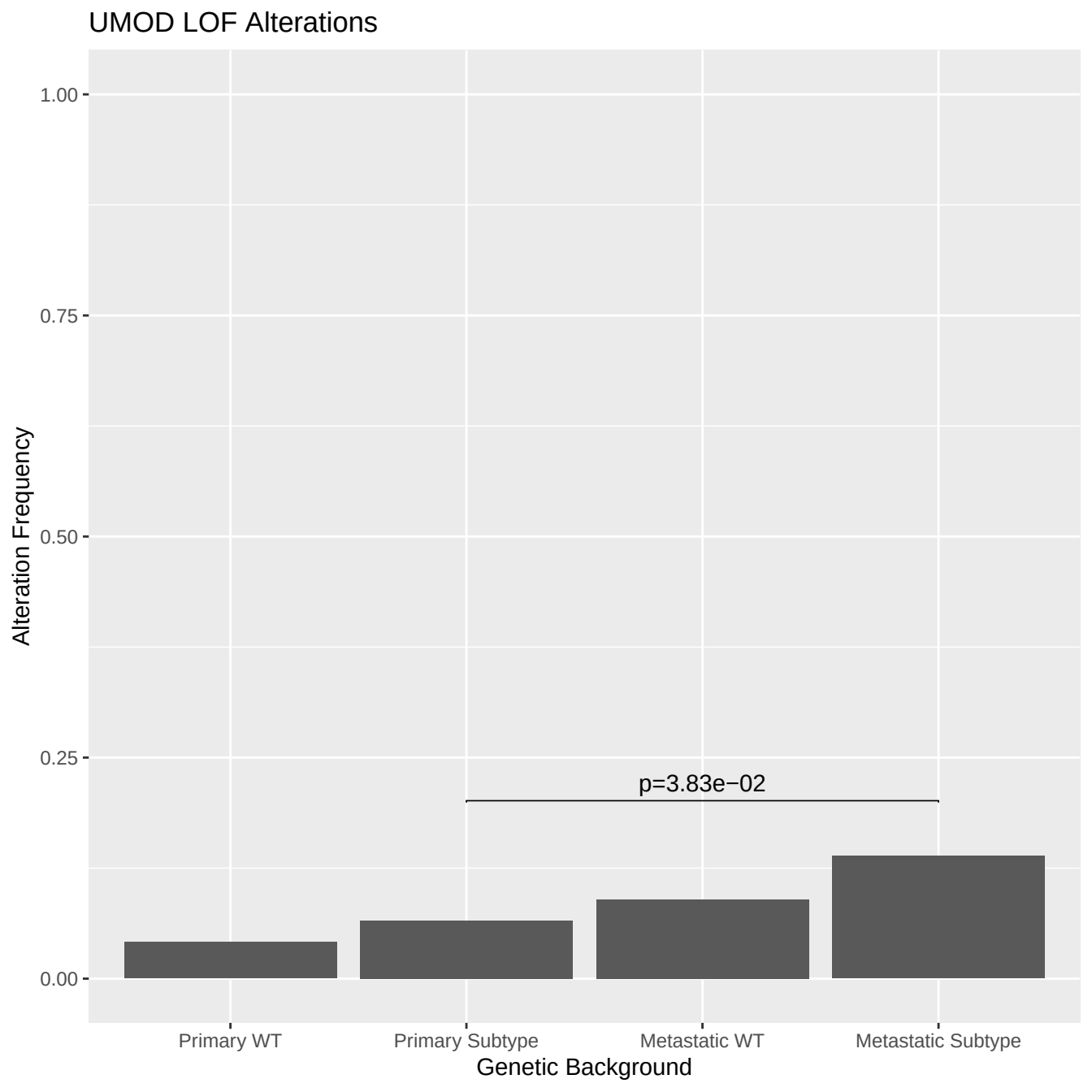

ZNF34 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.65e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

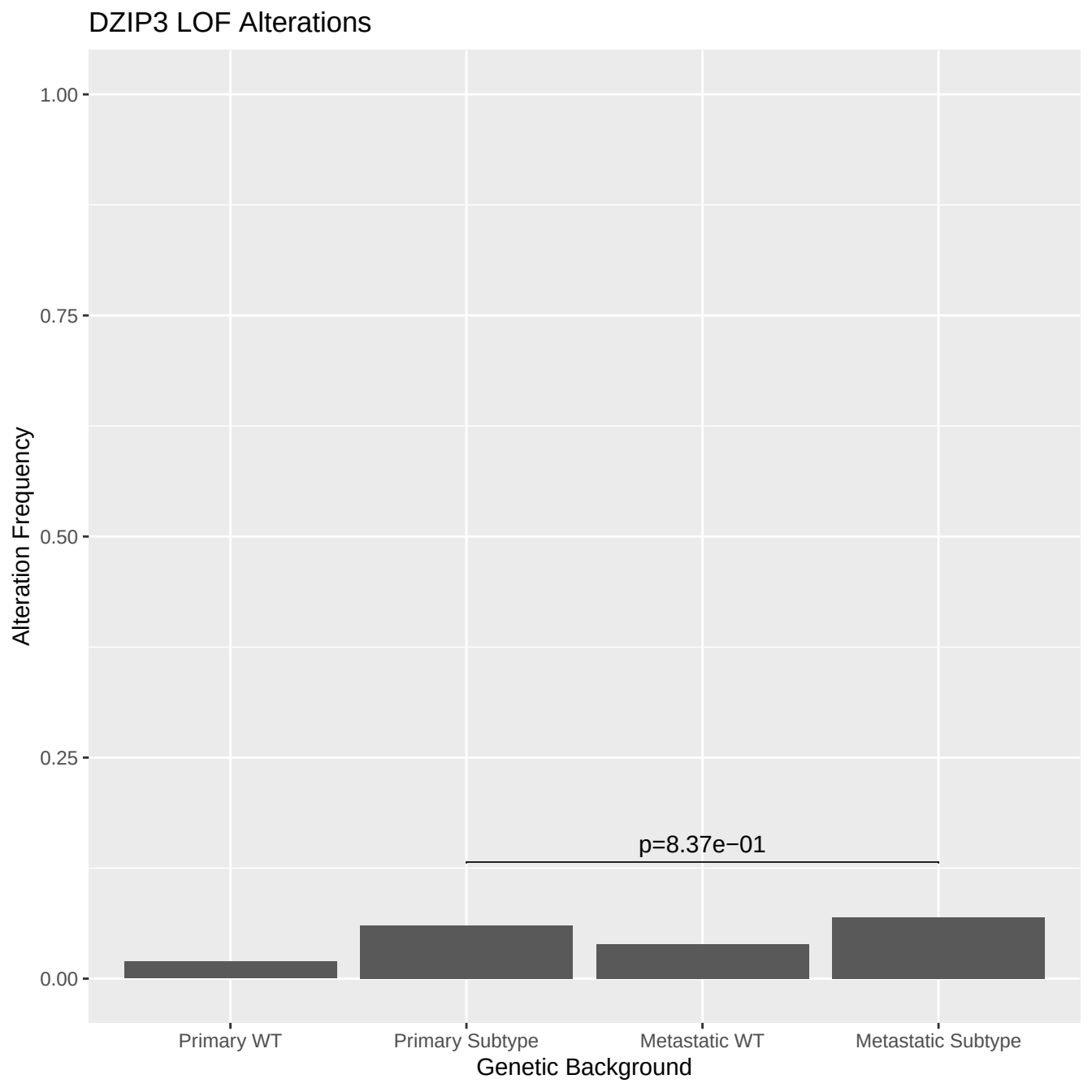

SHARPIN LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

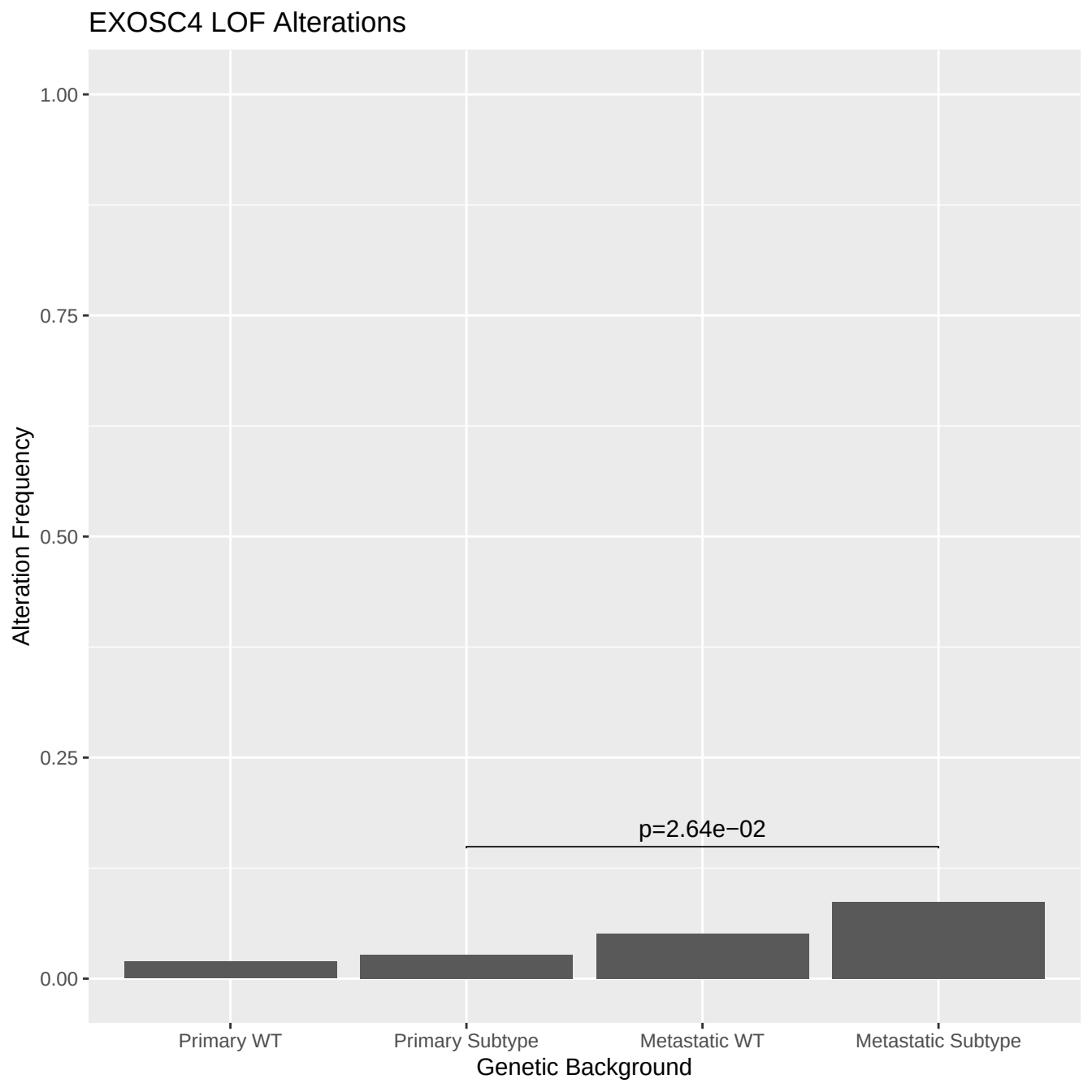

BAIAP2L1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.23e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

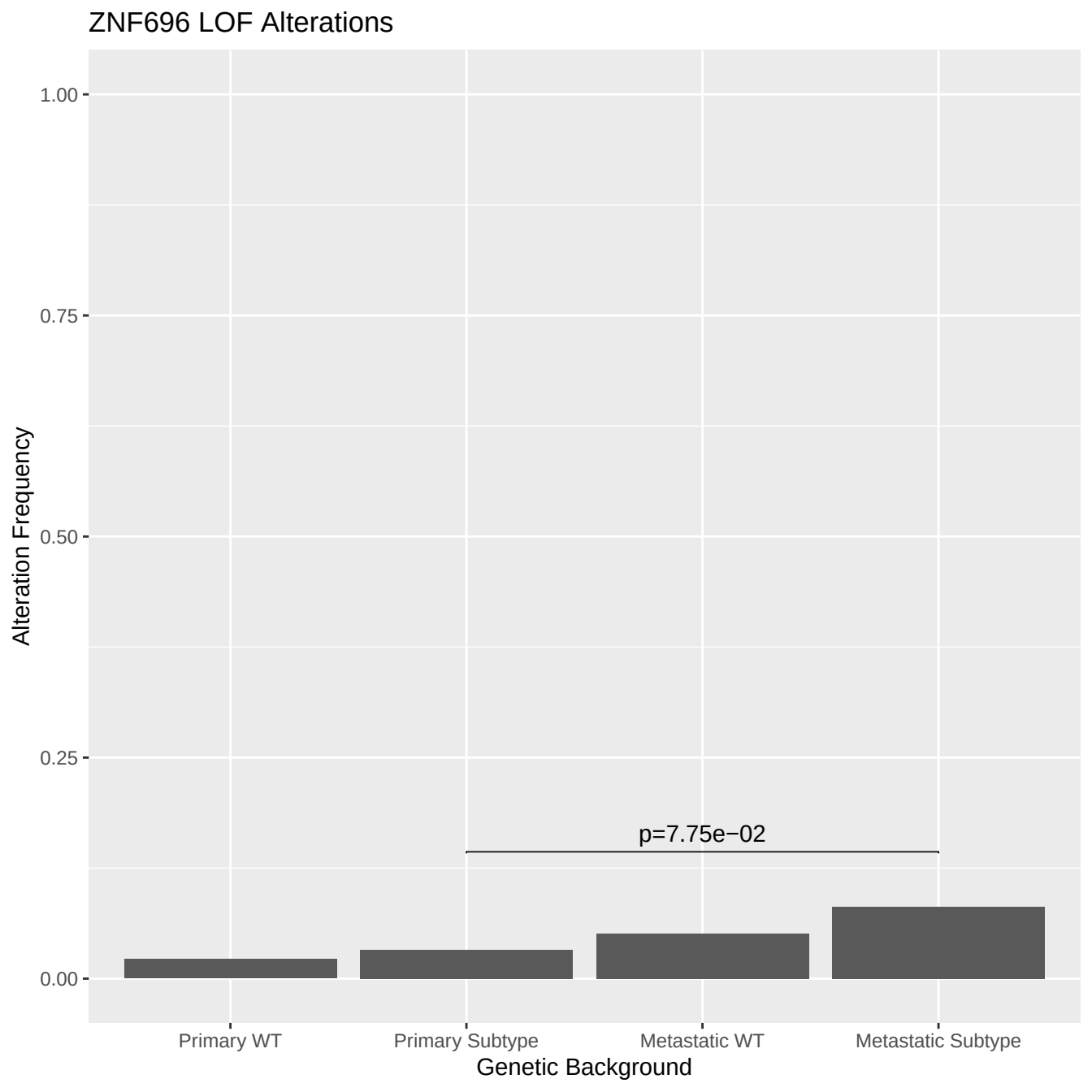

PARN LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

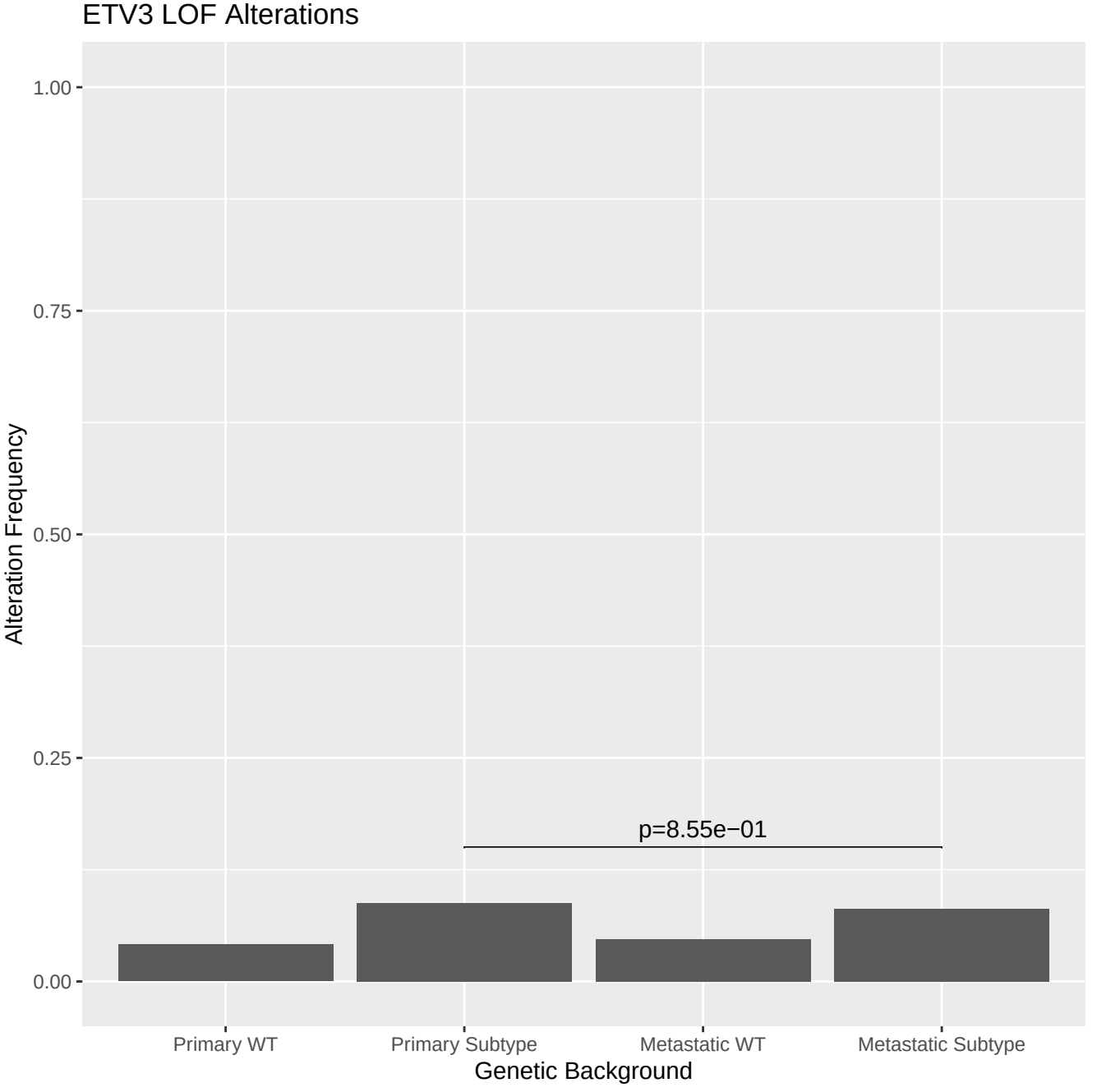

NAGLU LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.68e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

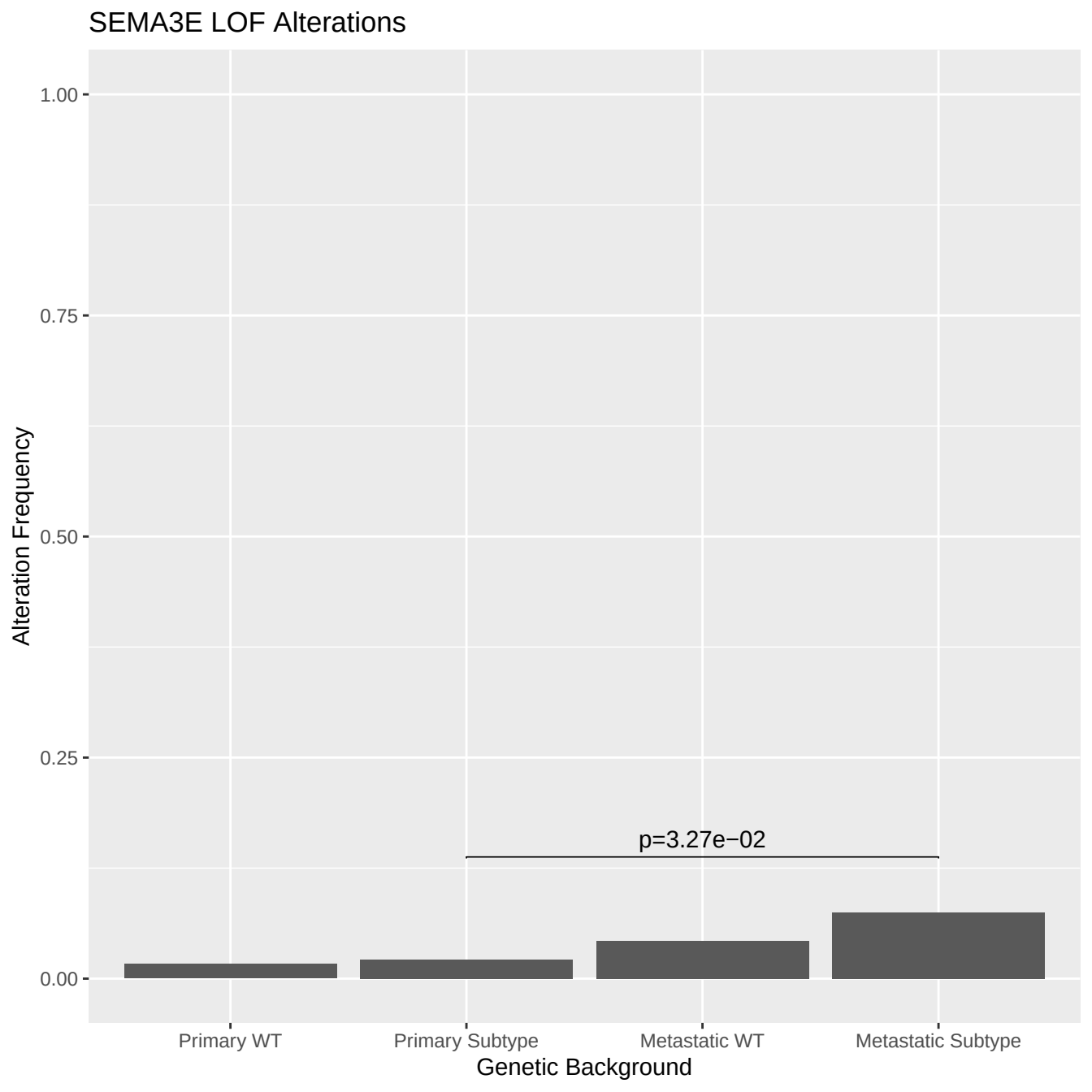

UMOD LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.83e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

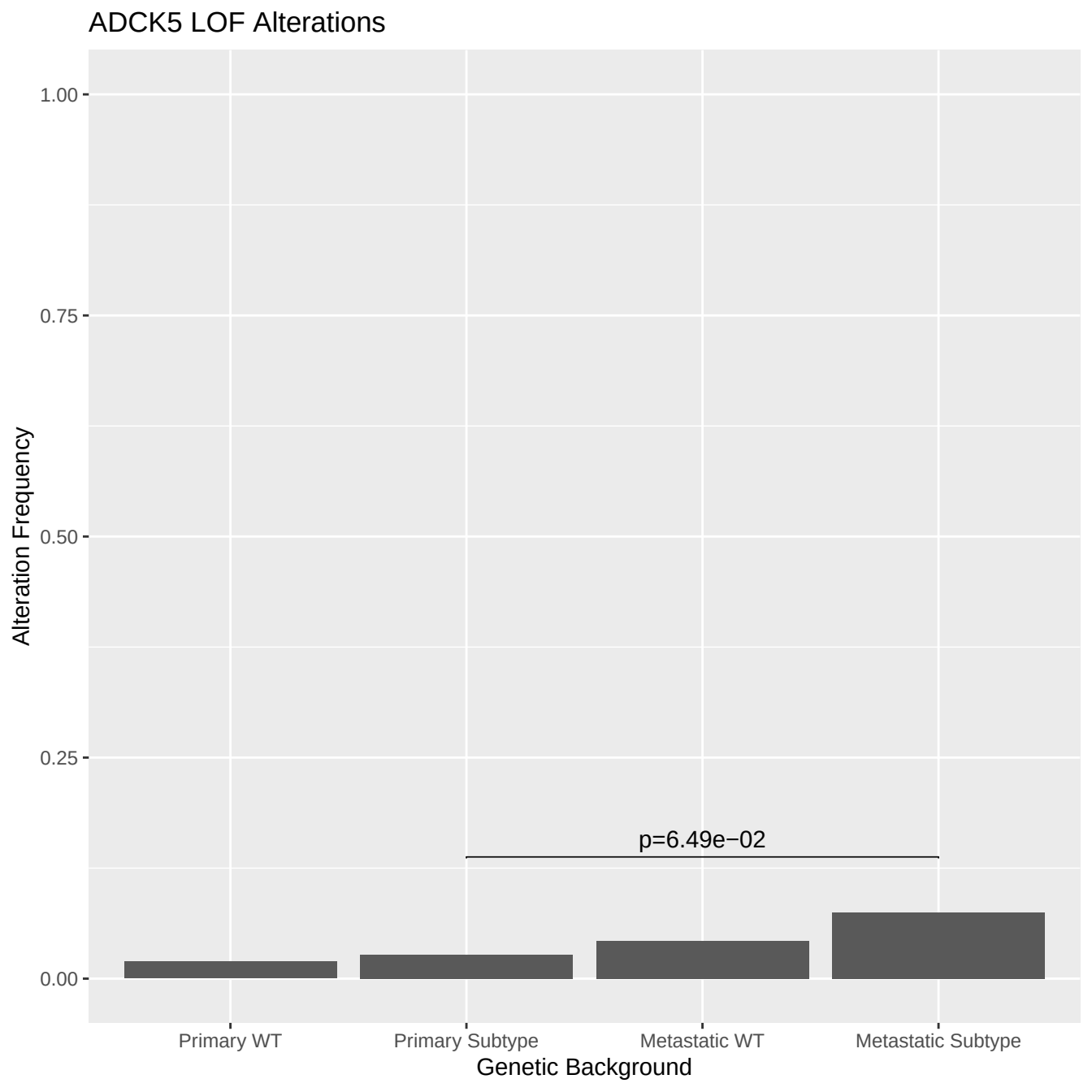

DZIP3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

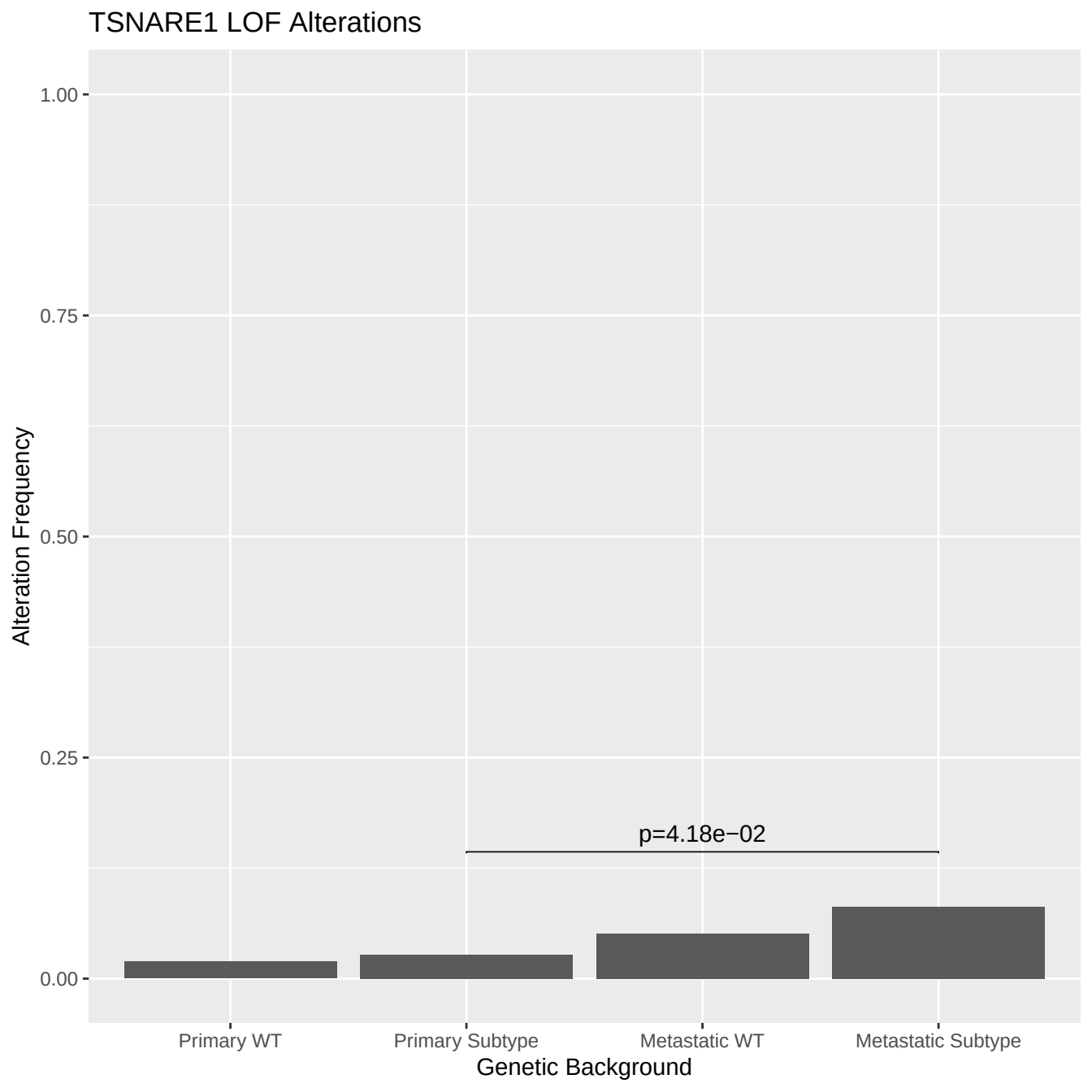

EXOSC4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

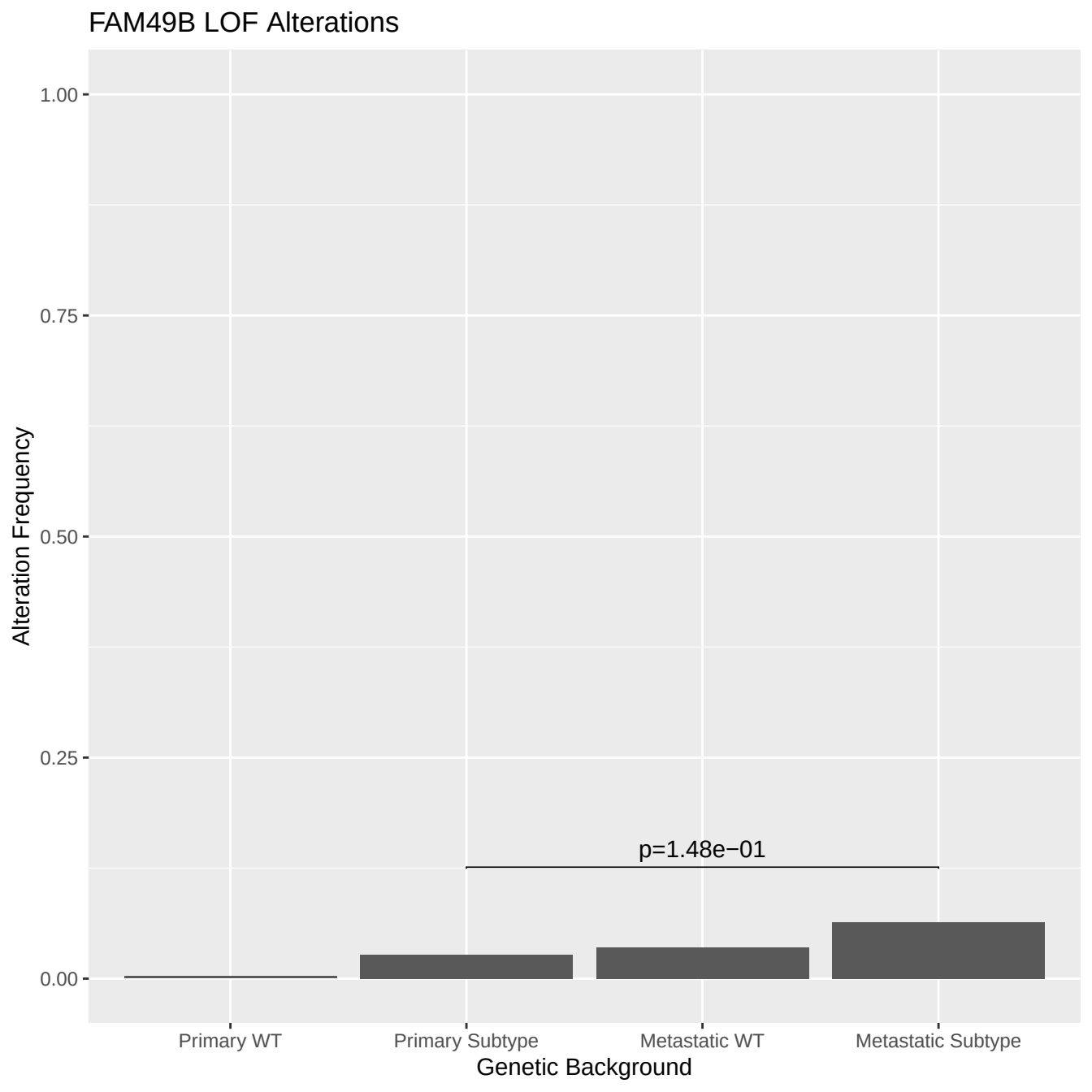

ZNF696 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.75e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

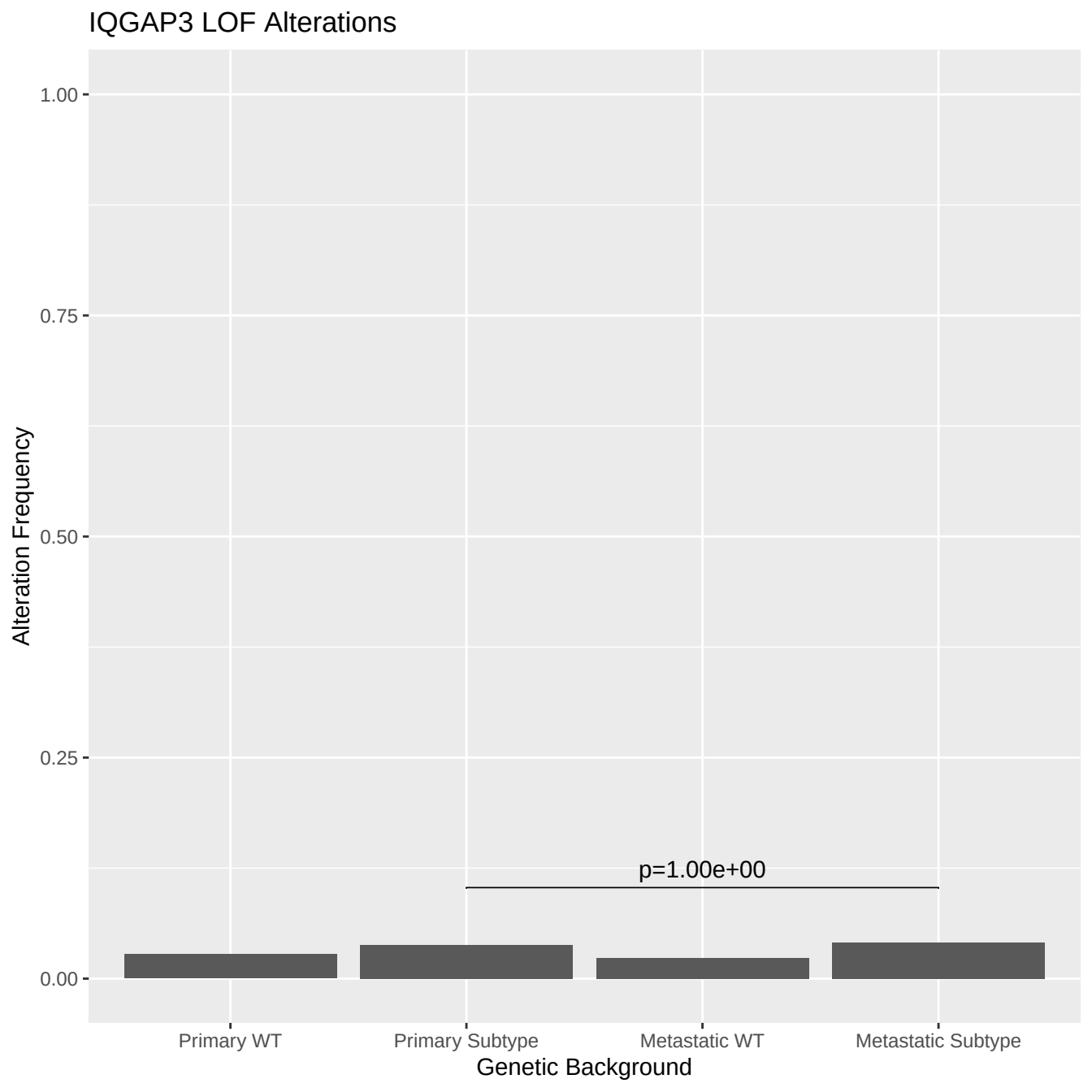

ETV3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.55e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

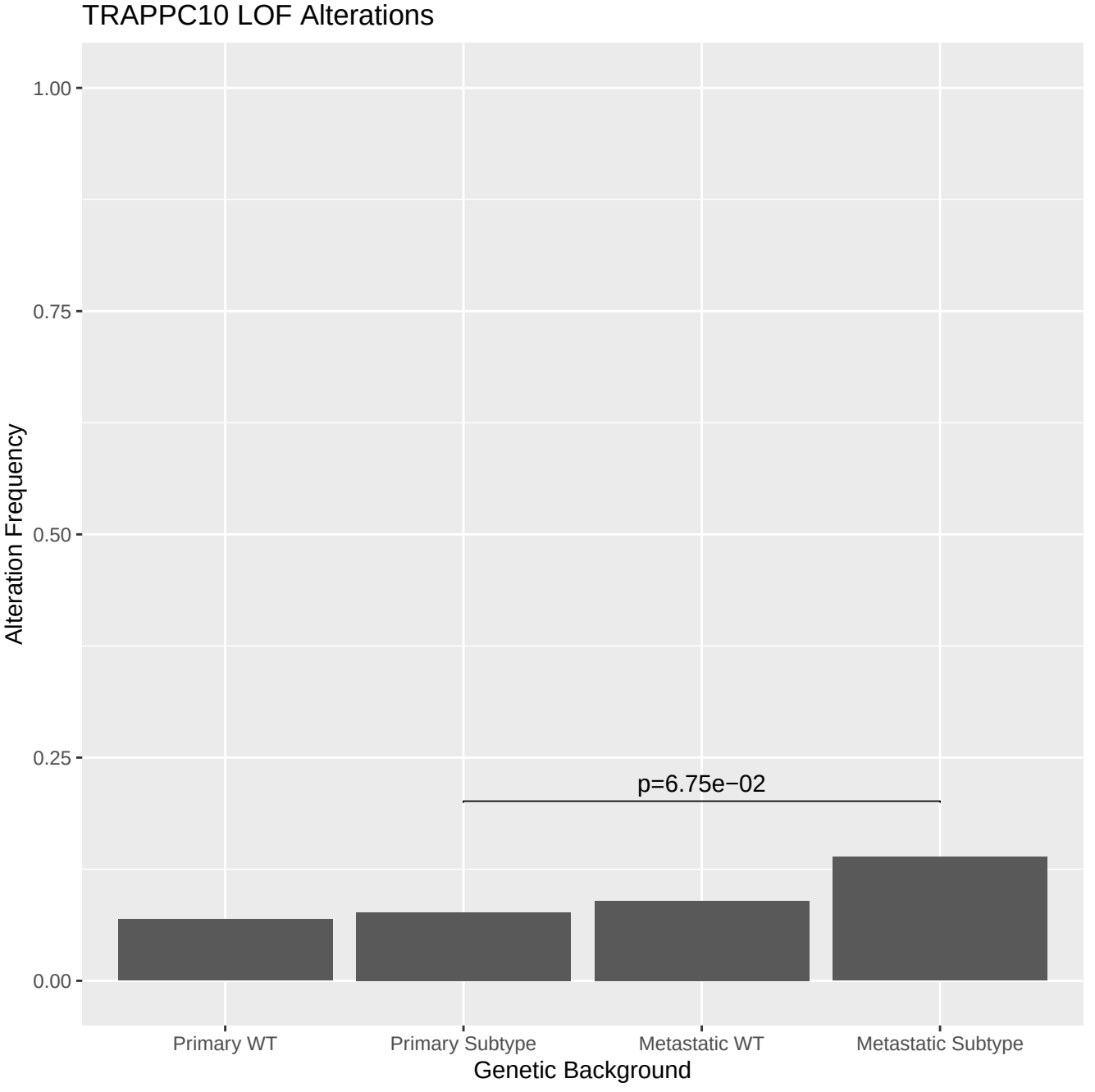

SEMA3E LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.27e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

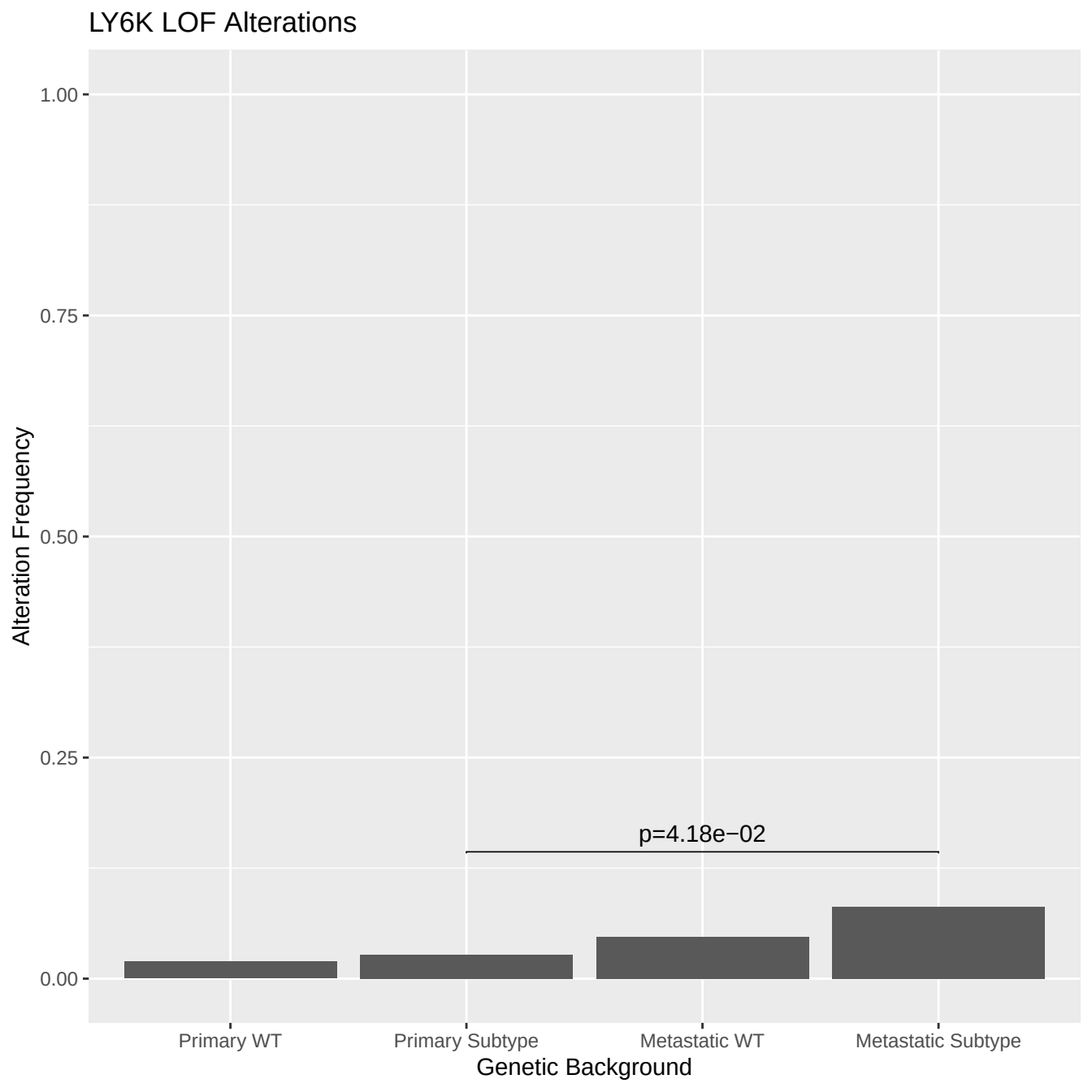

ADCK5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

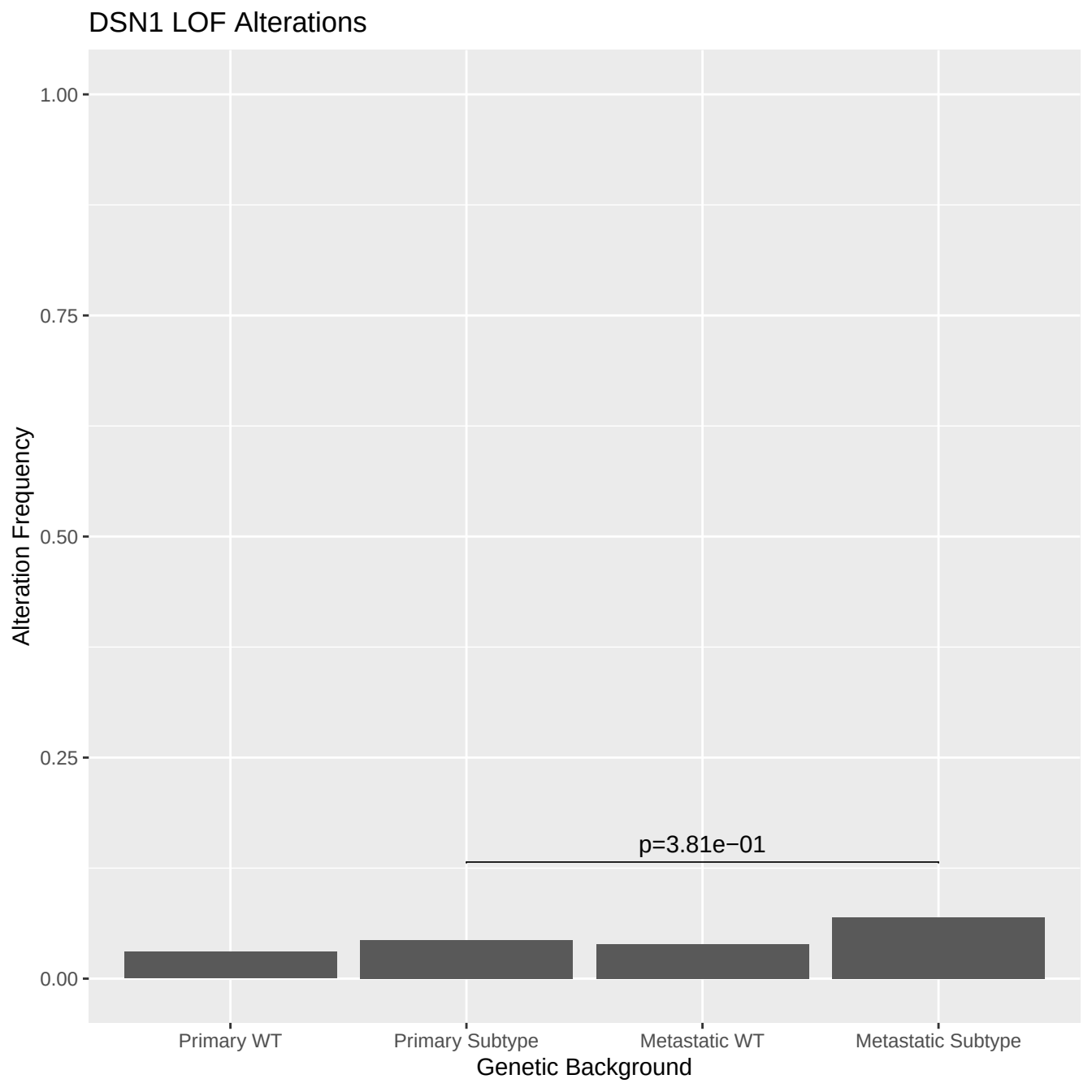

TSNARE1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

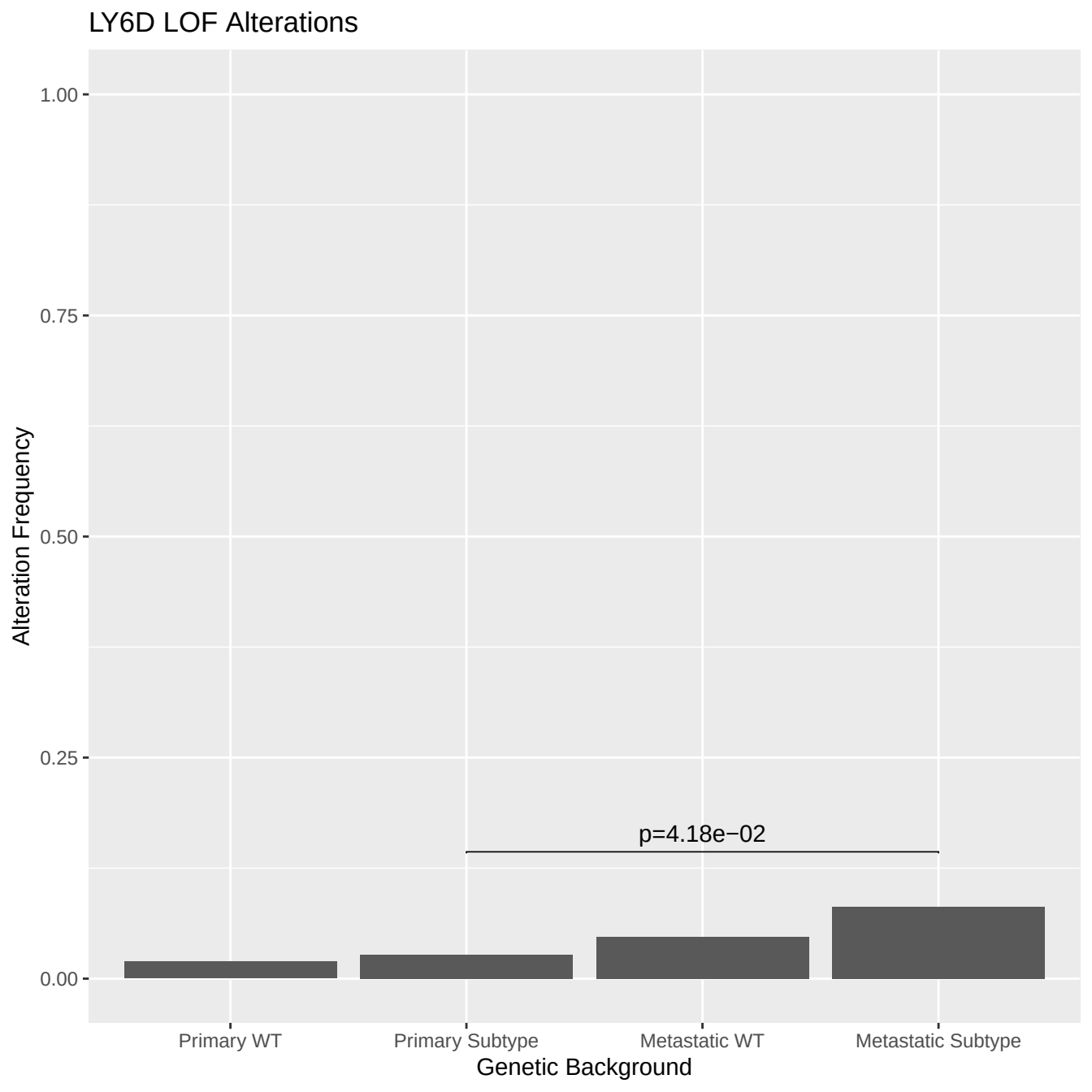

FAM49B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

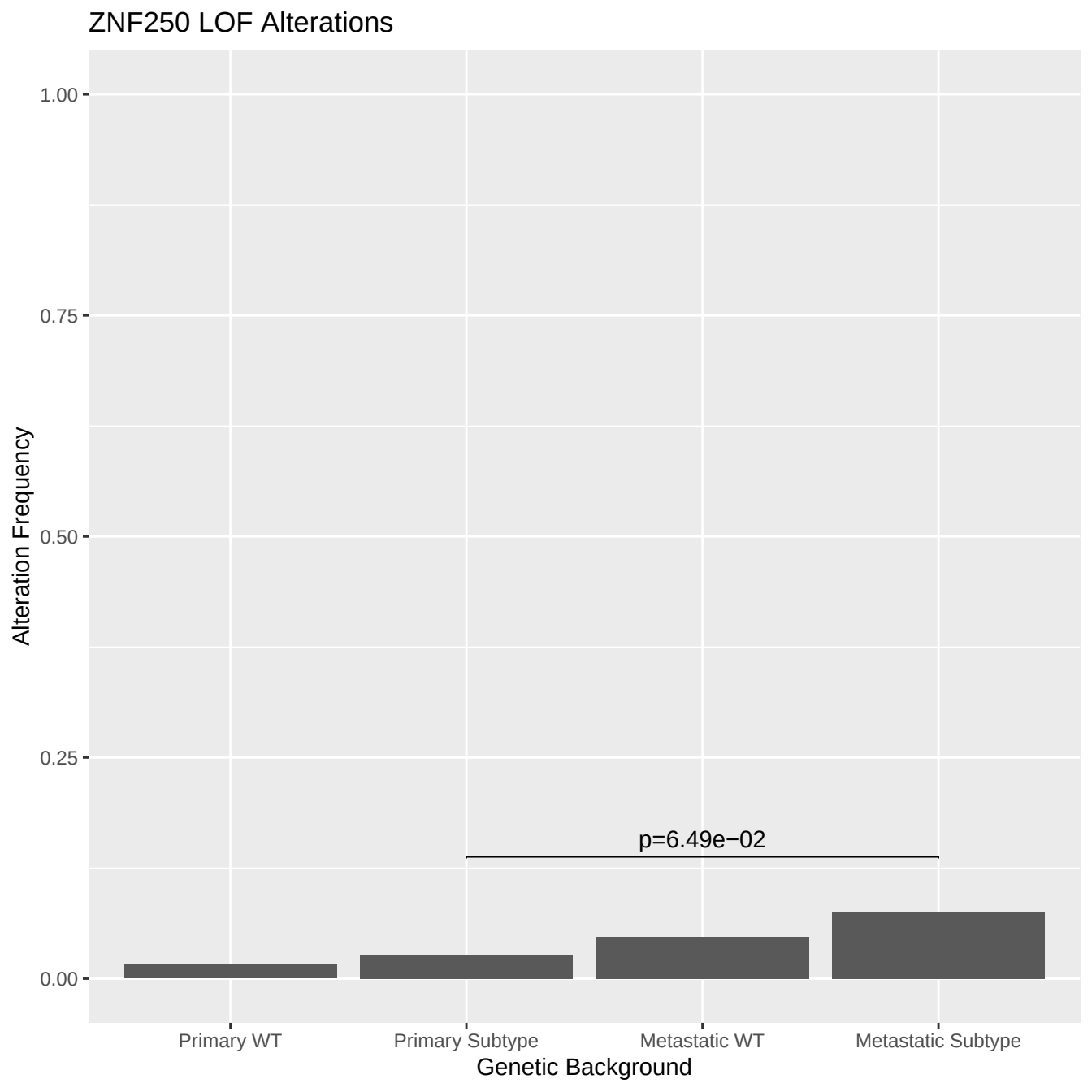

IQGAP3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

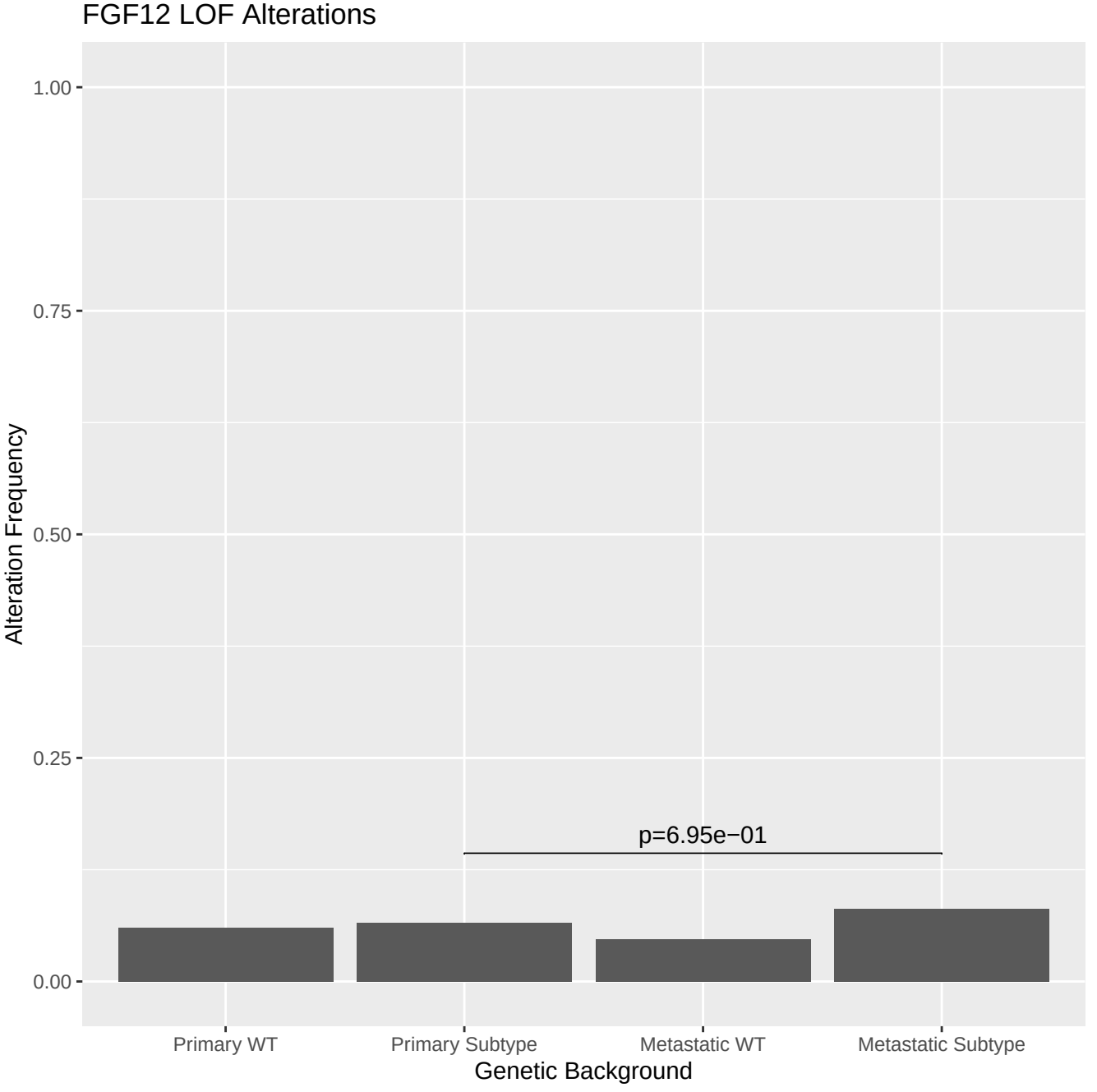

TRAPPC10 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.75e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

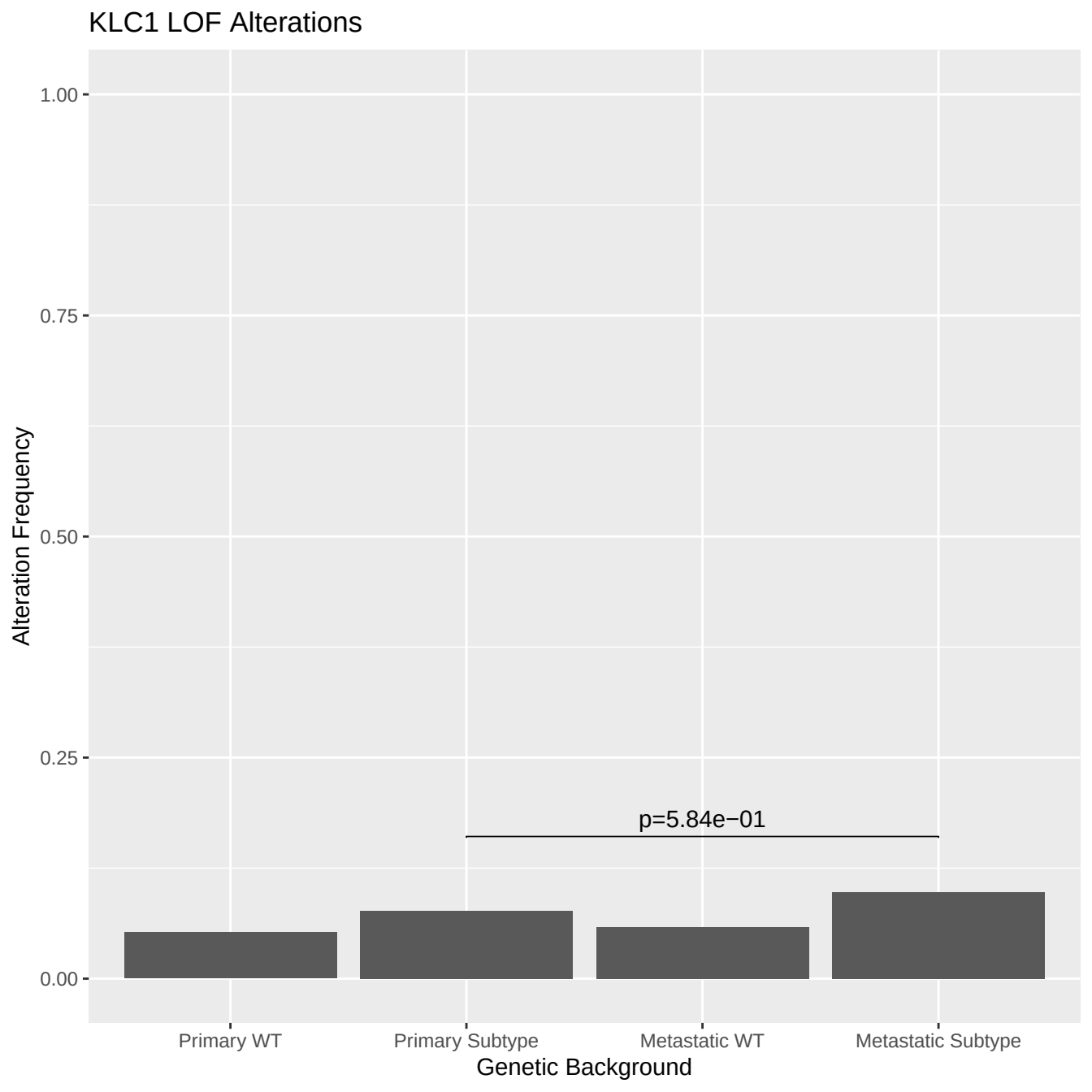

LY6K LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

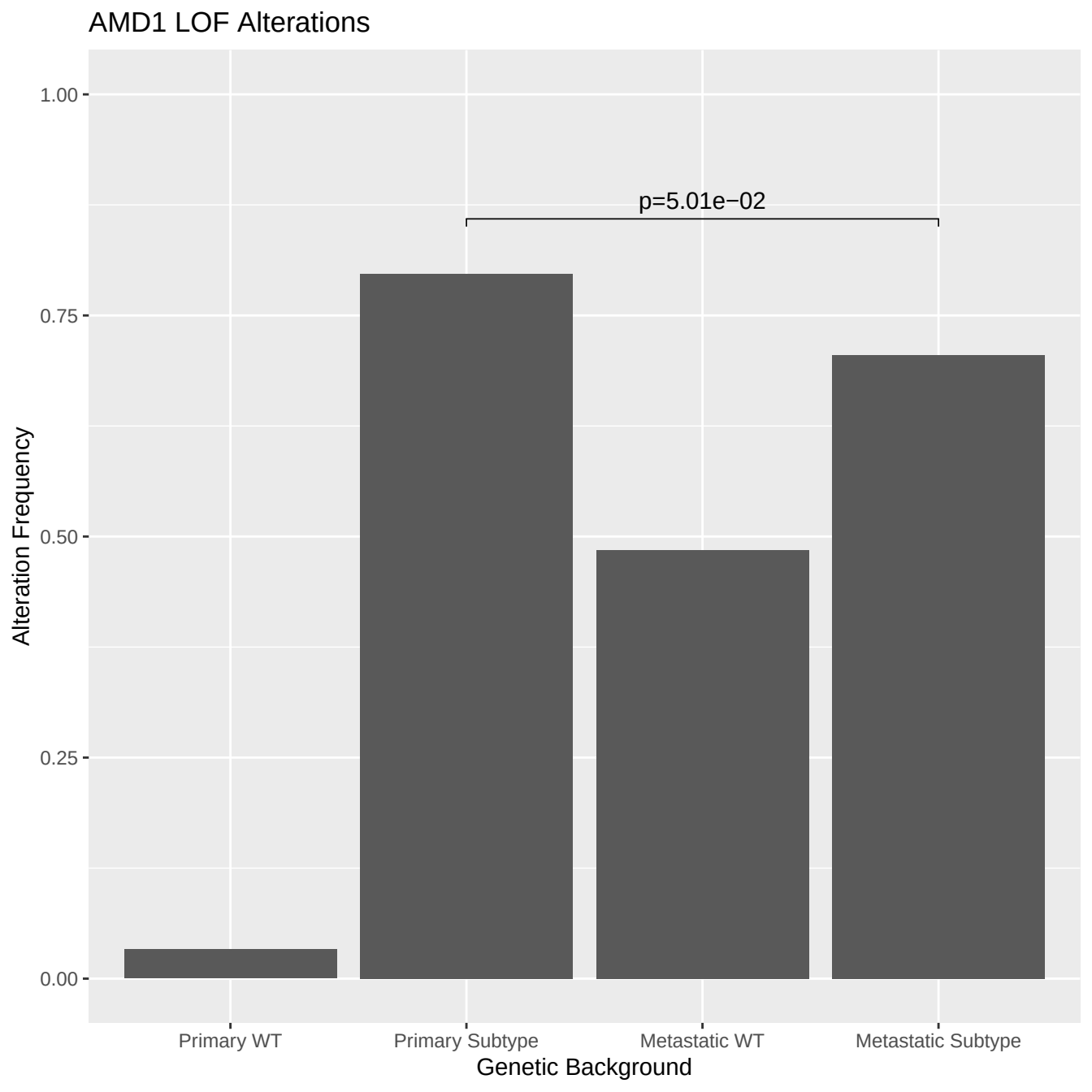

DSN1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

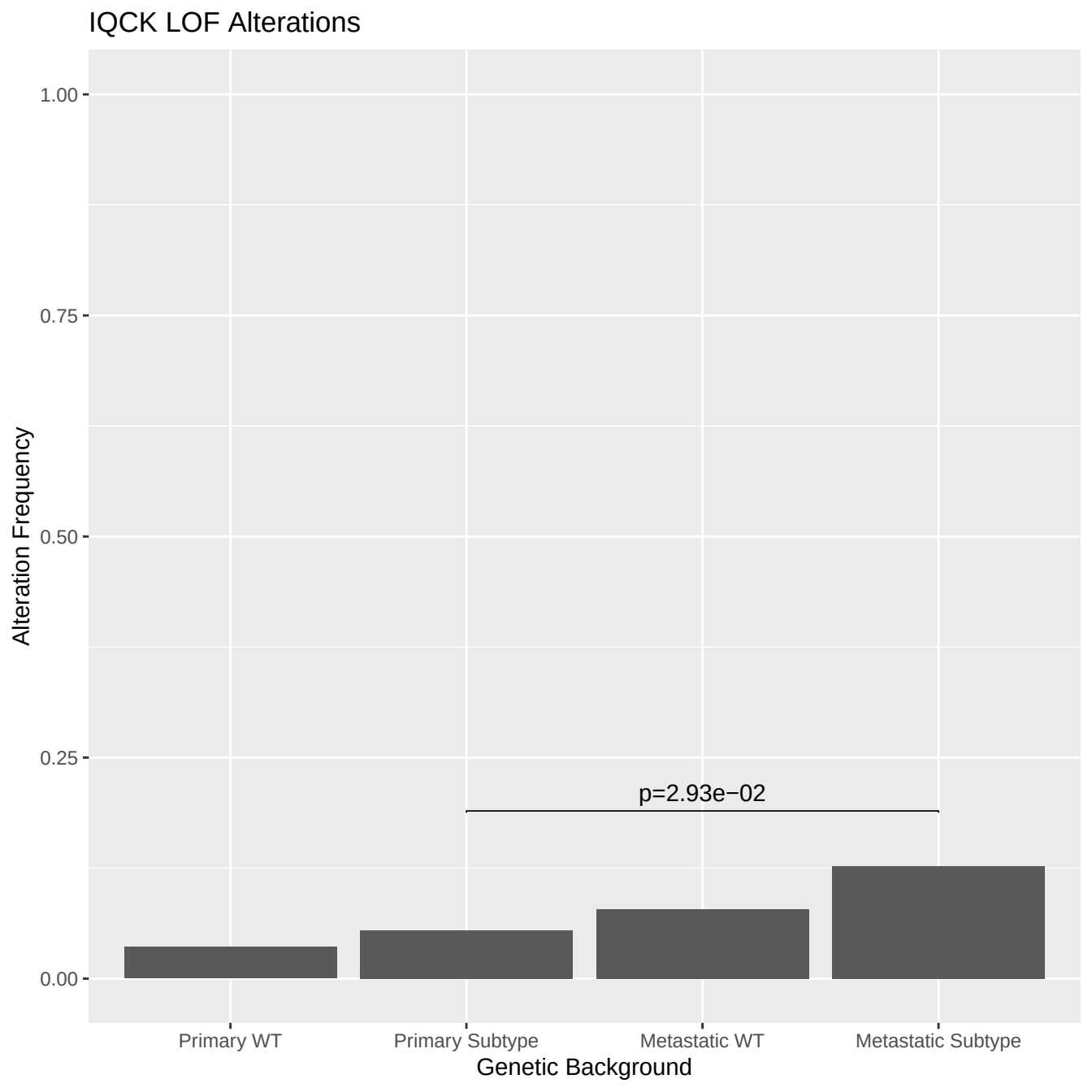

LY6D LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

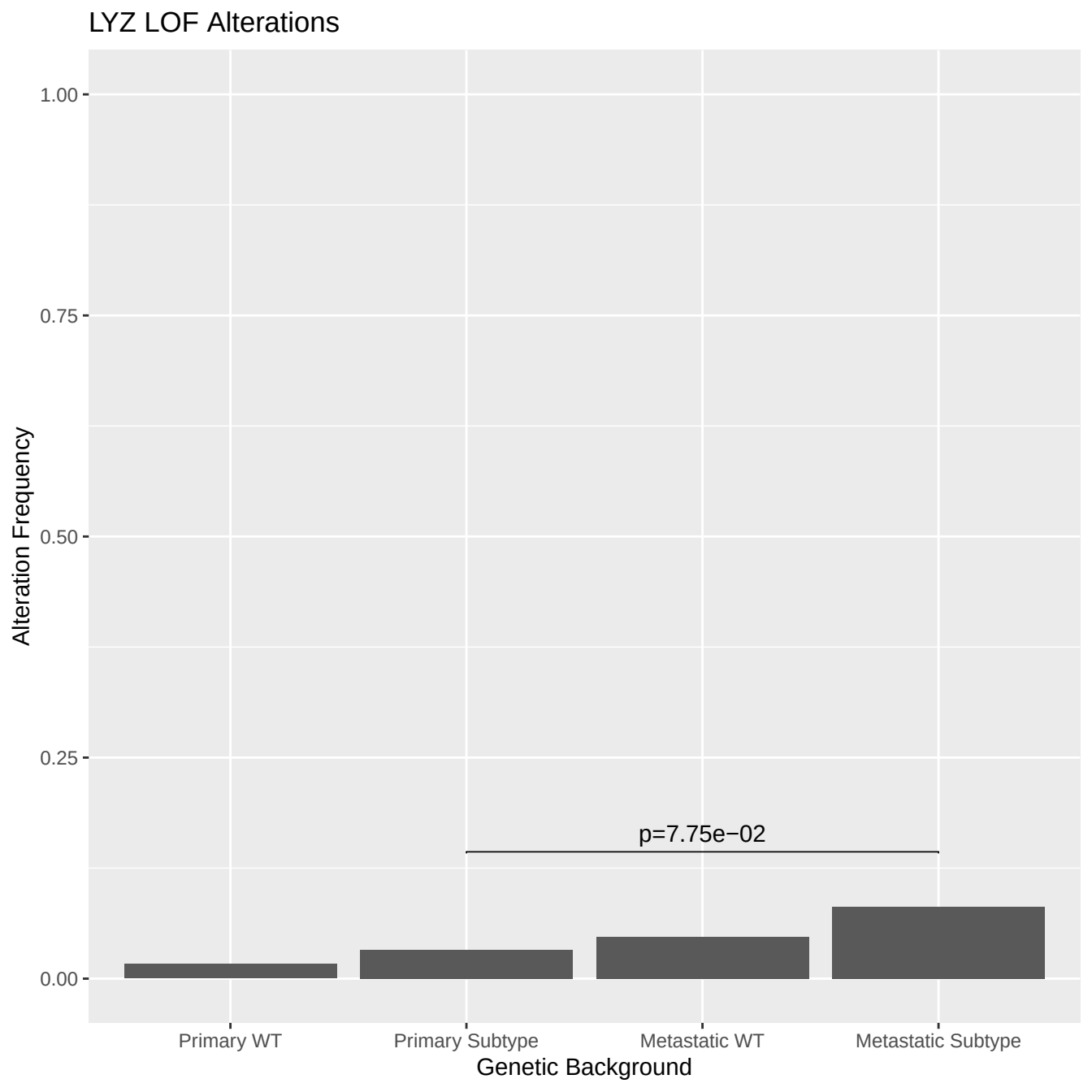

ZNF250 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

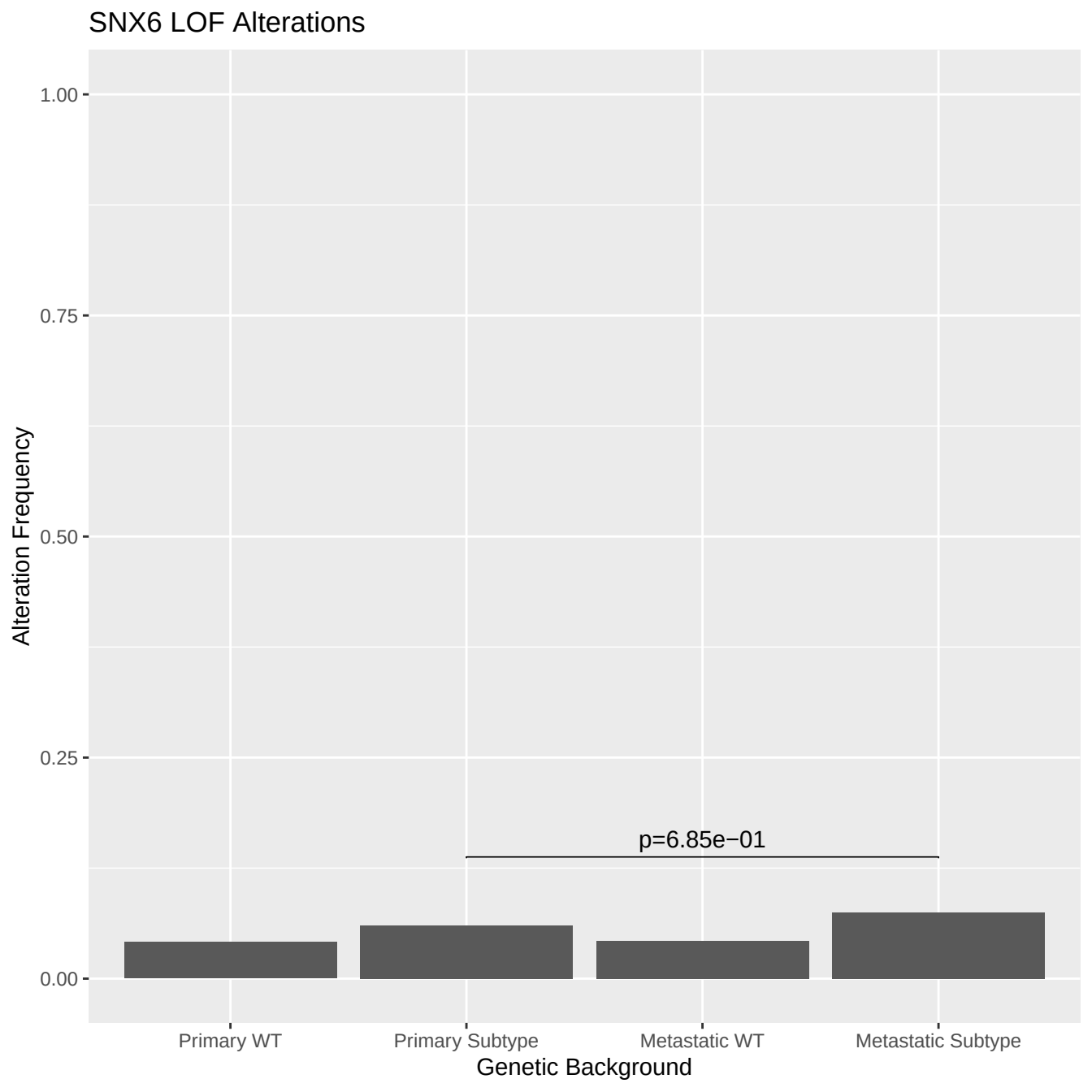

FGF12 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.95e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

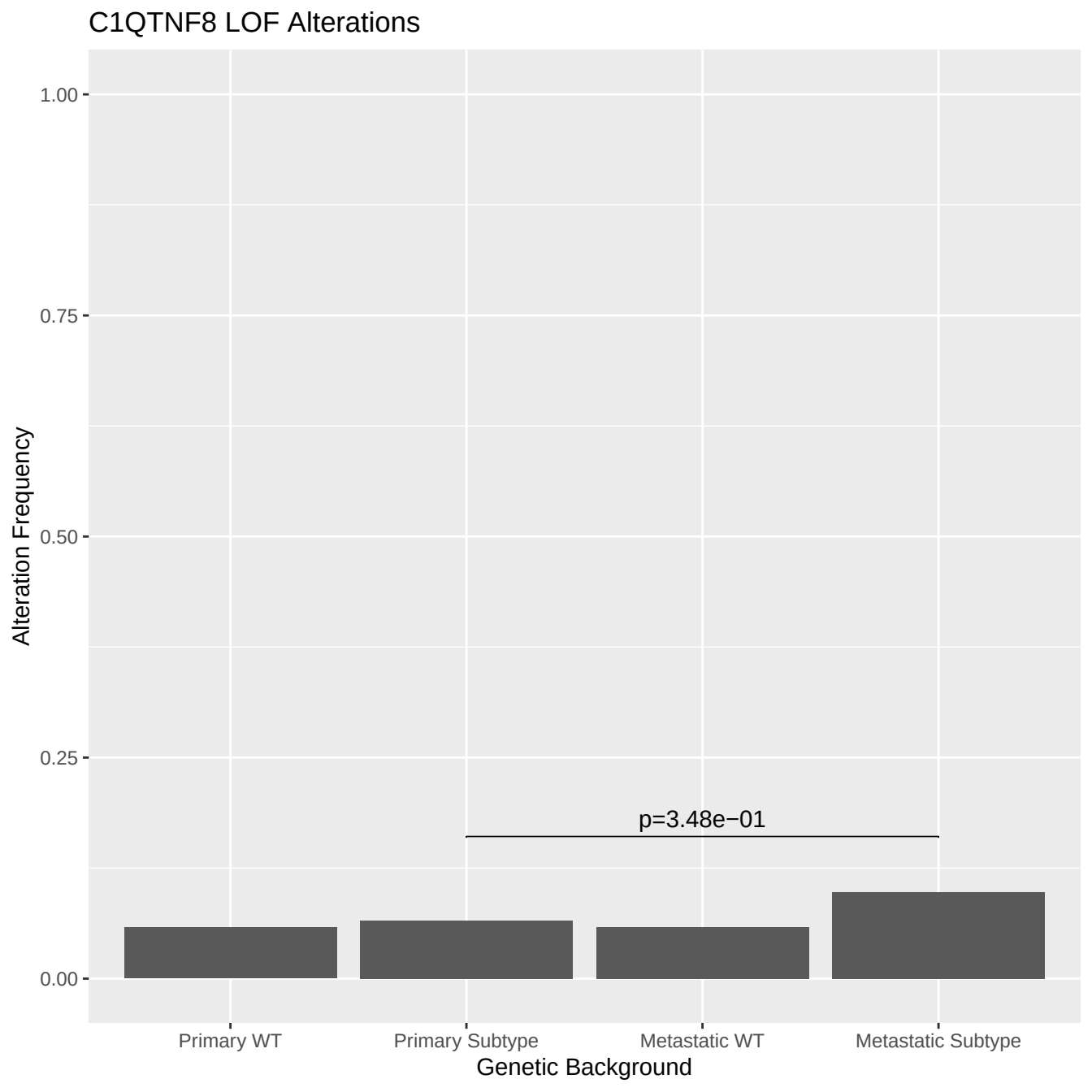

KLC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.84e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

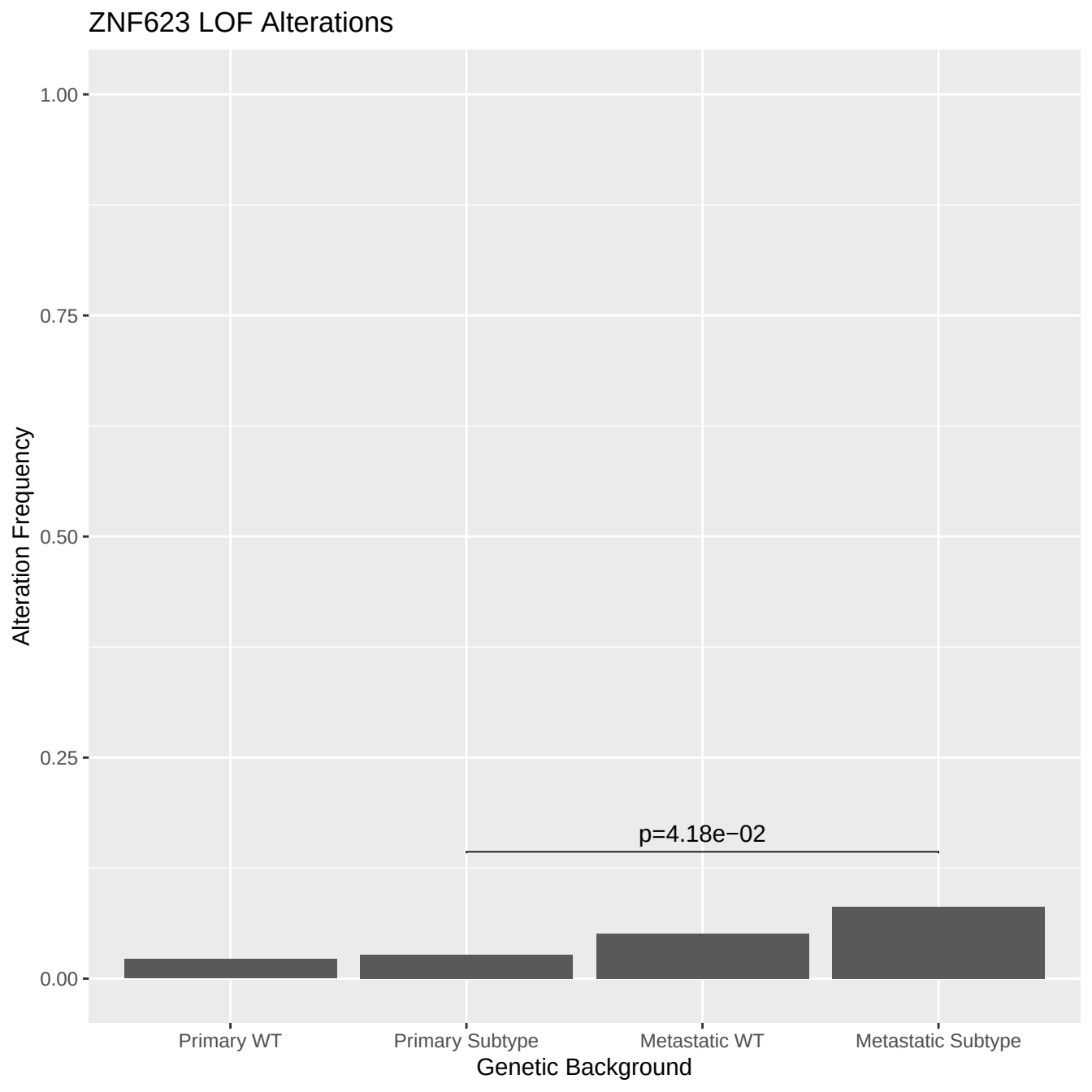

AMD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.01e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

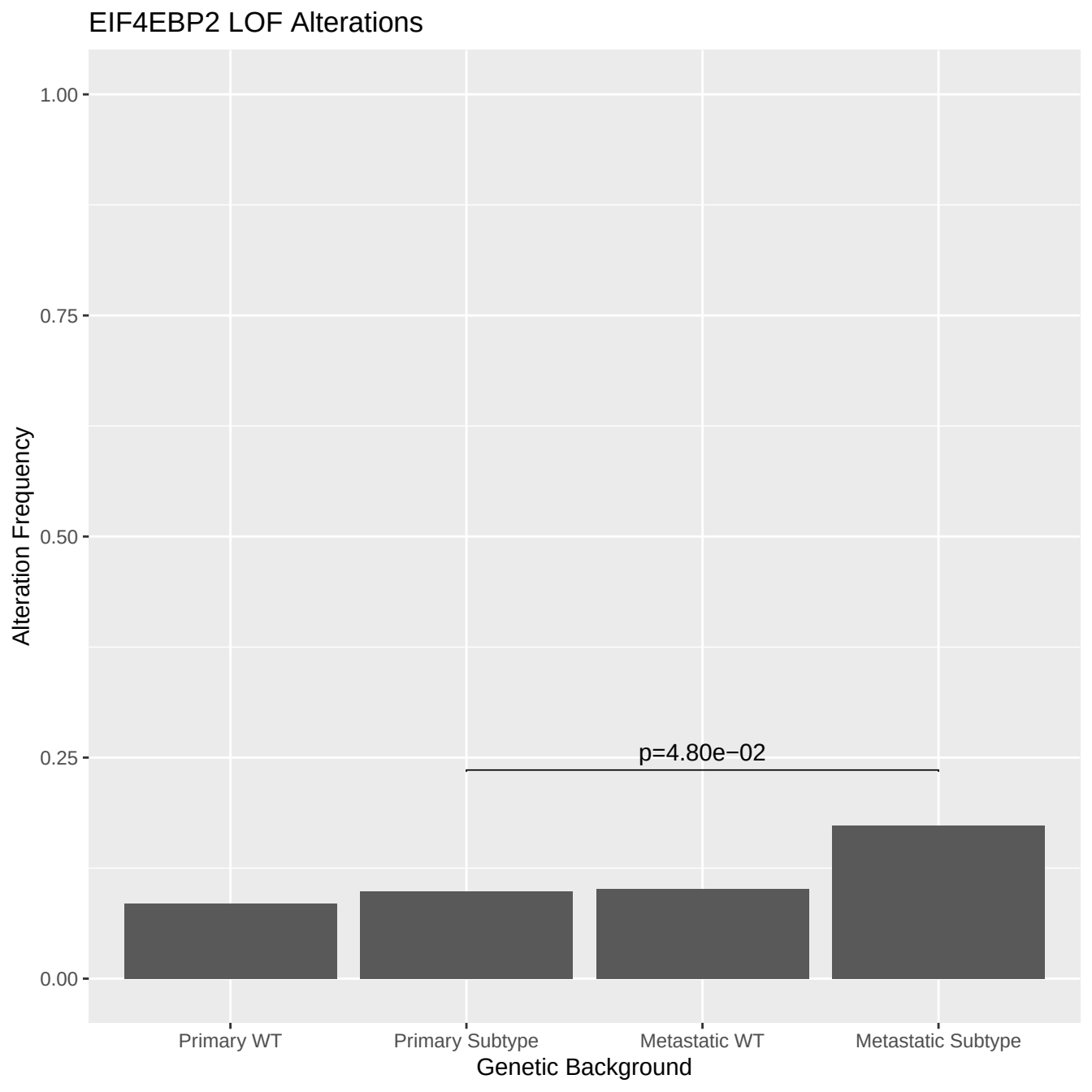

IQCK LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.93e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

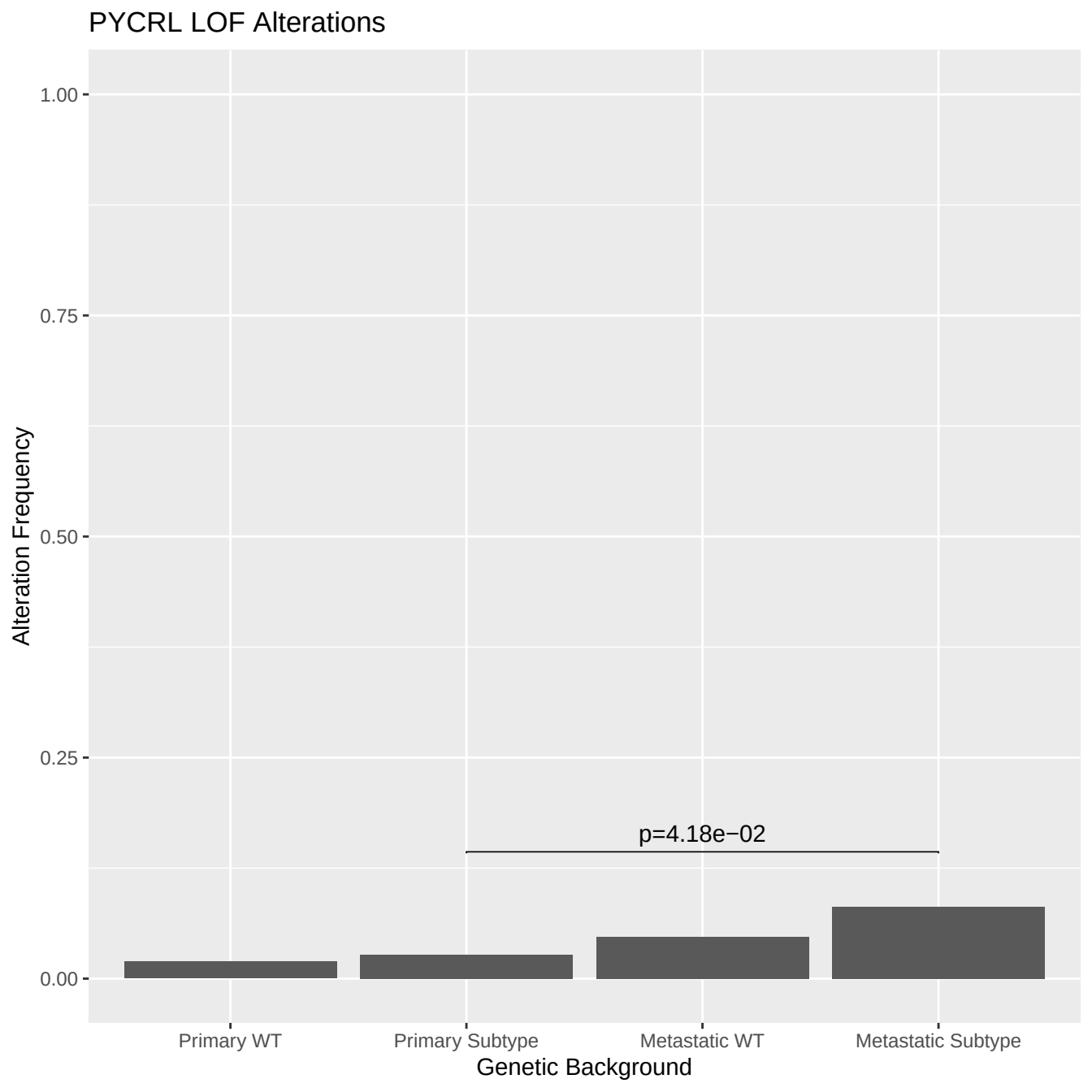

LYZ LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.75e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

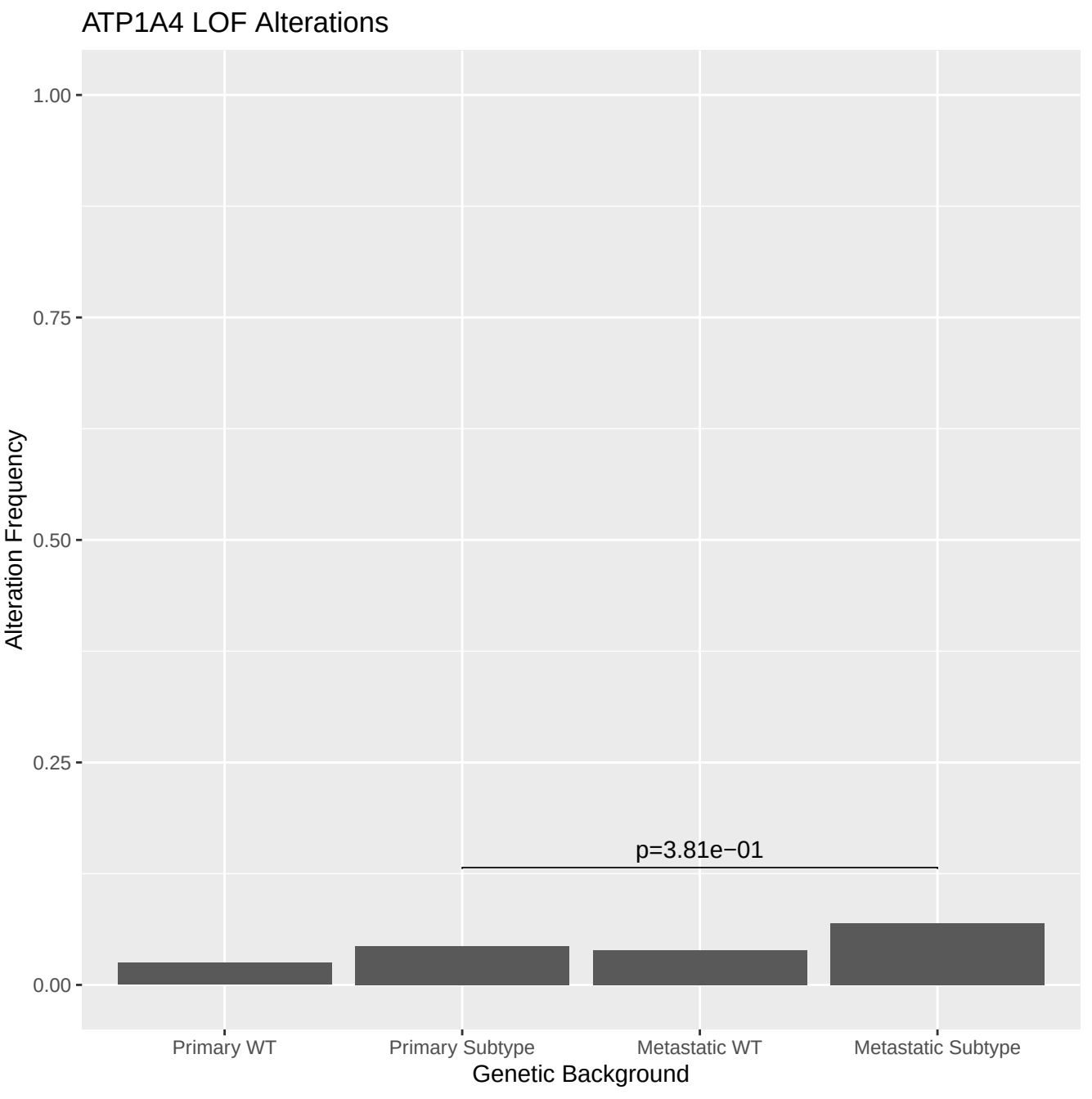

SNX6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

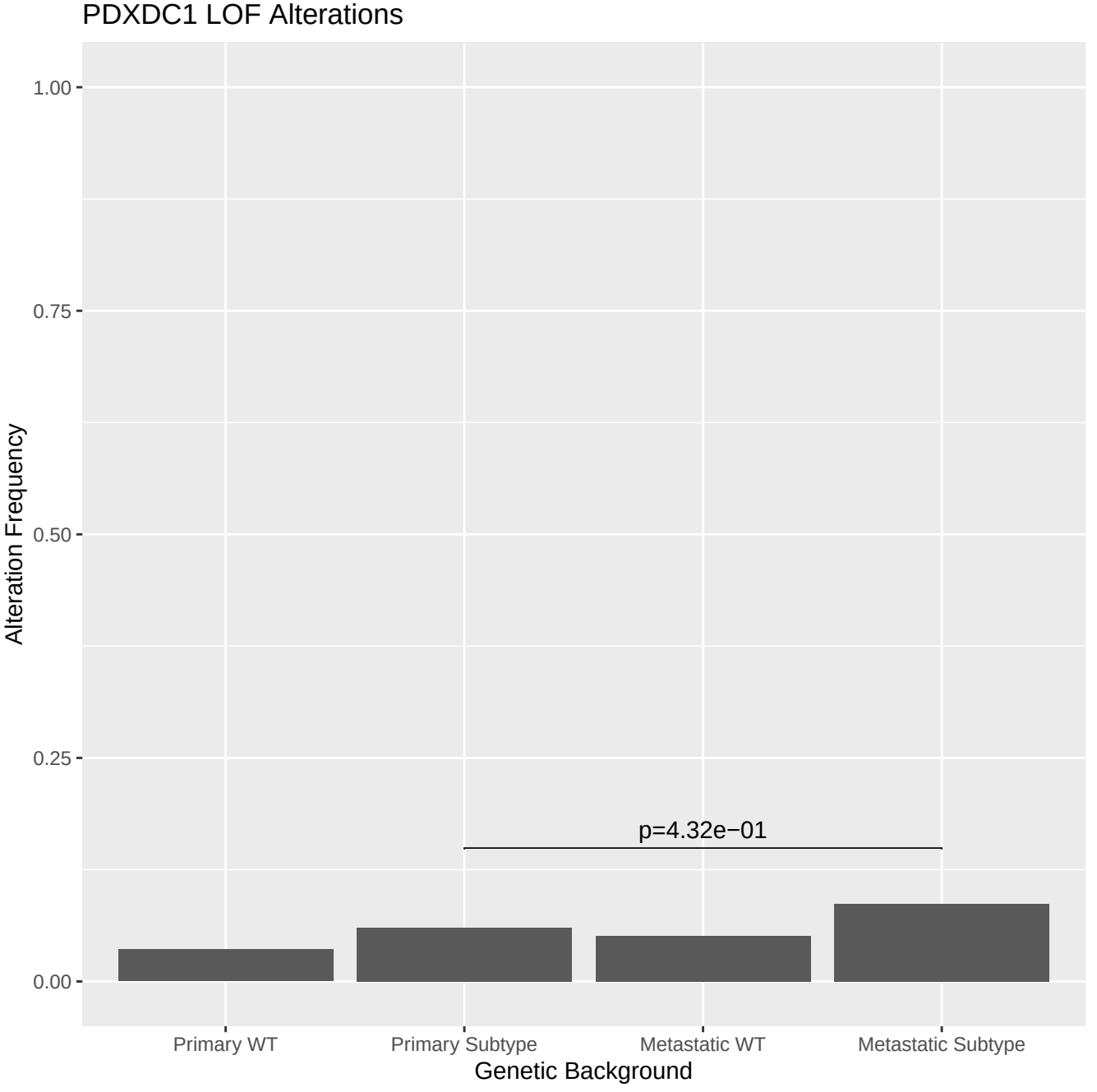

C1QTNF8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

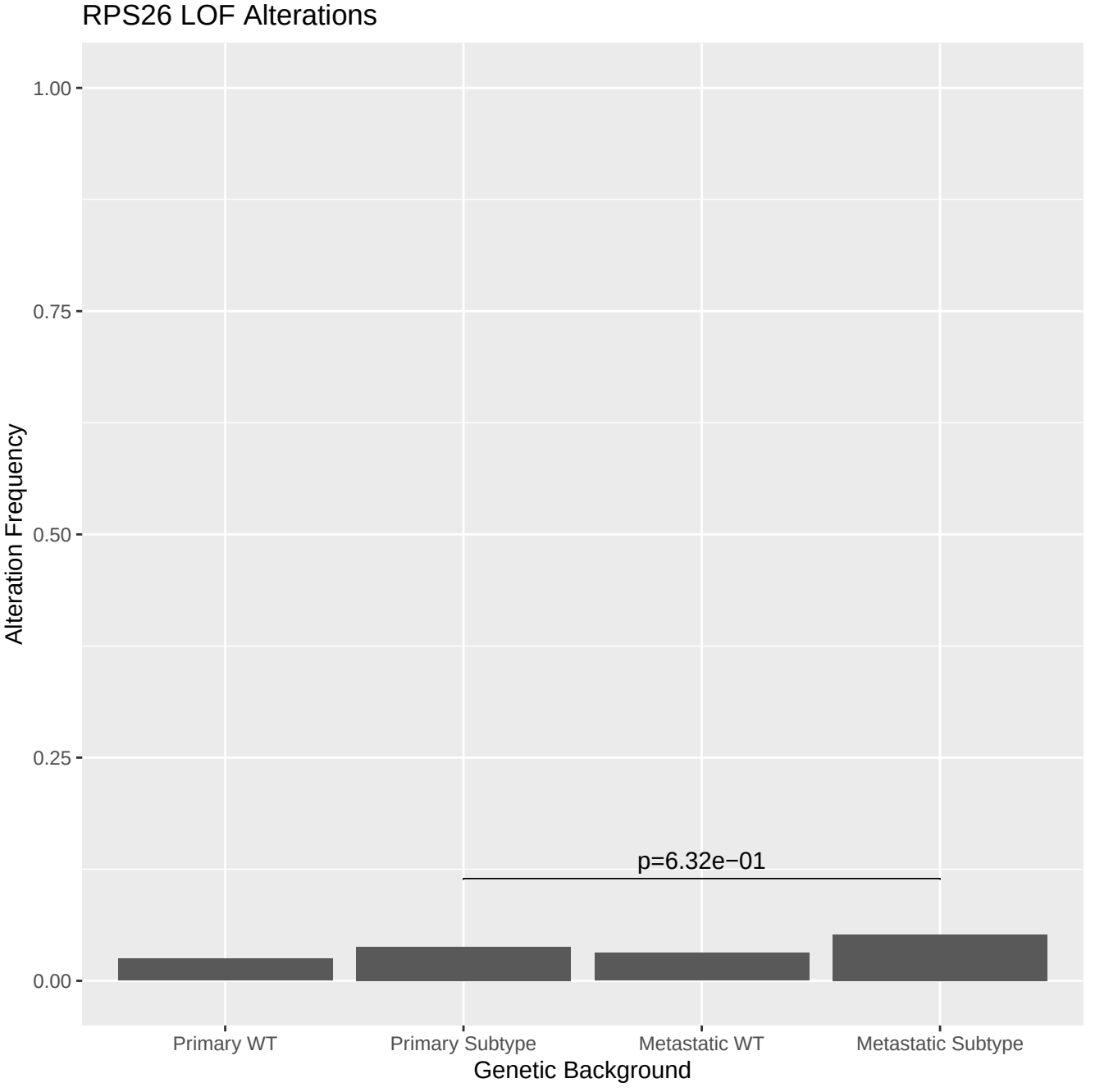

ZNF623 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

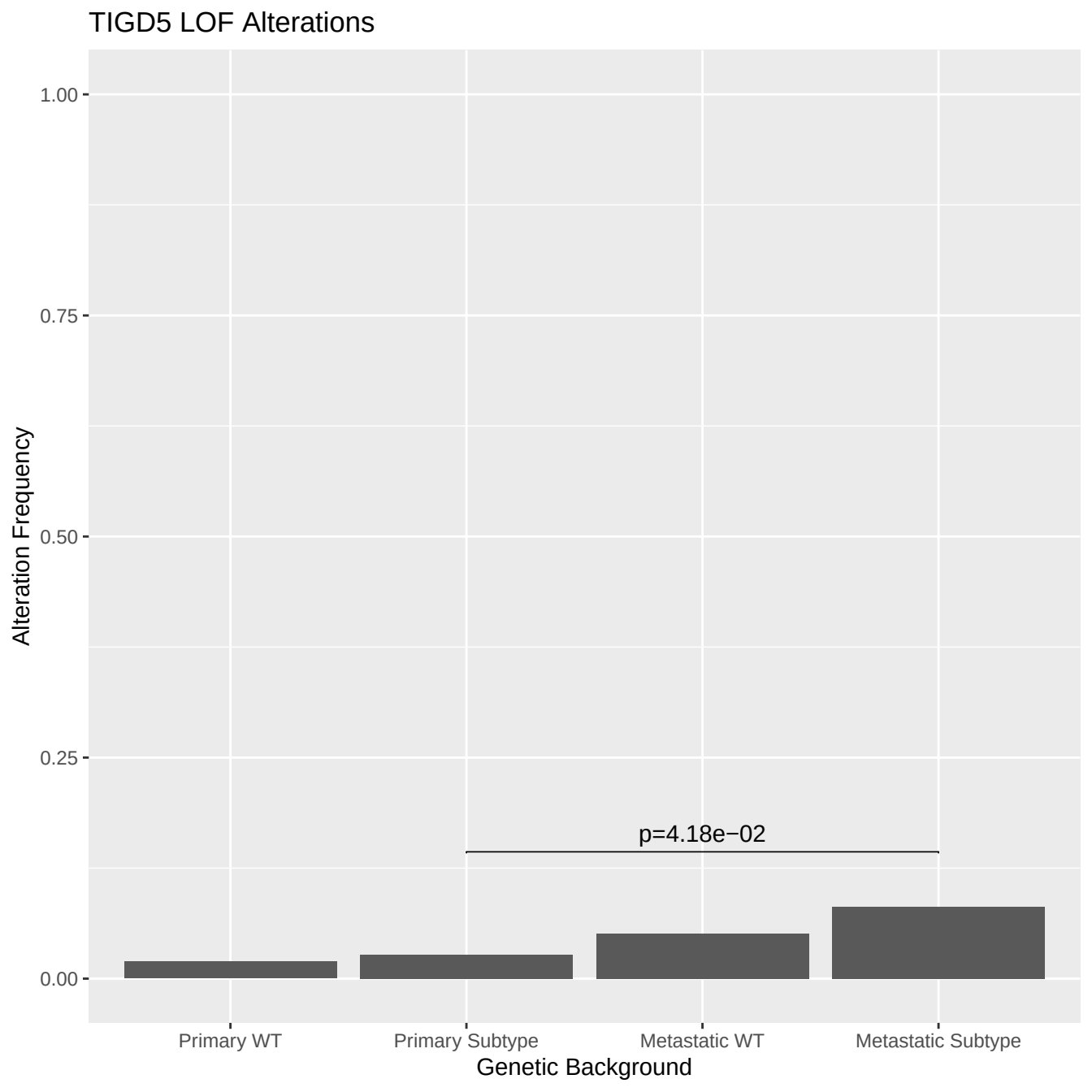

EIF4EBP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.80e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

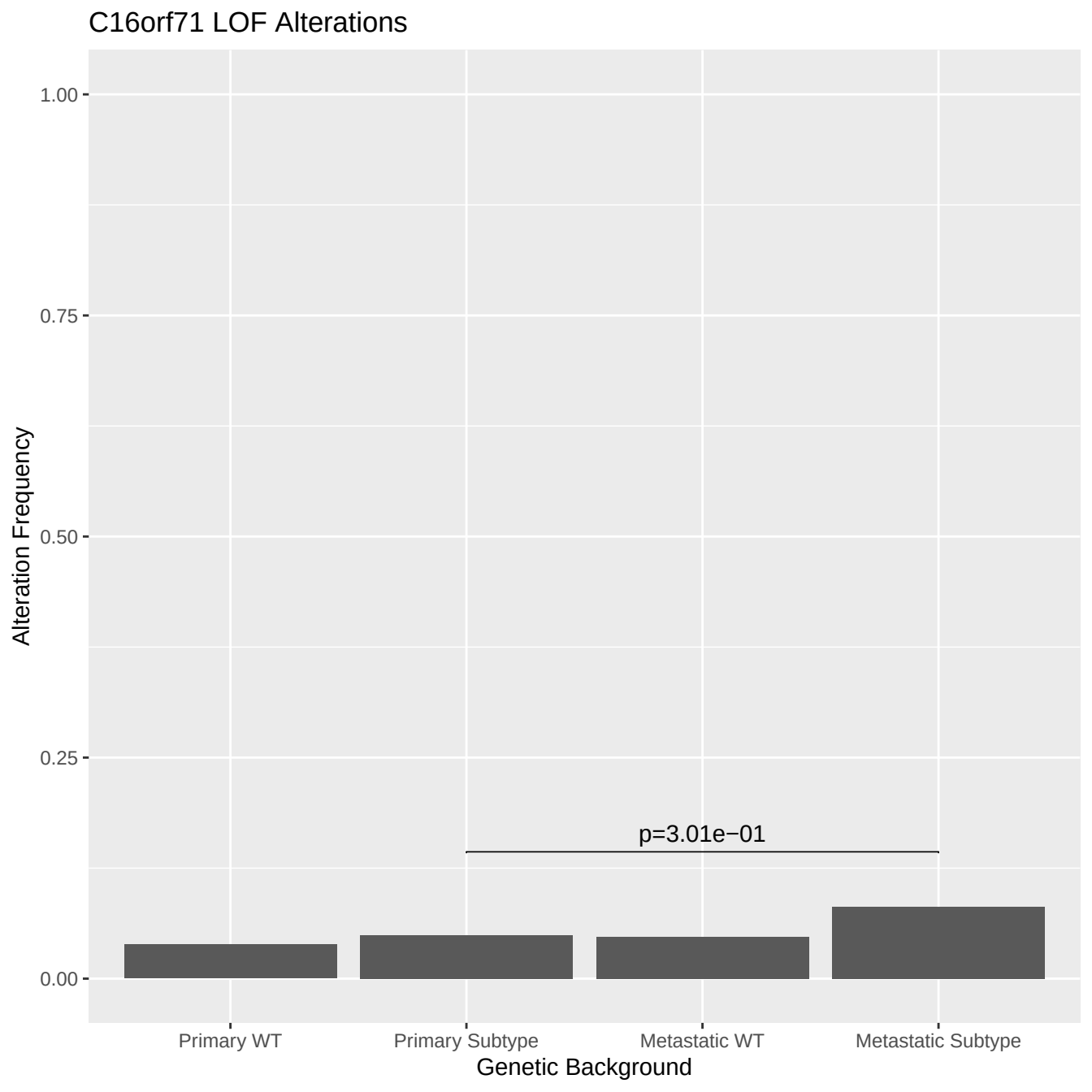

PYCRL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

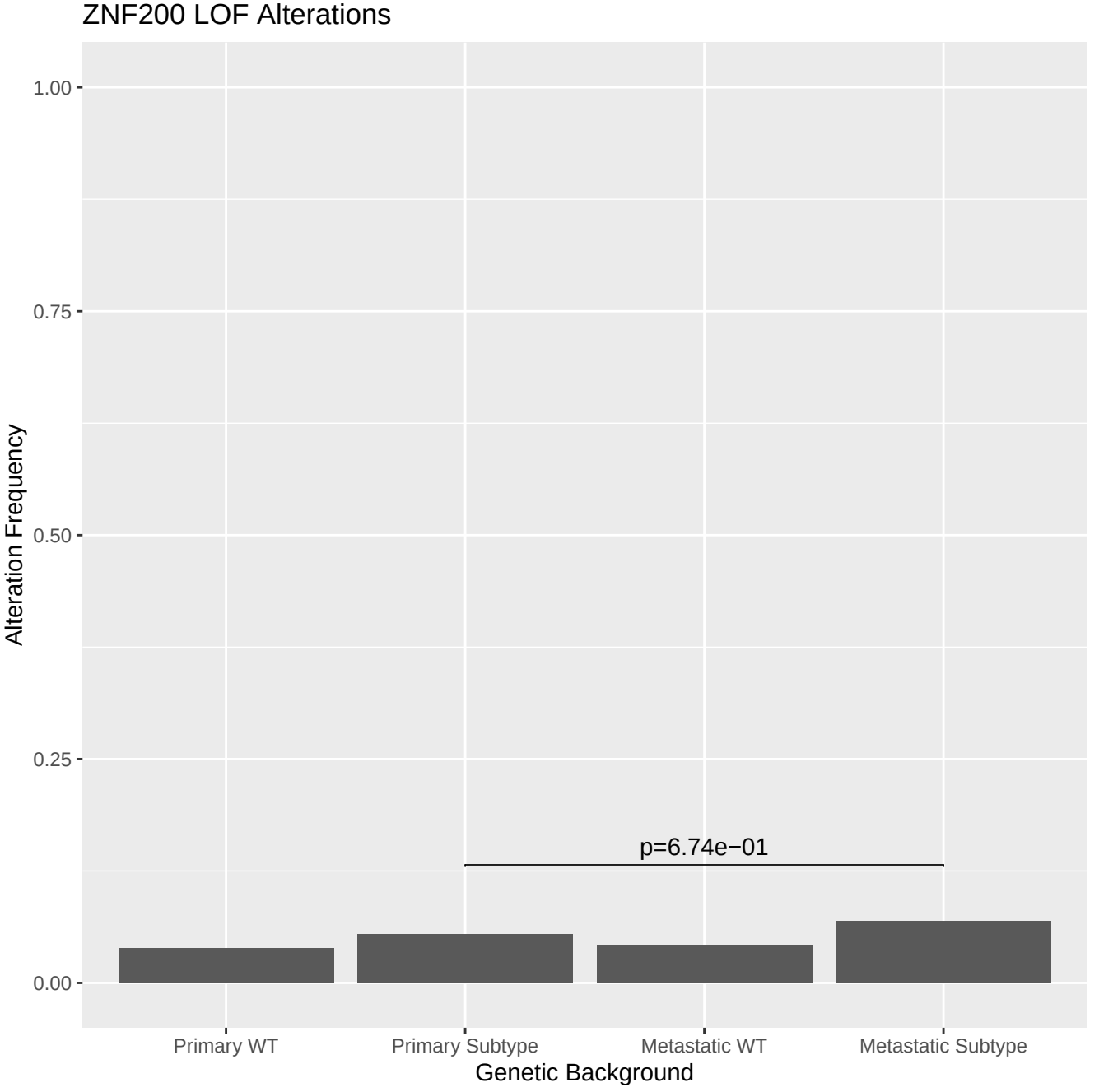

ATP1A4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

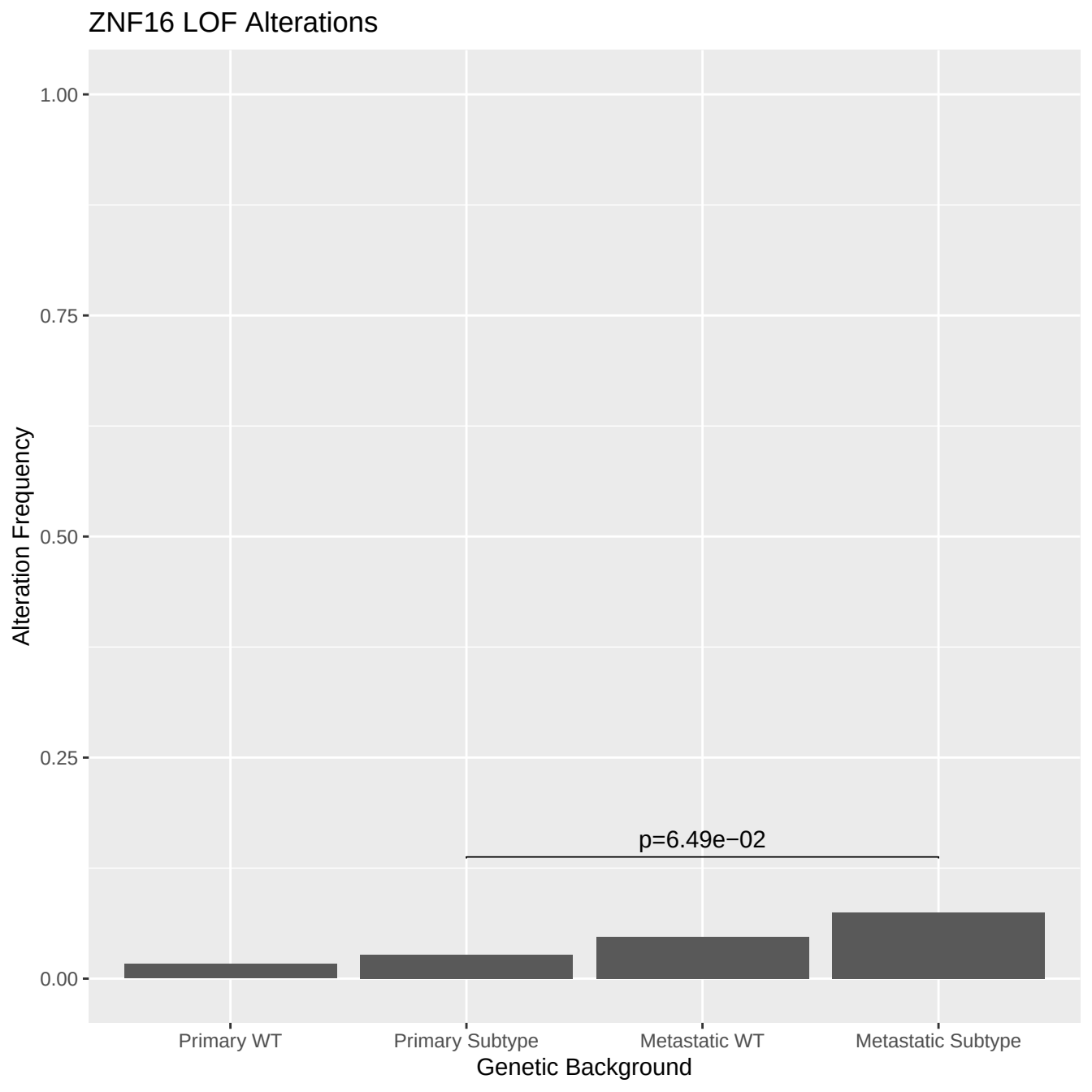

PDXDC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

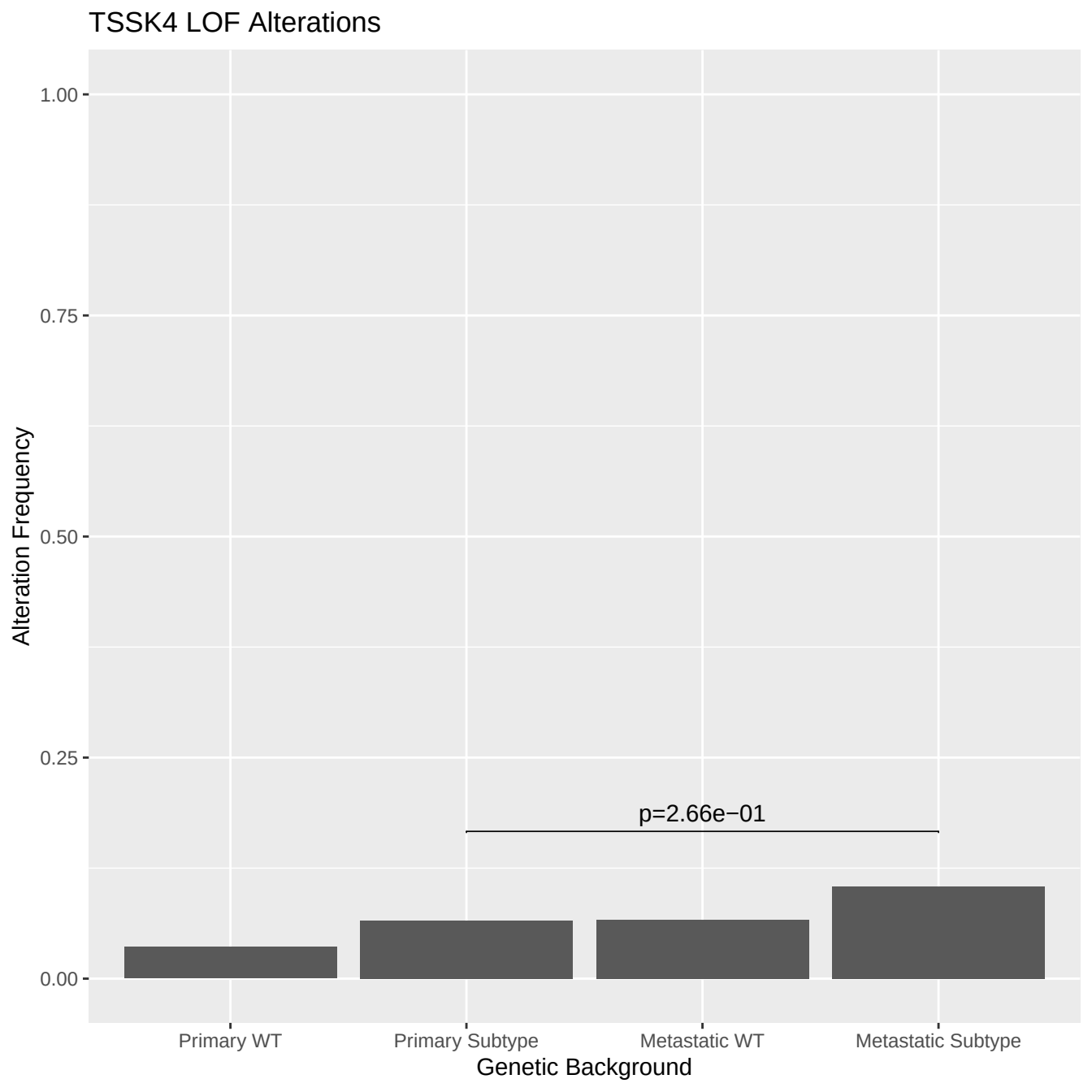

RPS26 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

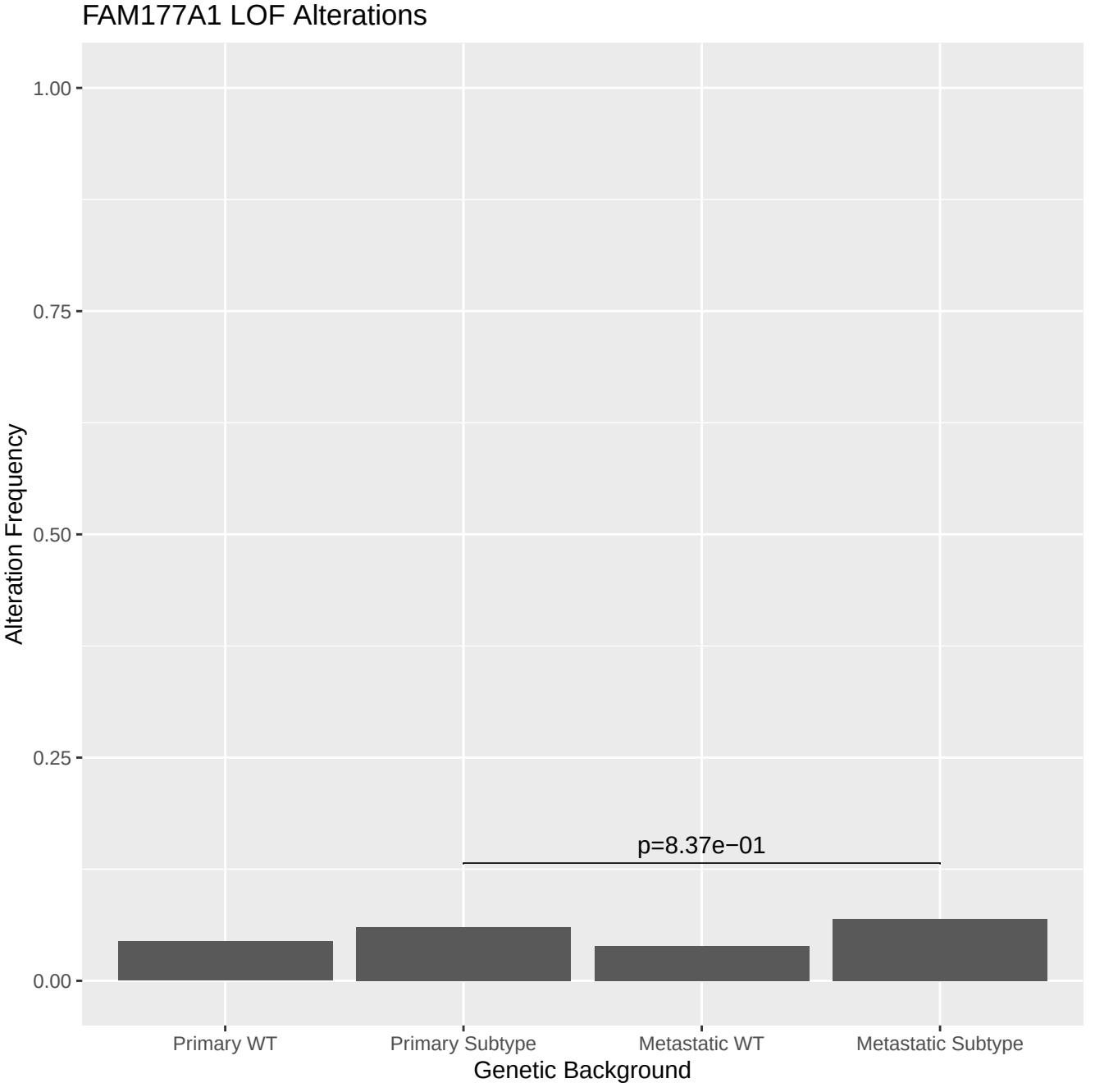

TIGD5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

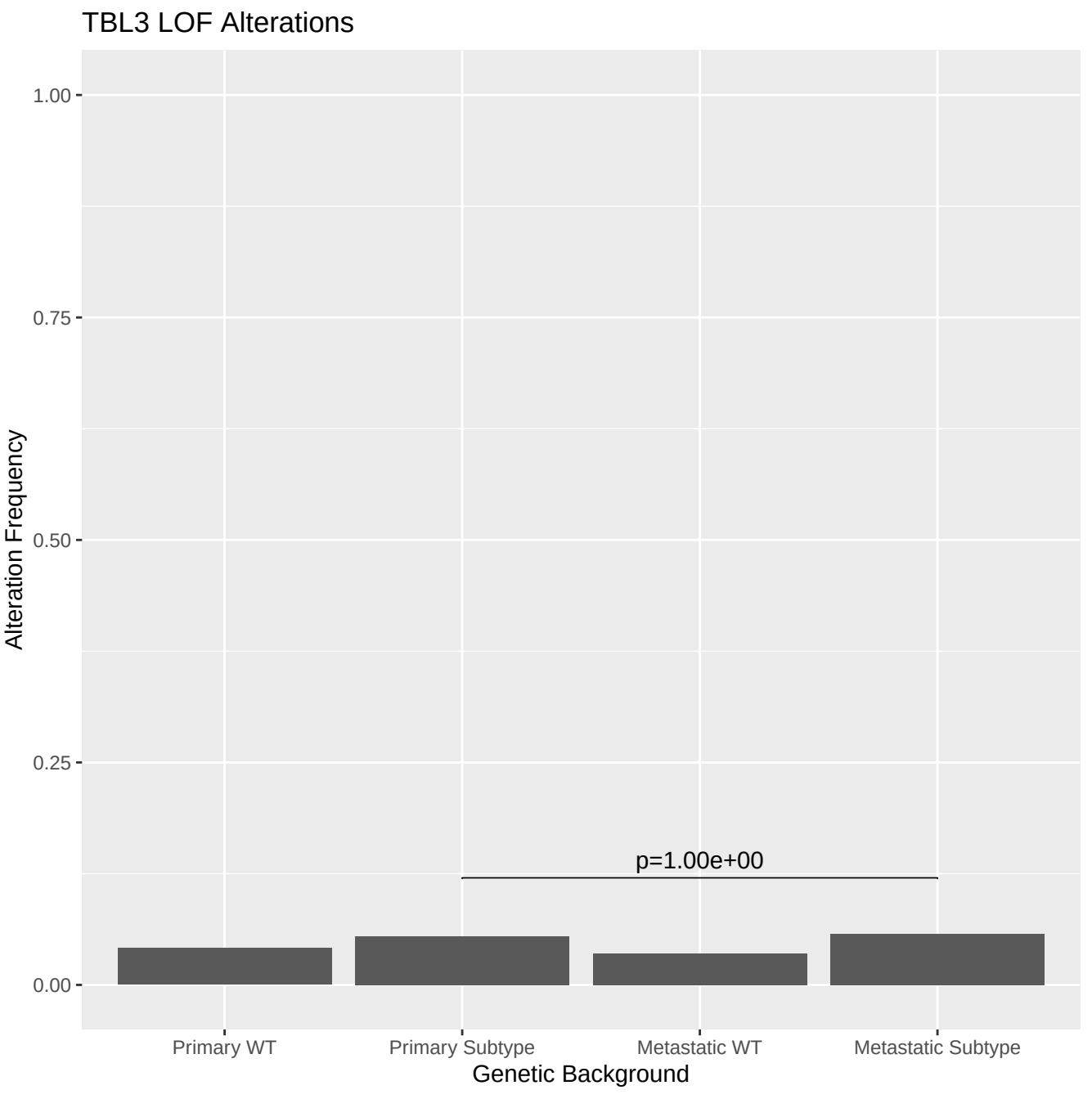

C16orf71 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.01e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

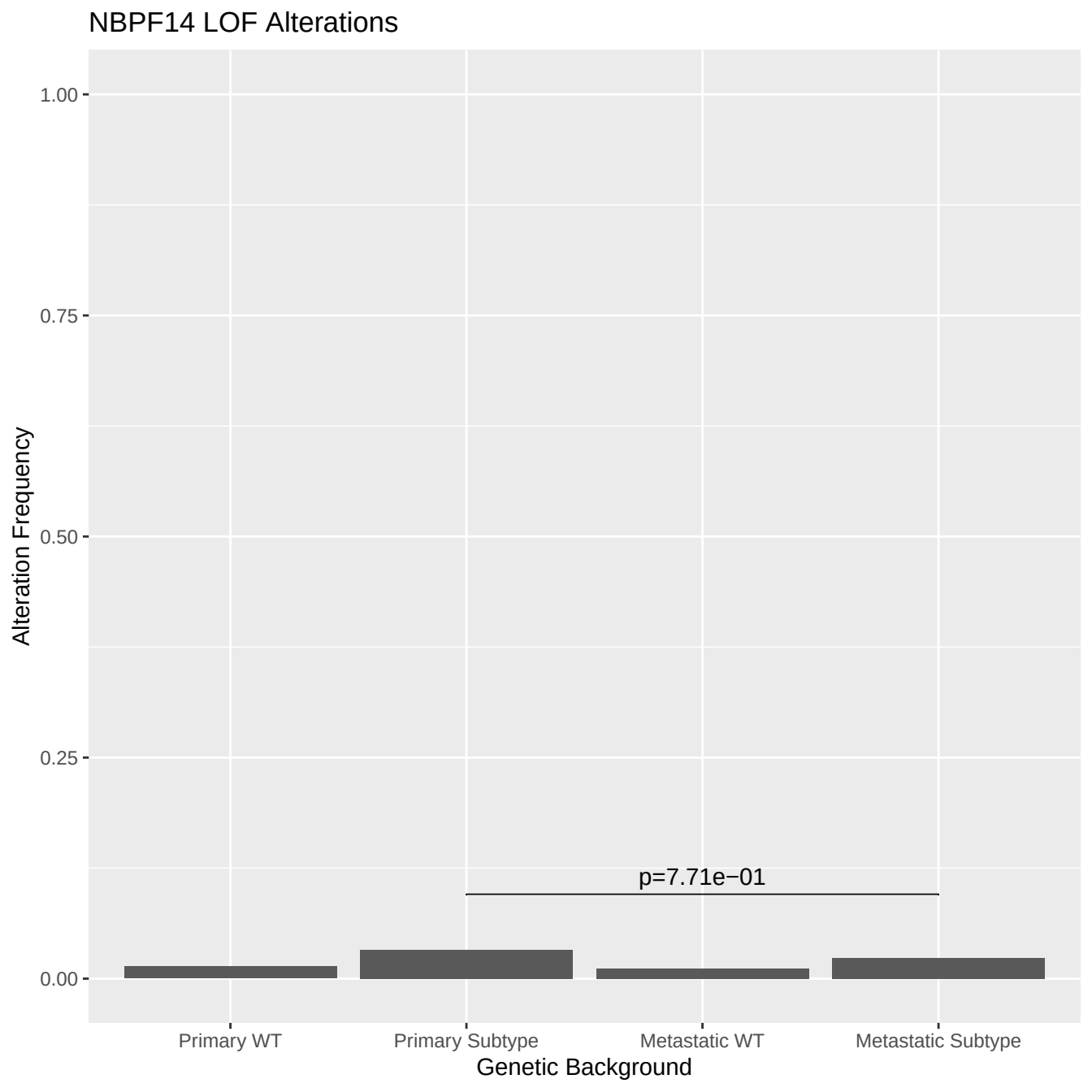

ZNF200 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

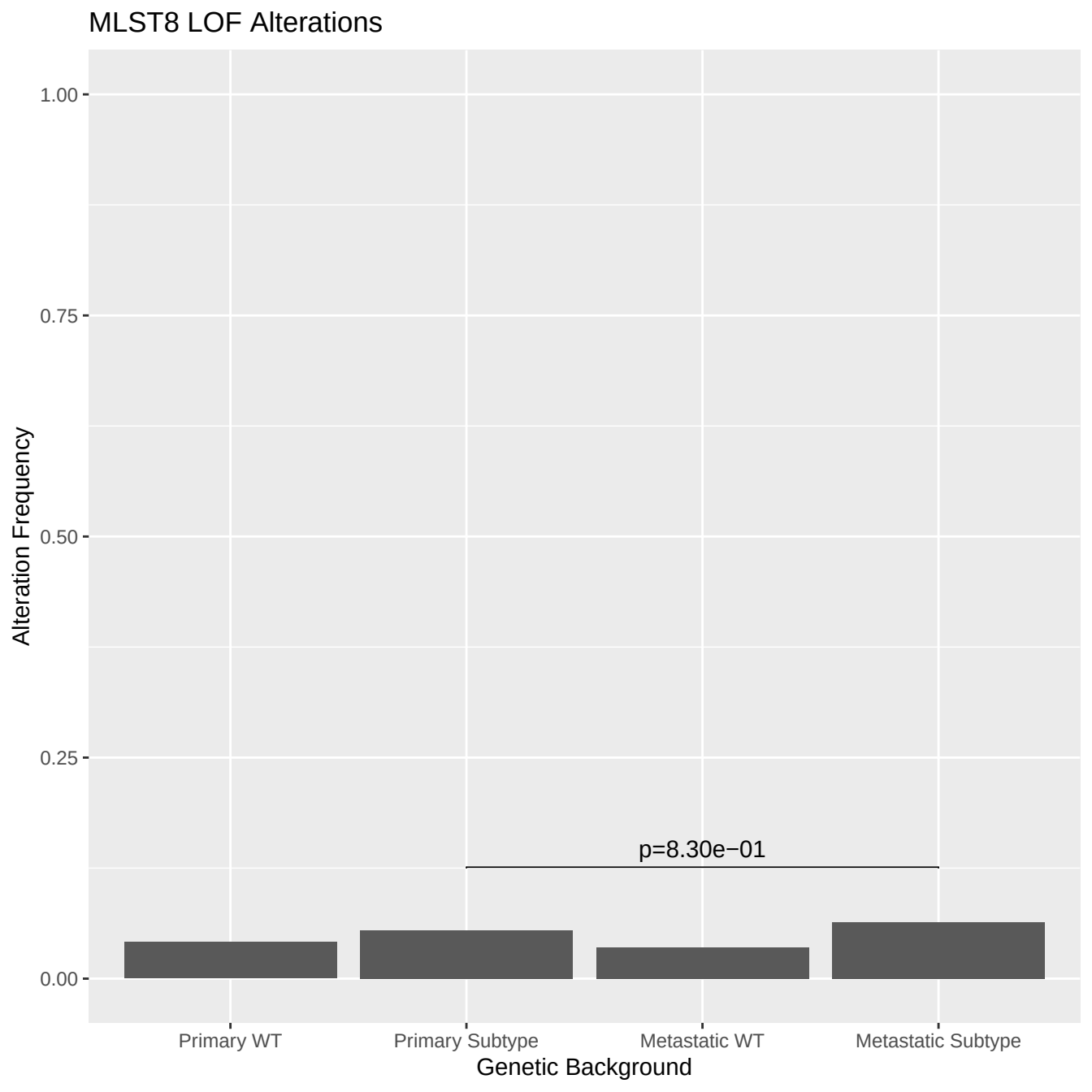

ZNF16 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

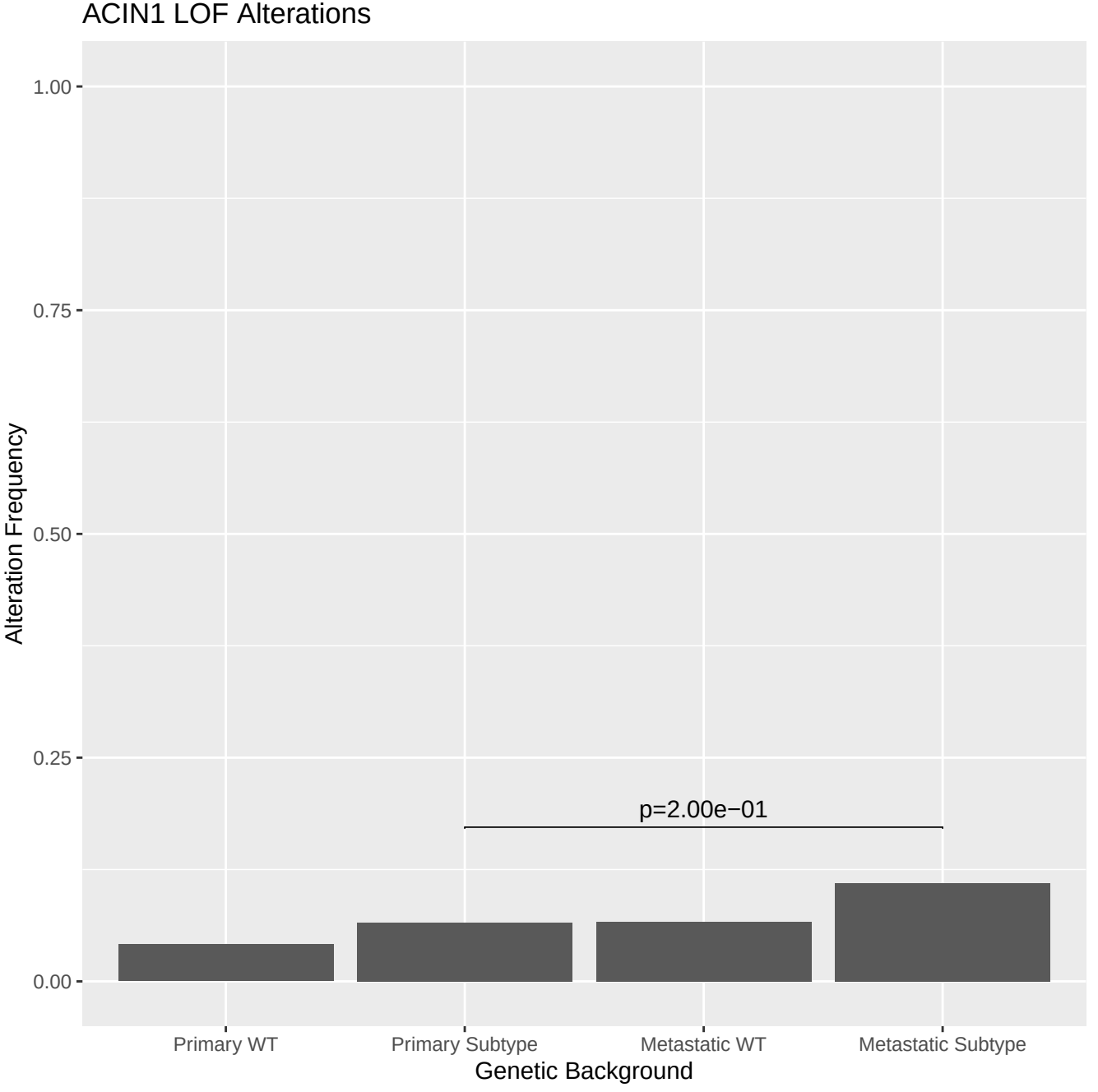

TSSK4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

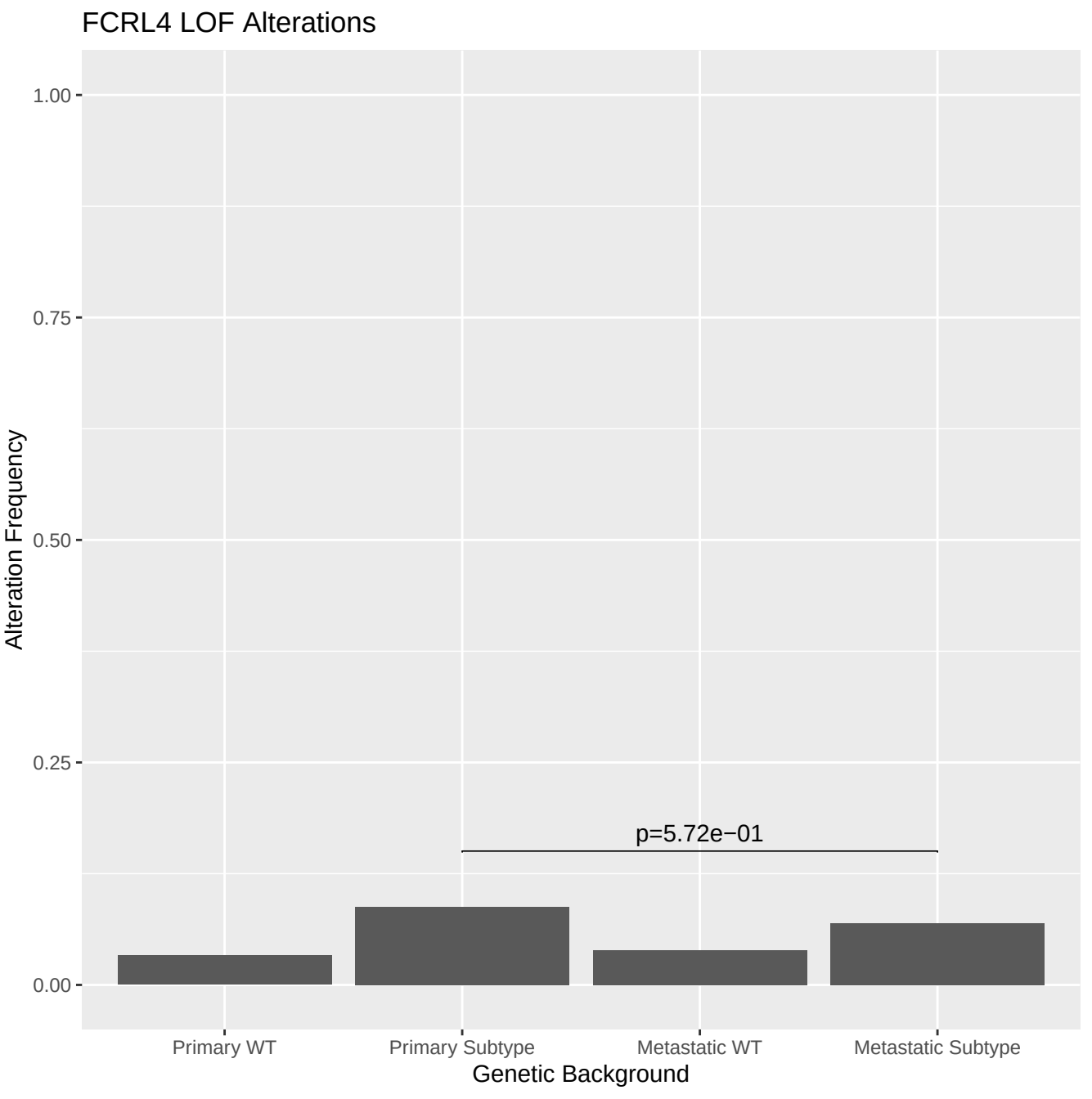

FAM177A1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

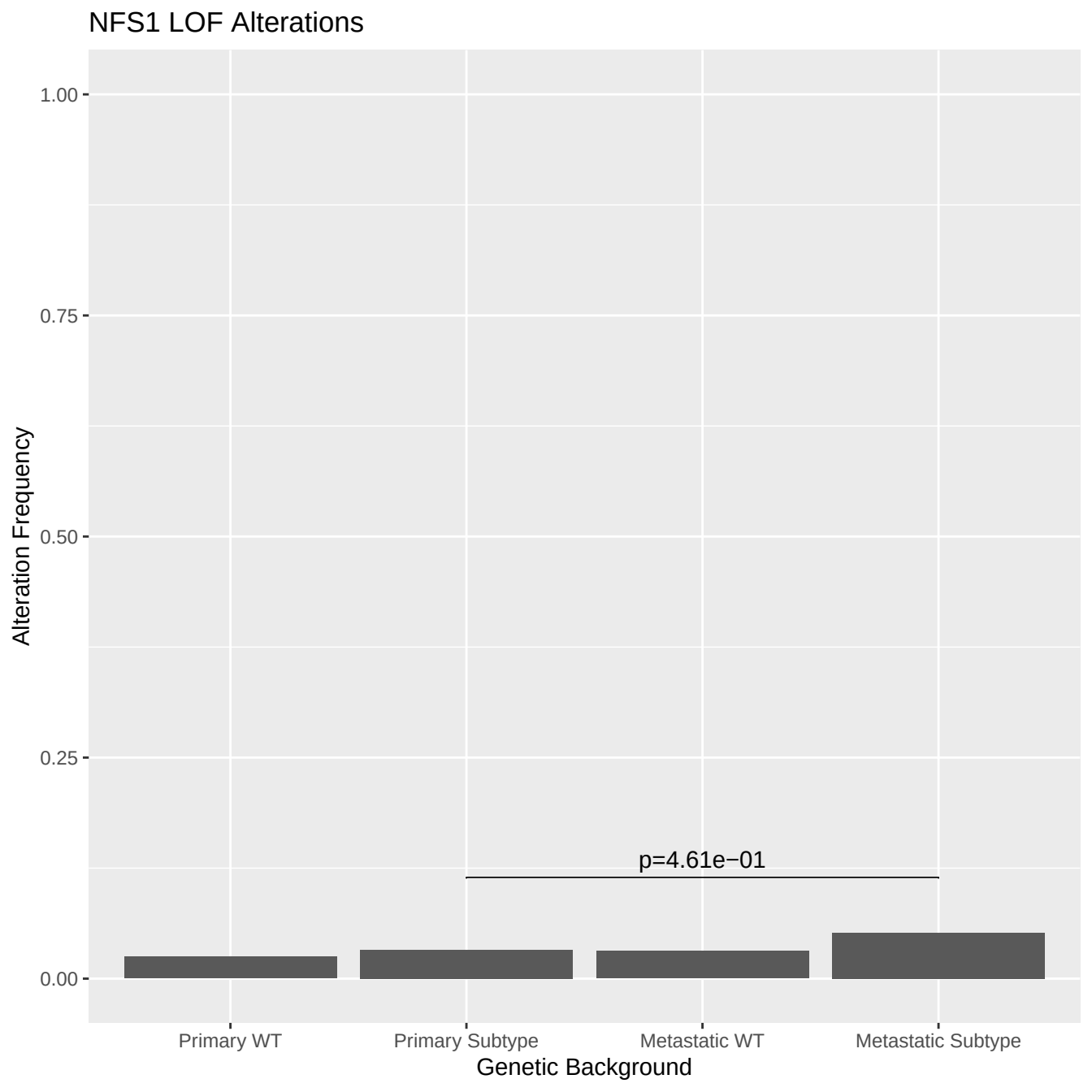

TBL3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

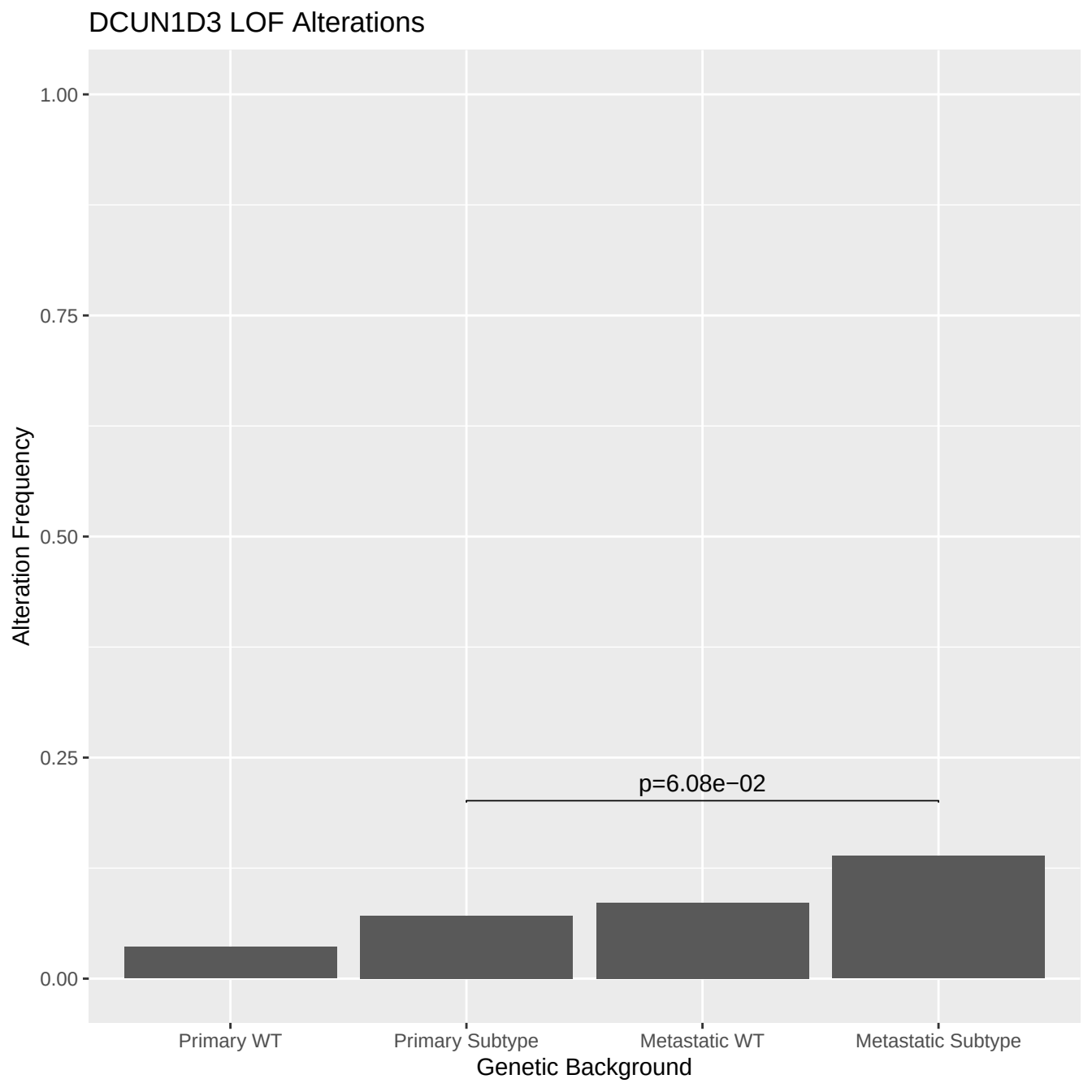

NBPF14 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

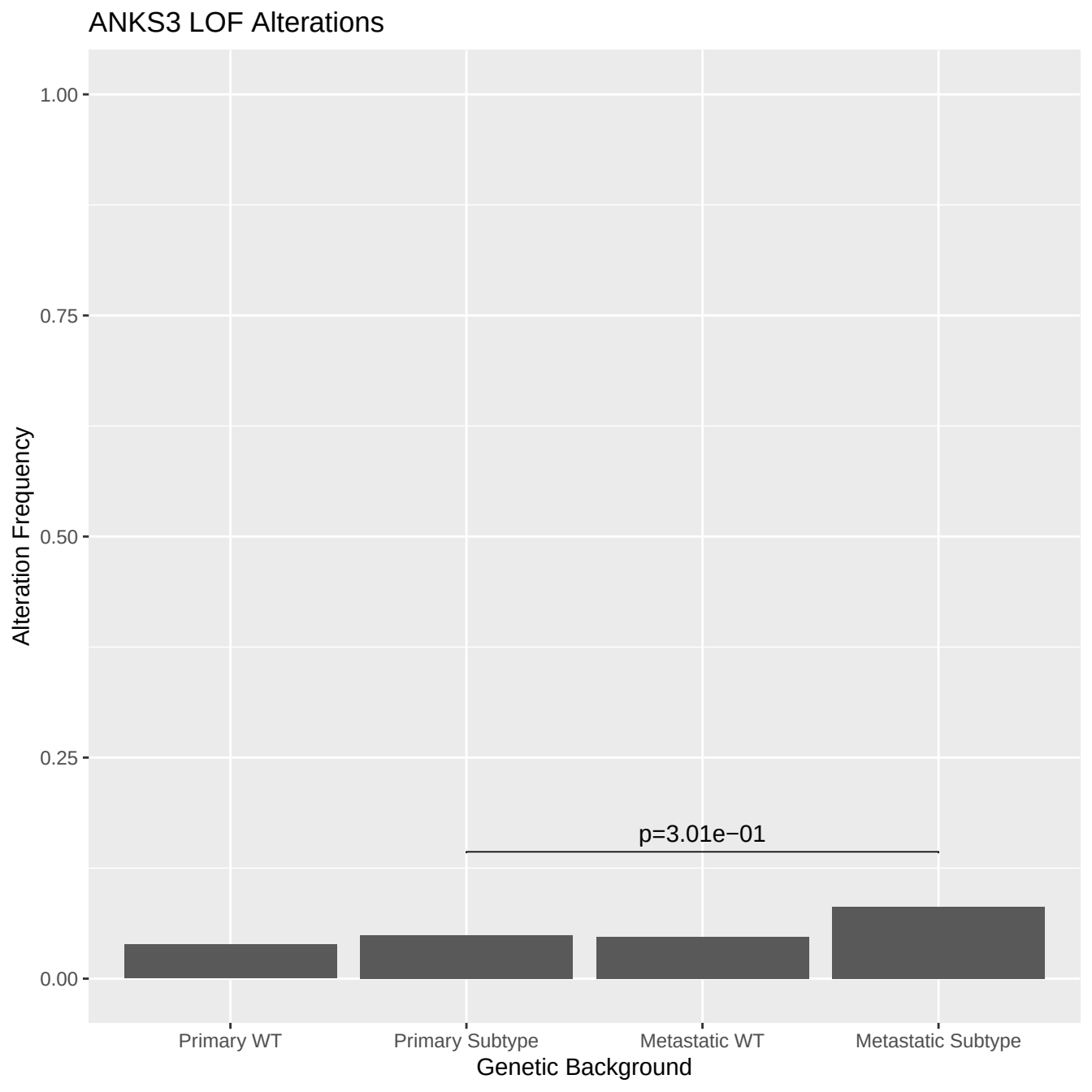

MLST8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

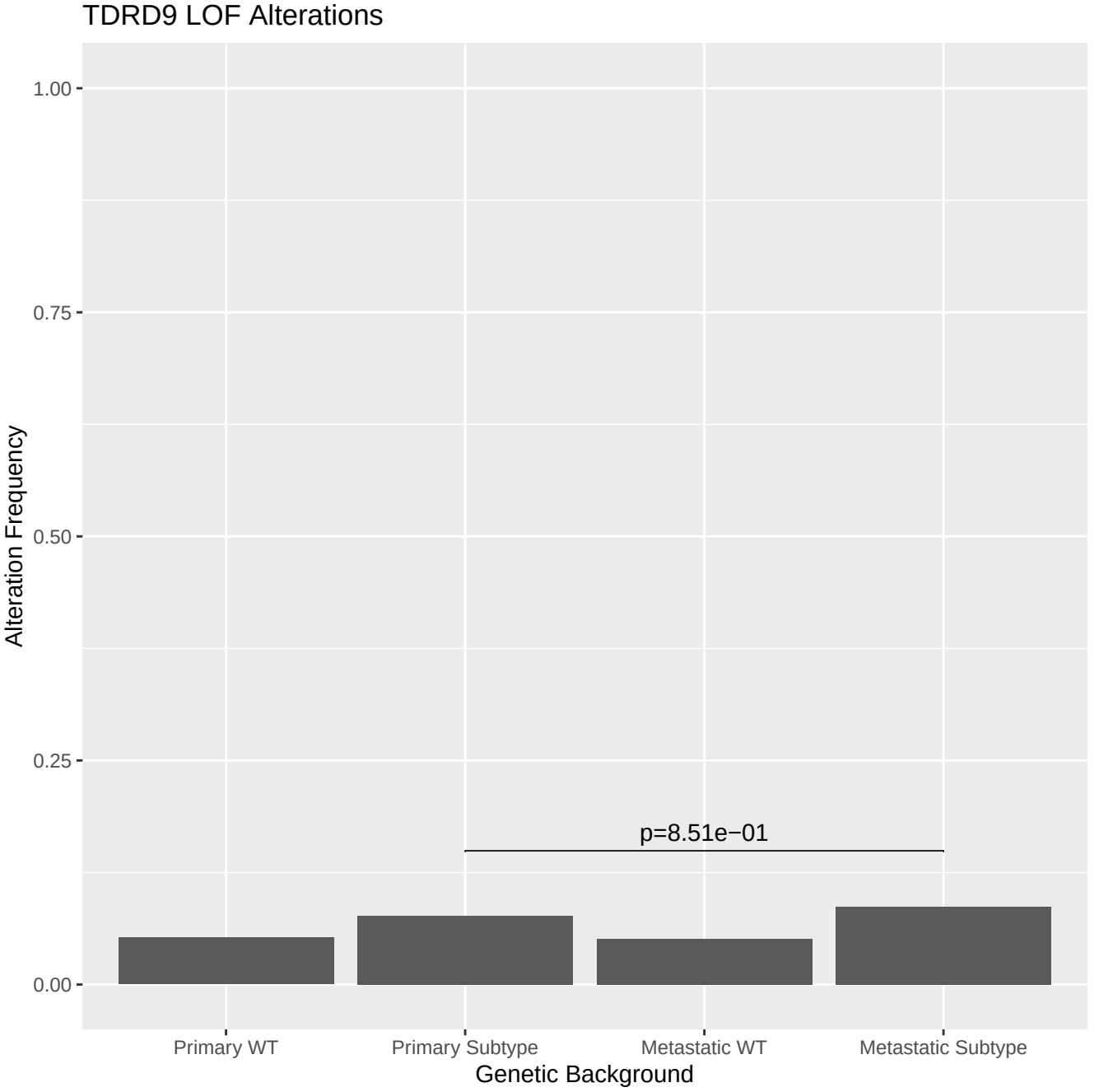

ACIN1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.00e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

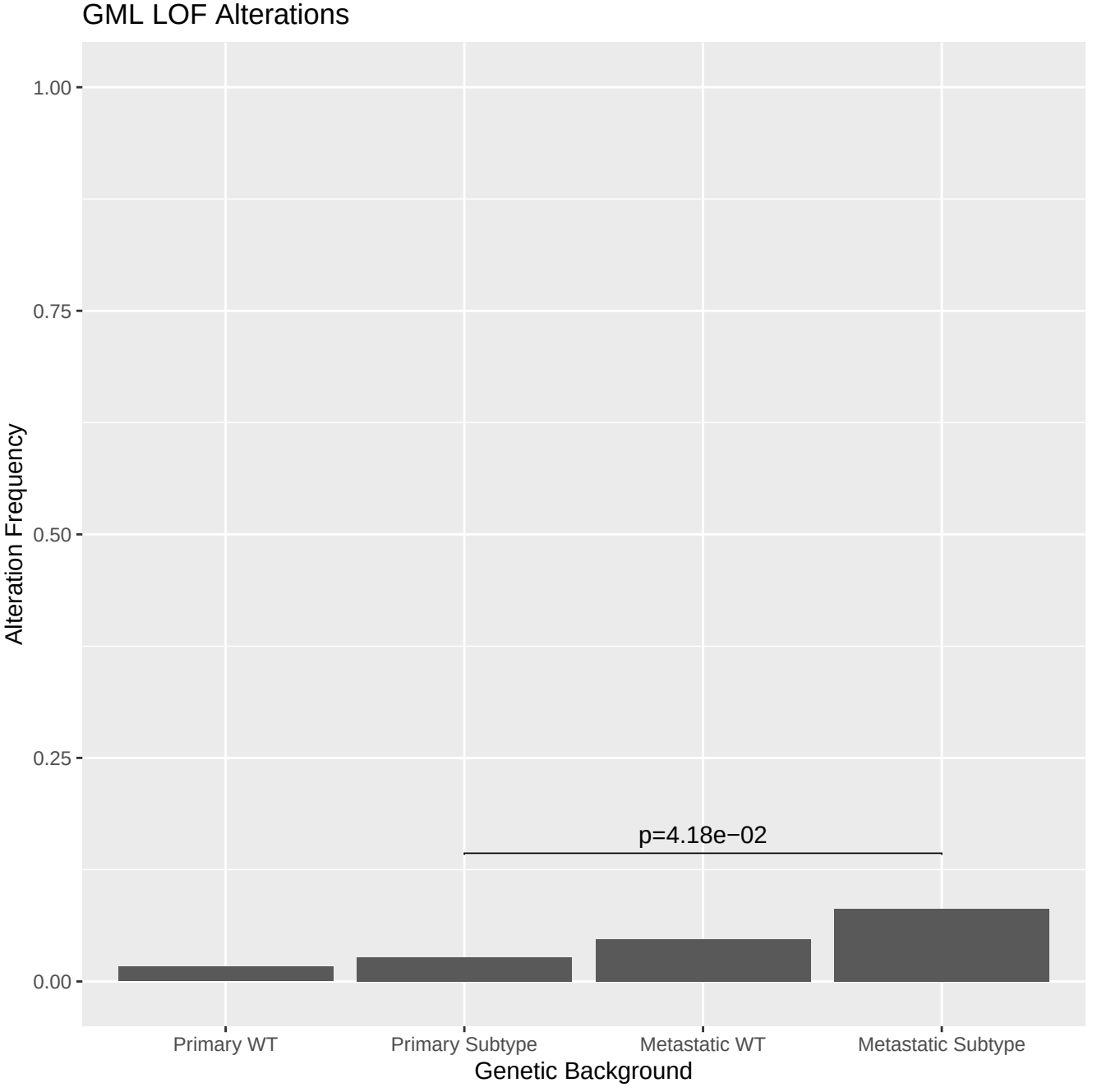

FCRL4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.72e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

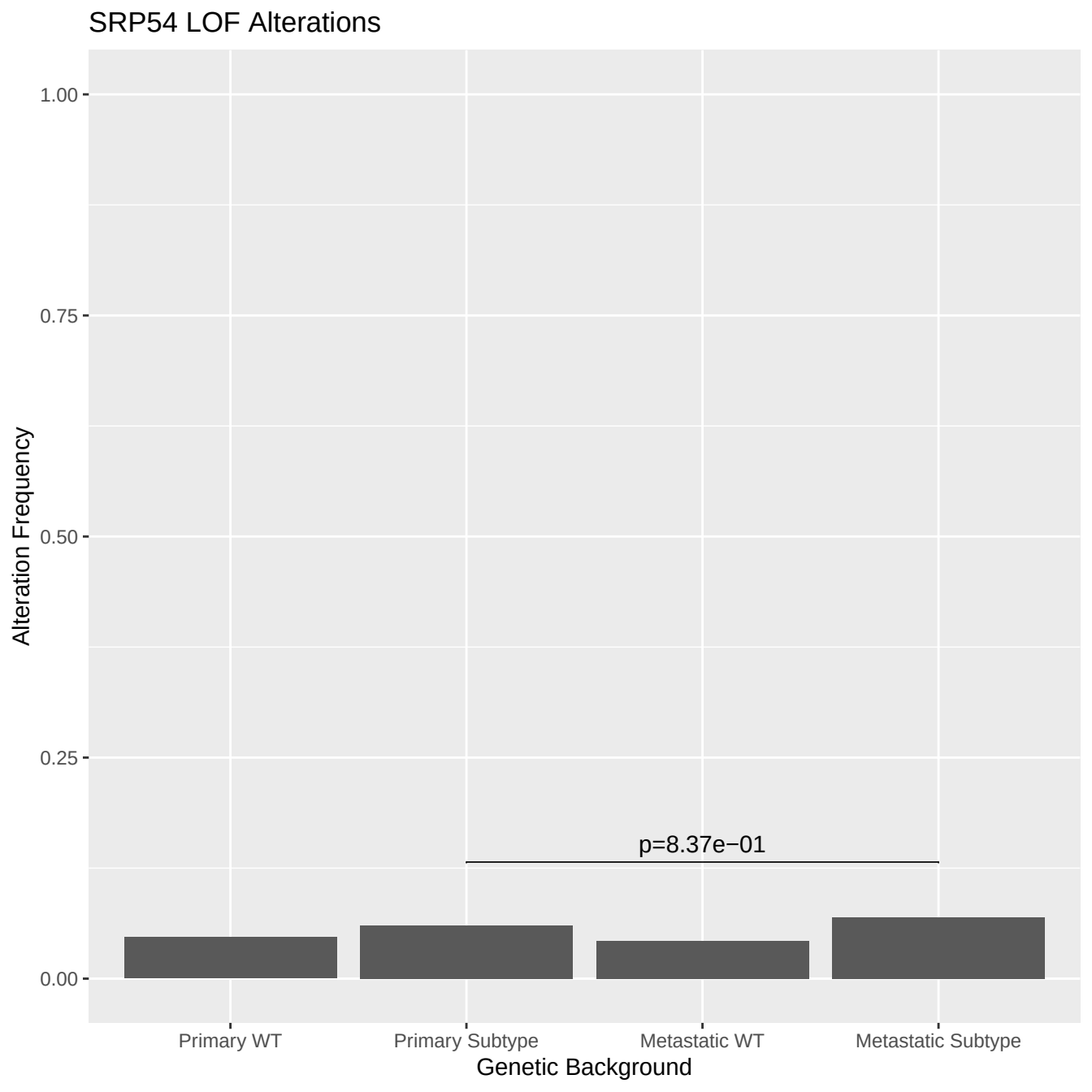

NFS1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.61e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

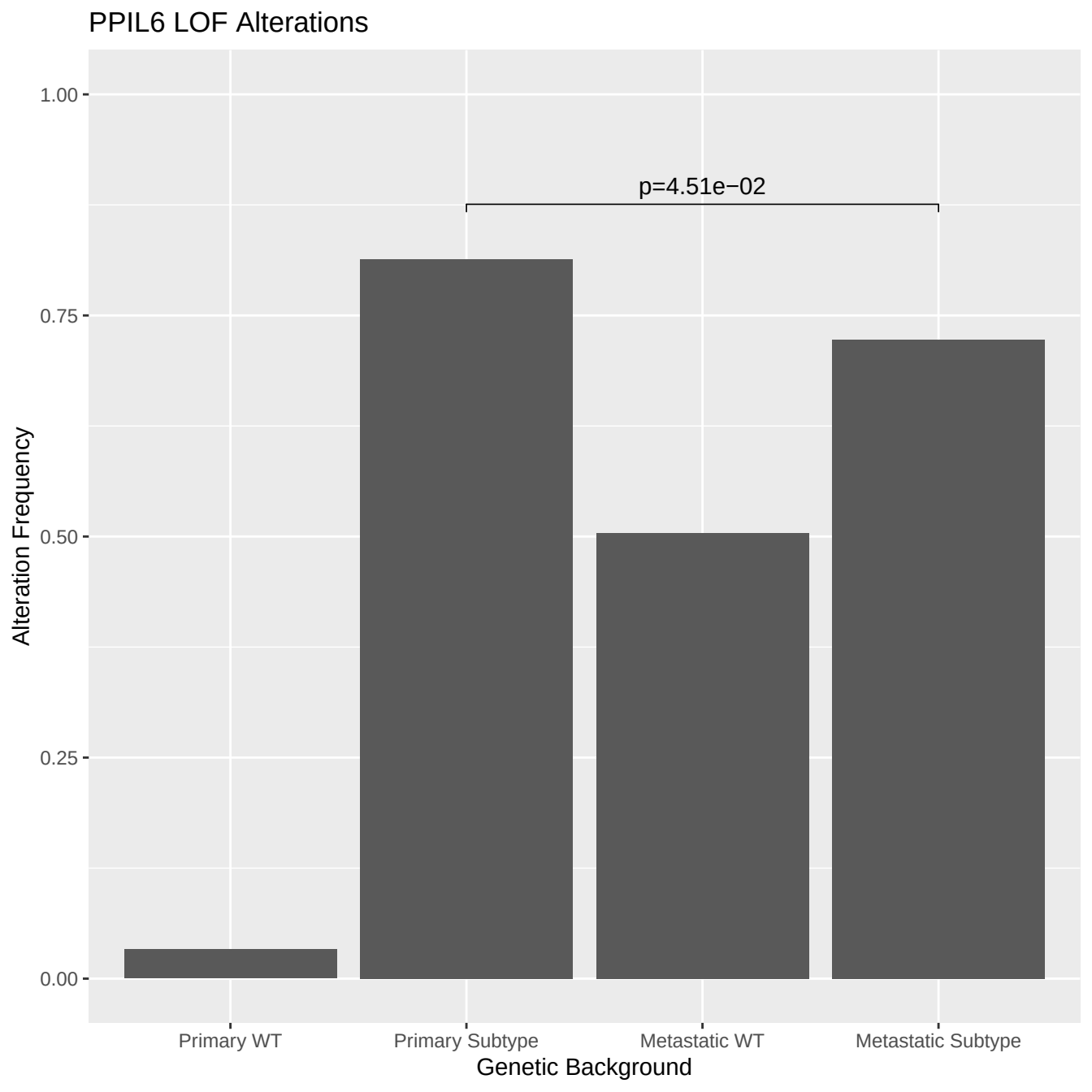

DCUN1D3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.08e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

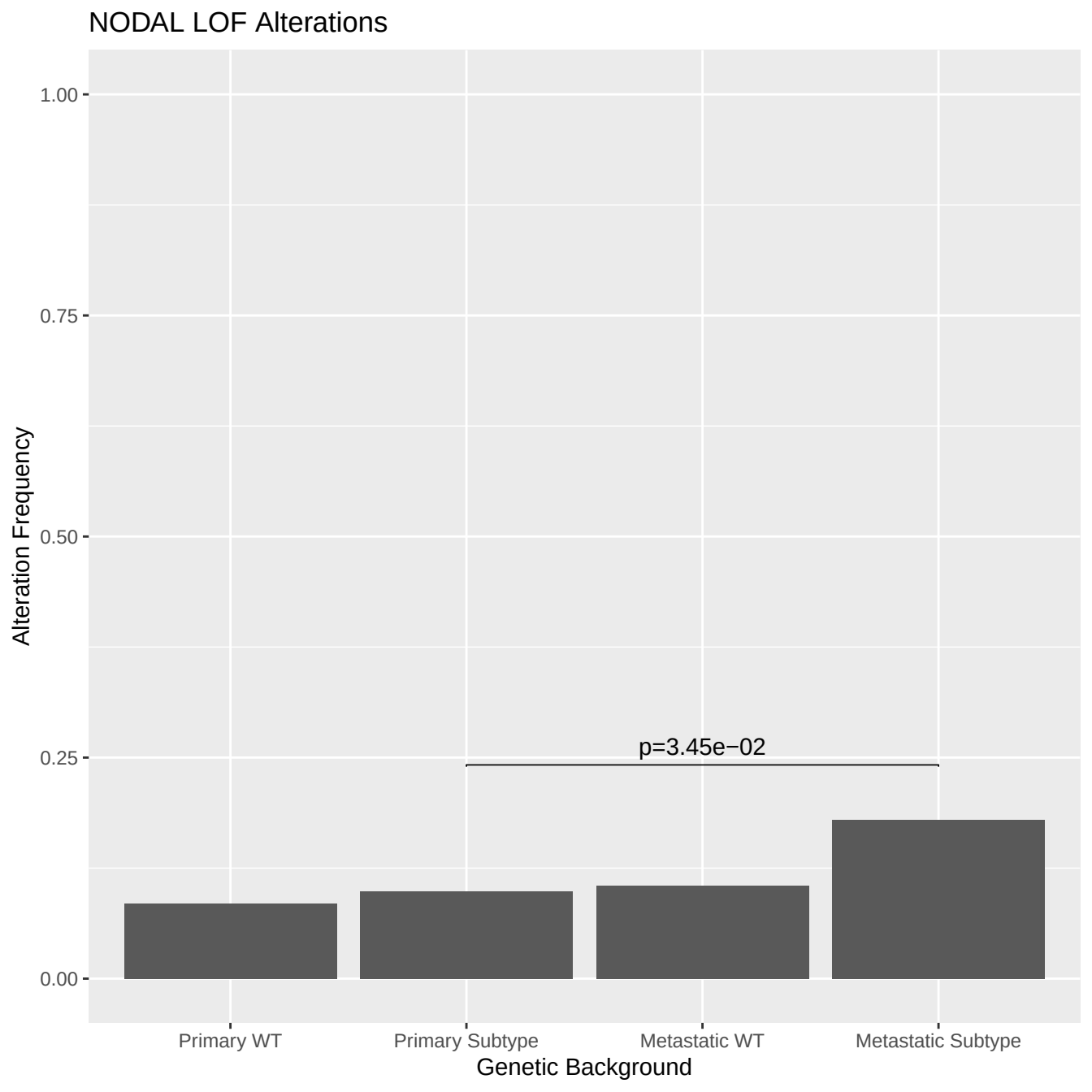

ANKS3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.01e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

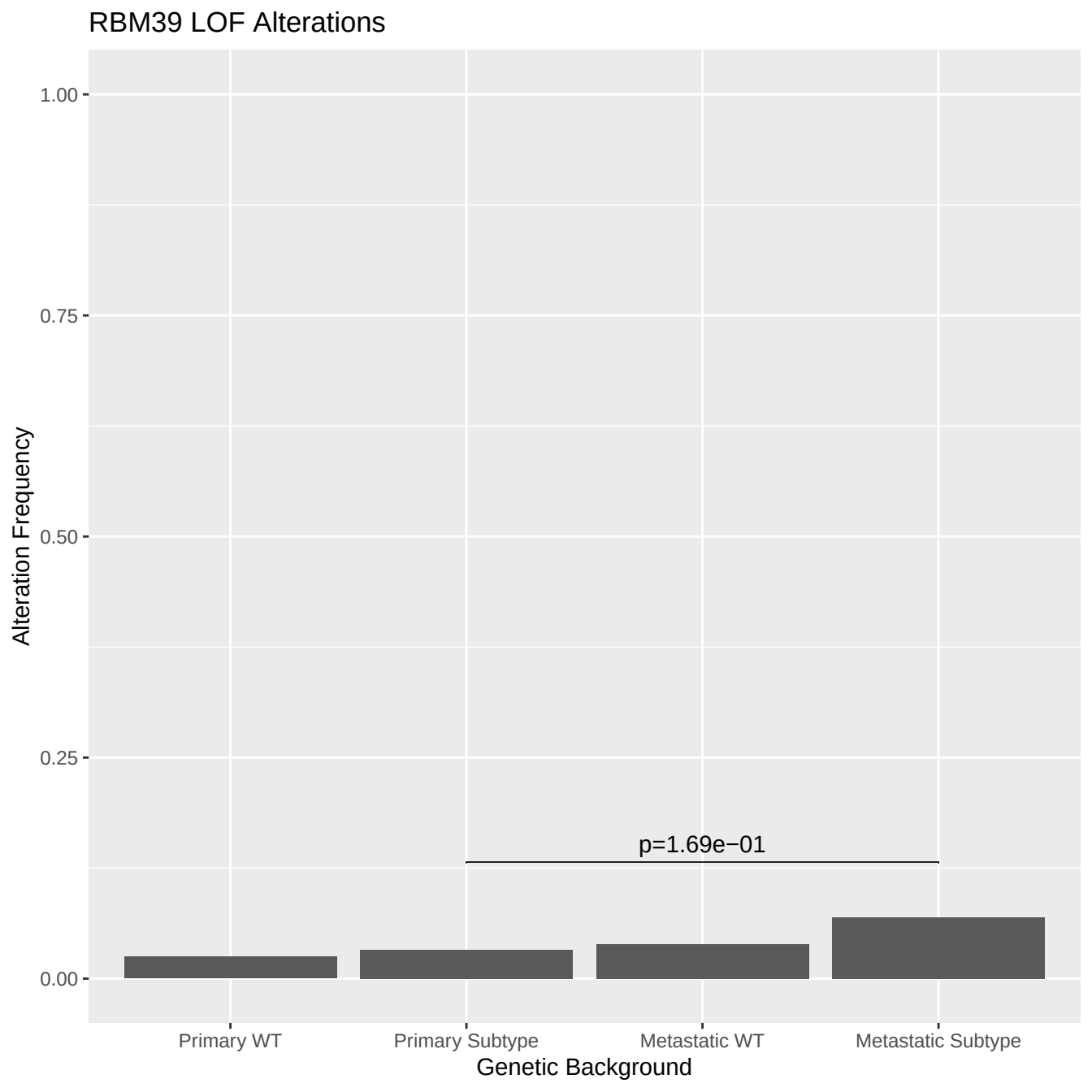

TDRD9 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

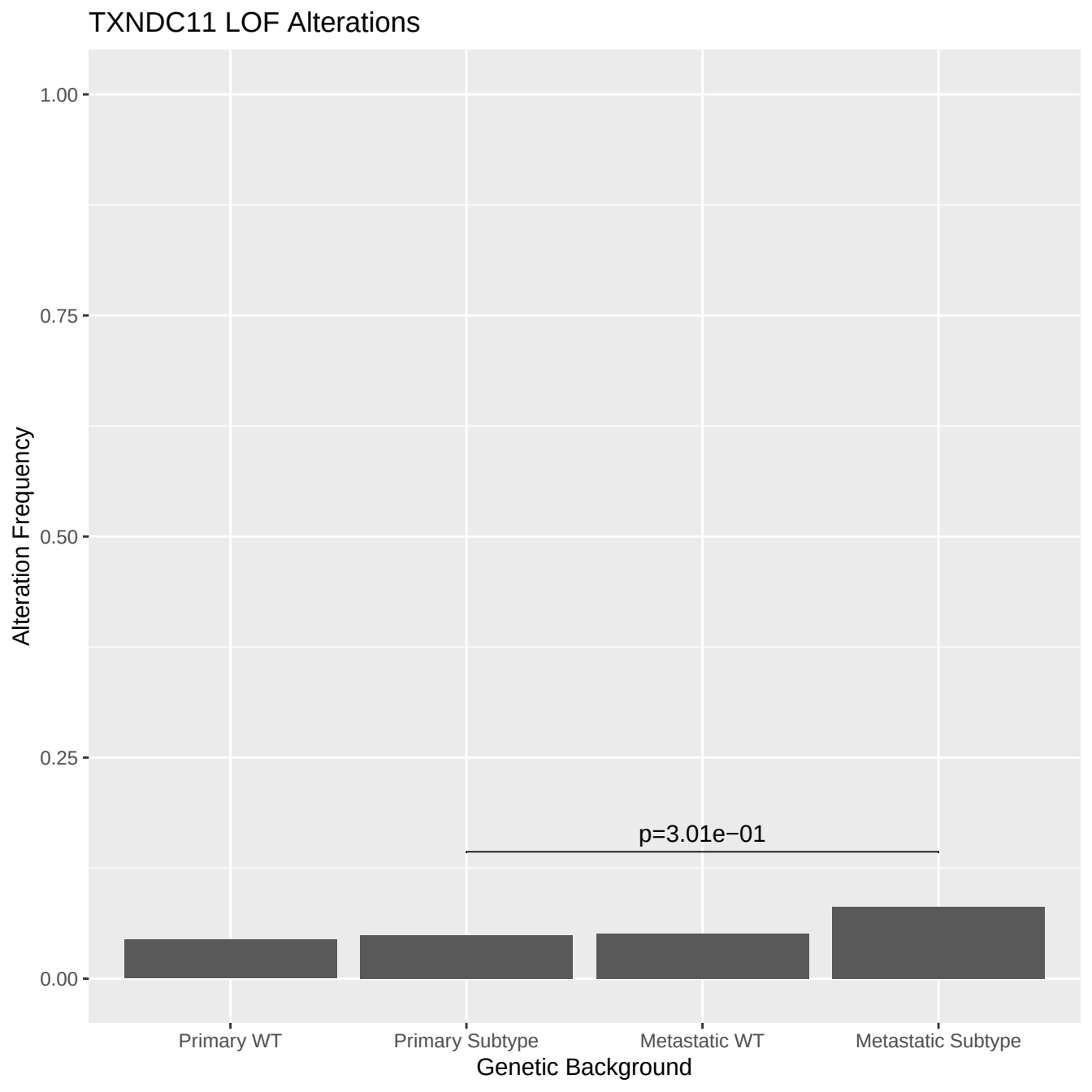

GML LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

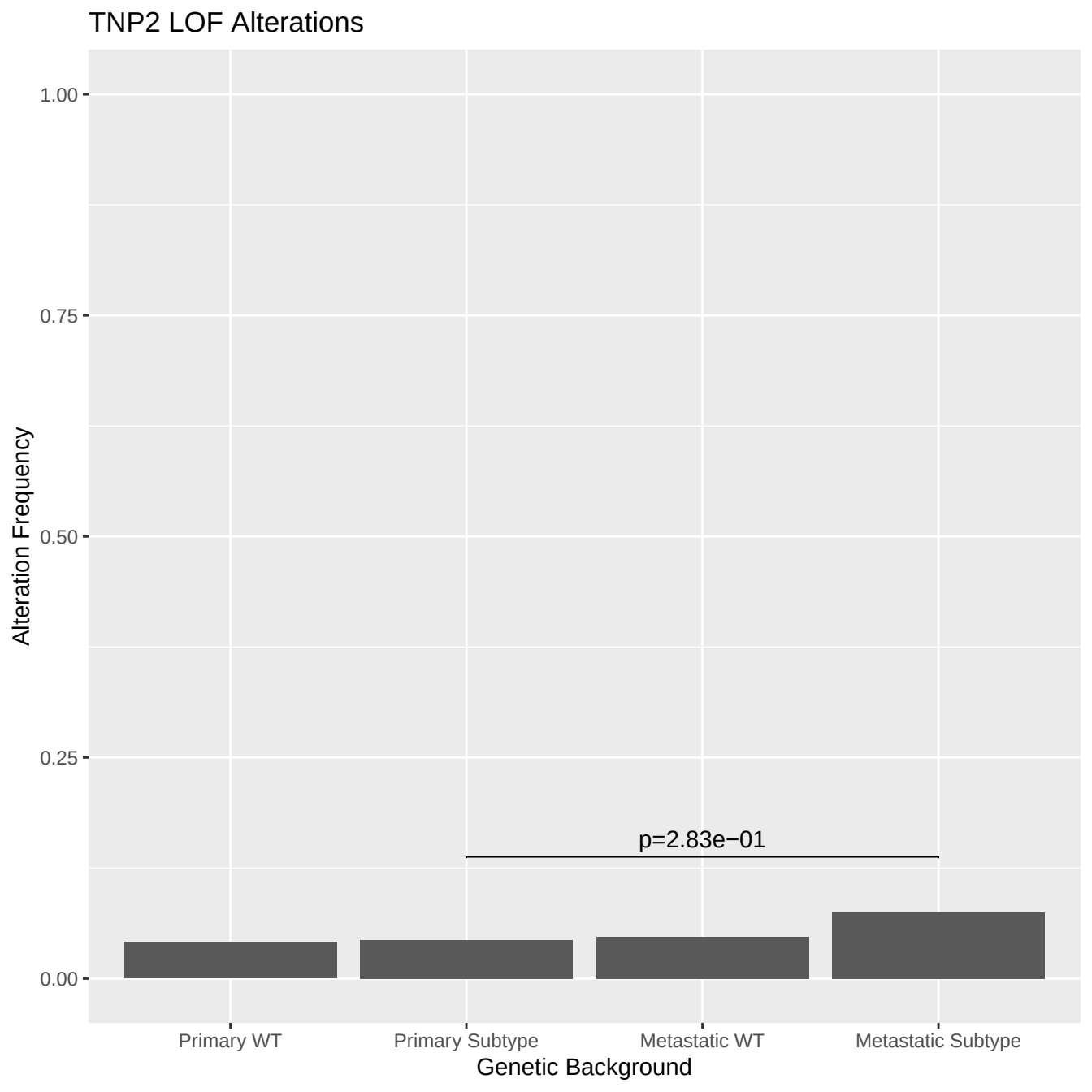

SRP54 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

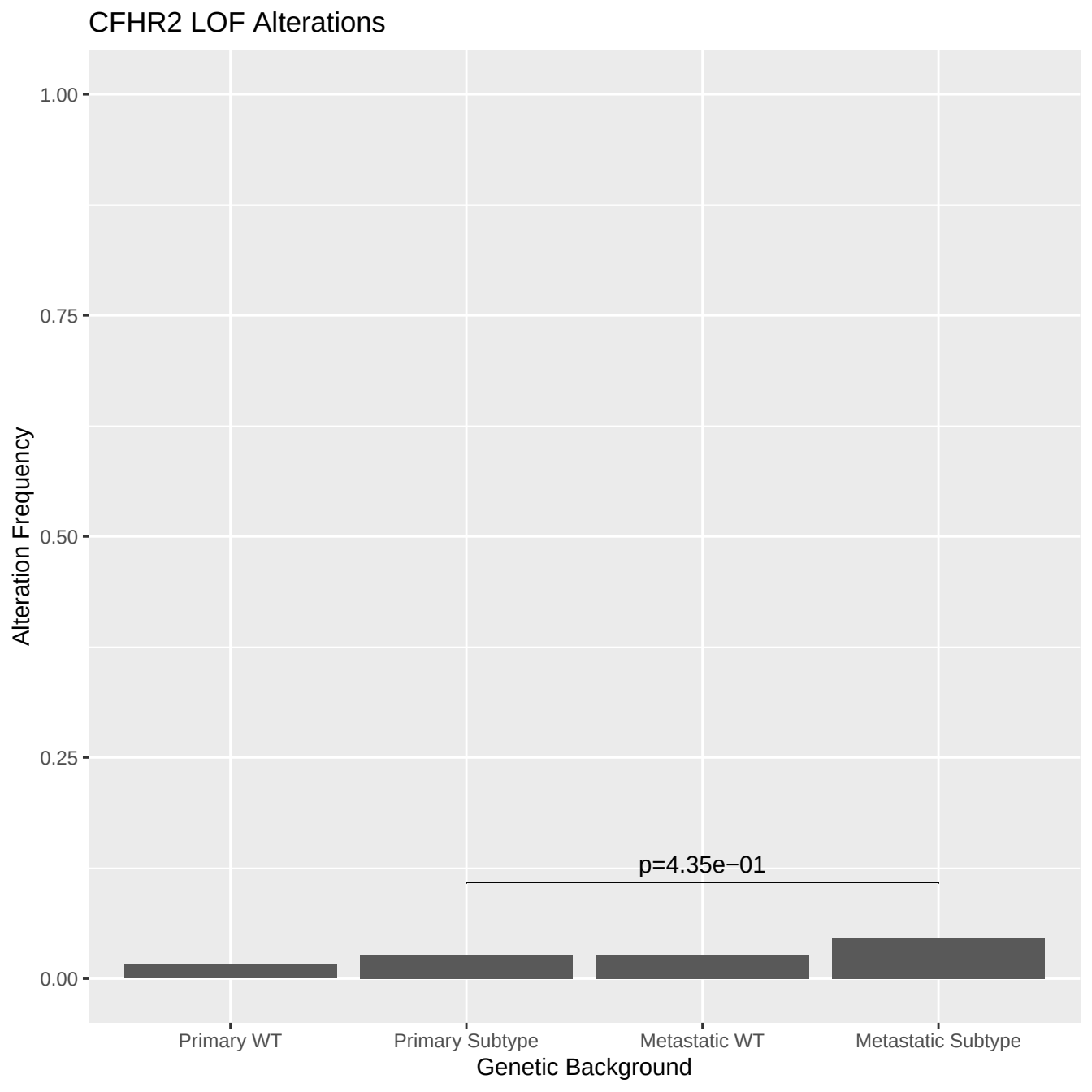

PPIL6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.51e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

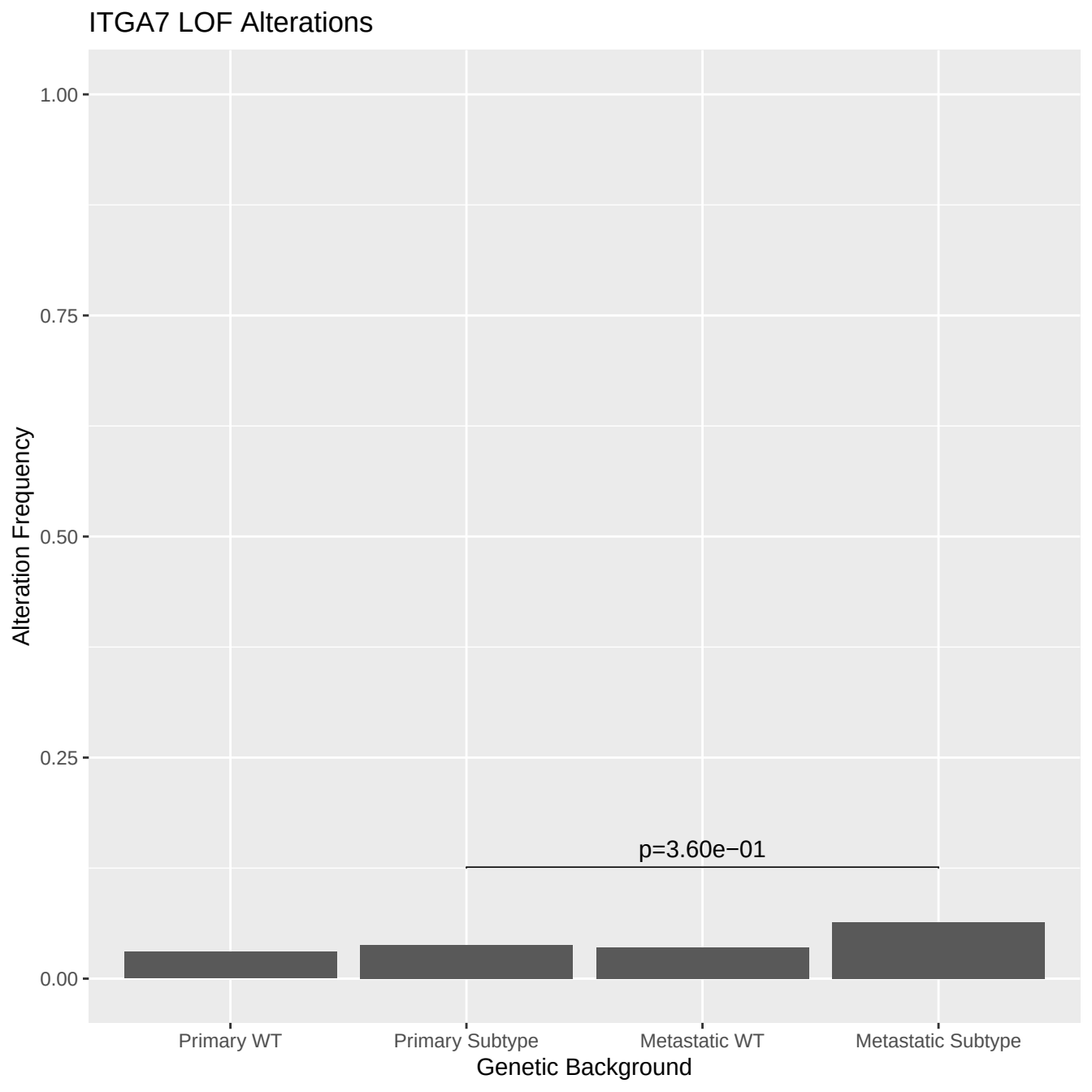

NODAL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.45e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

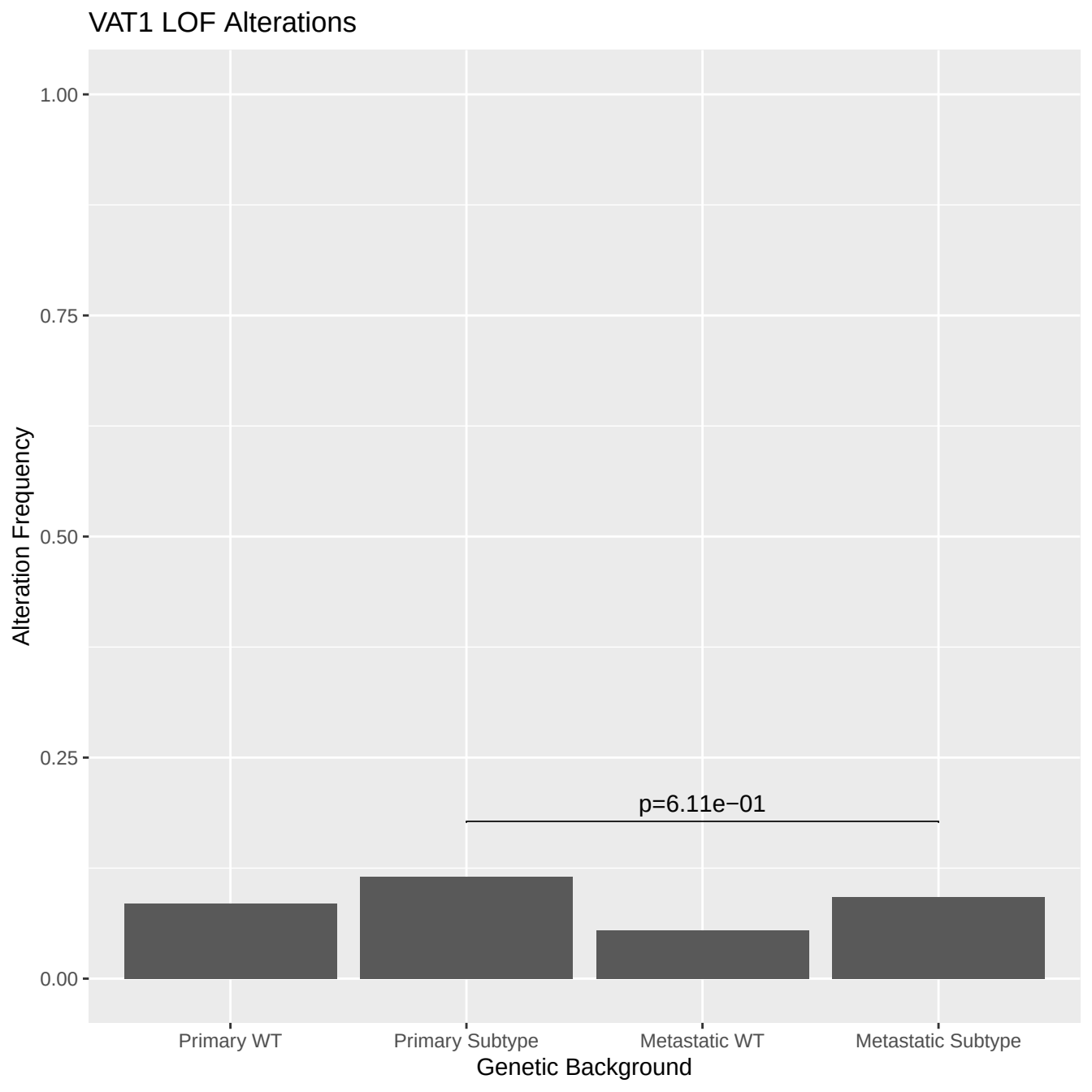

RBM39 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.69e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

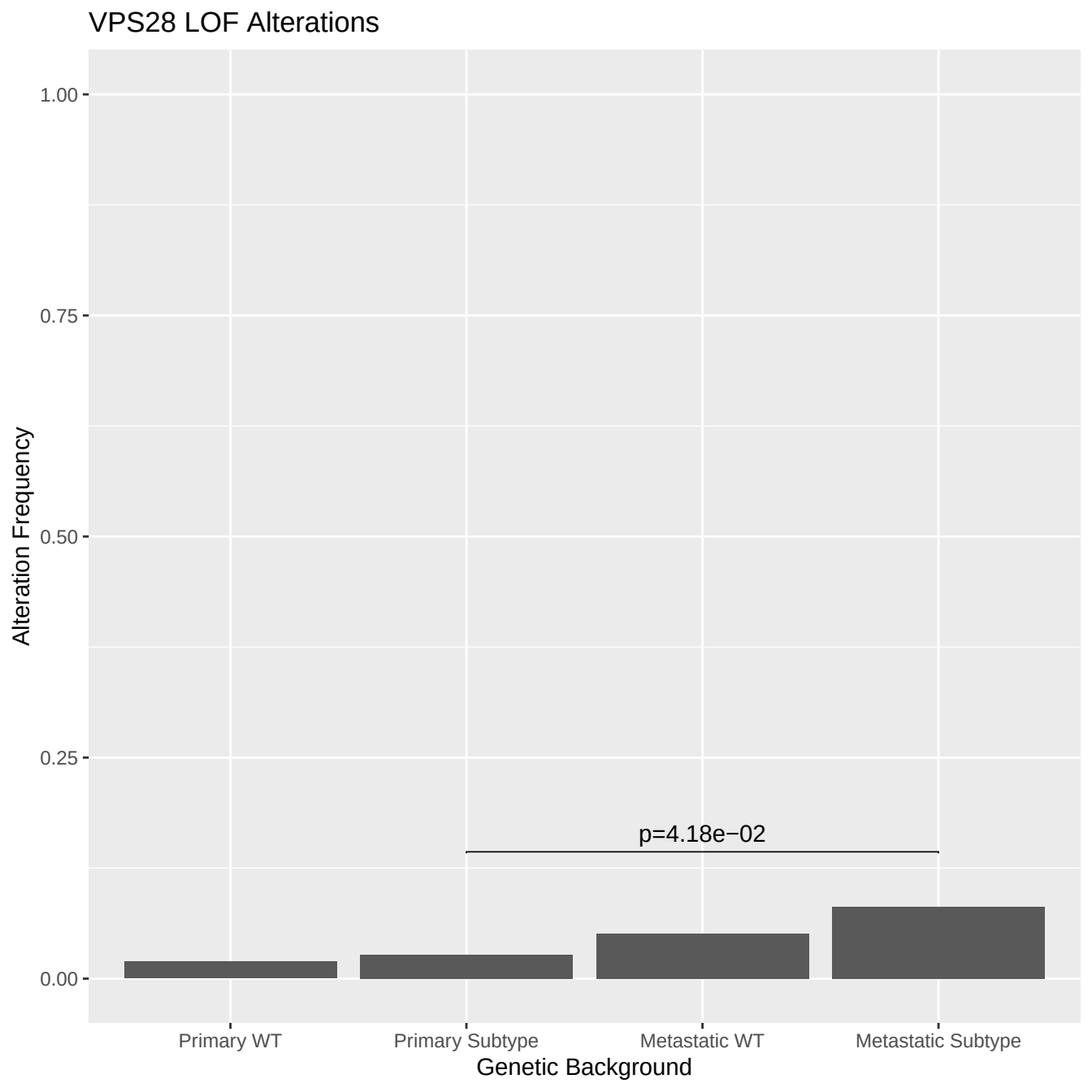

TXNDC11 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.01e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

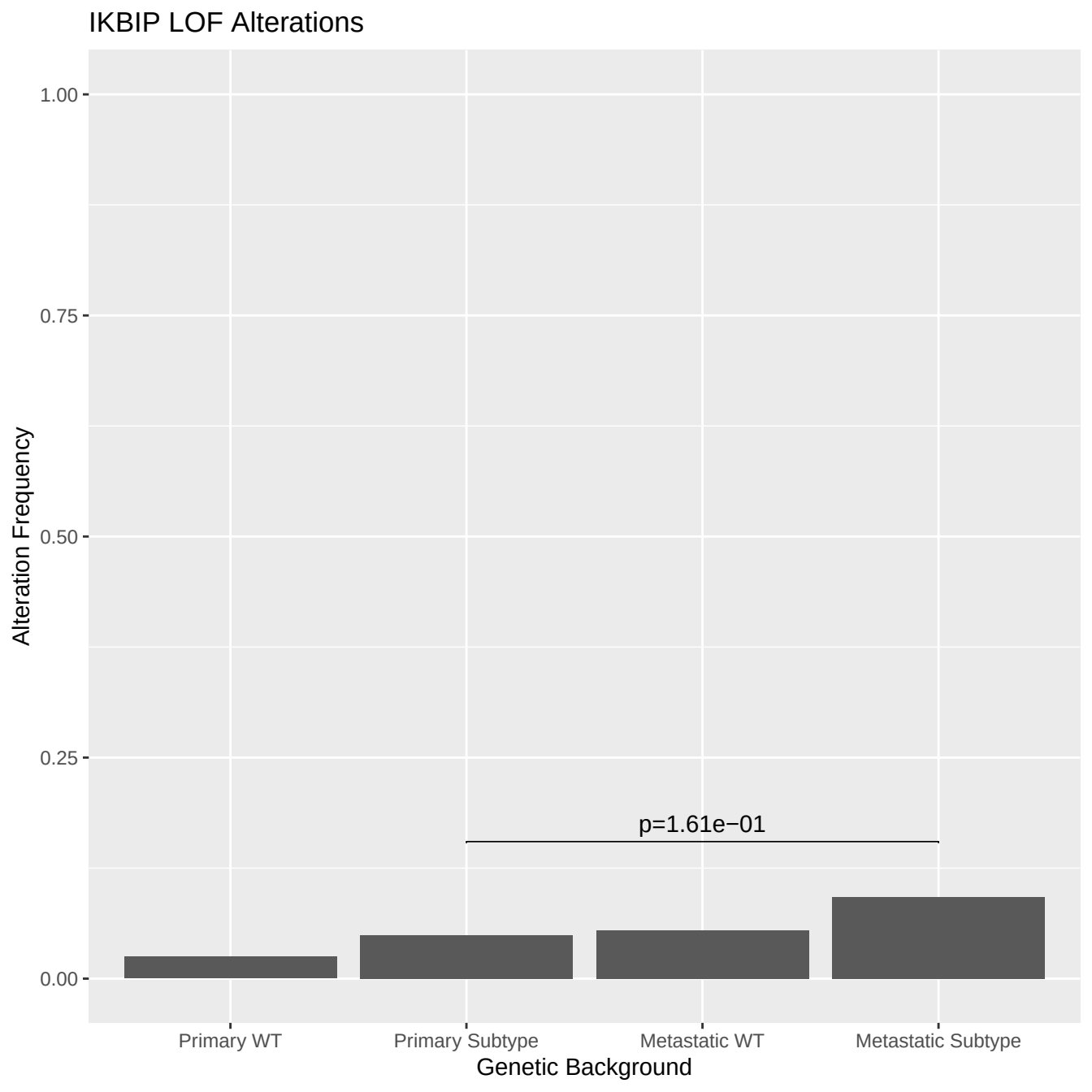

TNP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

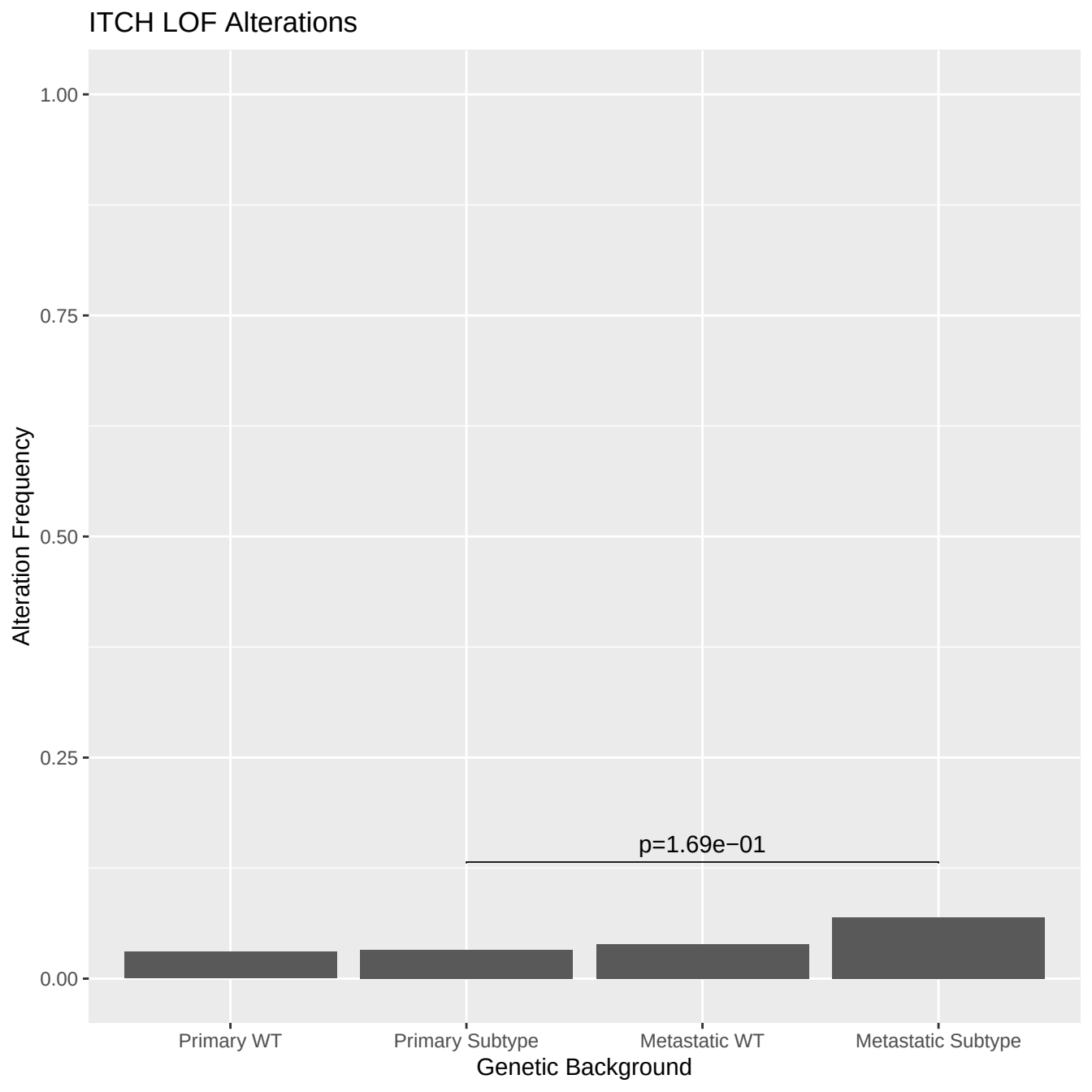

CFHR2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

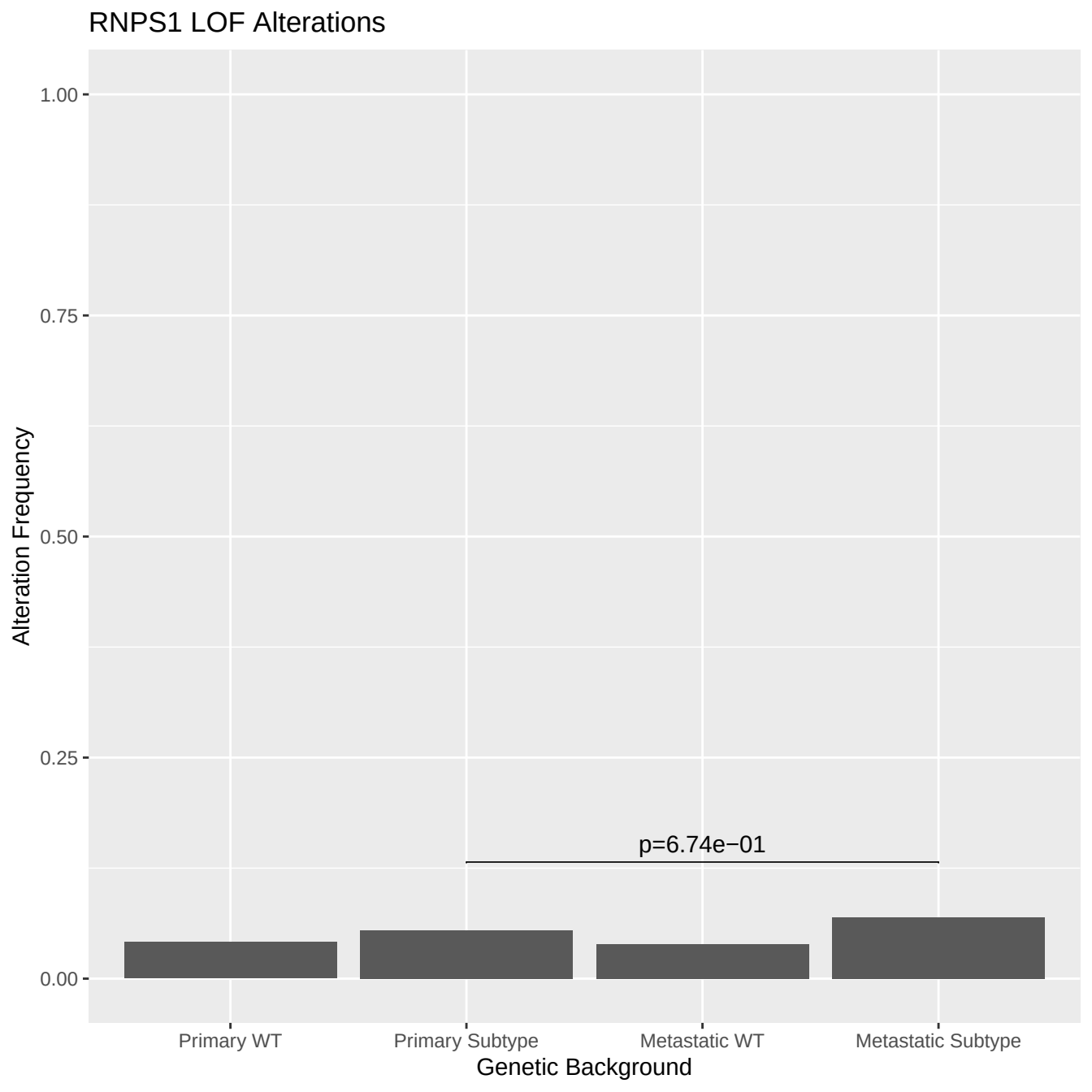

ITGA7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.60e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

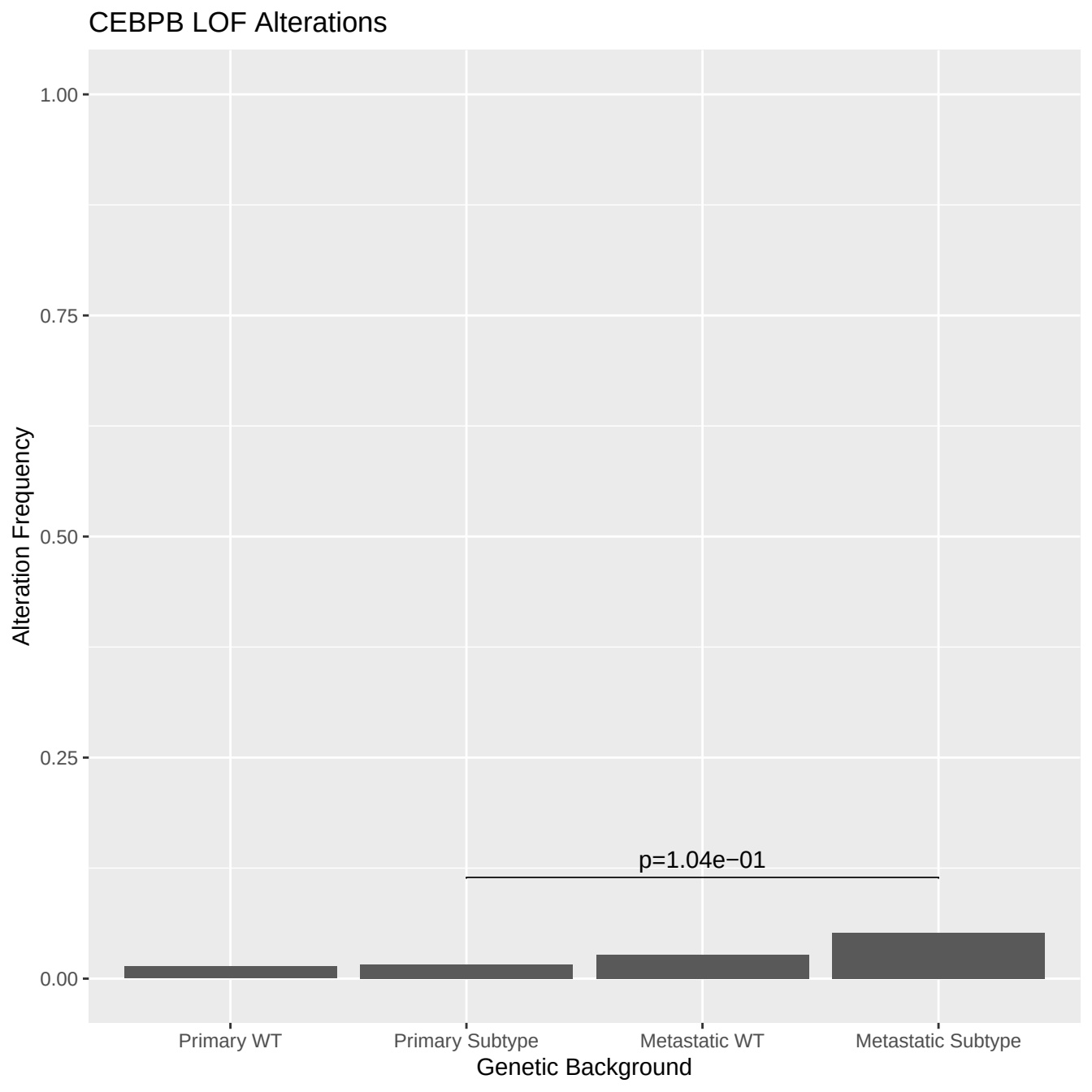

VAT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

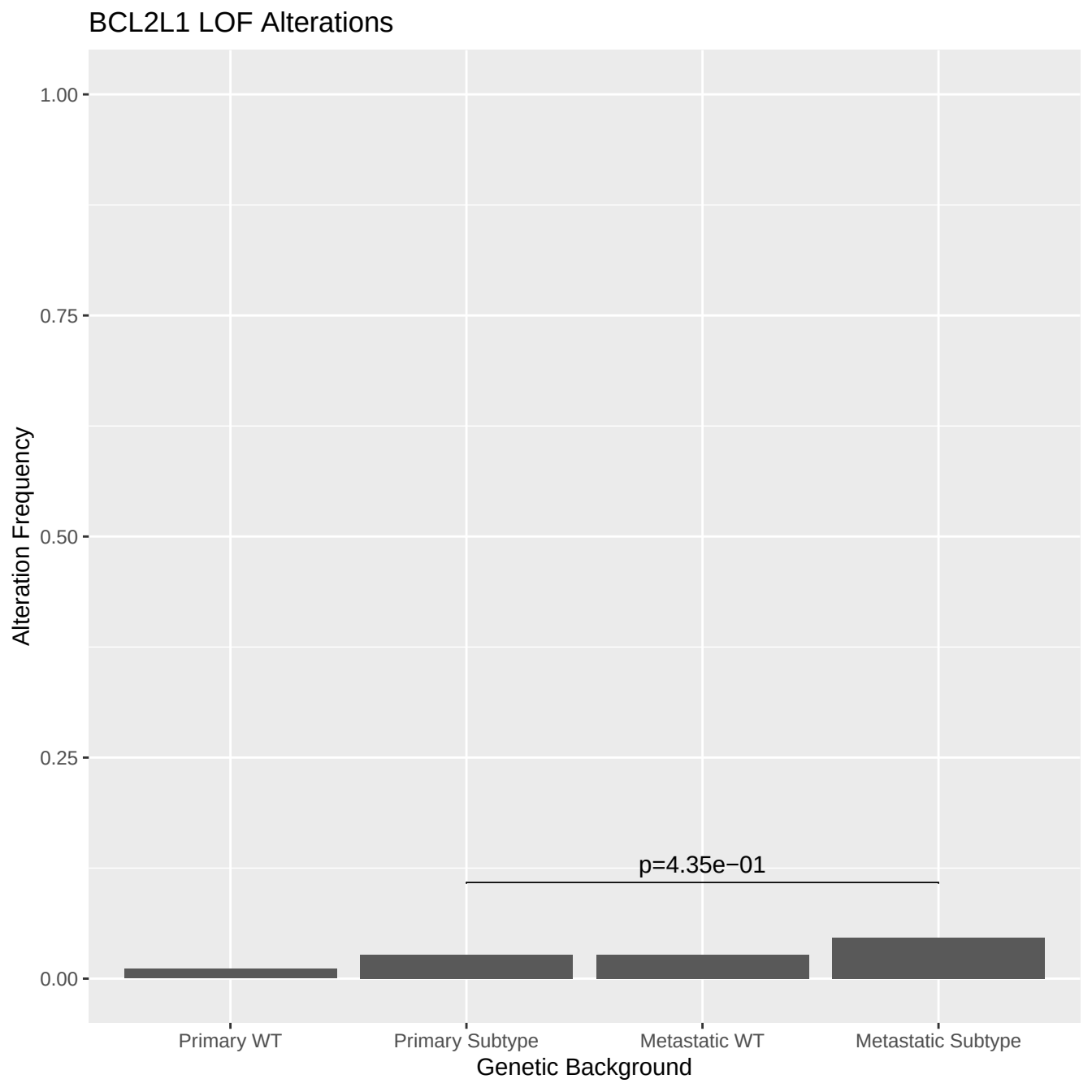

VPS28 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

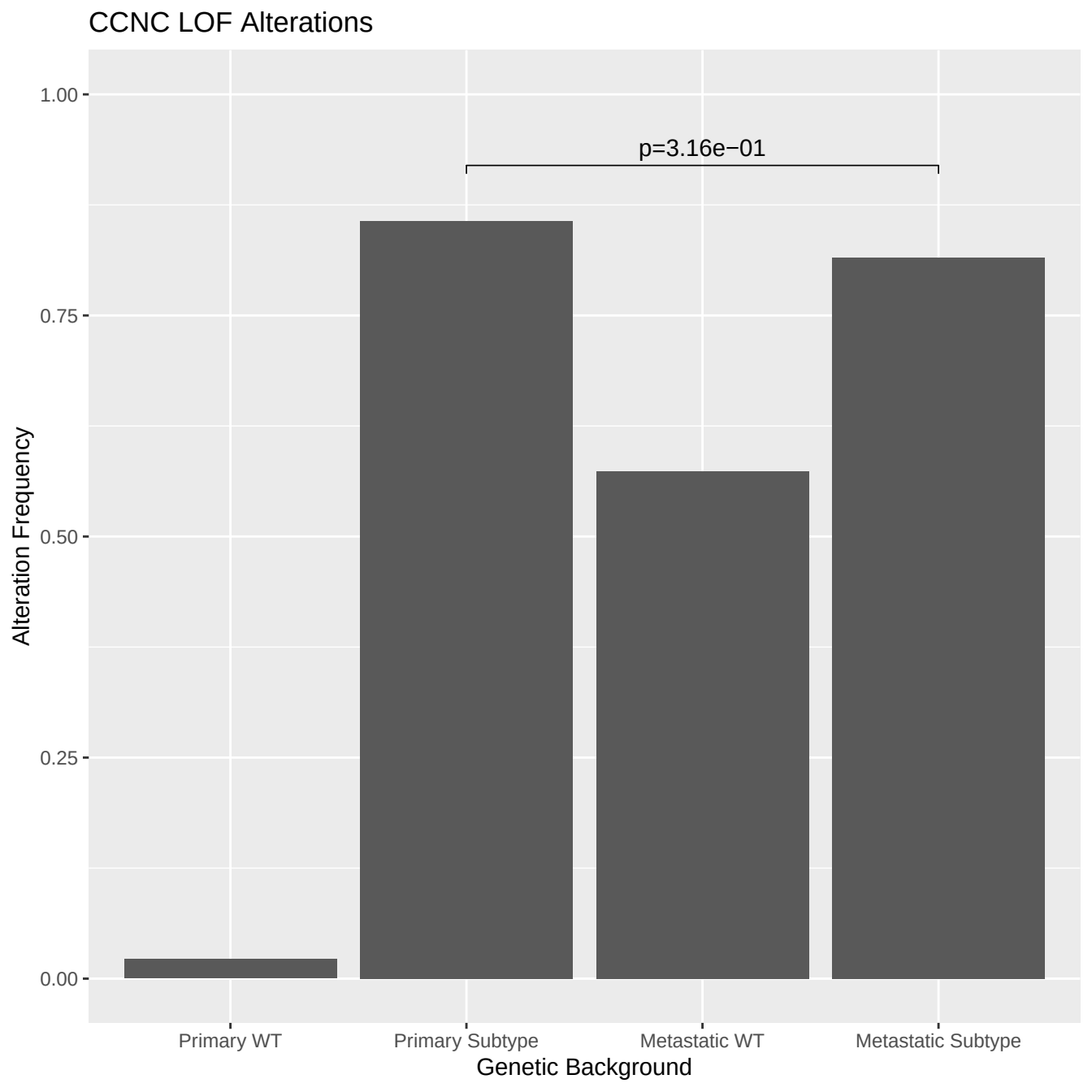

IKBIP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.61e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

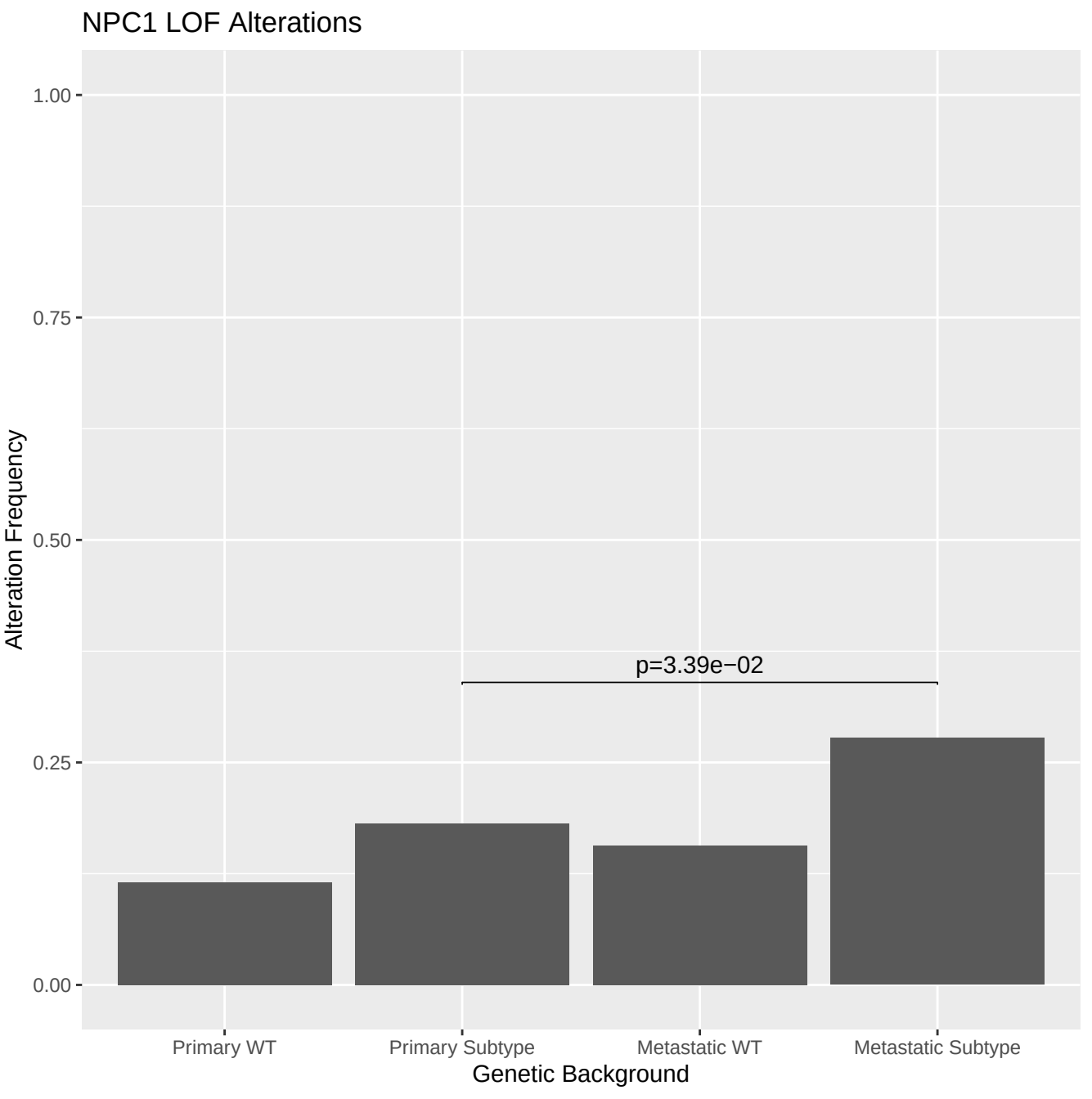

ITCH LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.69e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

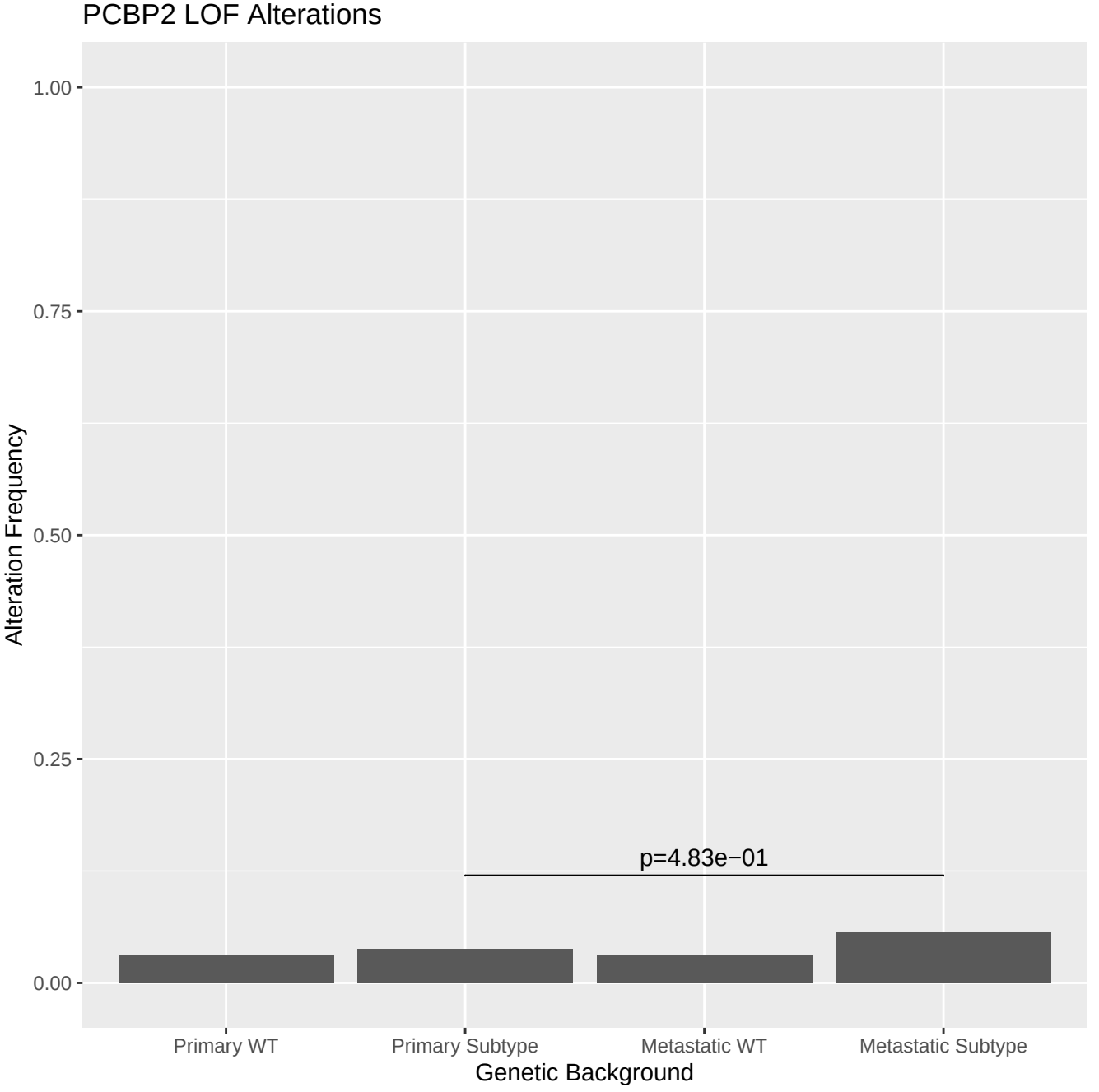

RNPS1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

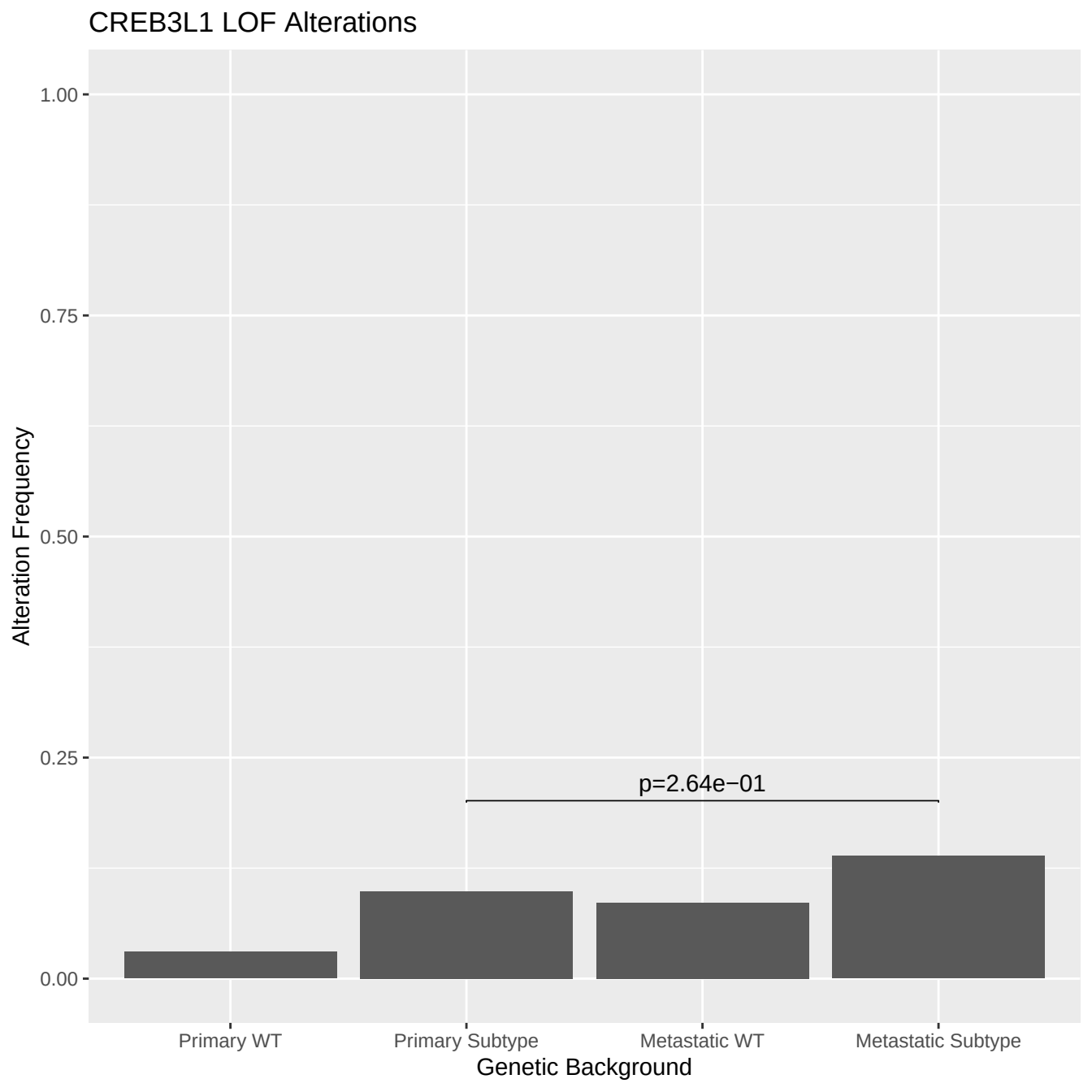

CEBPB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.04e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

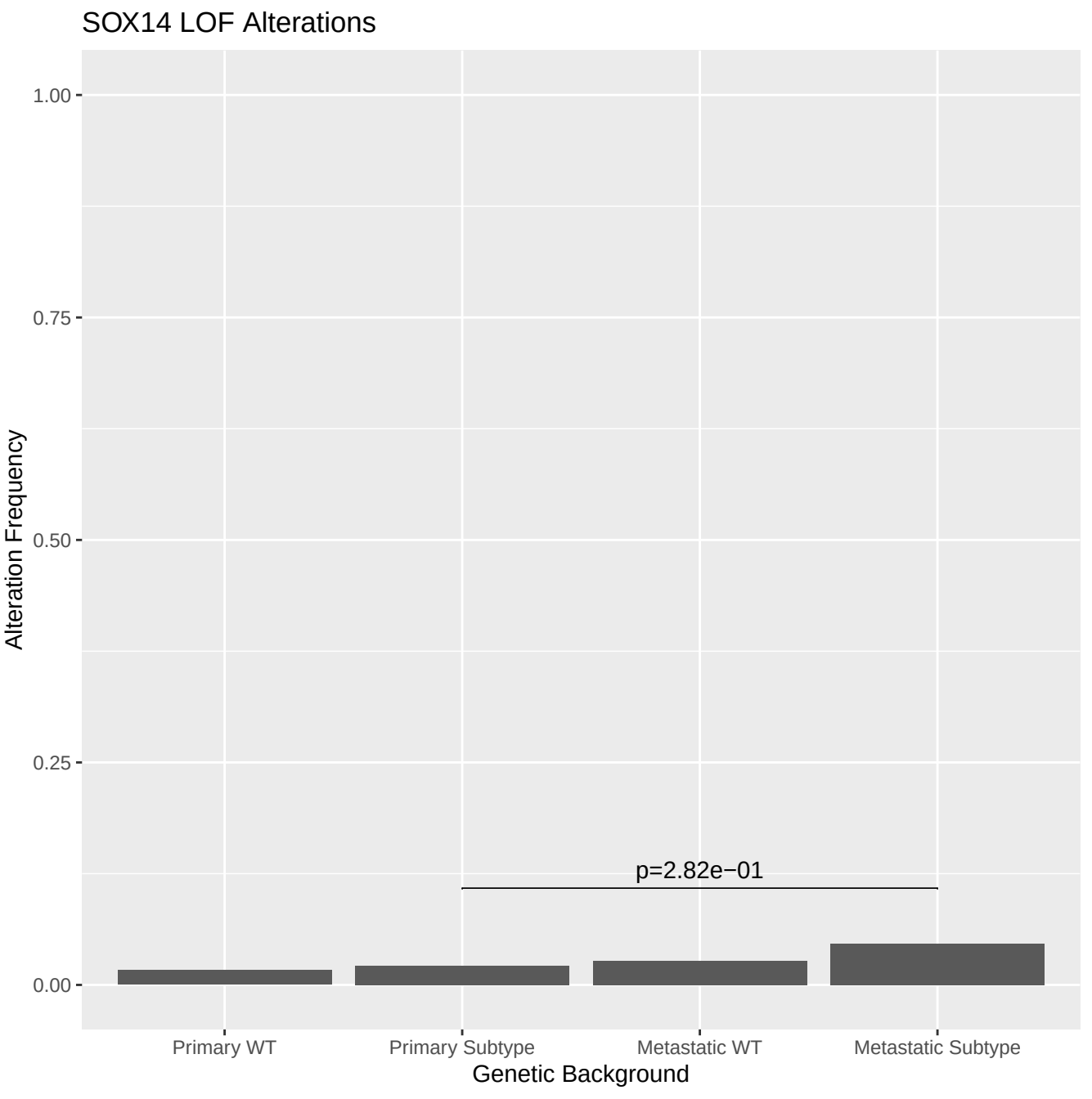

BCL2L1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

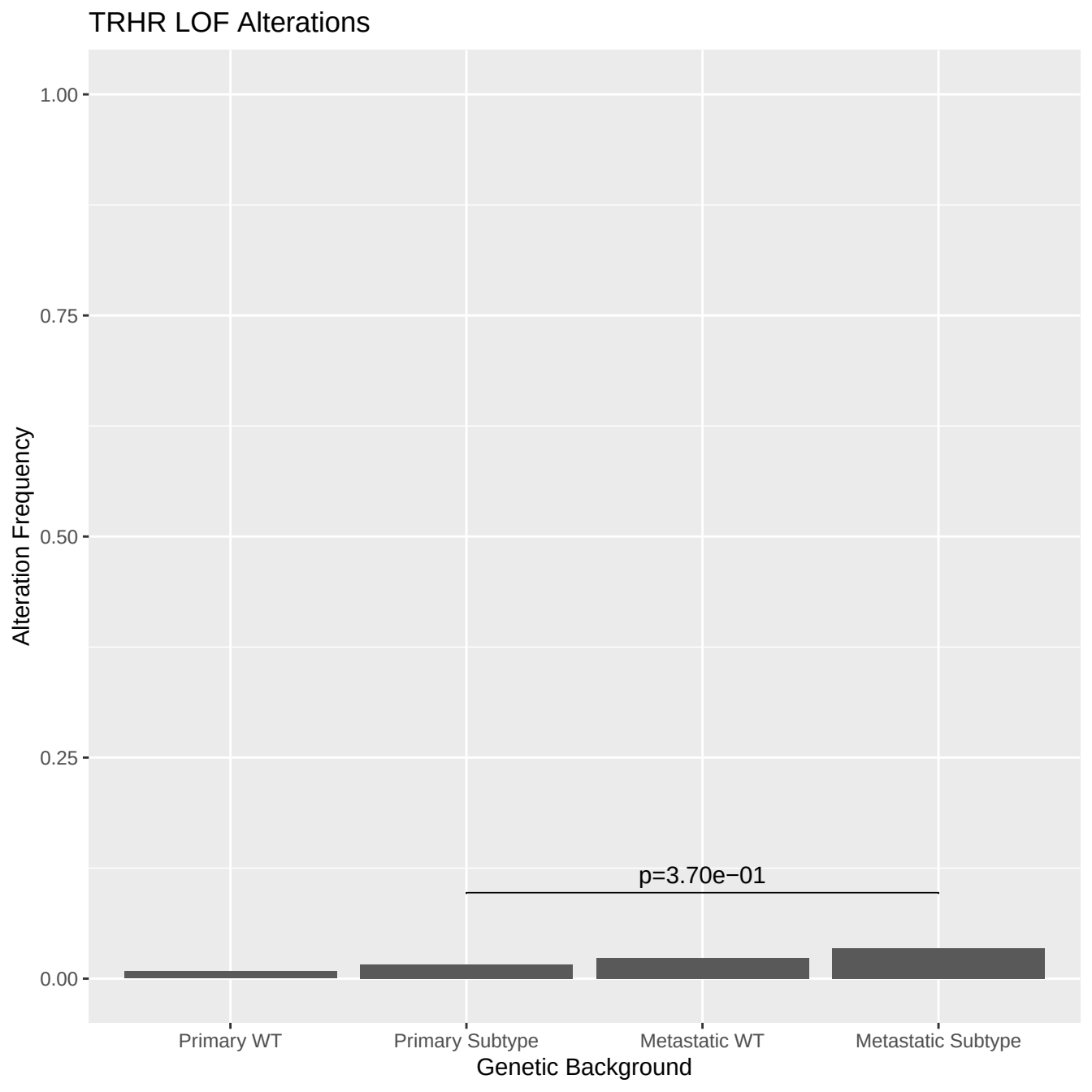

CCNC LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.16e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

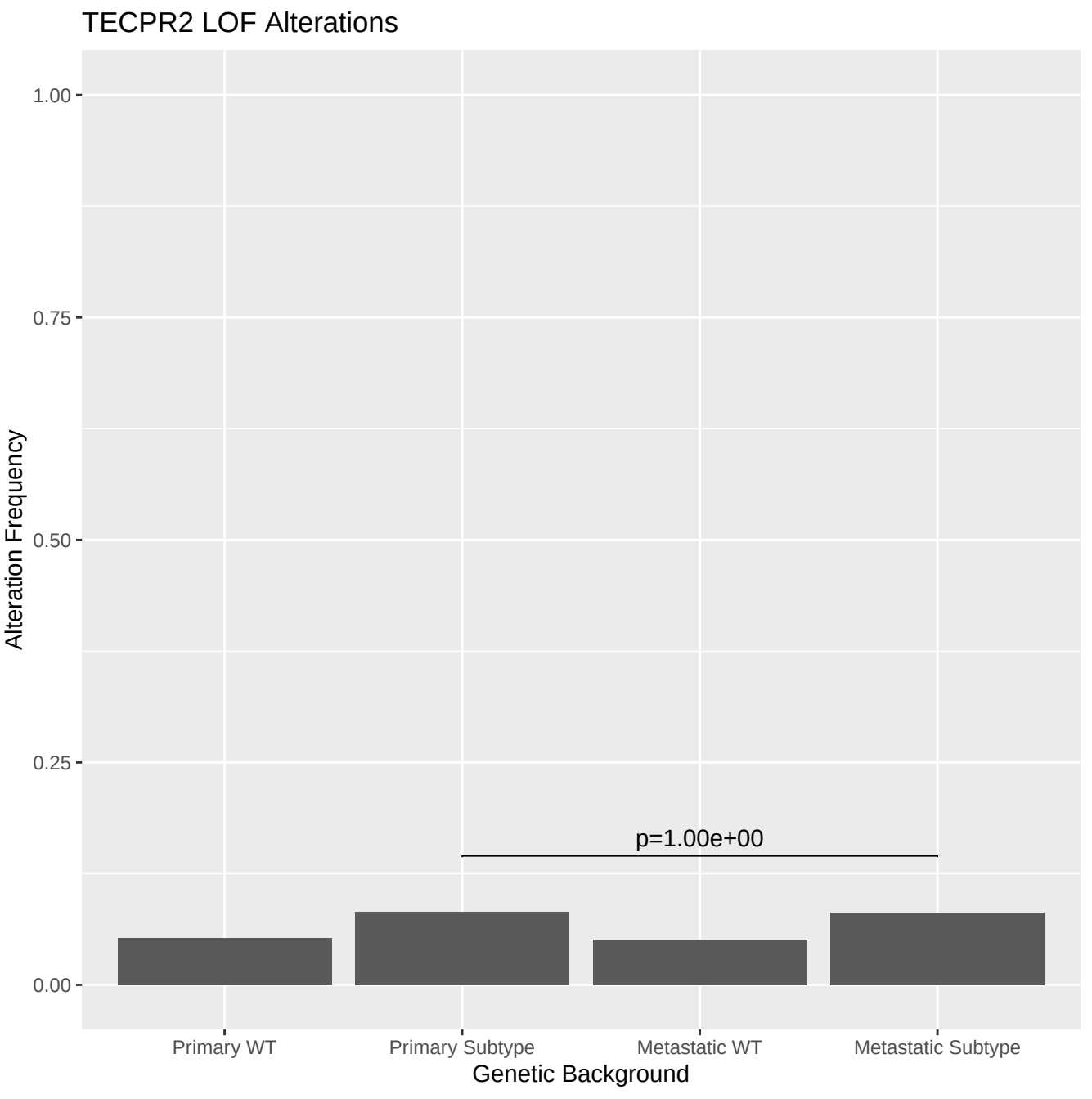

NPC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.39e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

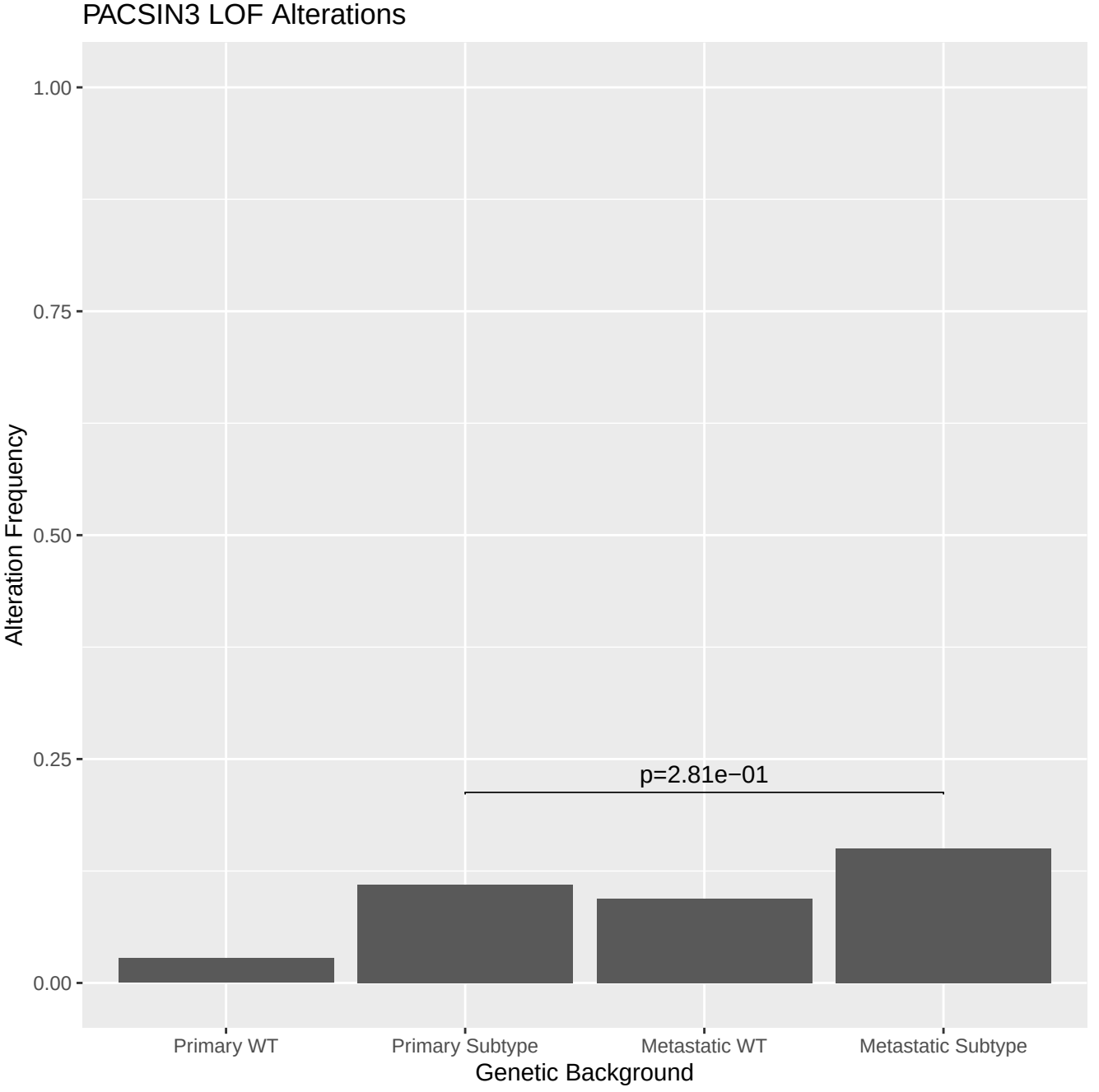

PCBP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

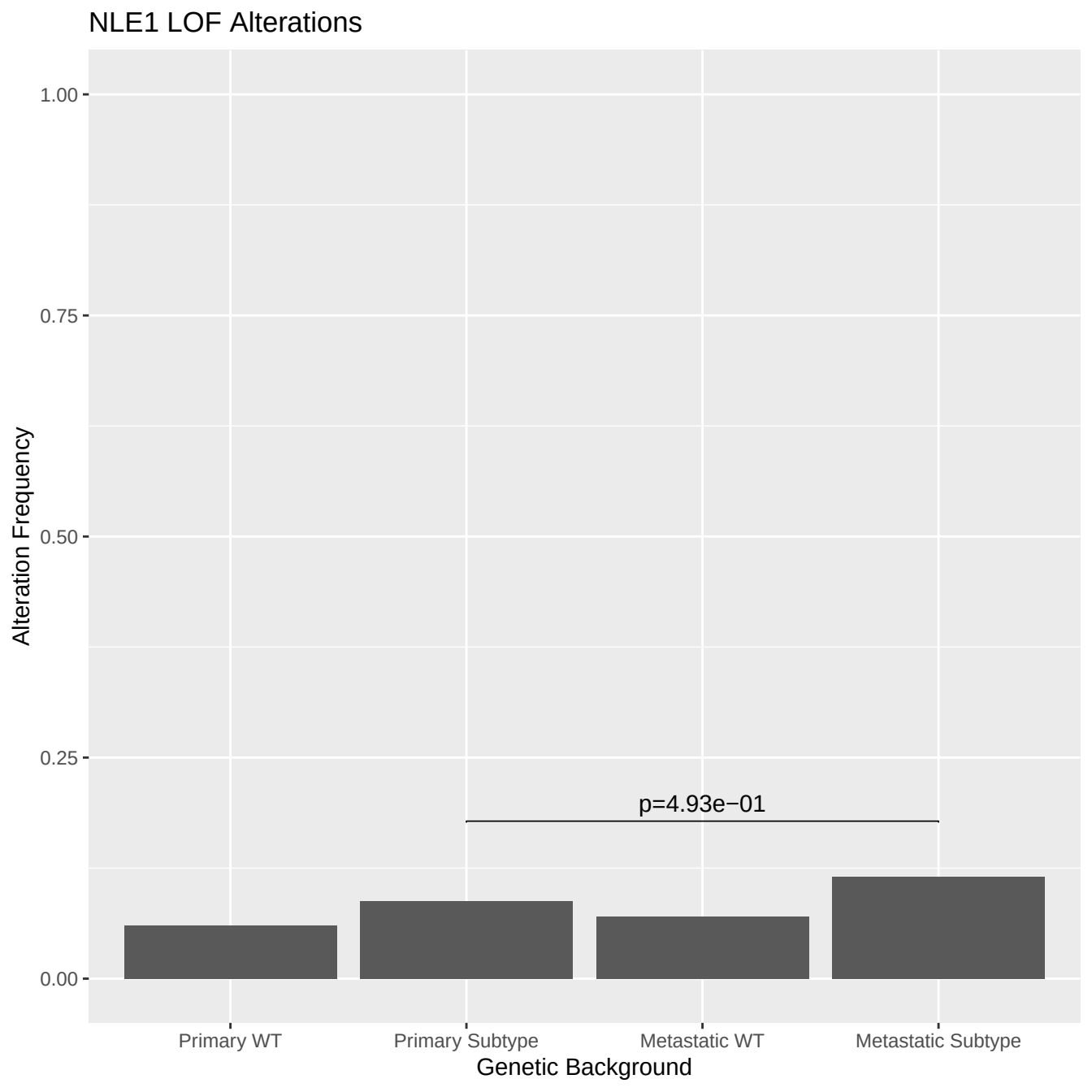

CREB3L1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

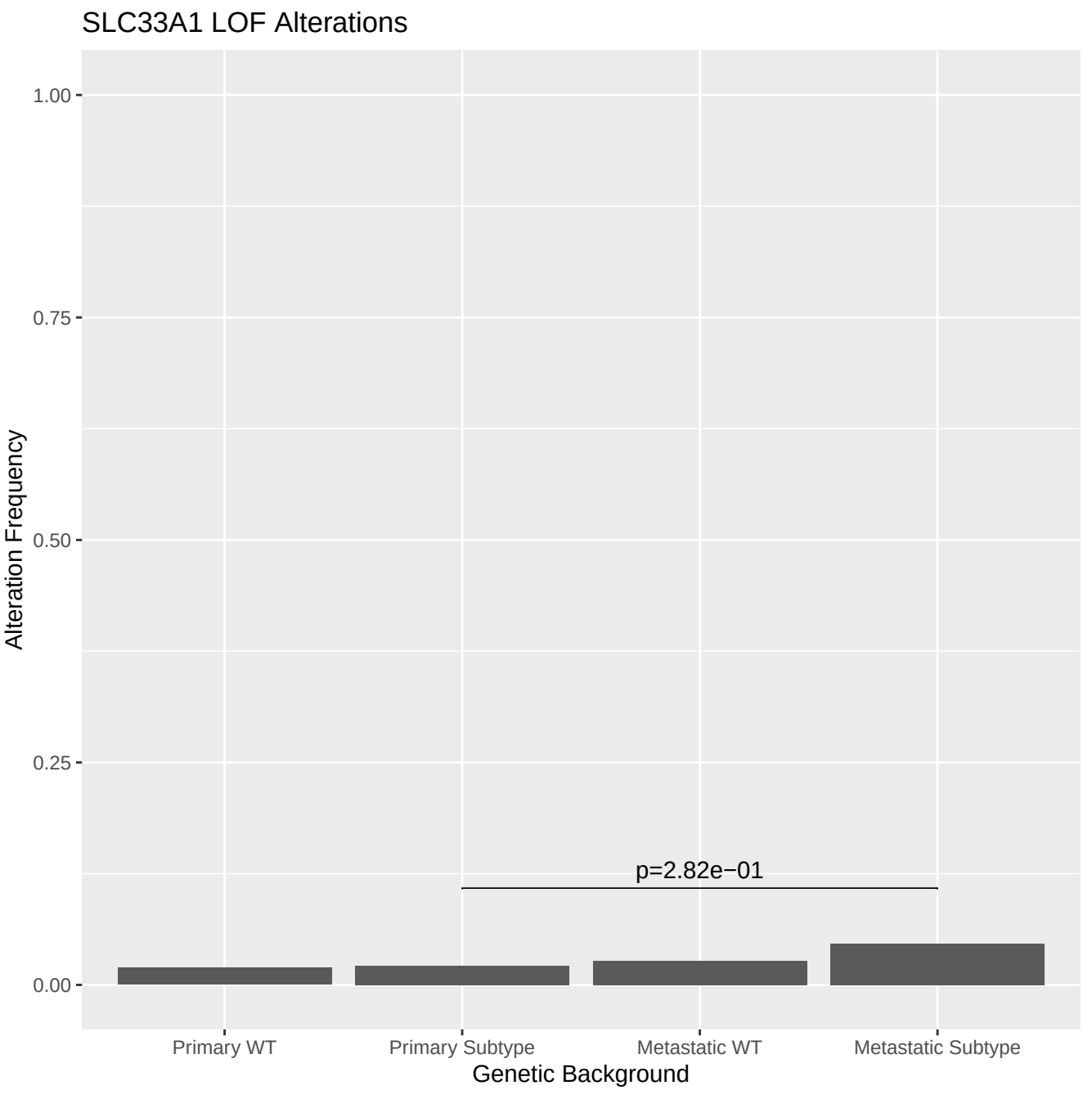

SOX14 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.82e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

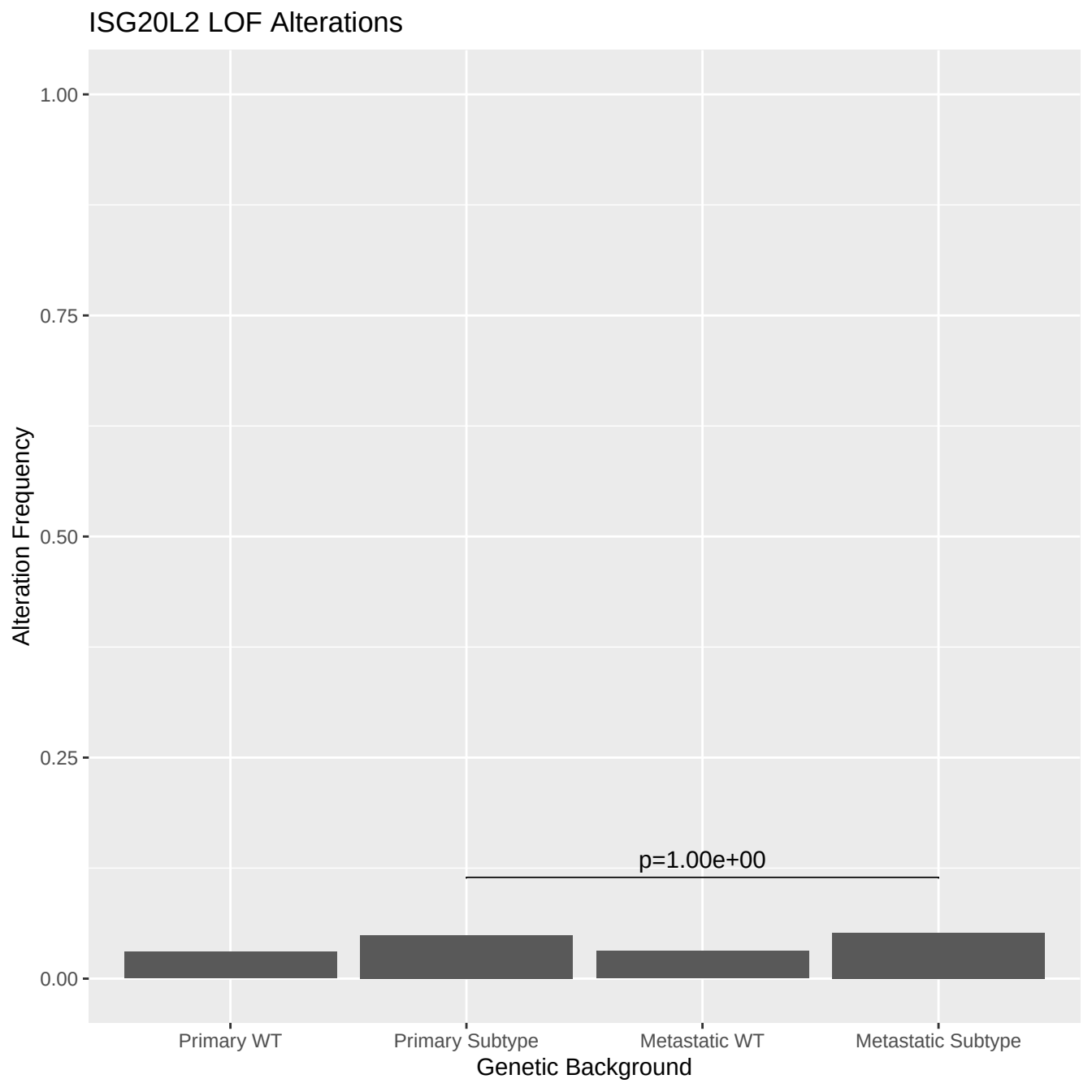

TRHR LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.70e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

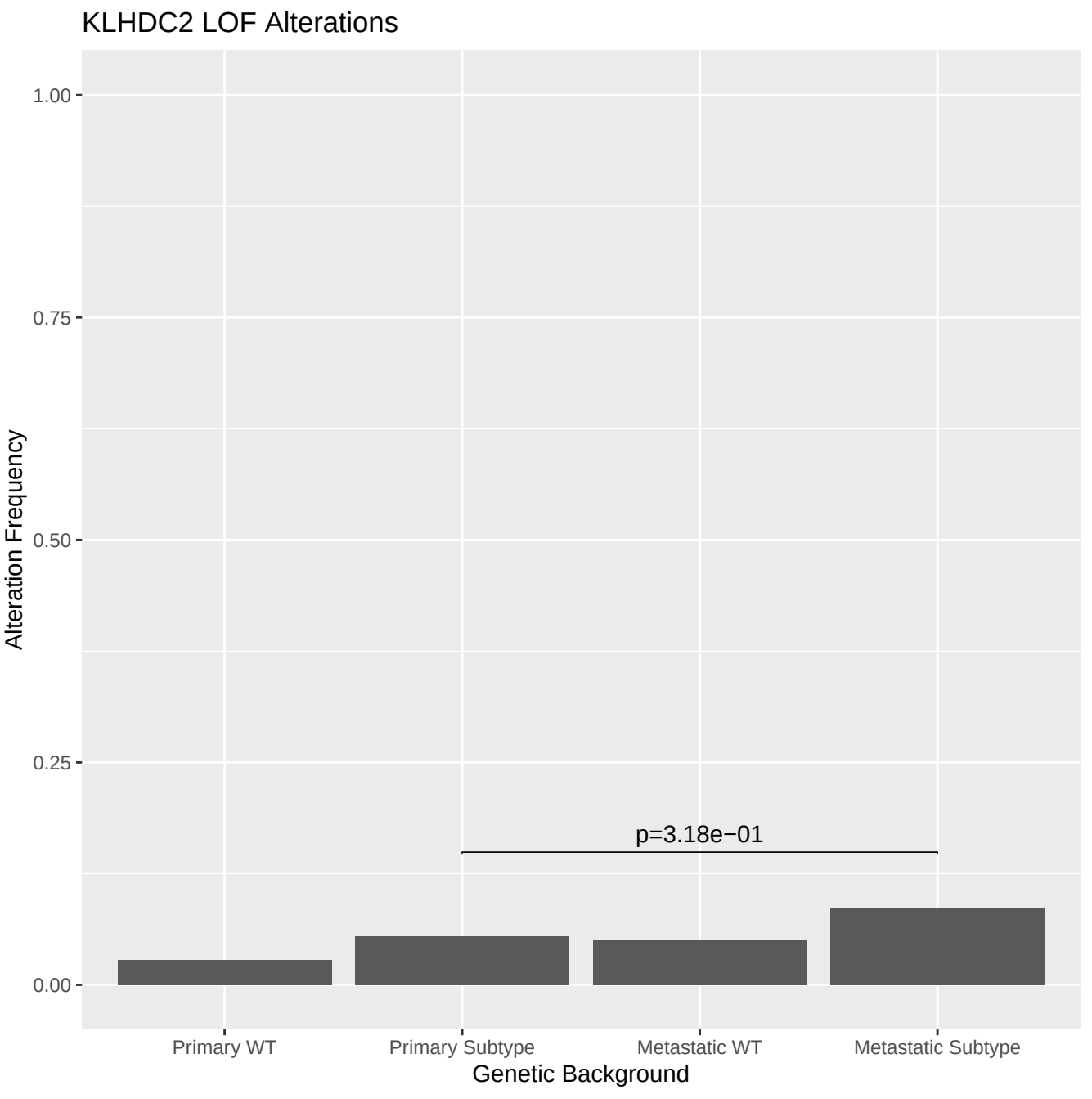

TECPR2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

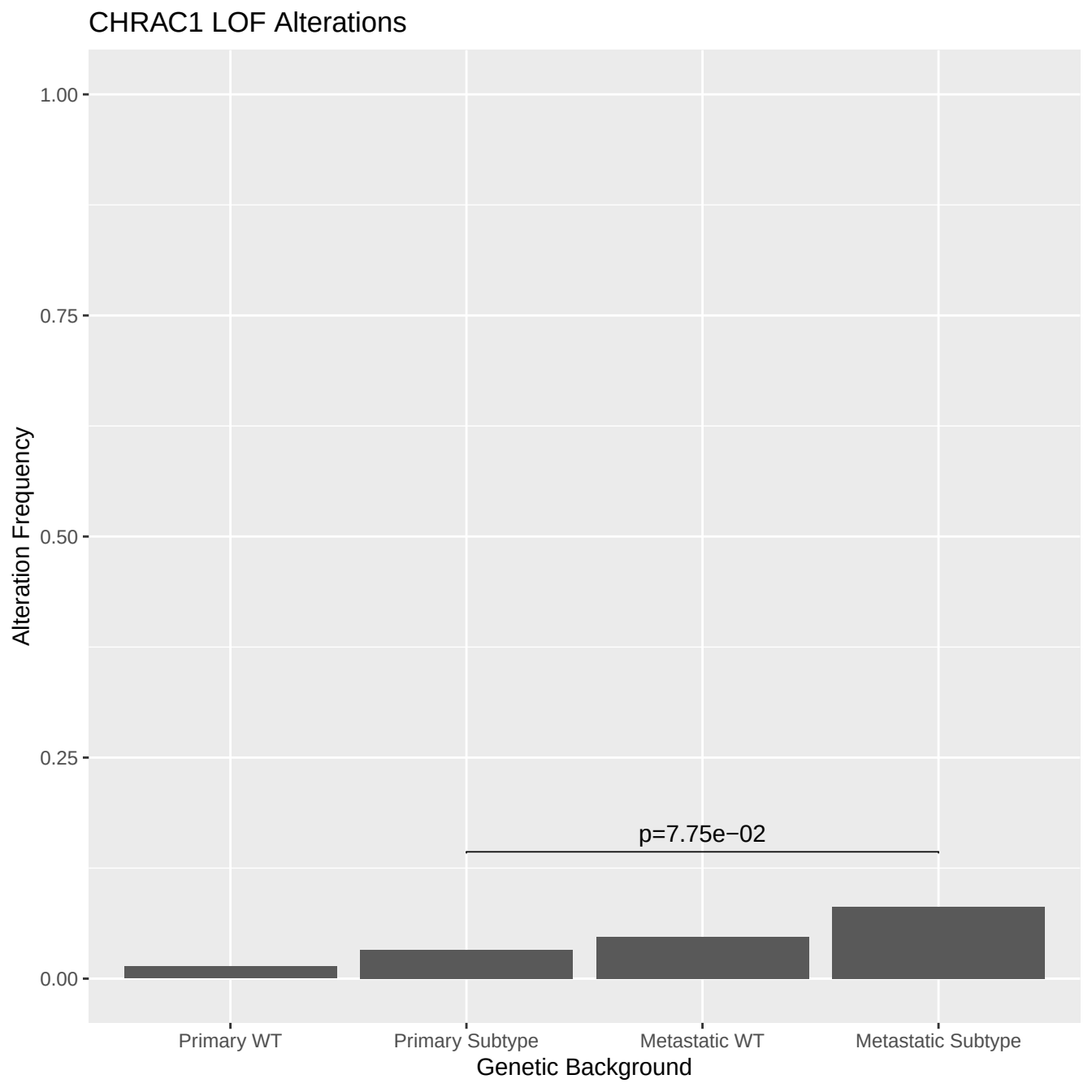

PACSIN3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

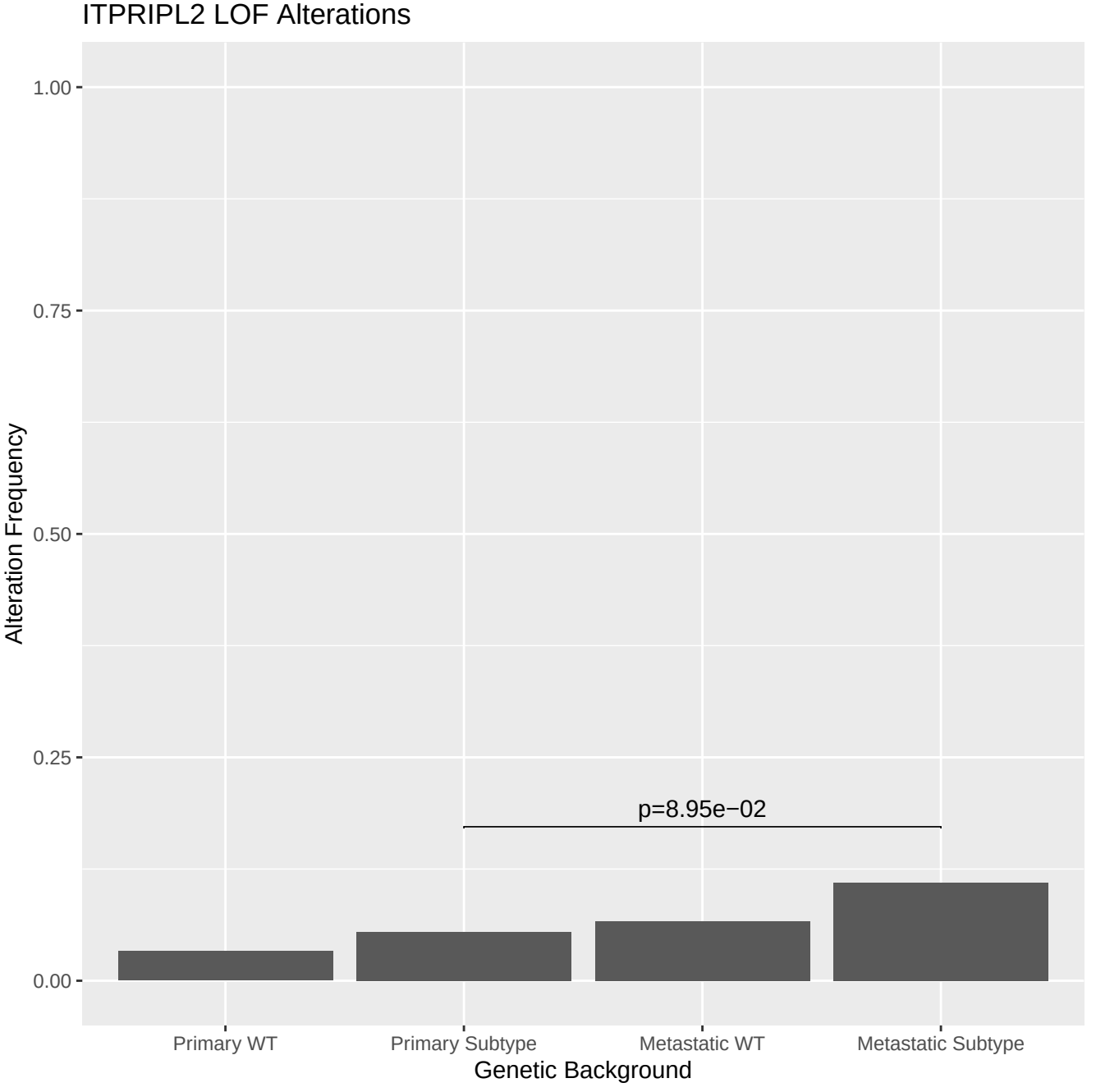

NLE1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.93e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

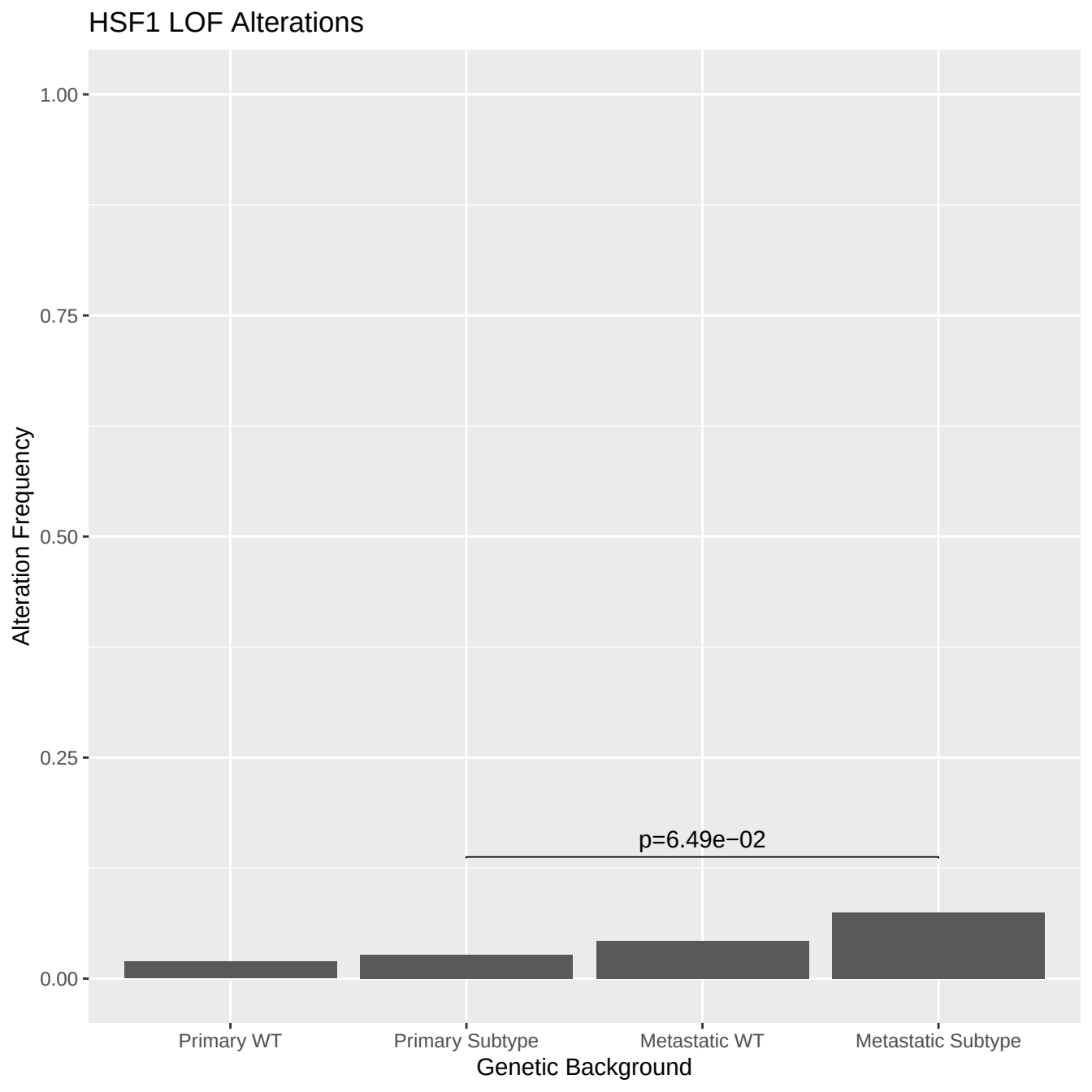

SLC33A1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.82e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

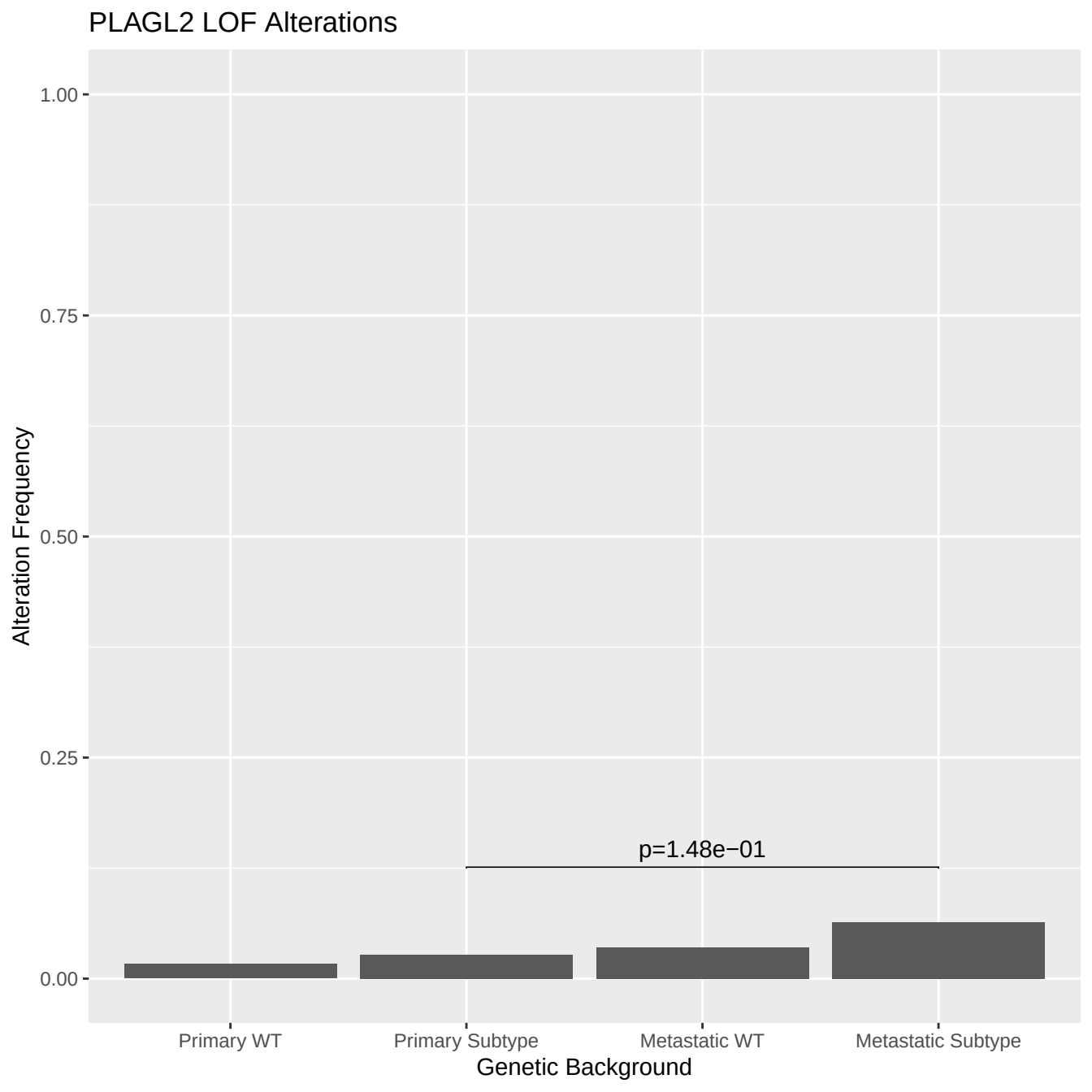

ISG20L2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

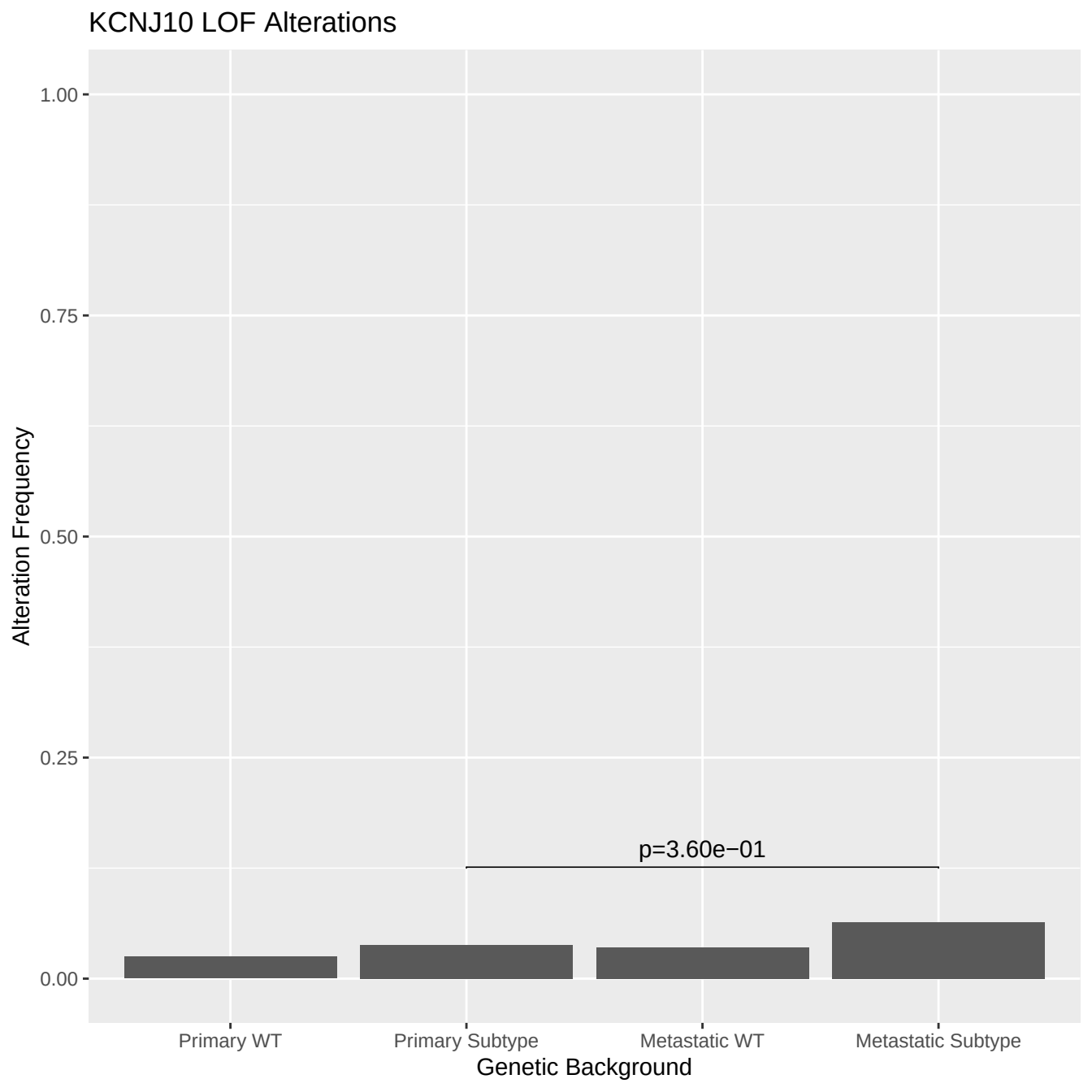

KLHDC2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

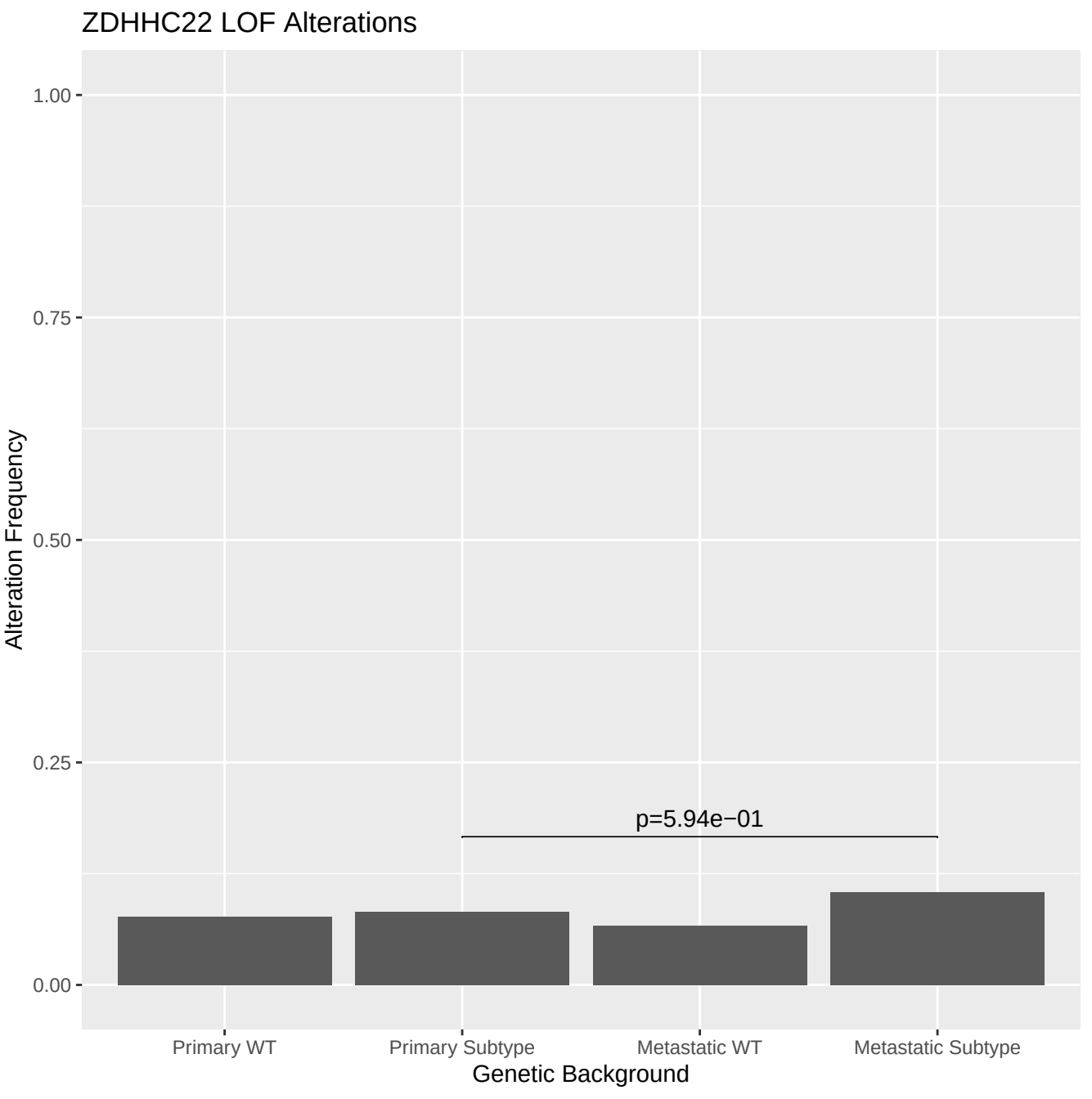

CHRAC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.75e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

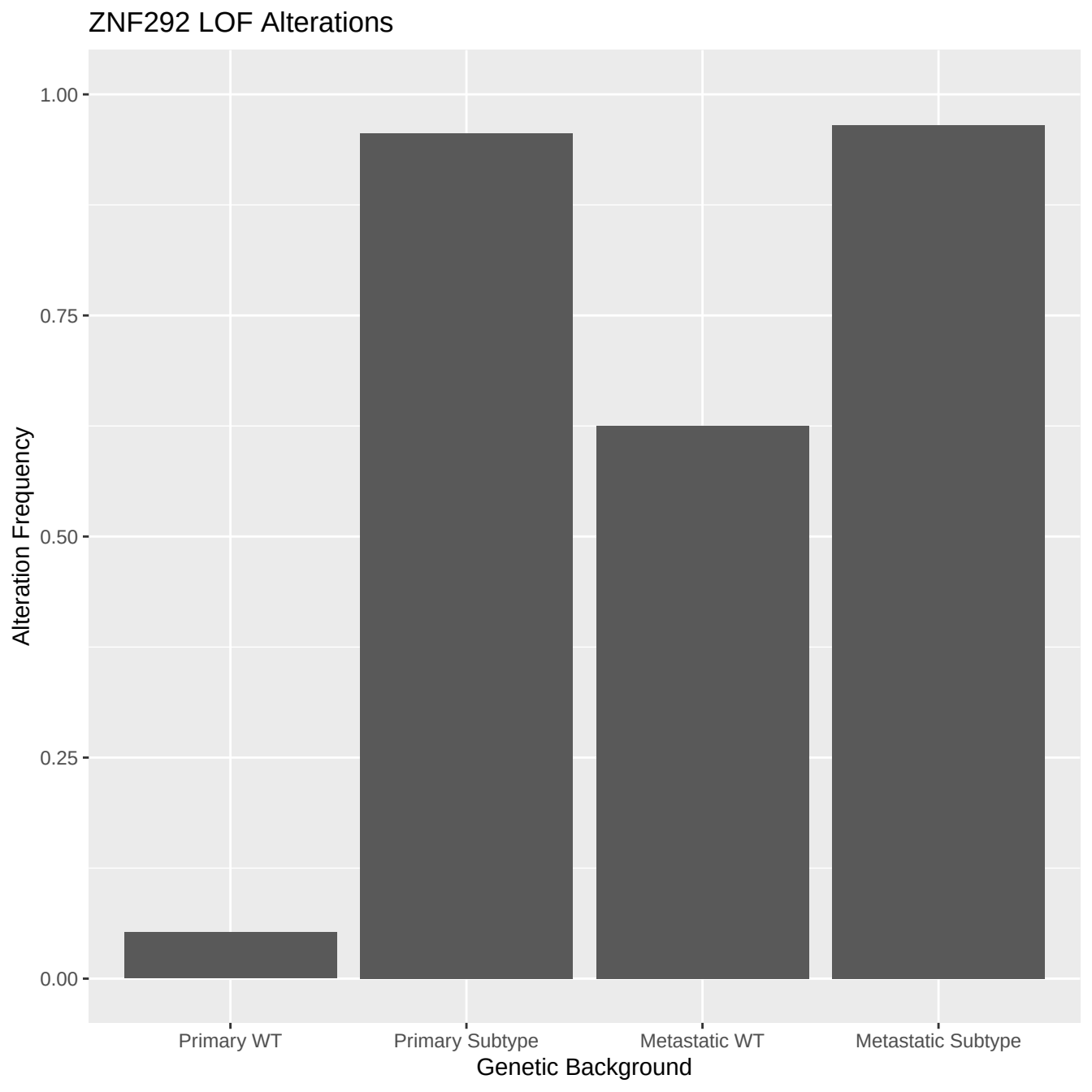

ITPRIPL2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.95e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

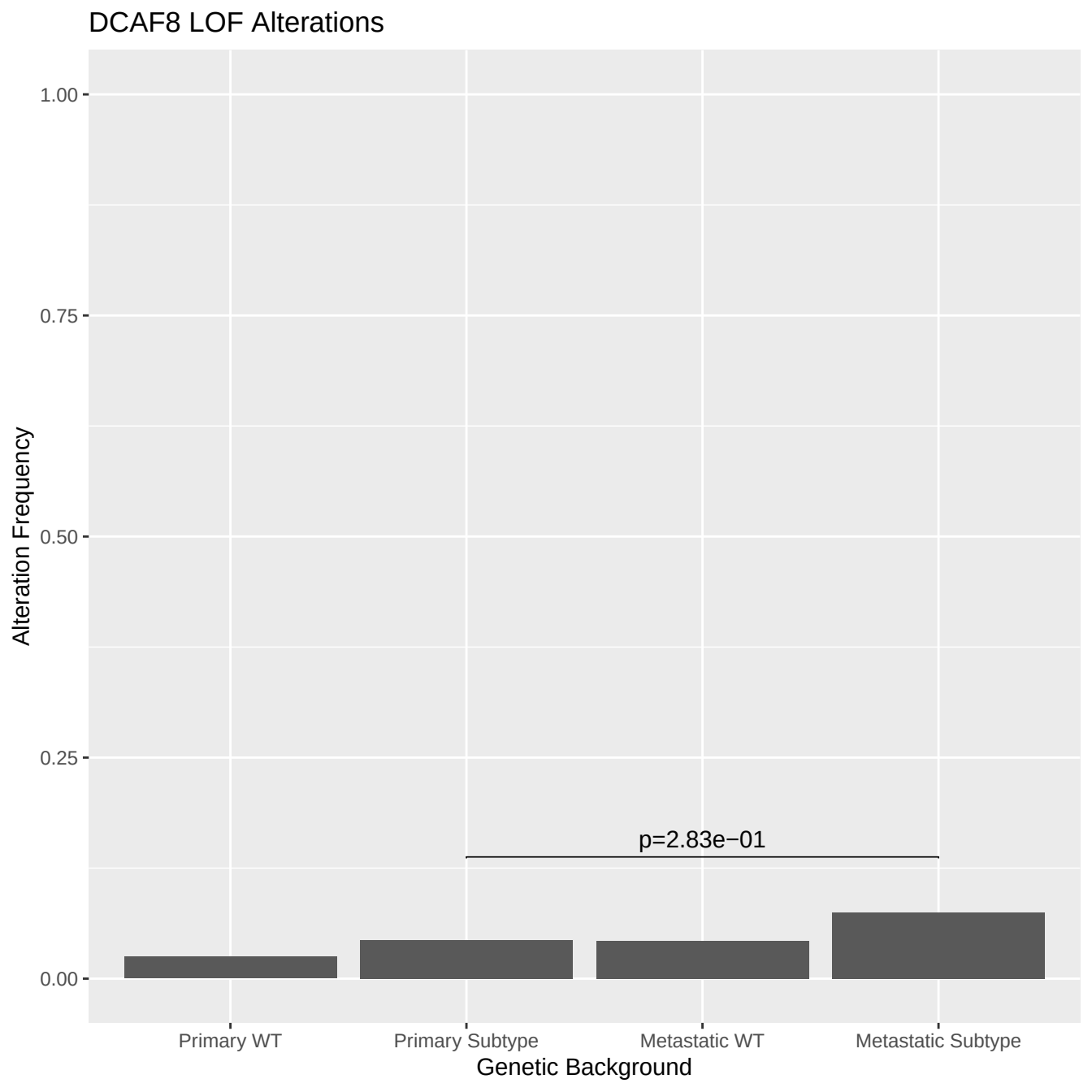

HSF1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

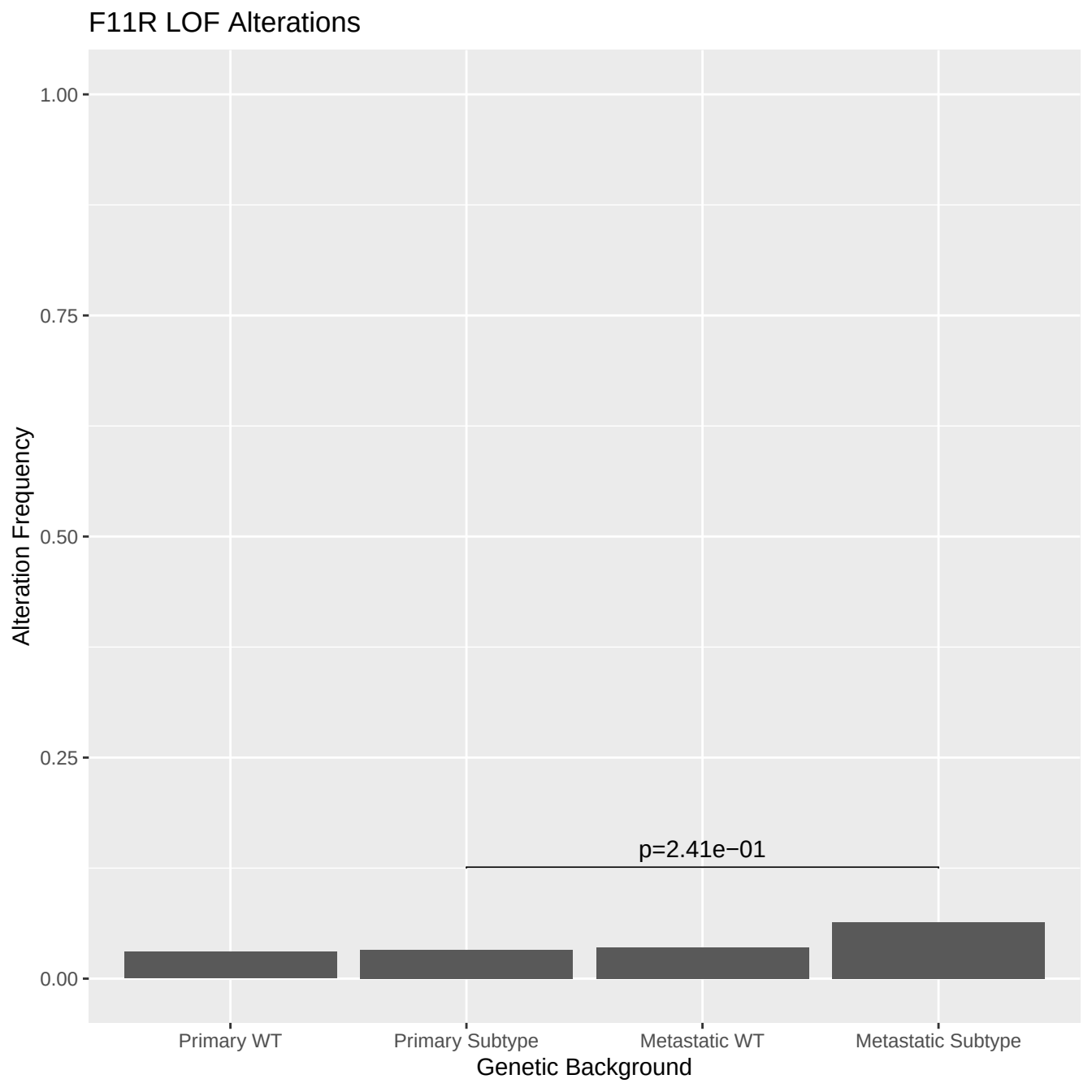

PLAGL2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

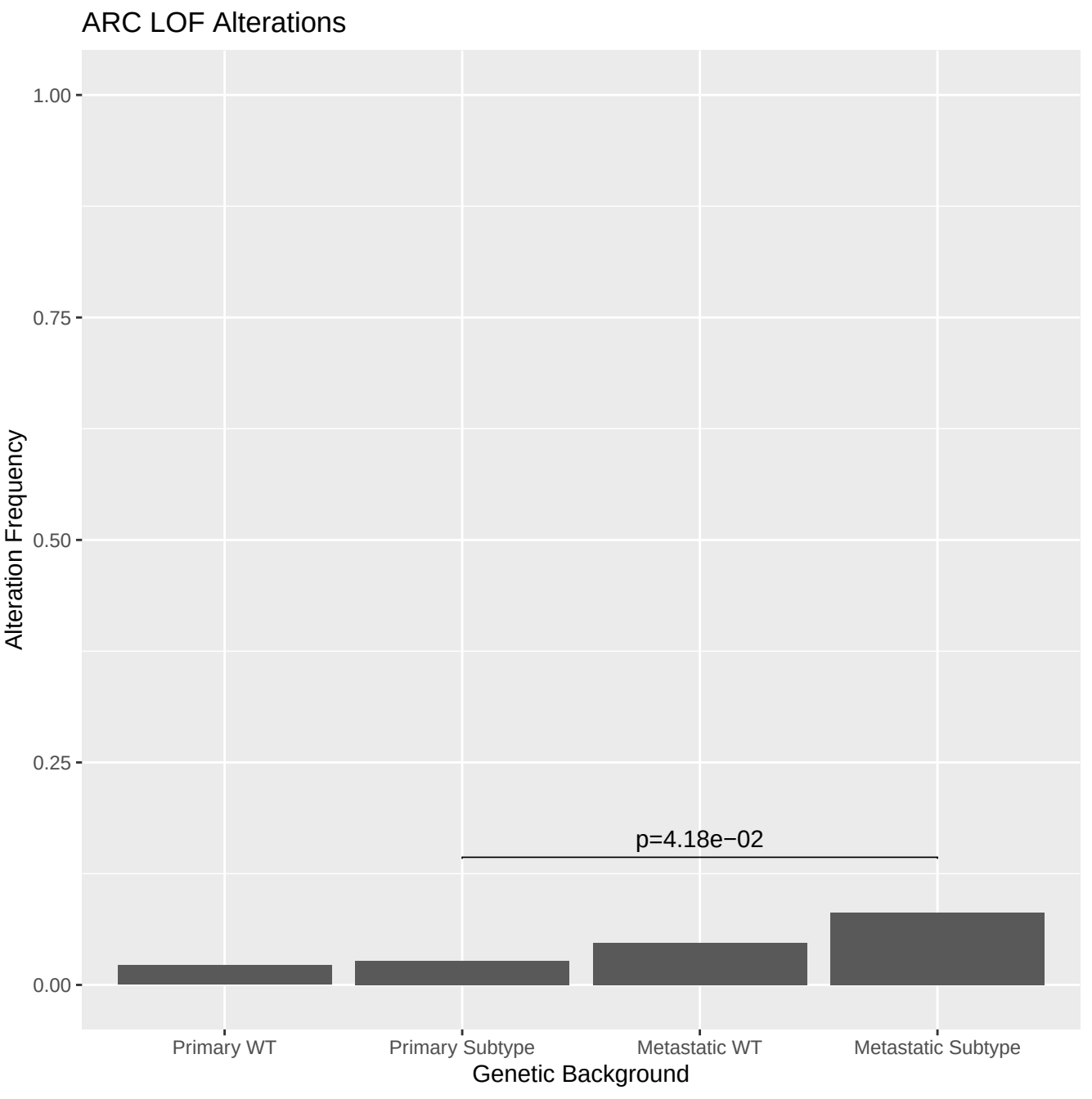

KCNJ10 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.60e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

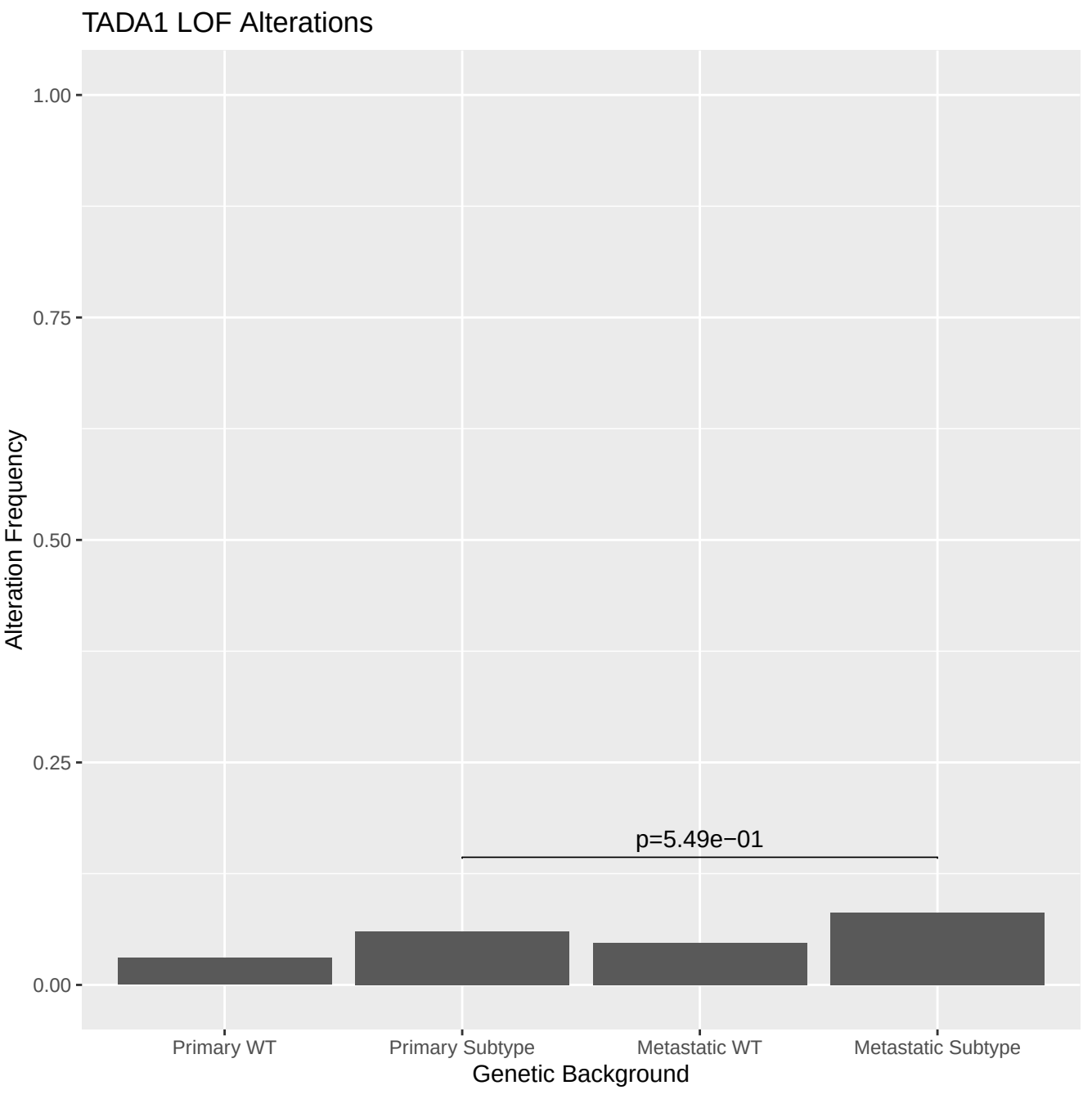

ZDHHC22 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.94e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

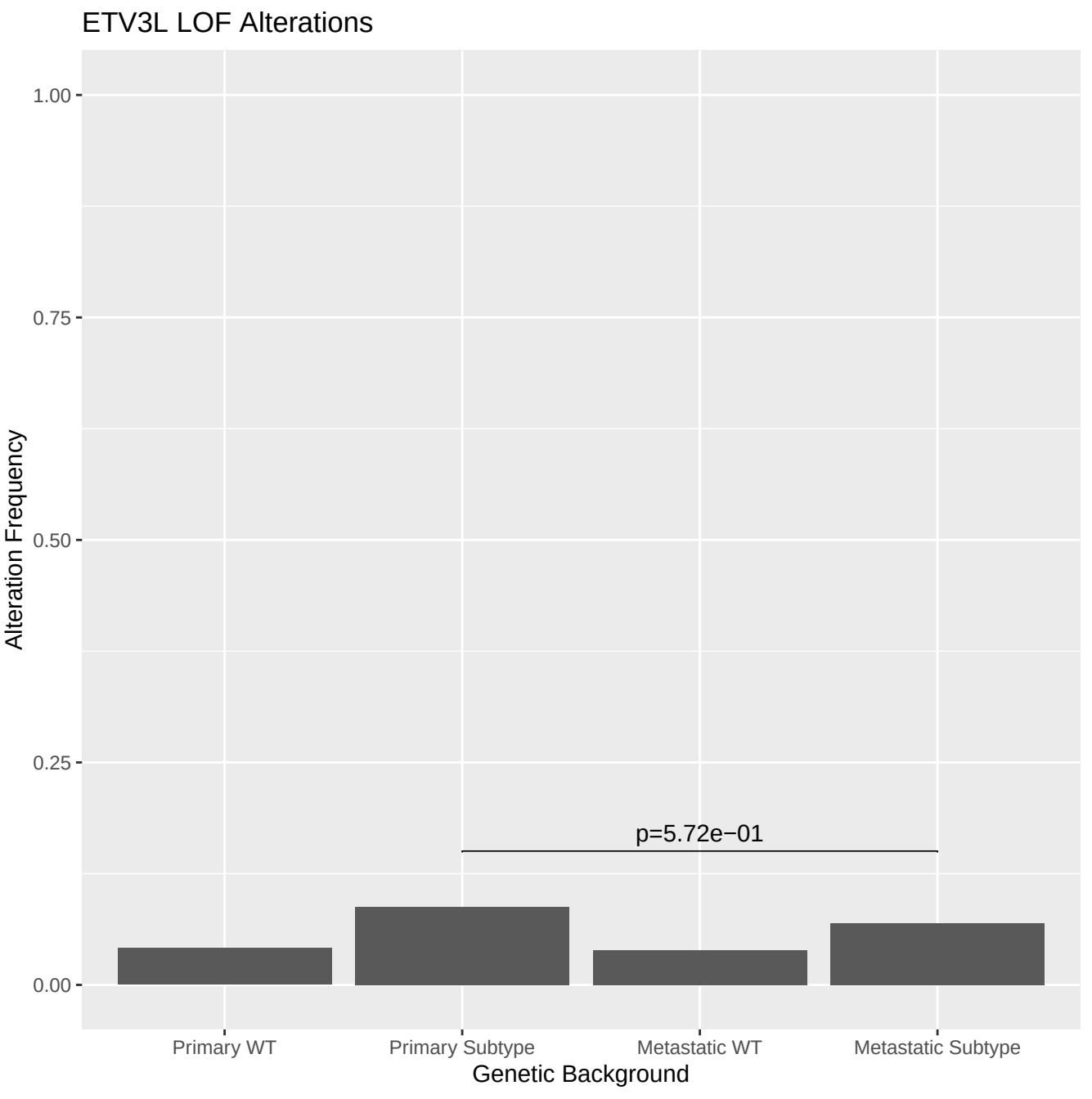

ZNF292 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

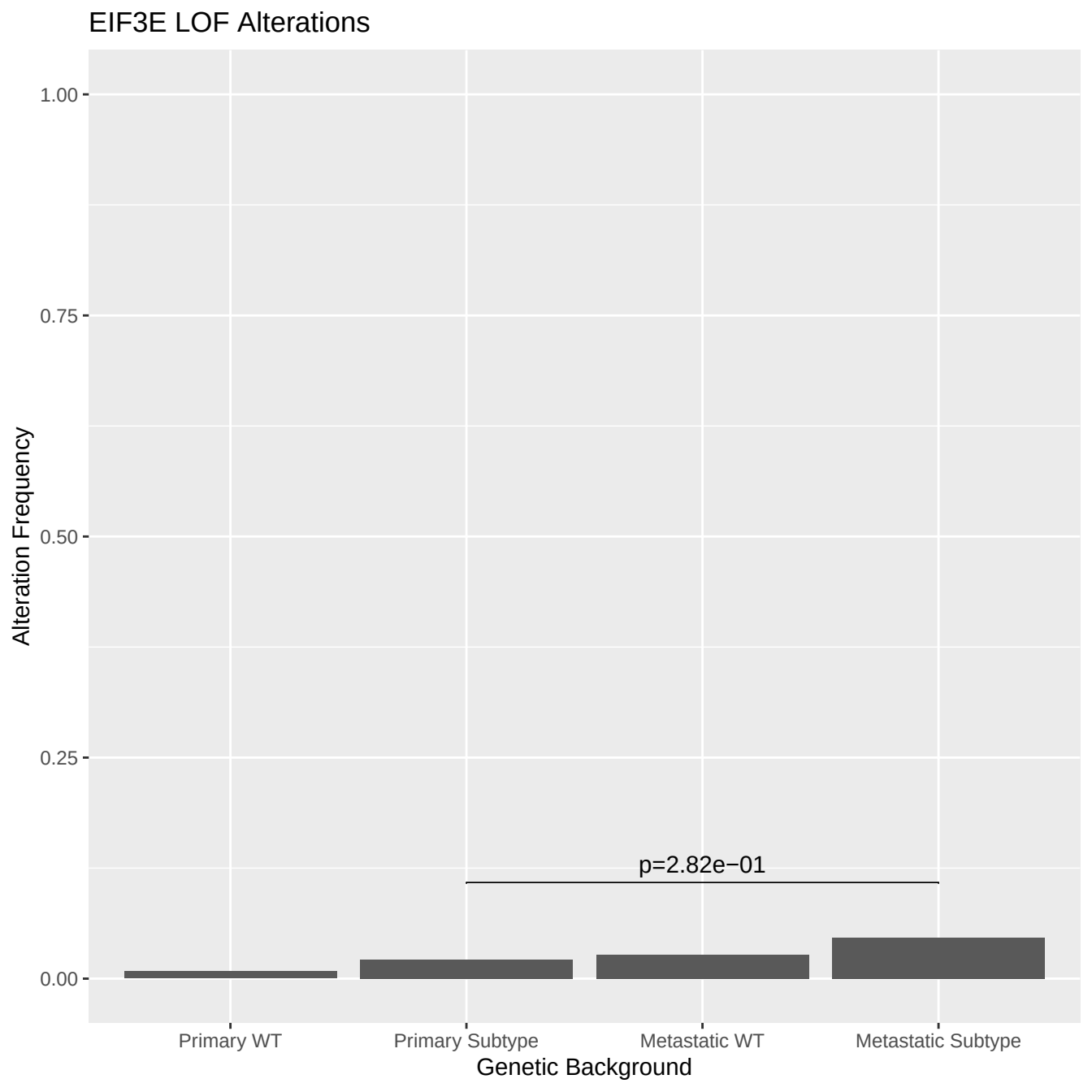

DCAF8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

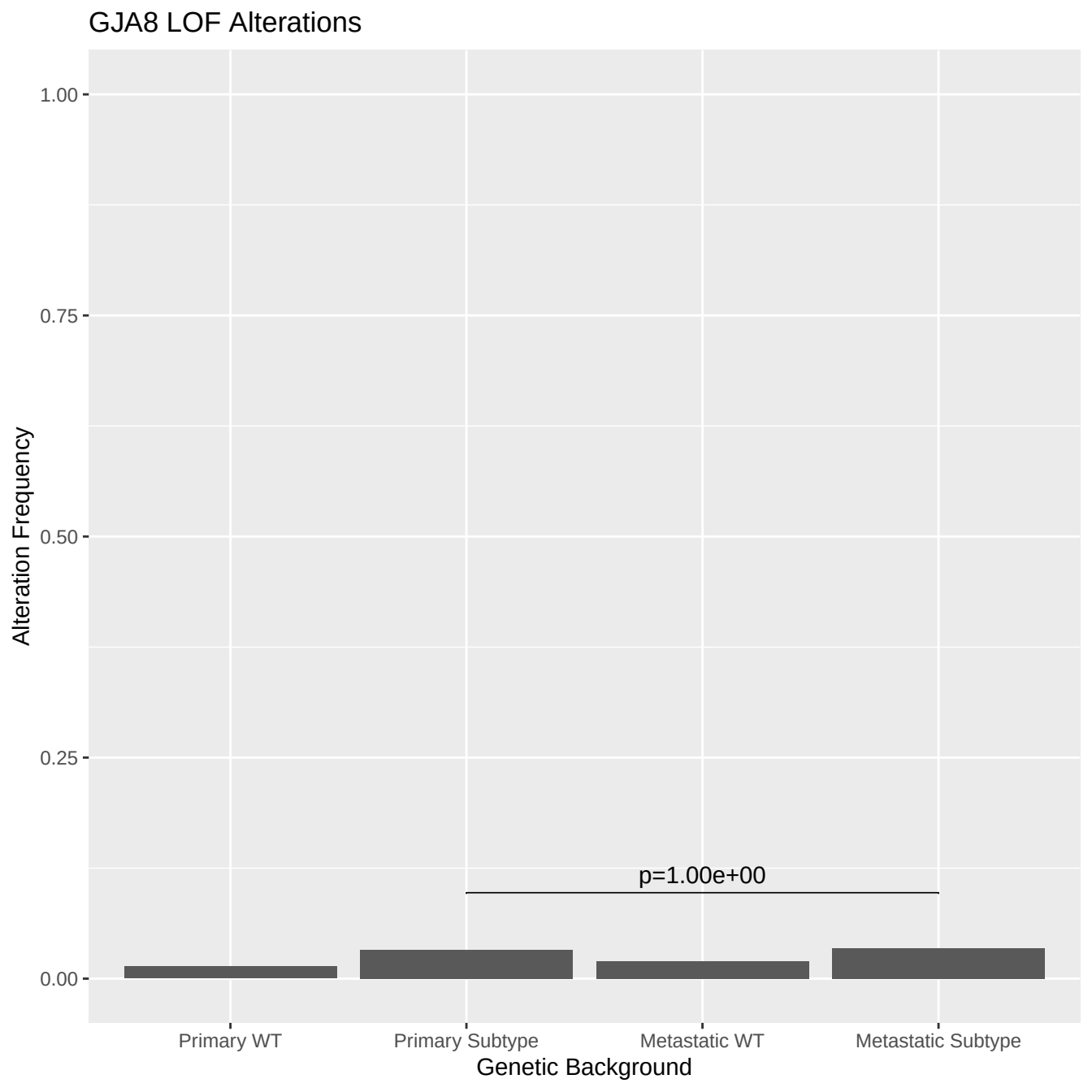

F11R LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

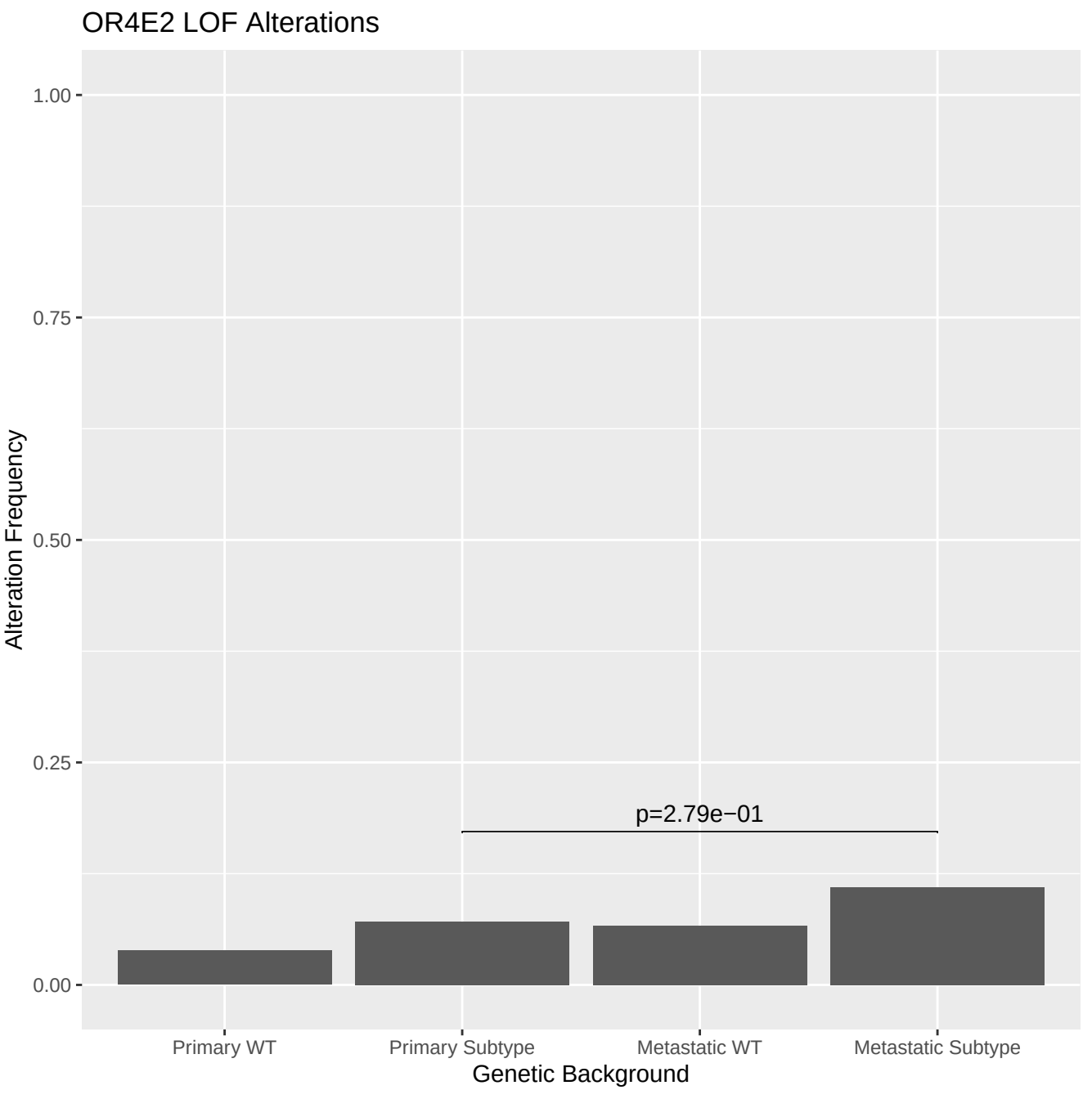

ARC LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

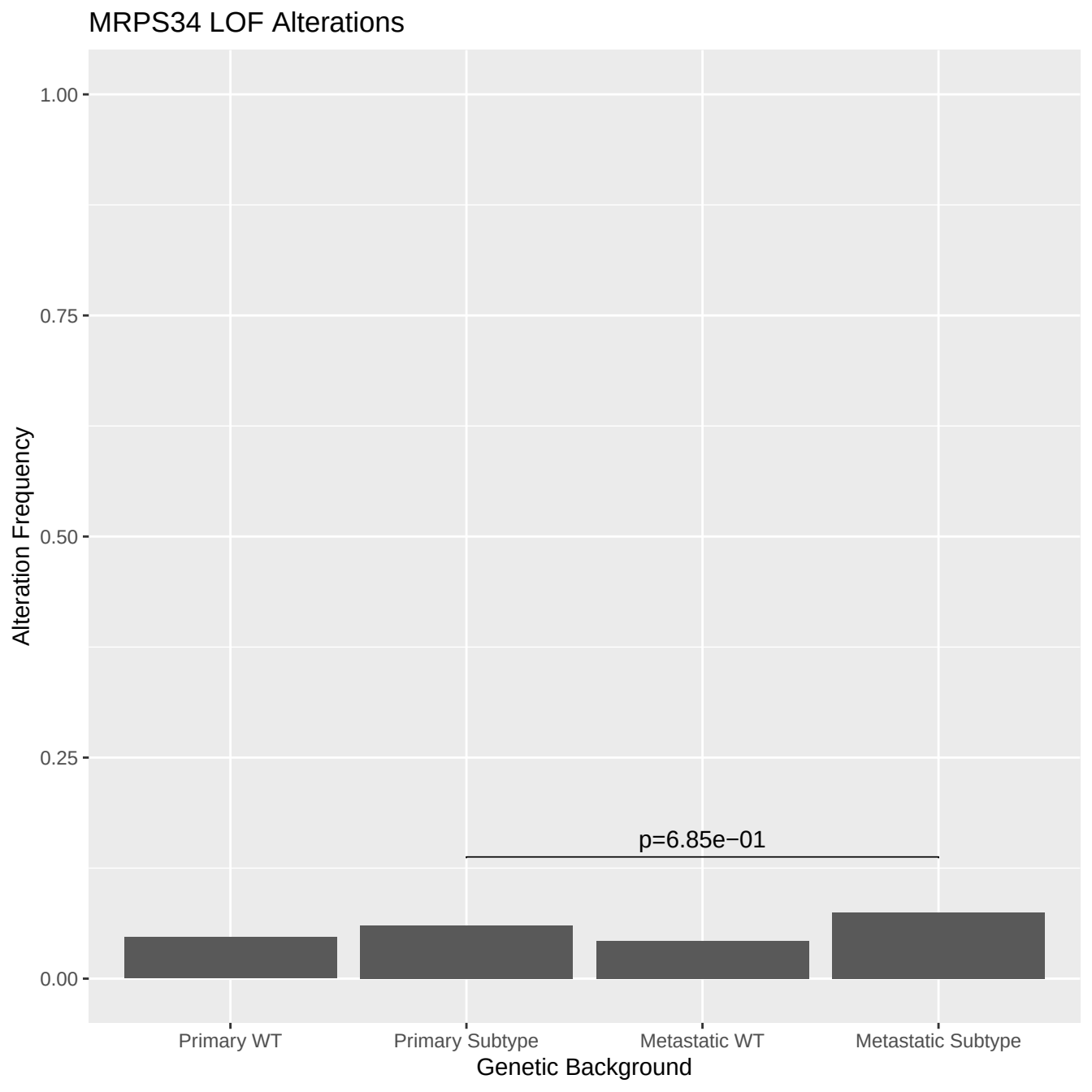

TADA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

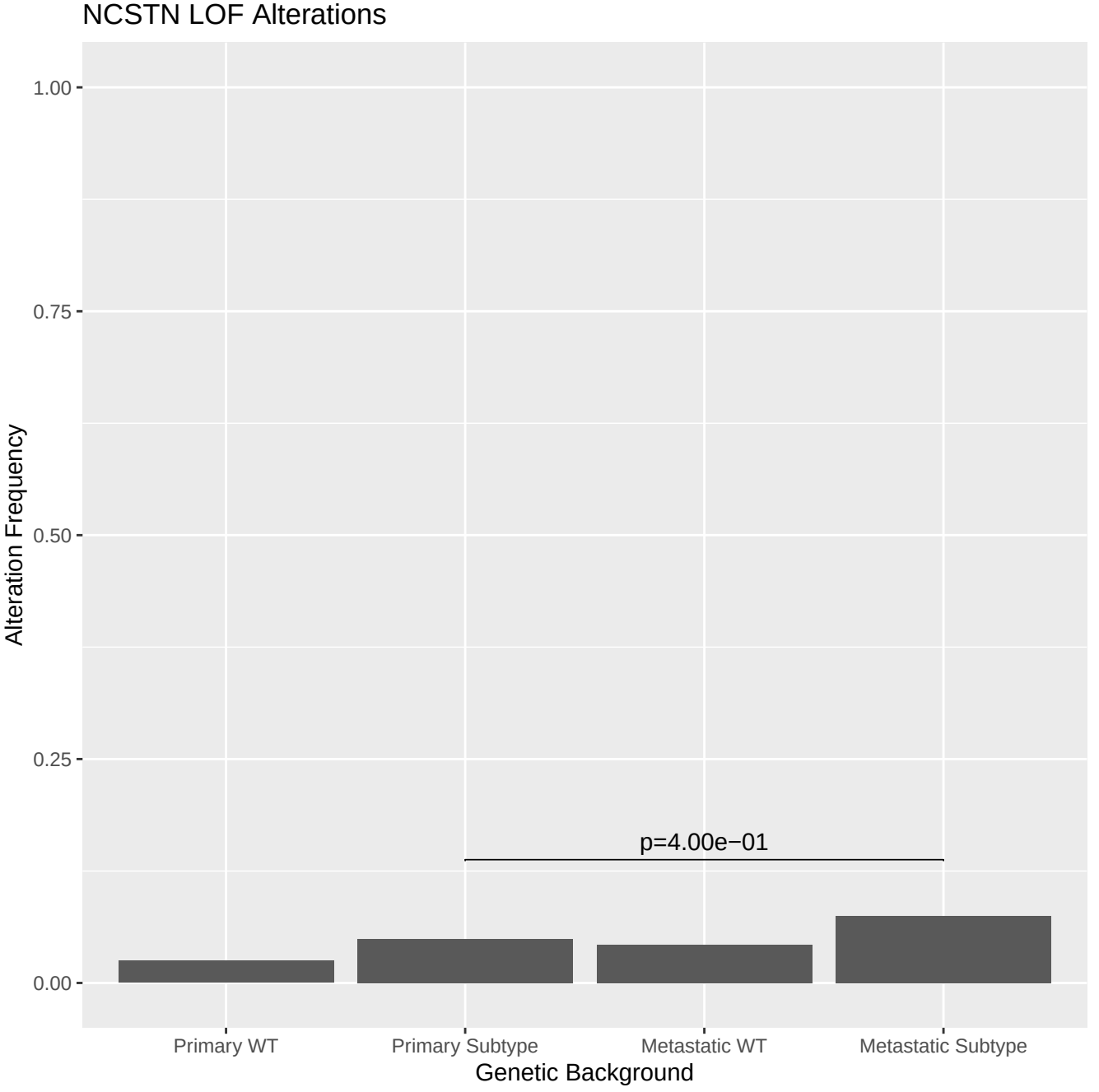

ETV3L LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.72e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

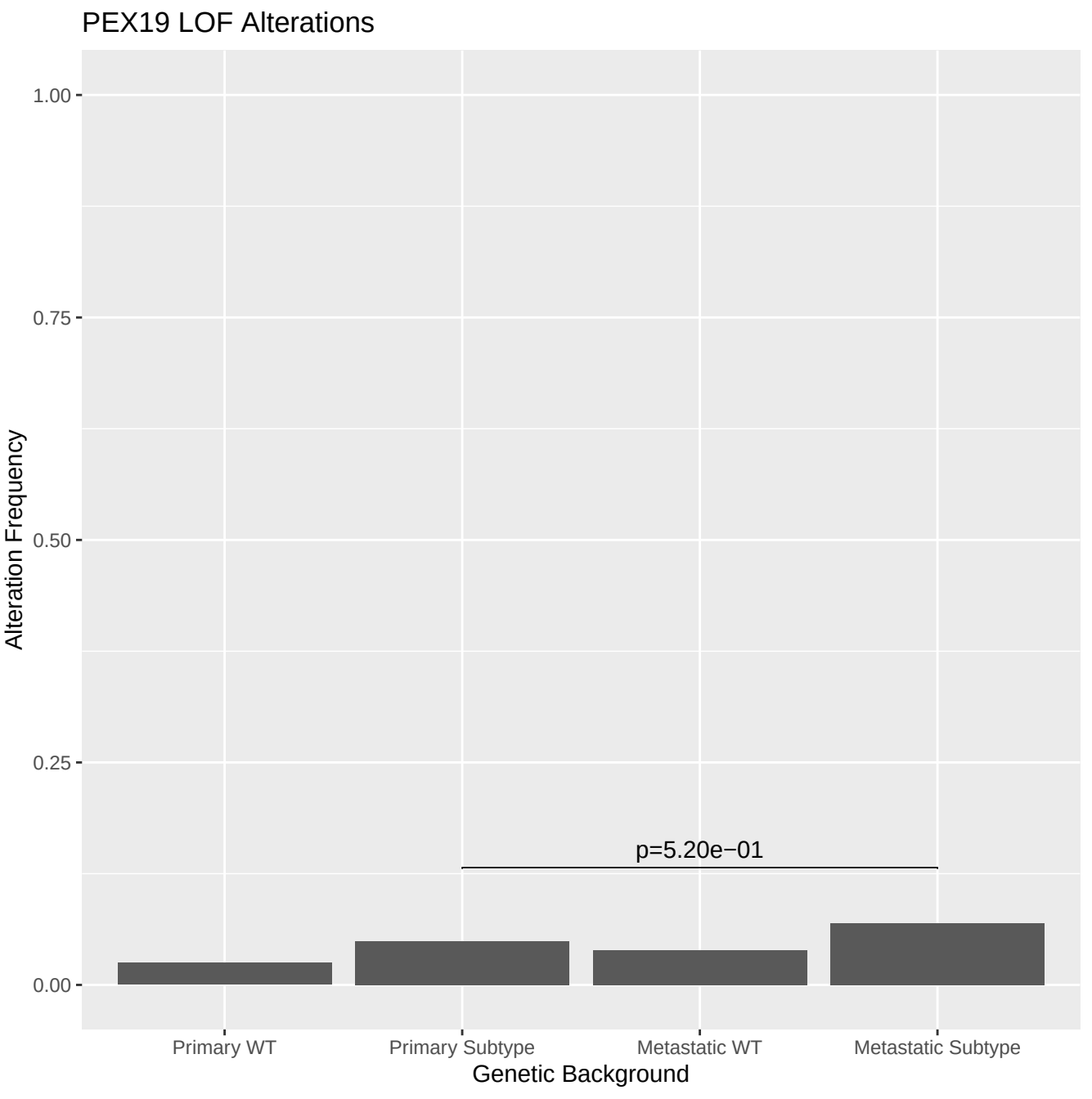

EIF3E LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.82e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

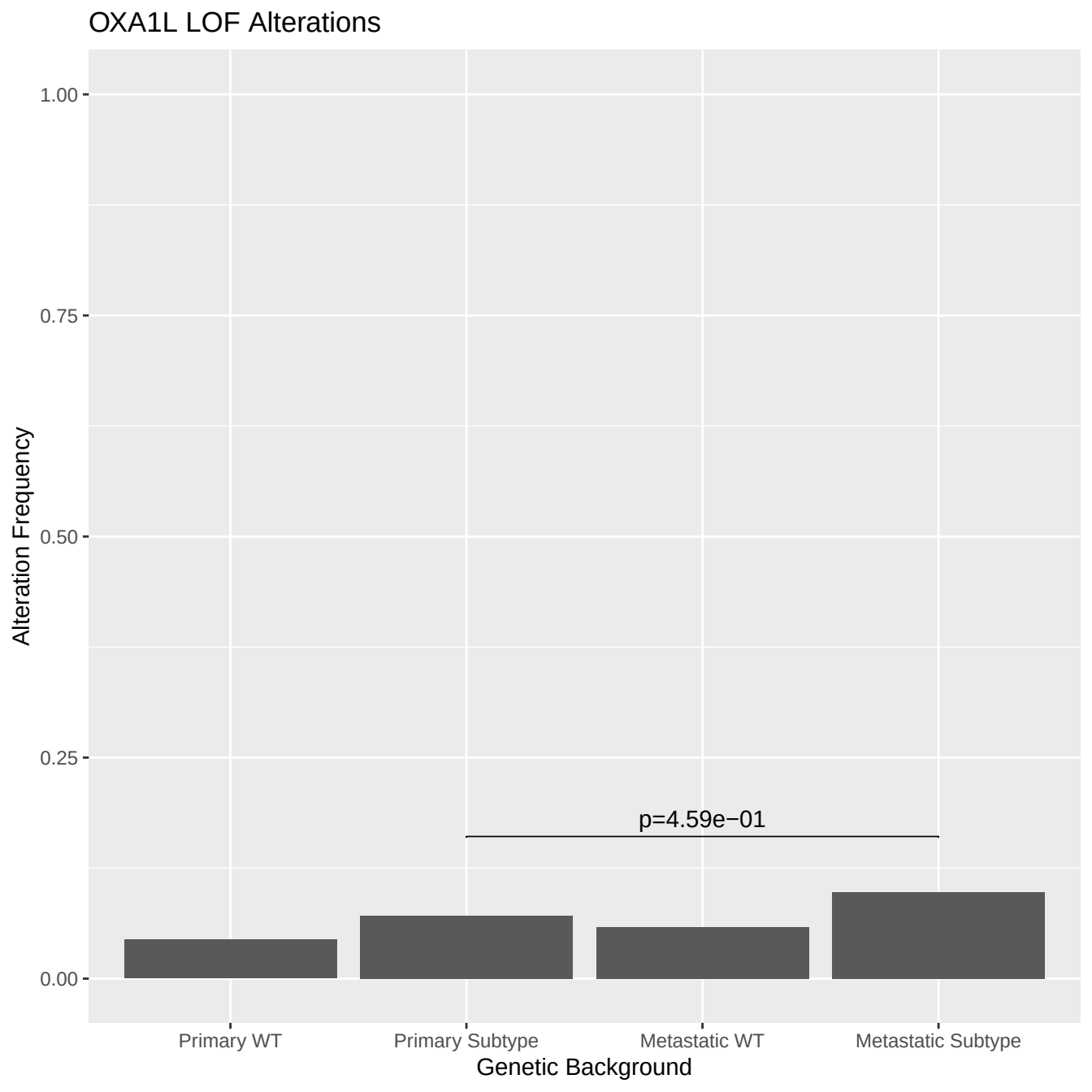

GJA8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

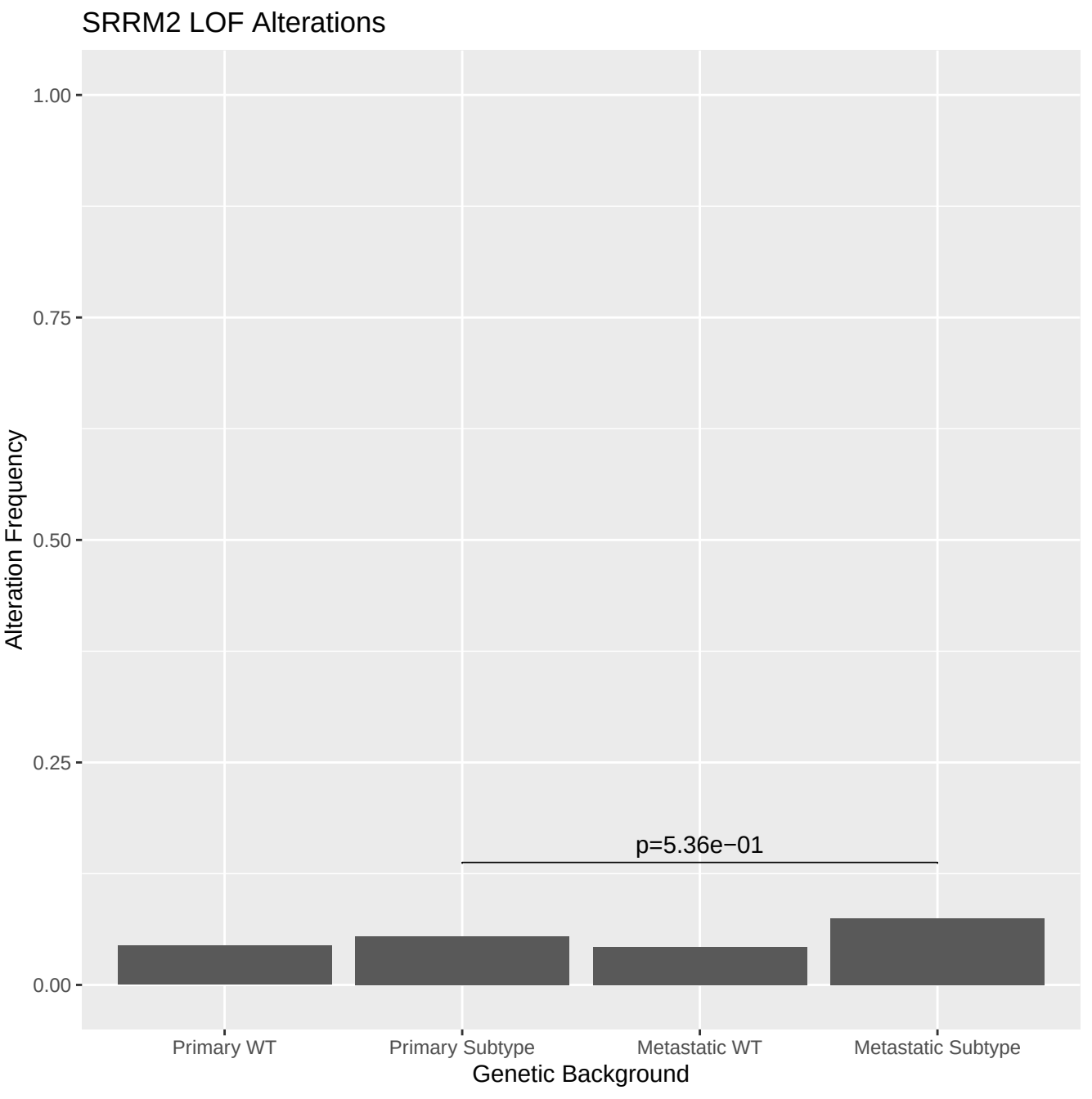

OR4E2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.79e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

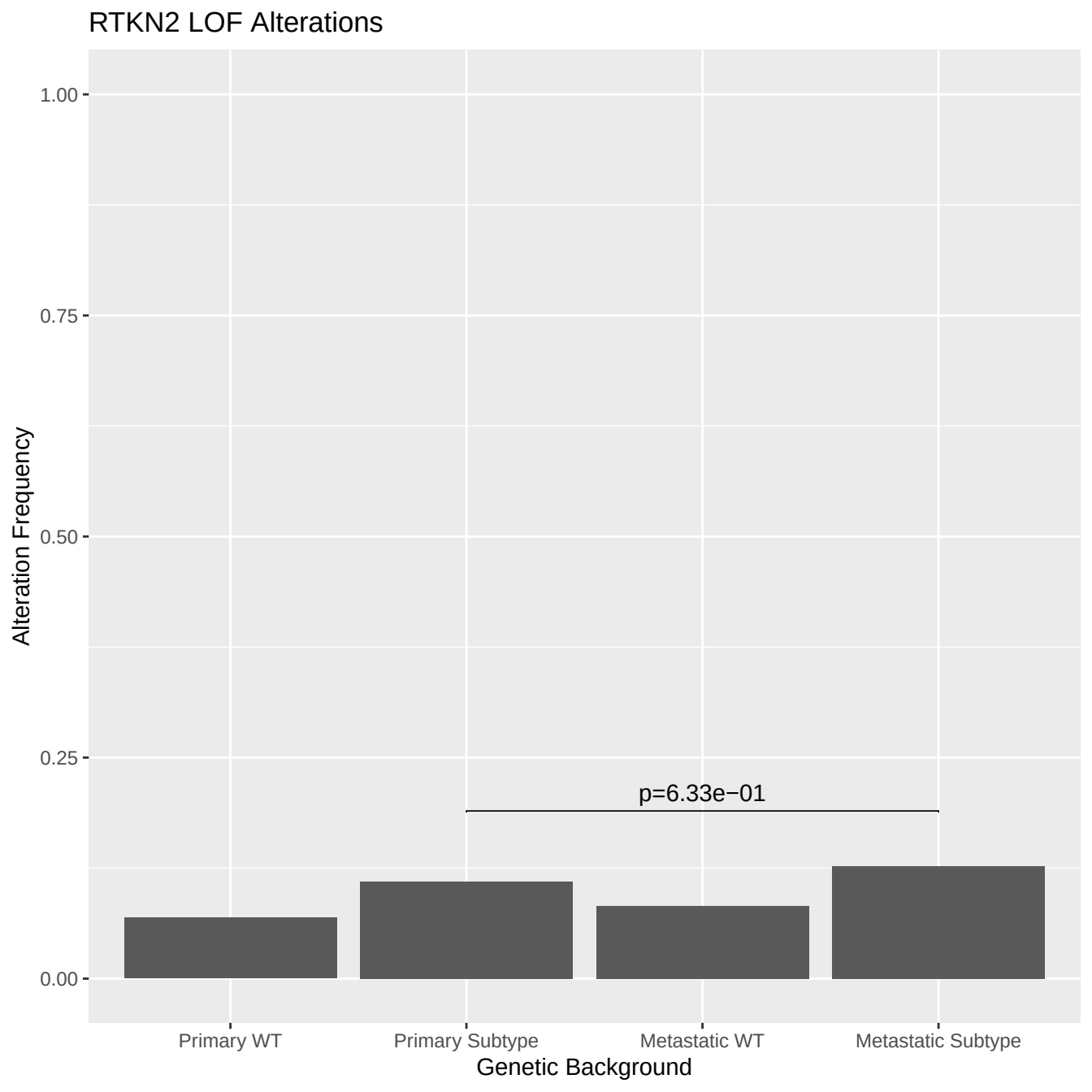

MRPS34 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

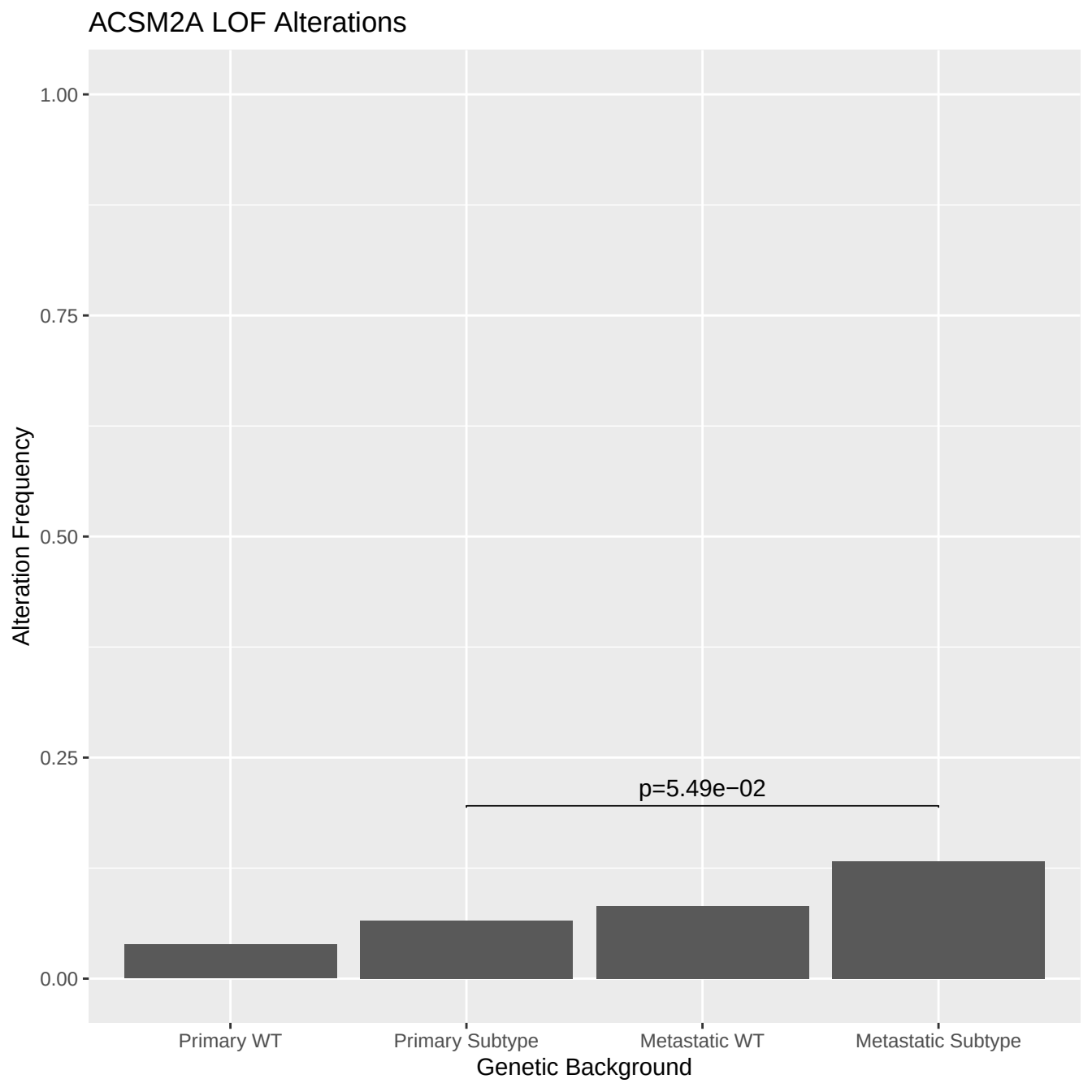

NCSTN LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.00e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

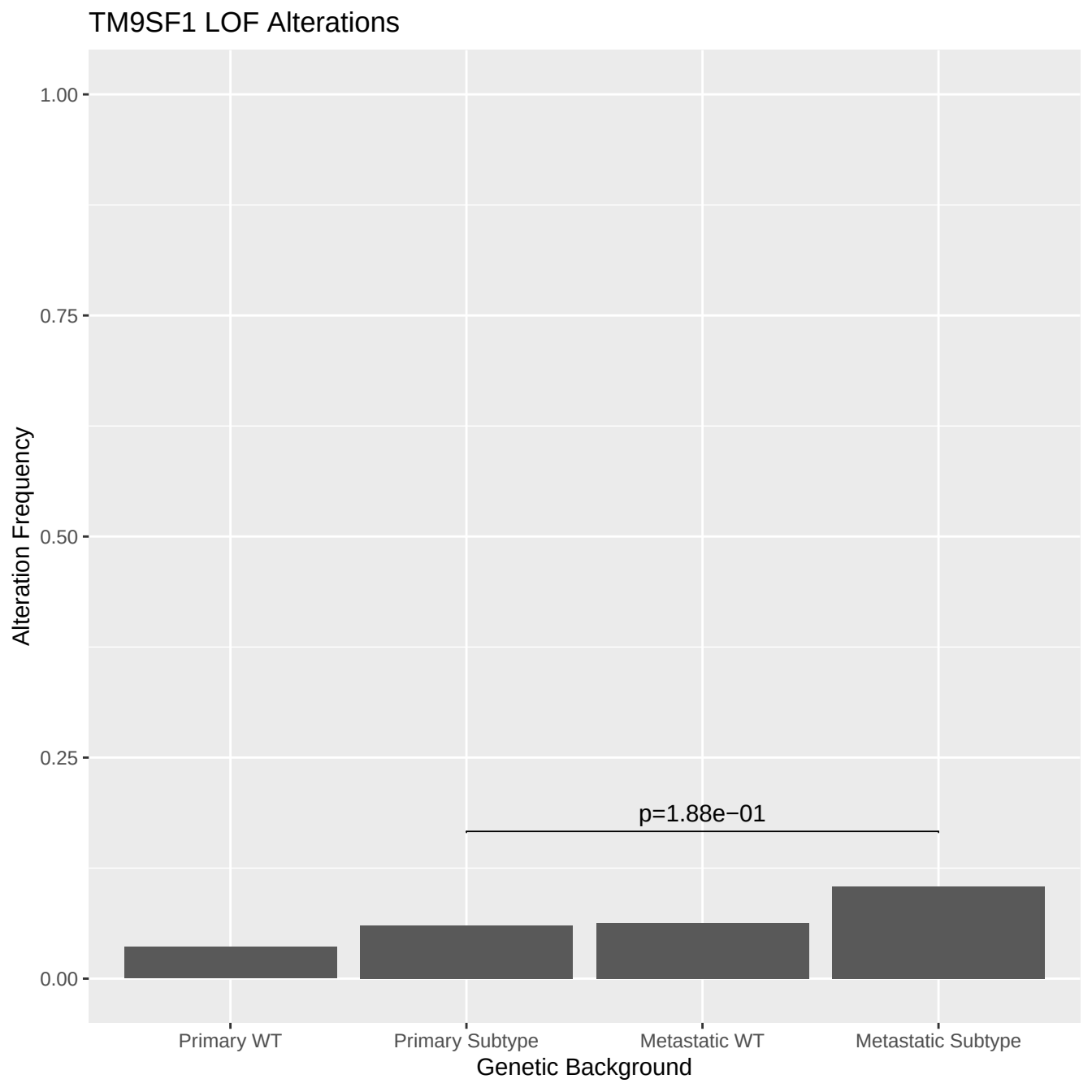

PEX19 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.20e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

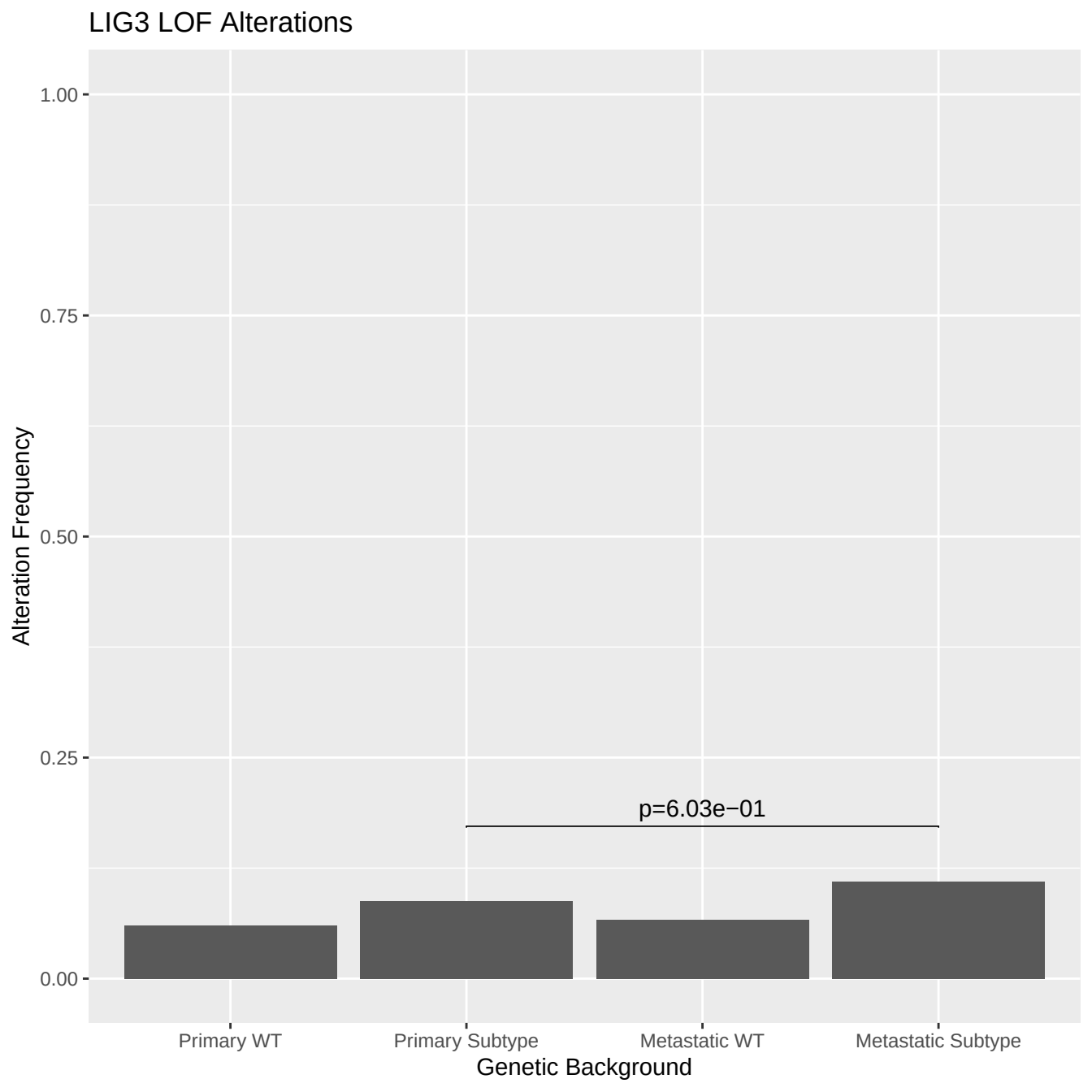

OXA1L LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.59e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

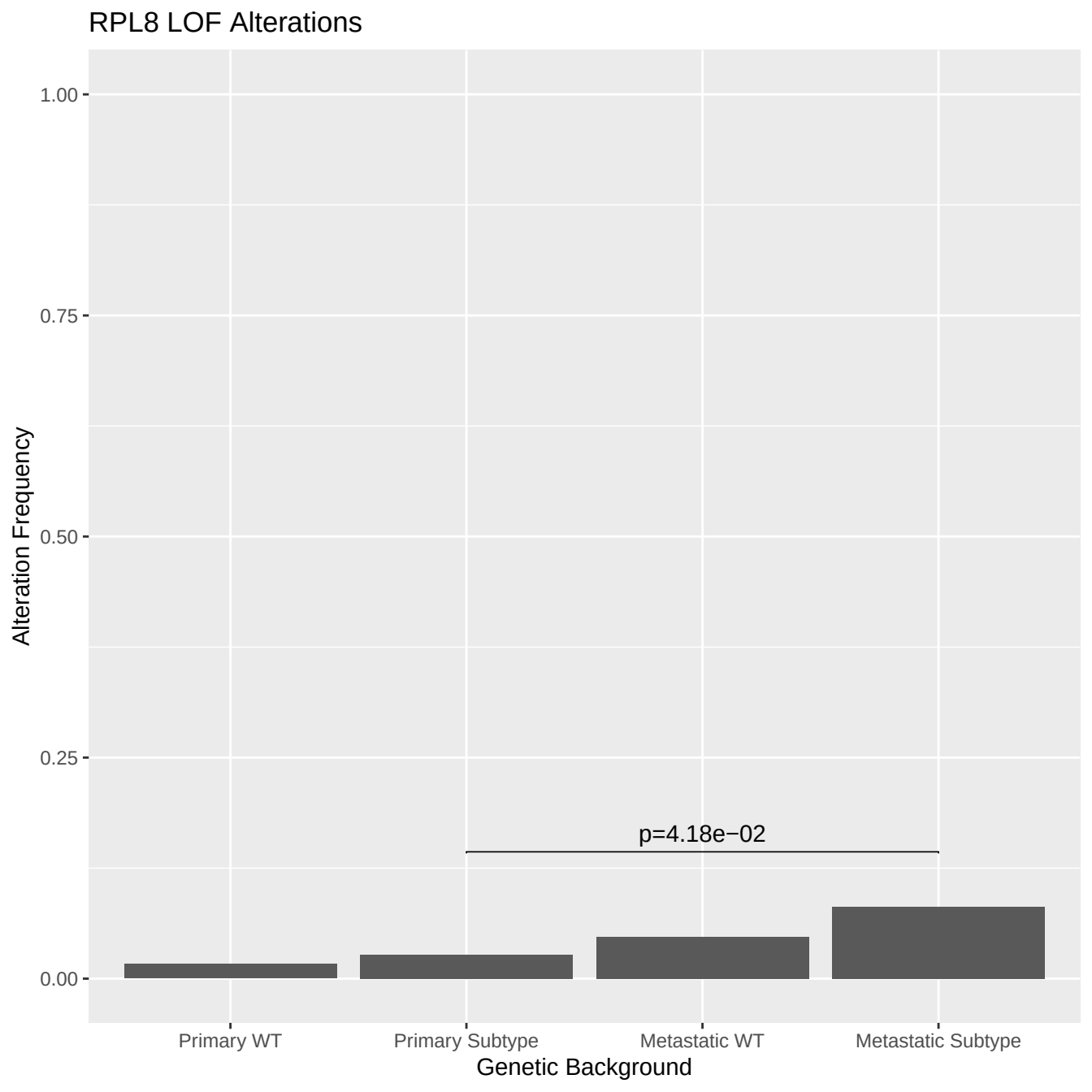

SRRM2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.36e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

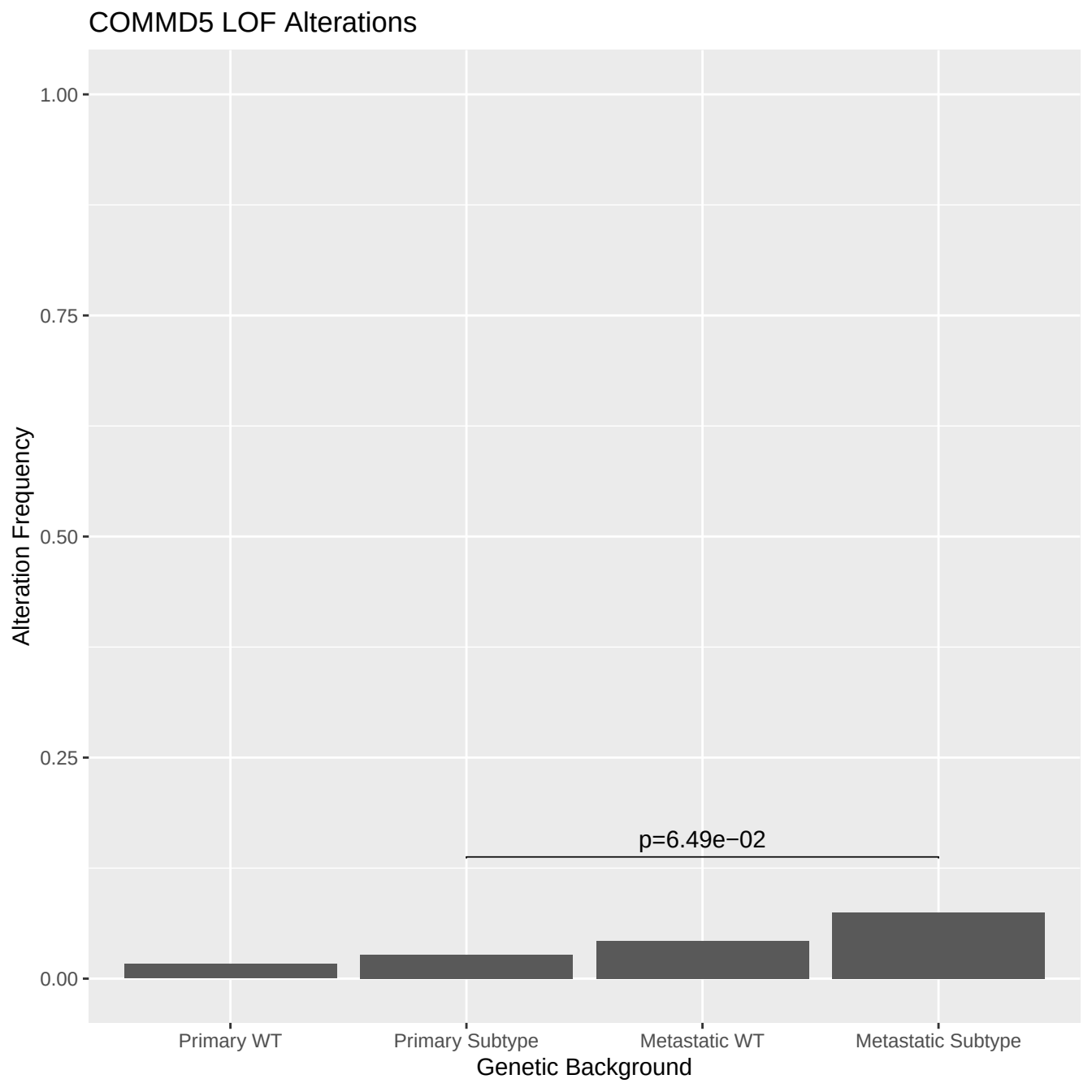

RTKN2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

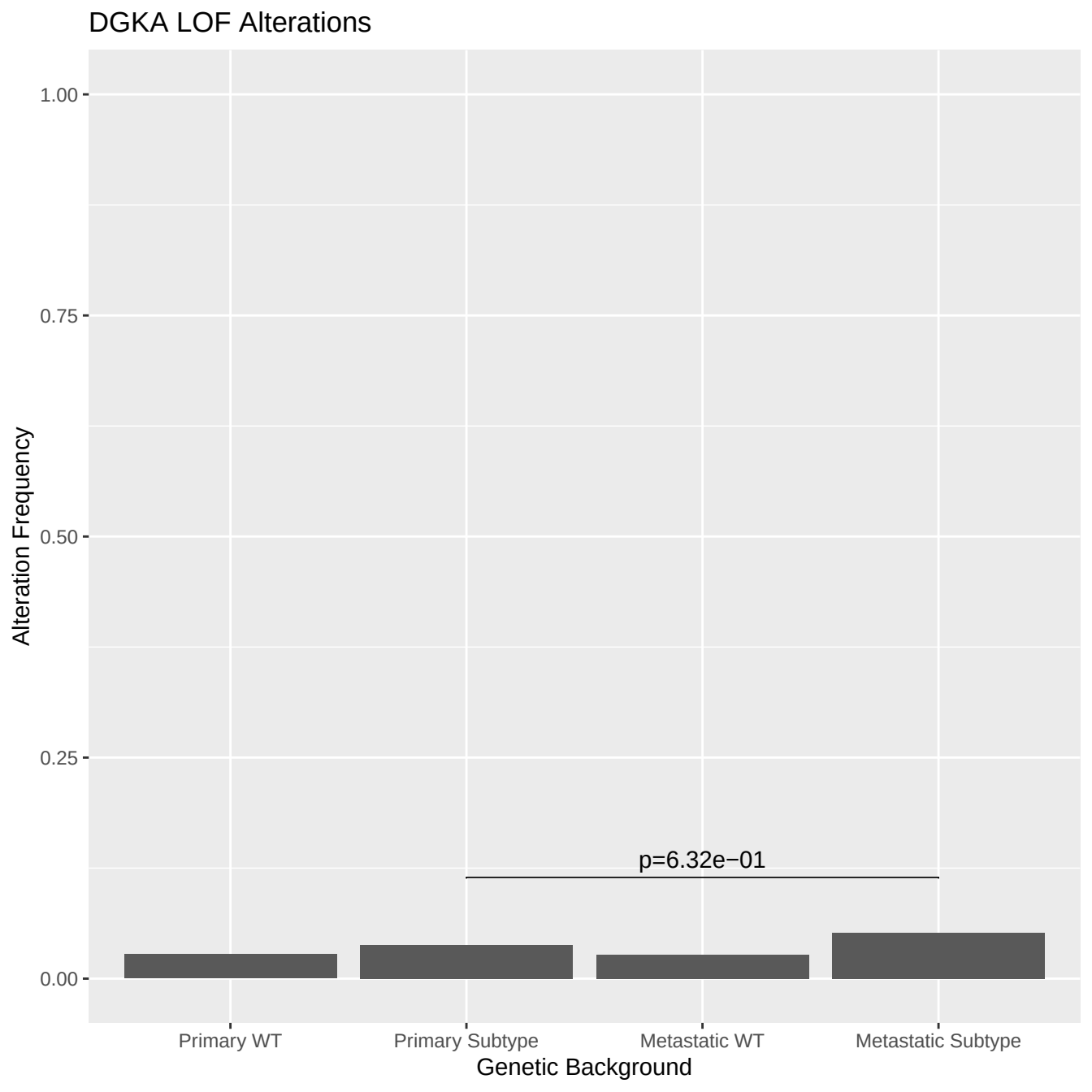

ACSM2A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

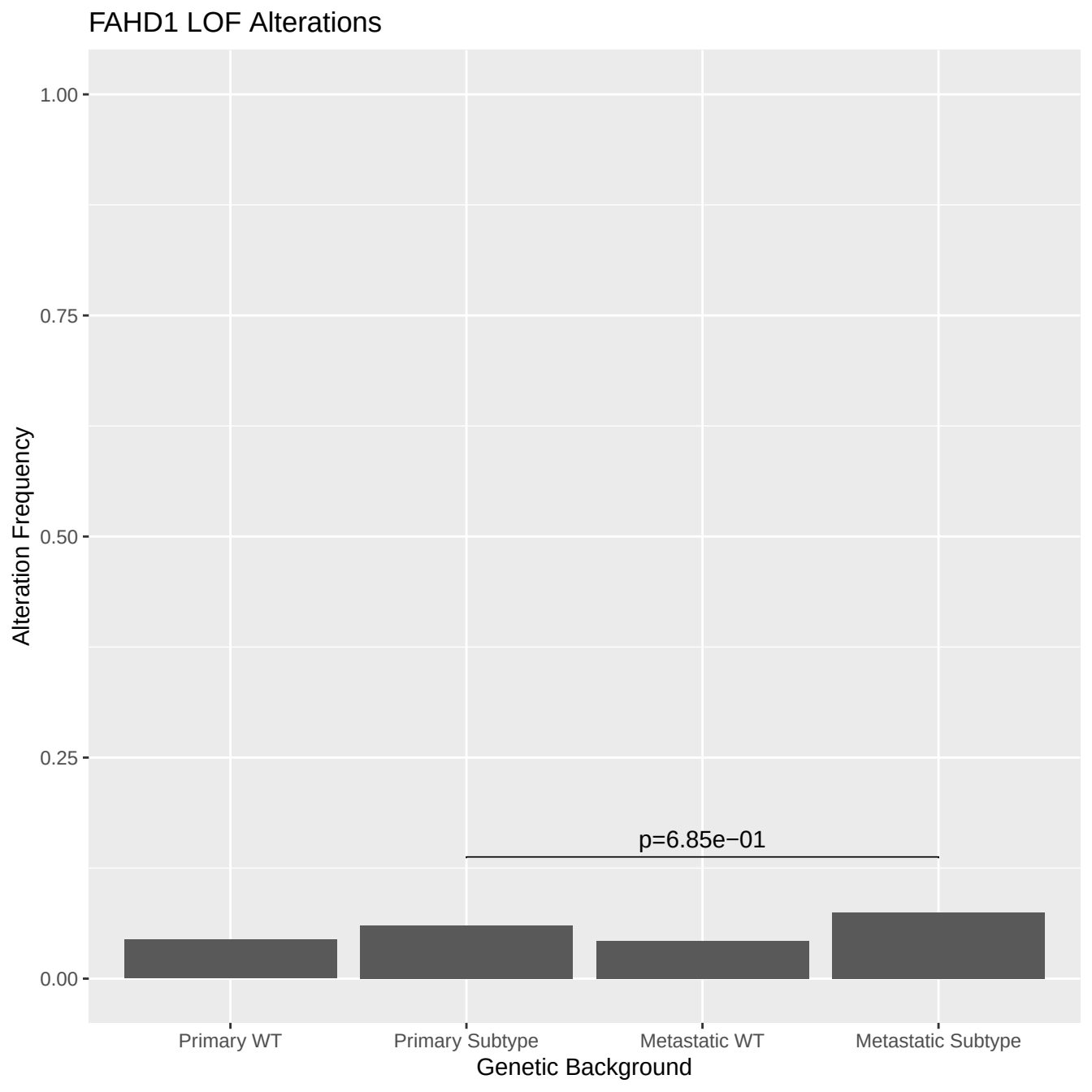

TM9SF1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

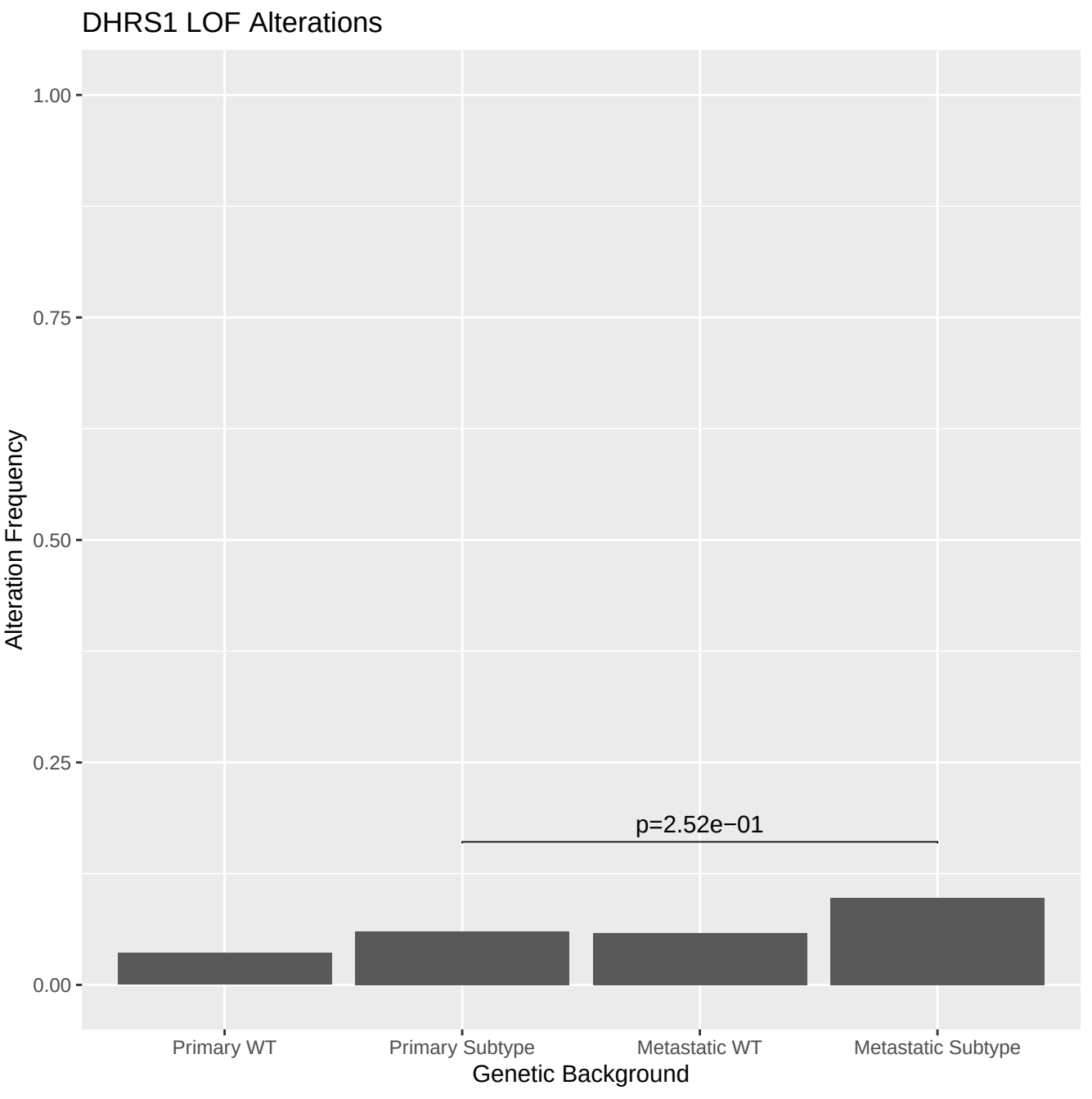

LIG3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

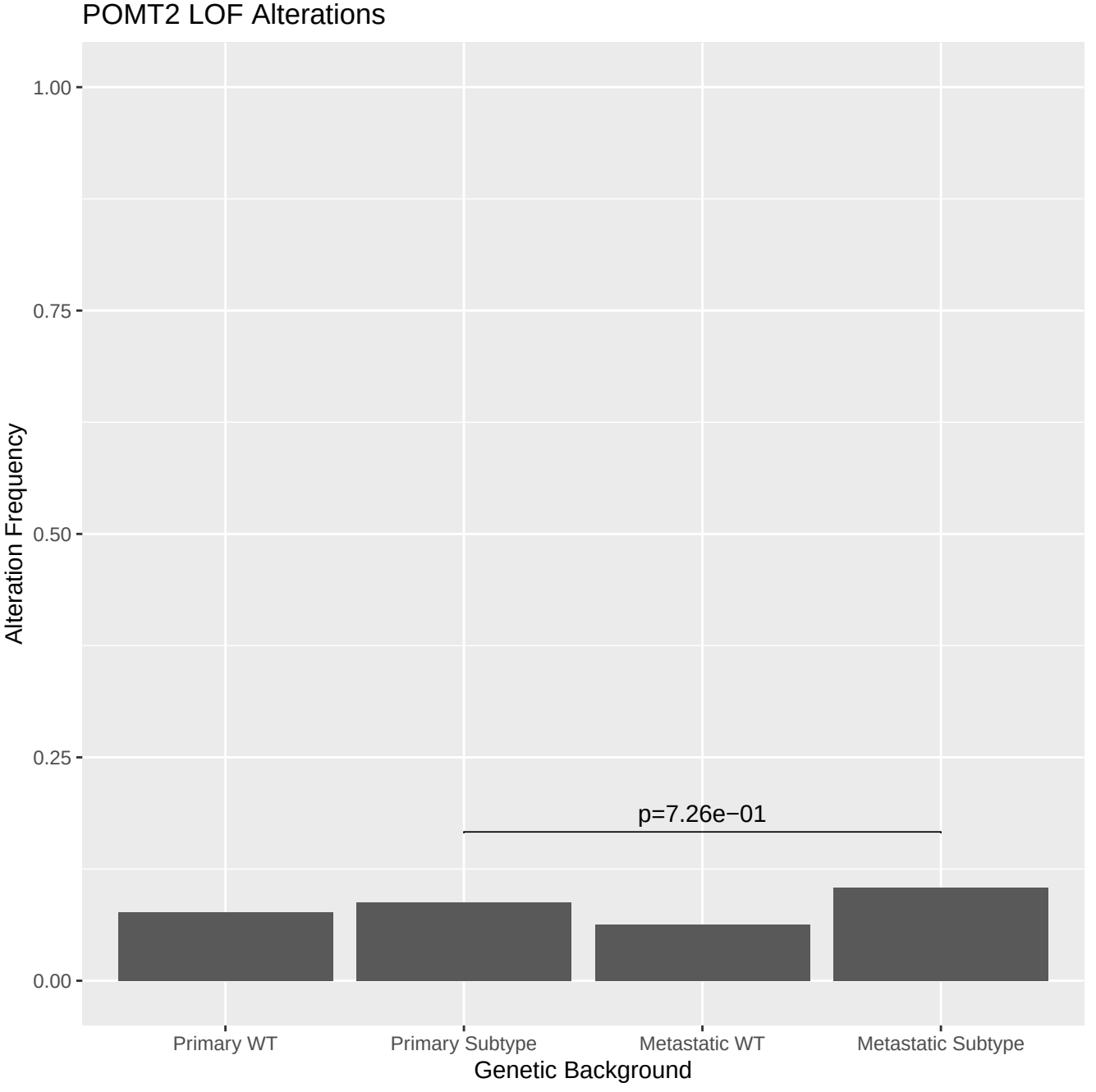

RPL8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

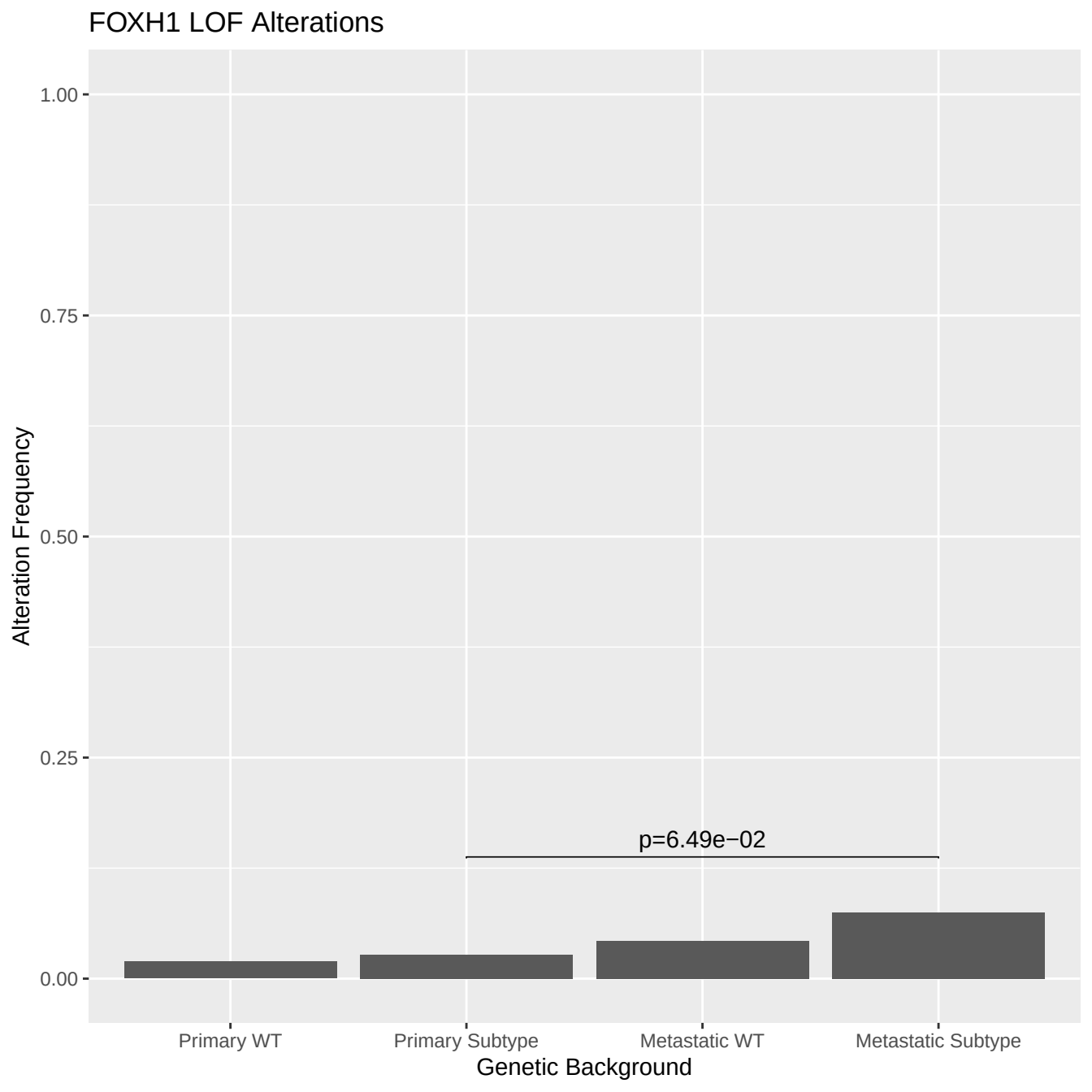

COMMD5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

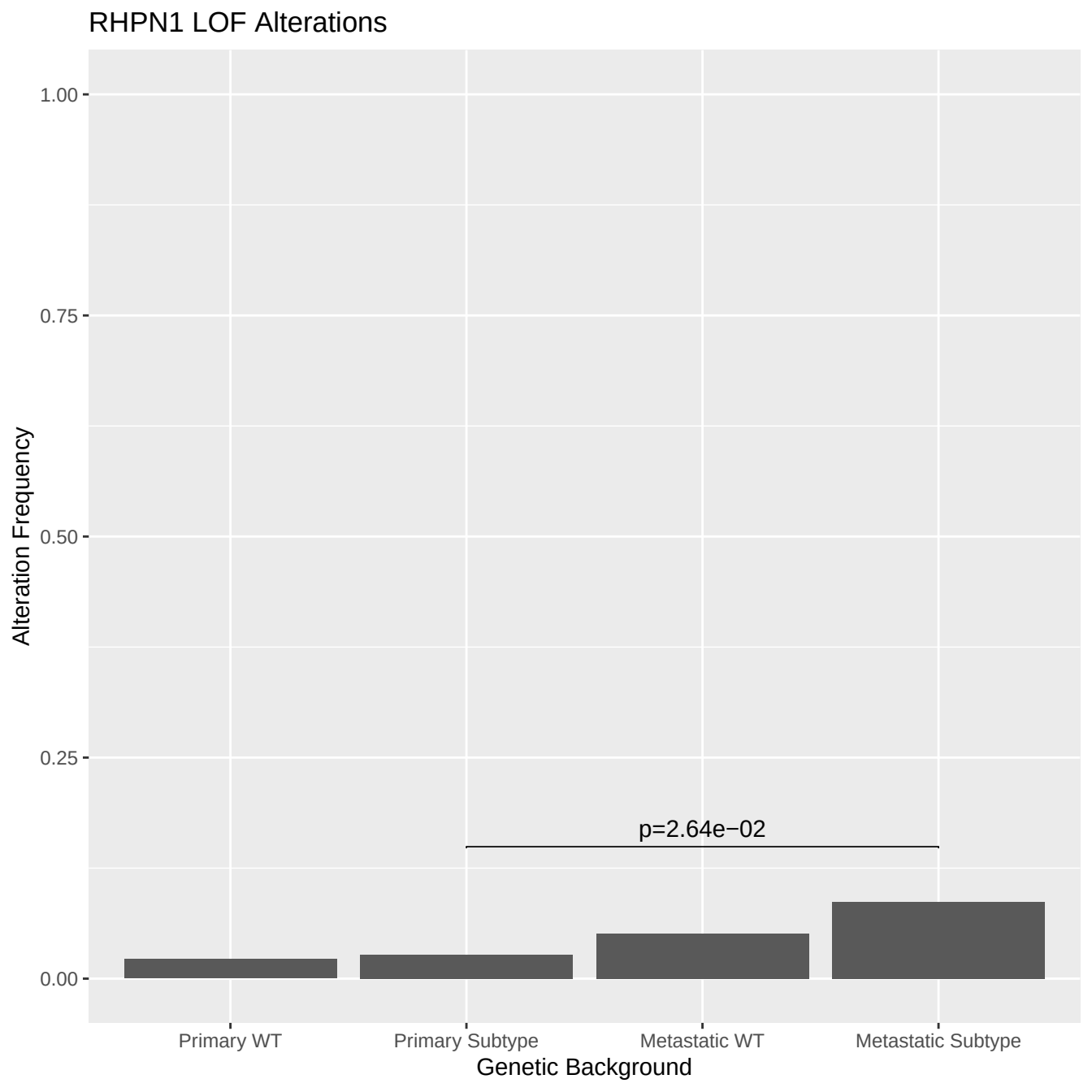

DGKA LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

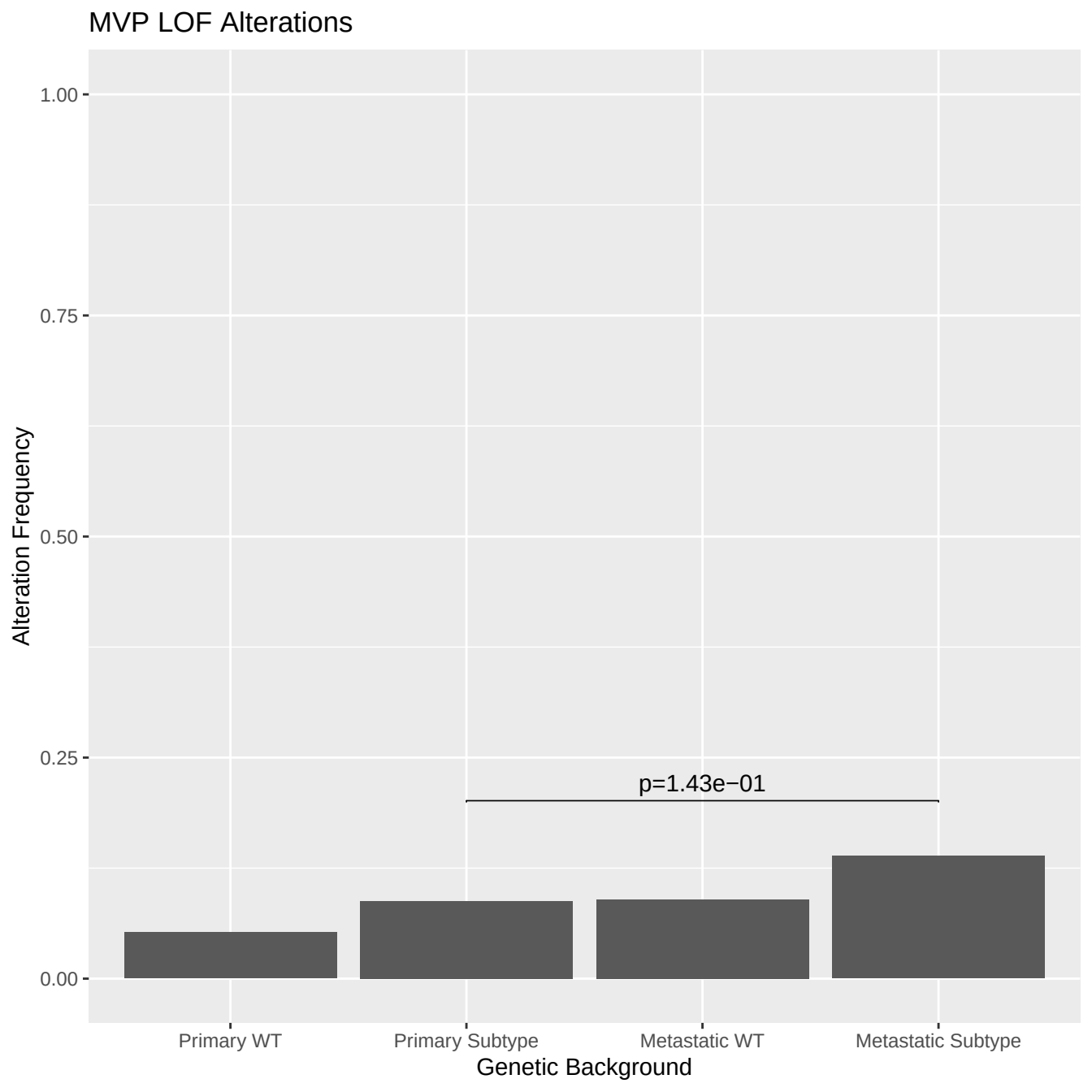

FAHD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

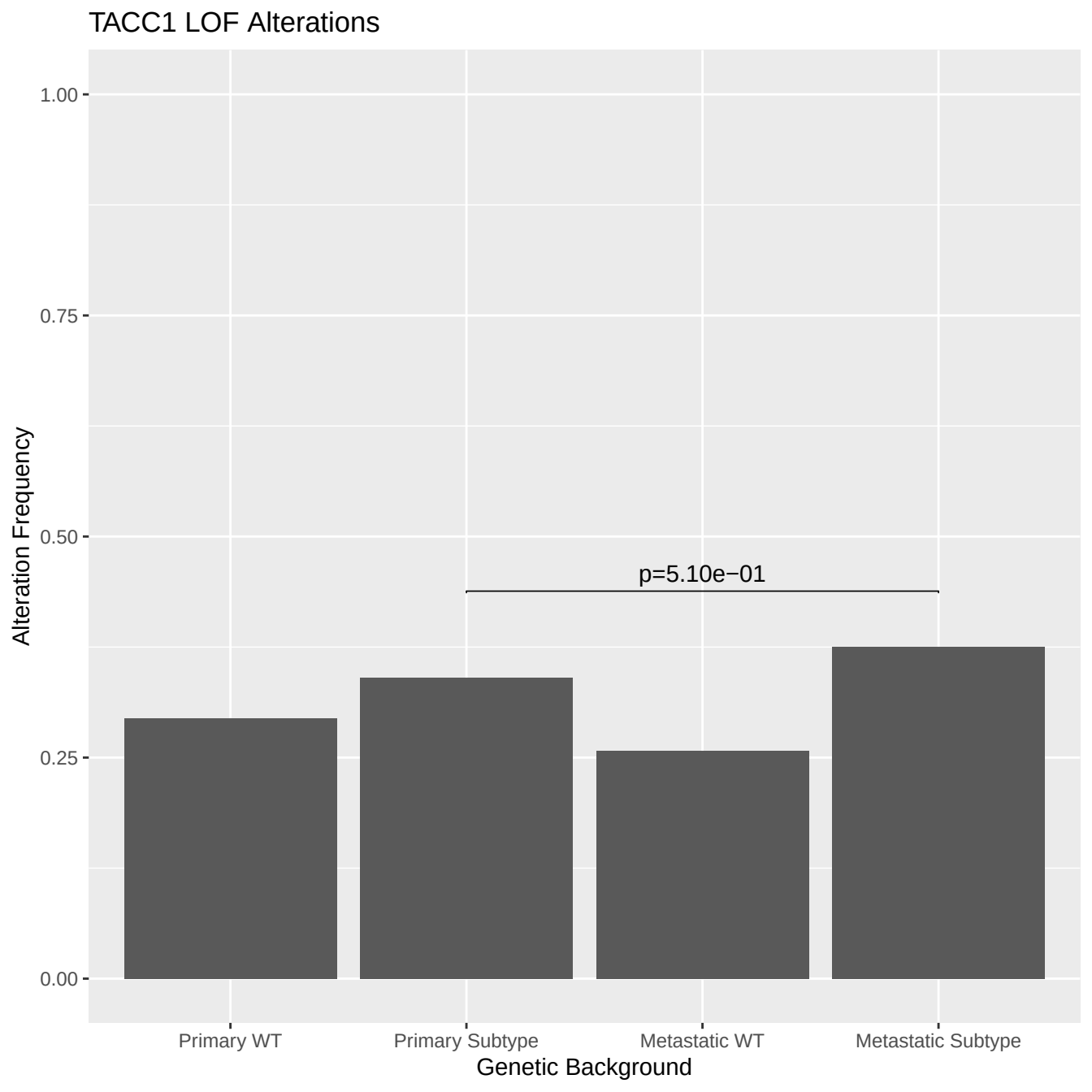

DHRS1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.52e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

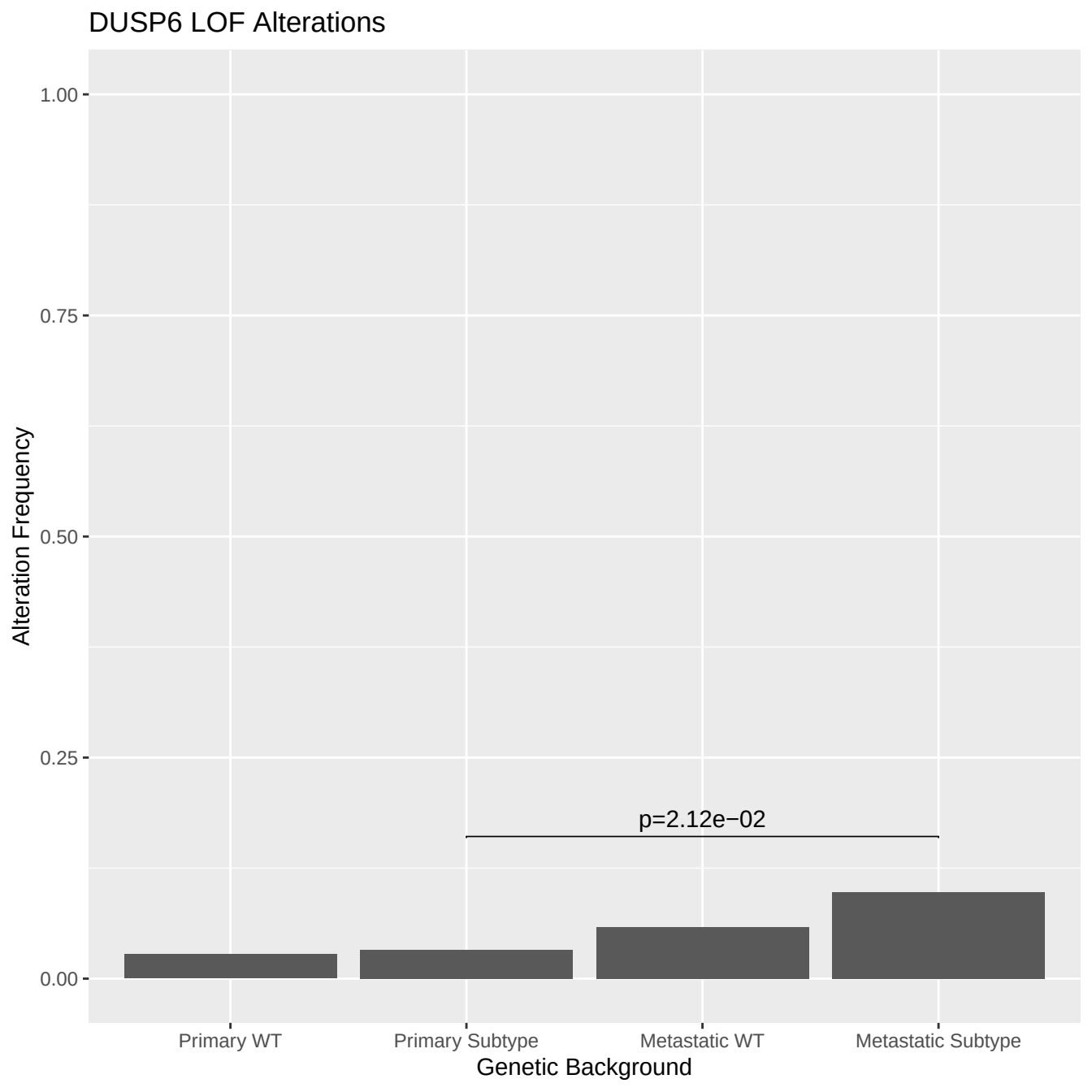

POMT2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.26e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

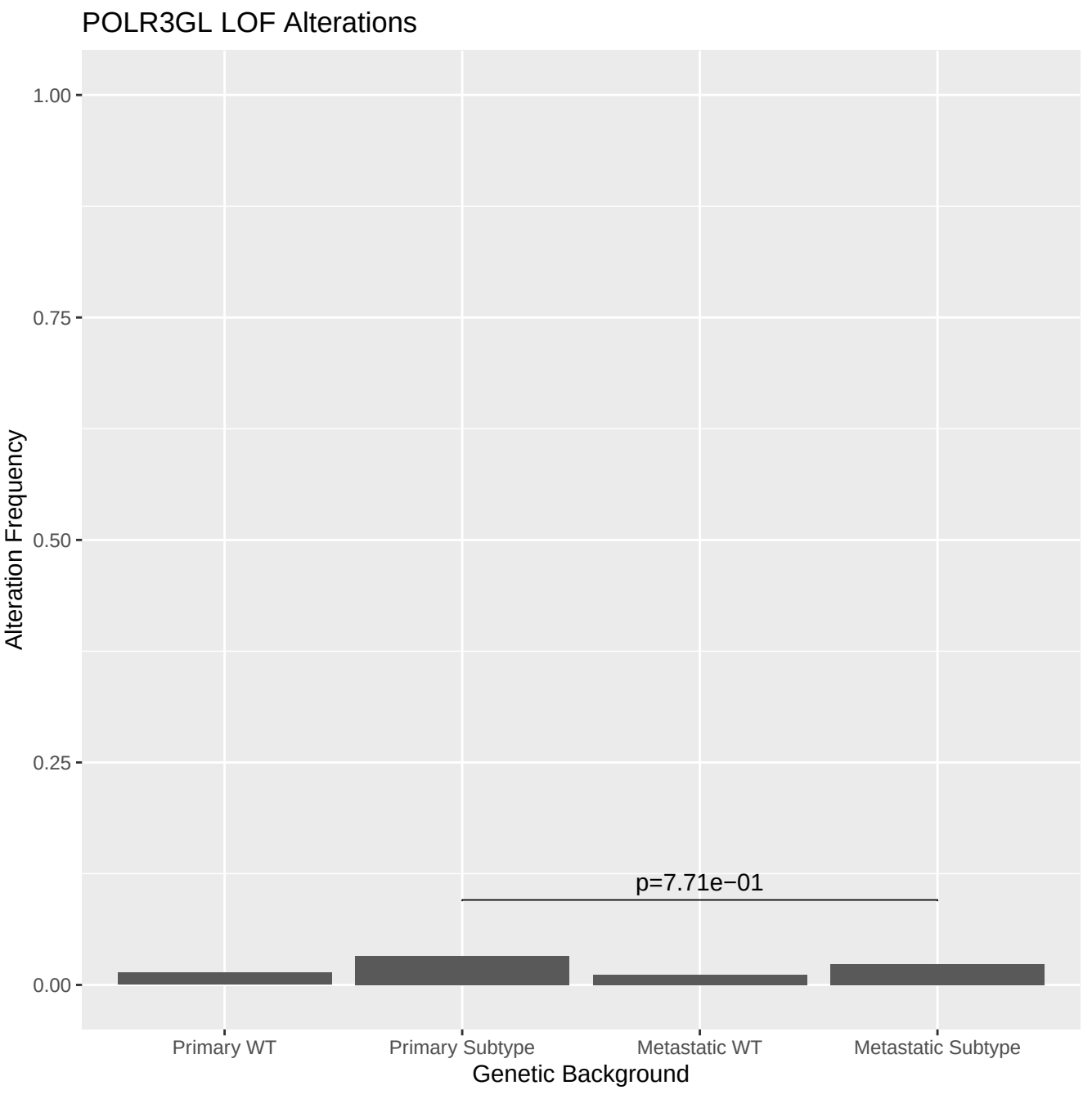

FOXH1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

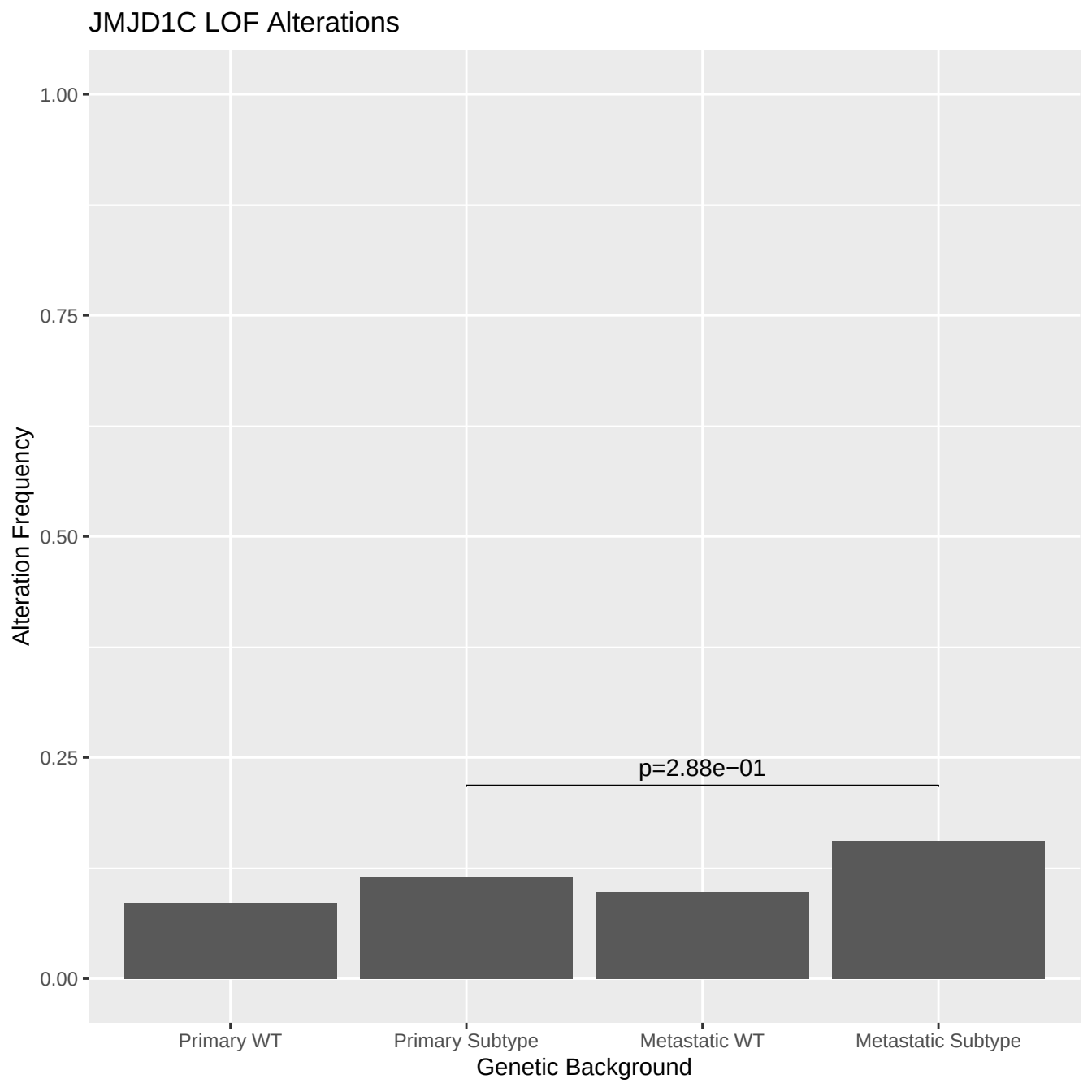

RHPN1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

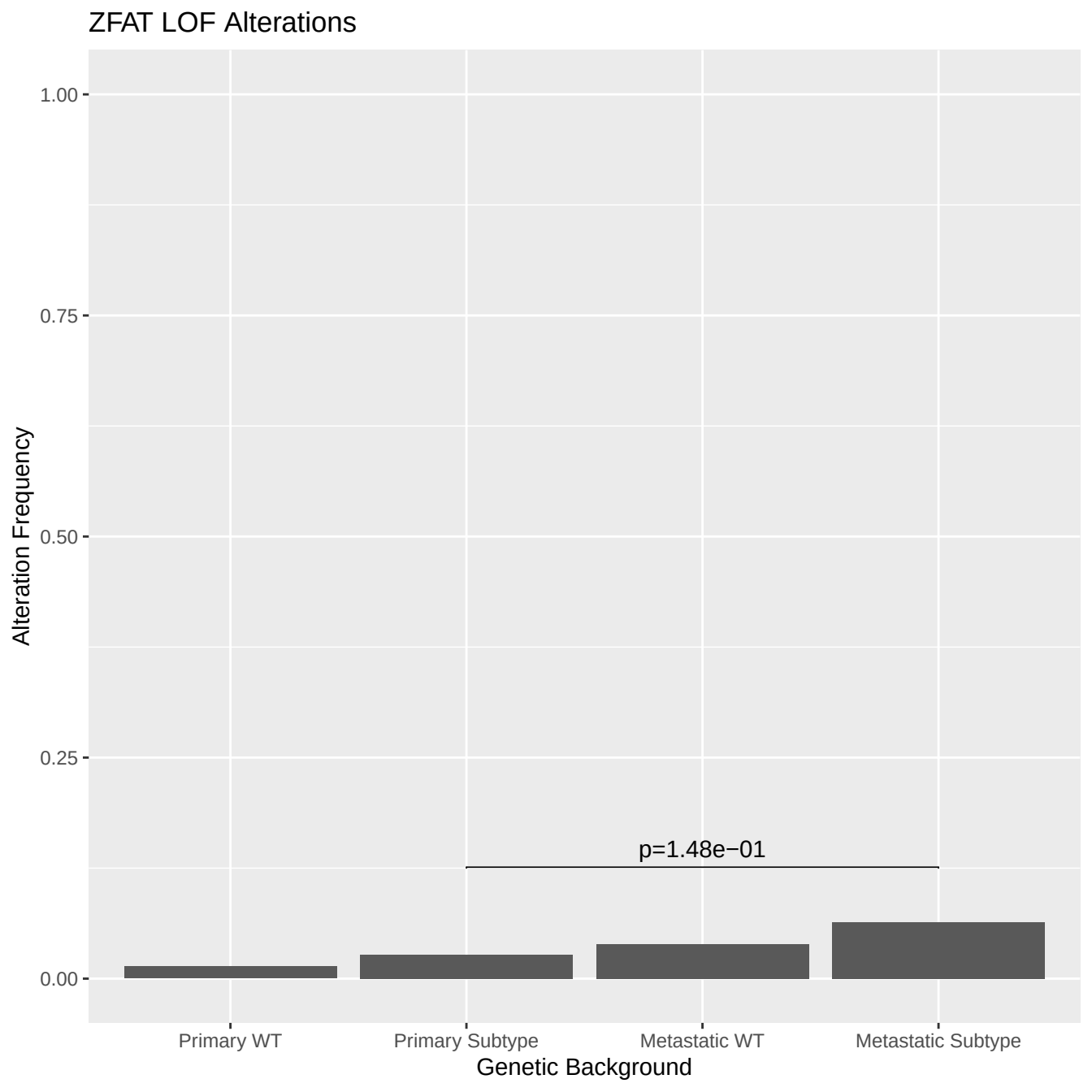

MVP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.43e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

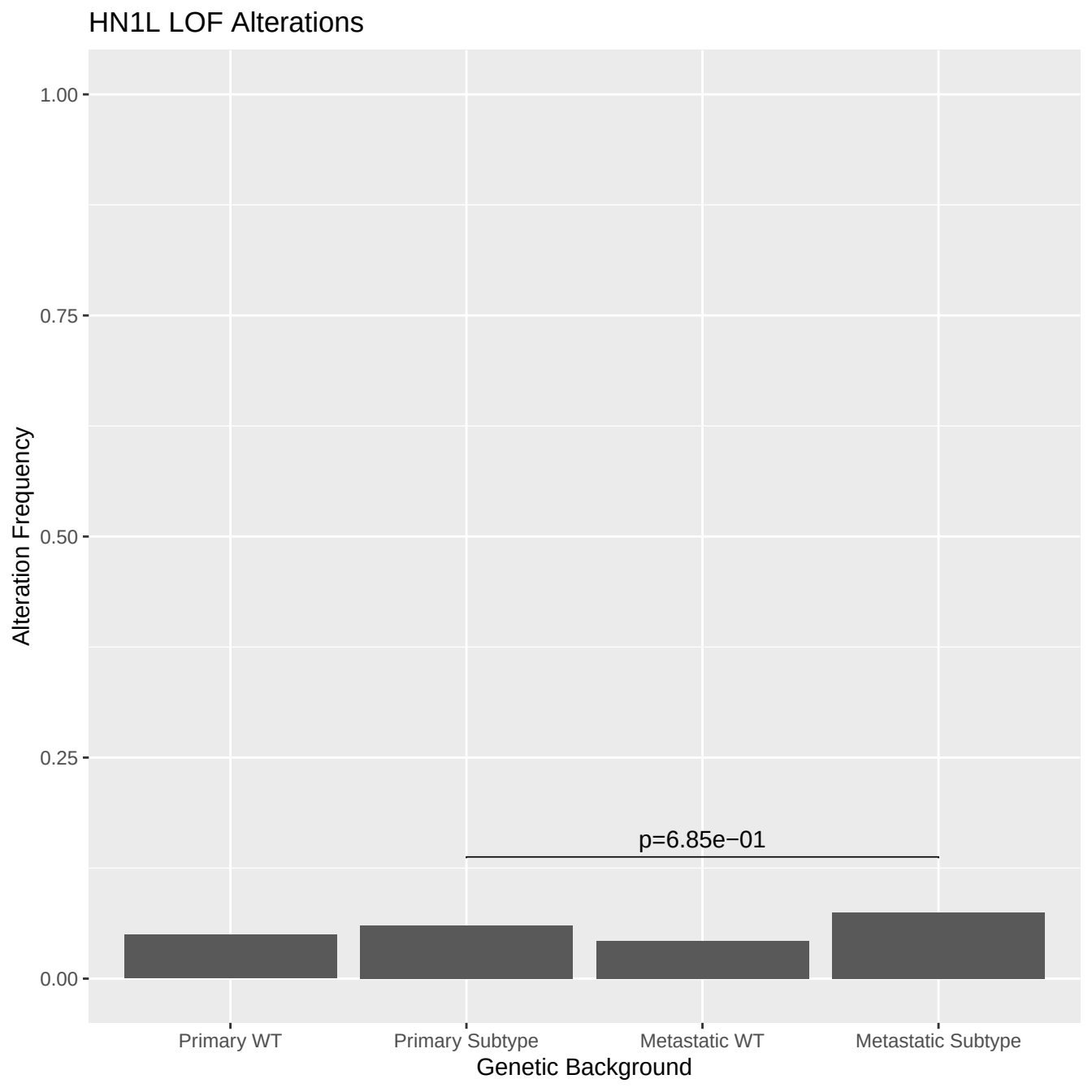

TACC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.10e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

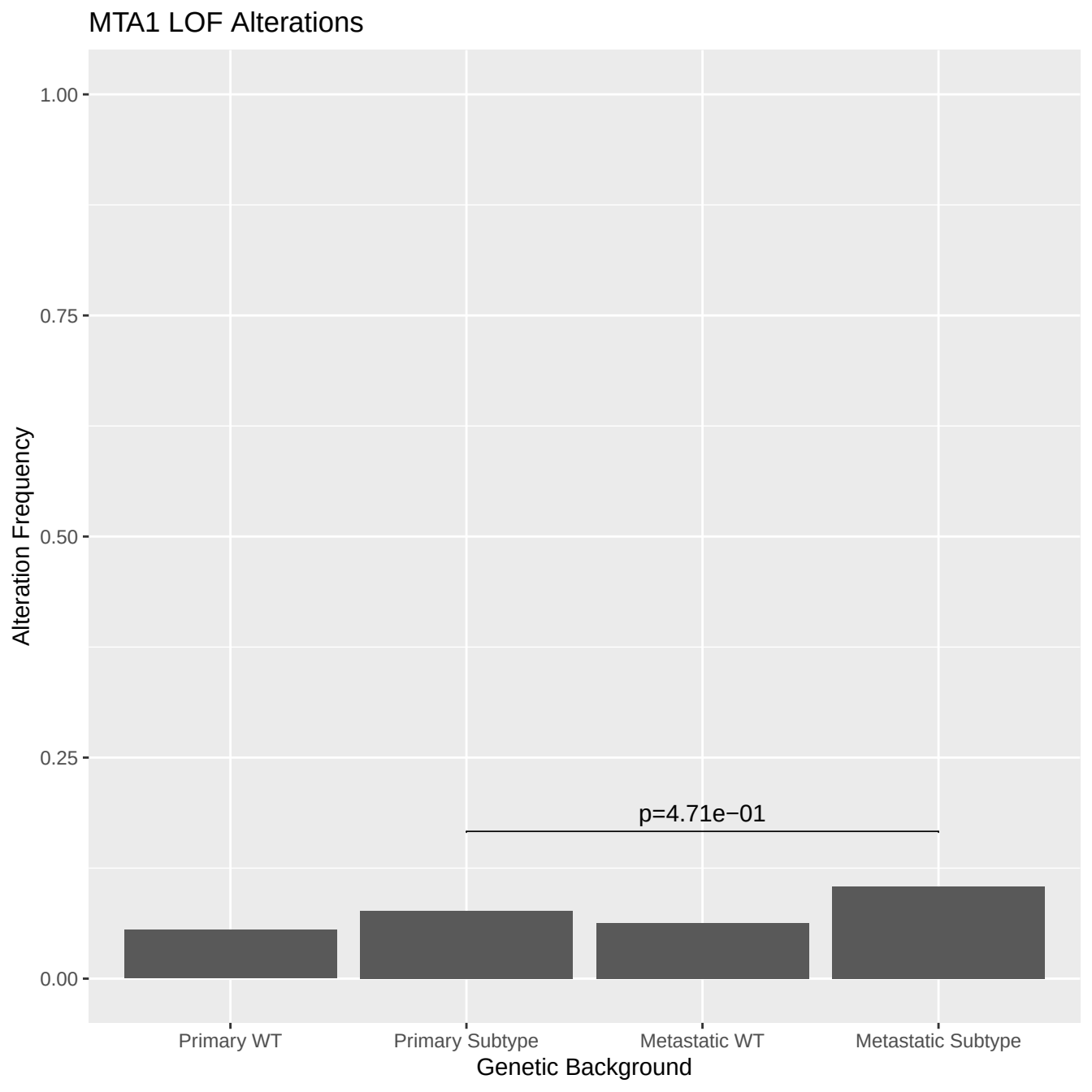

DUSP6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.12e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

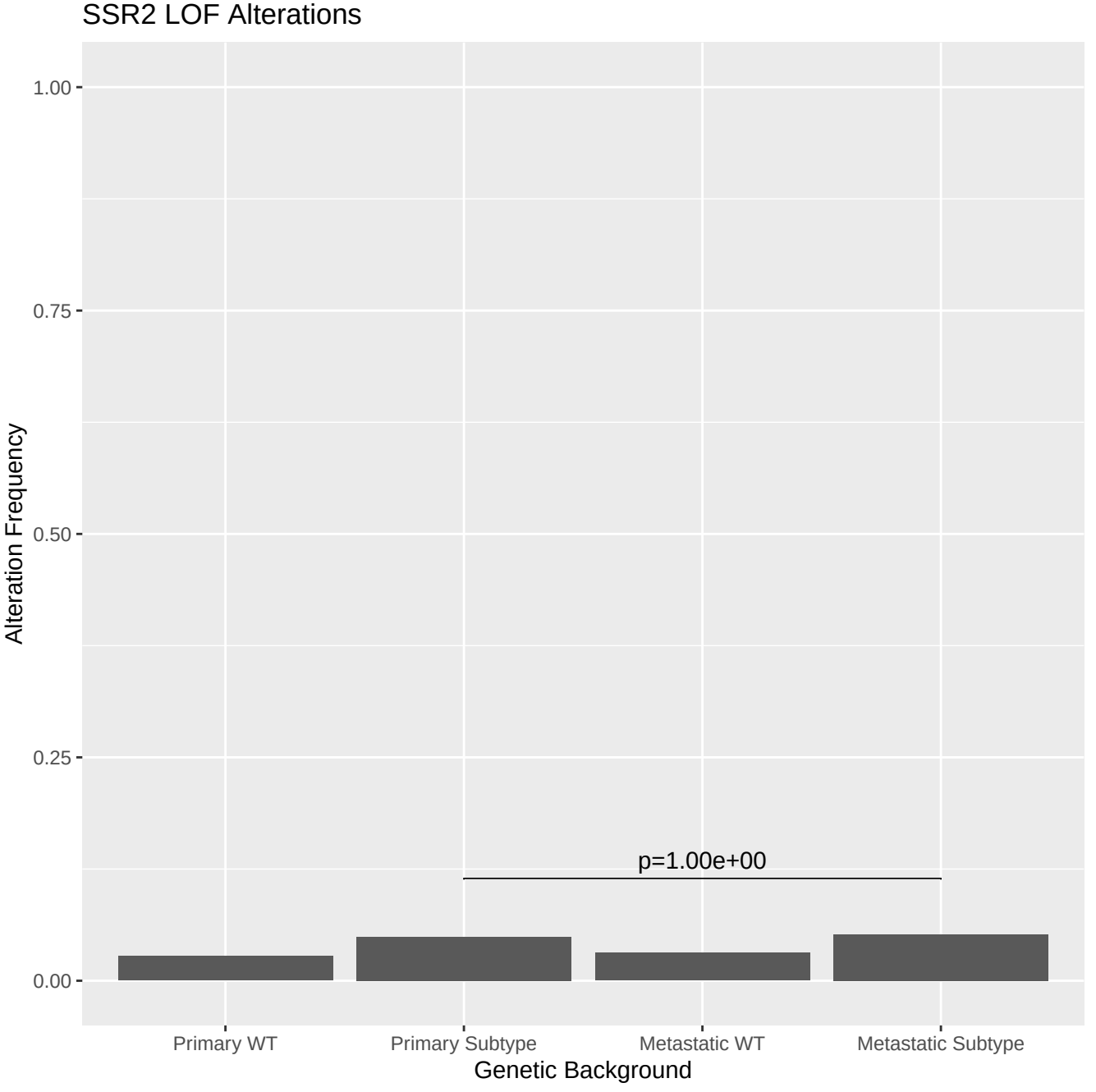

POLR3GL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

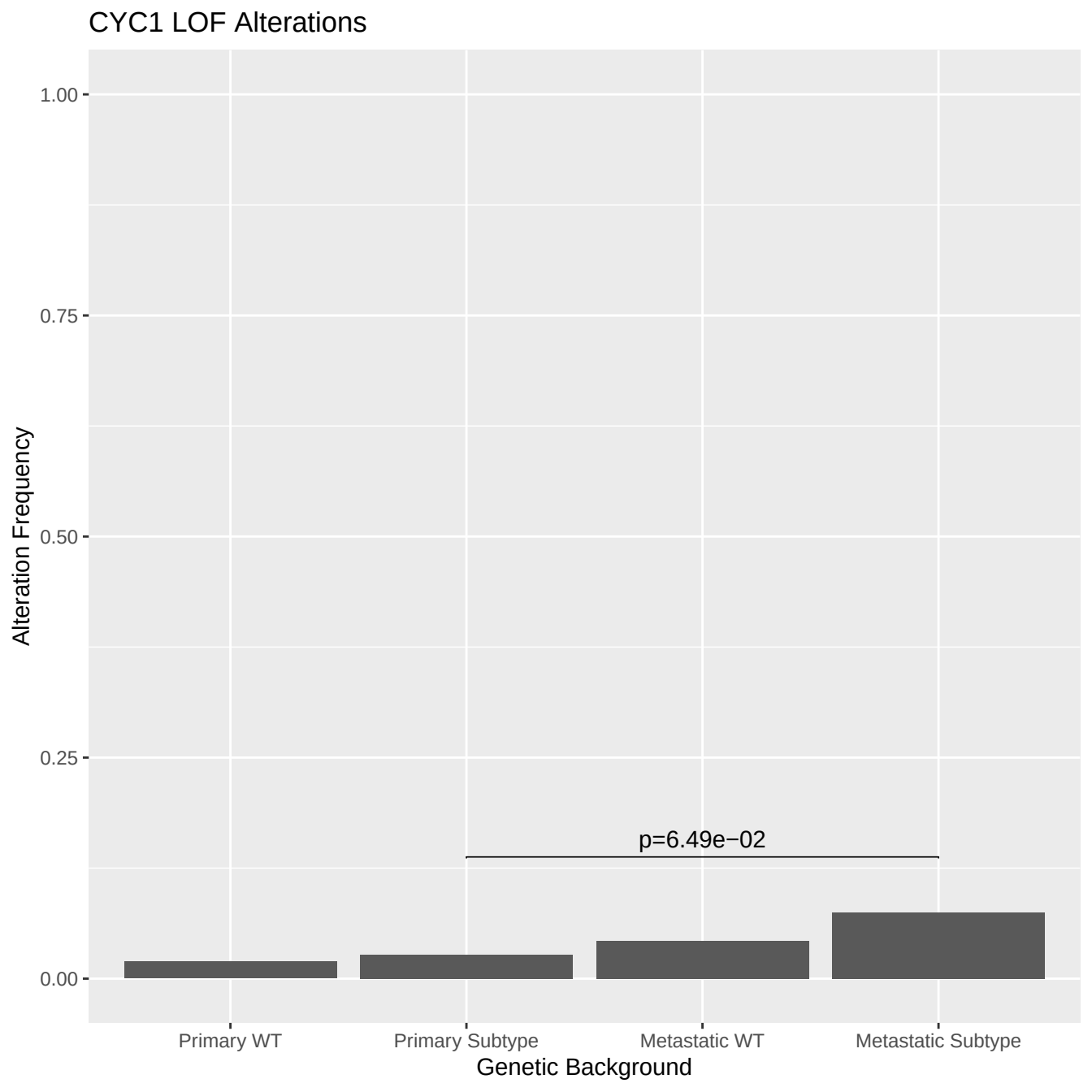

JMJD1C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

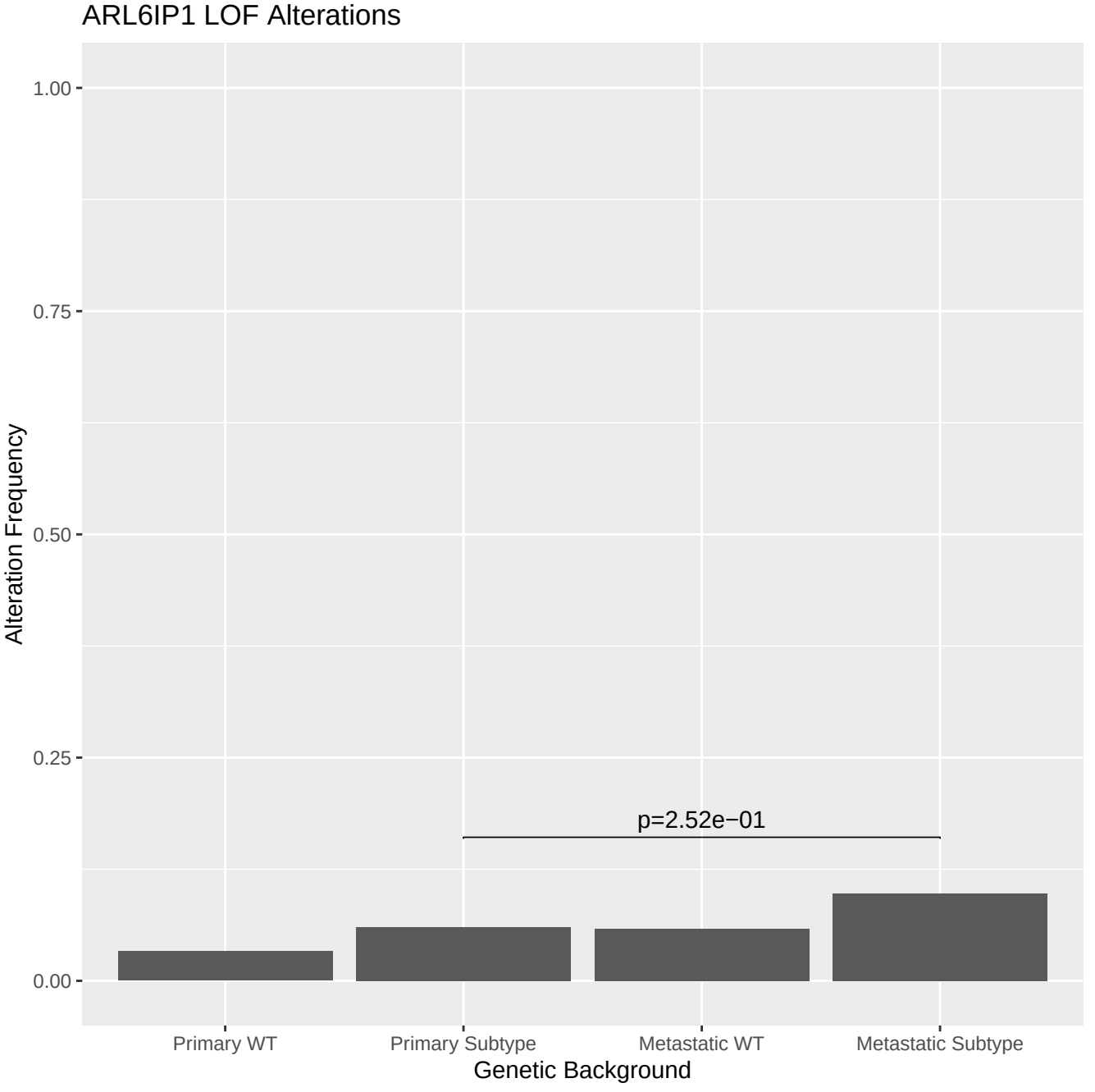

ZFAT LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

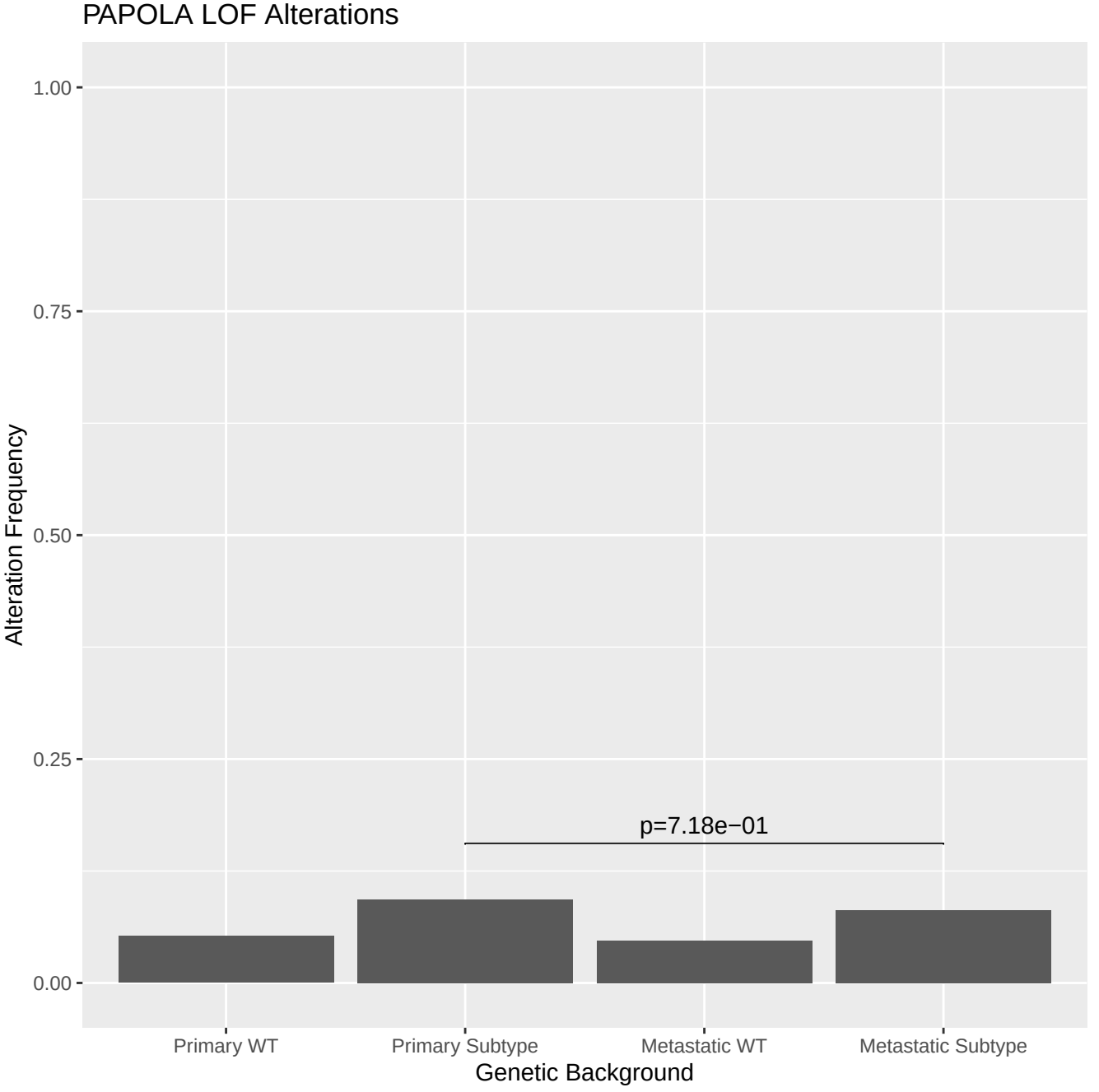

HN1L LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

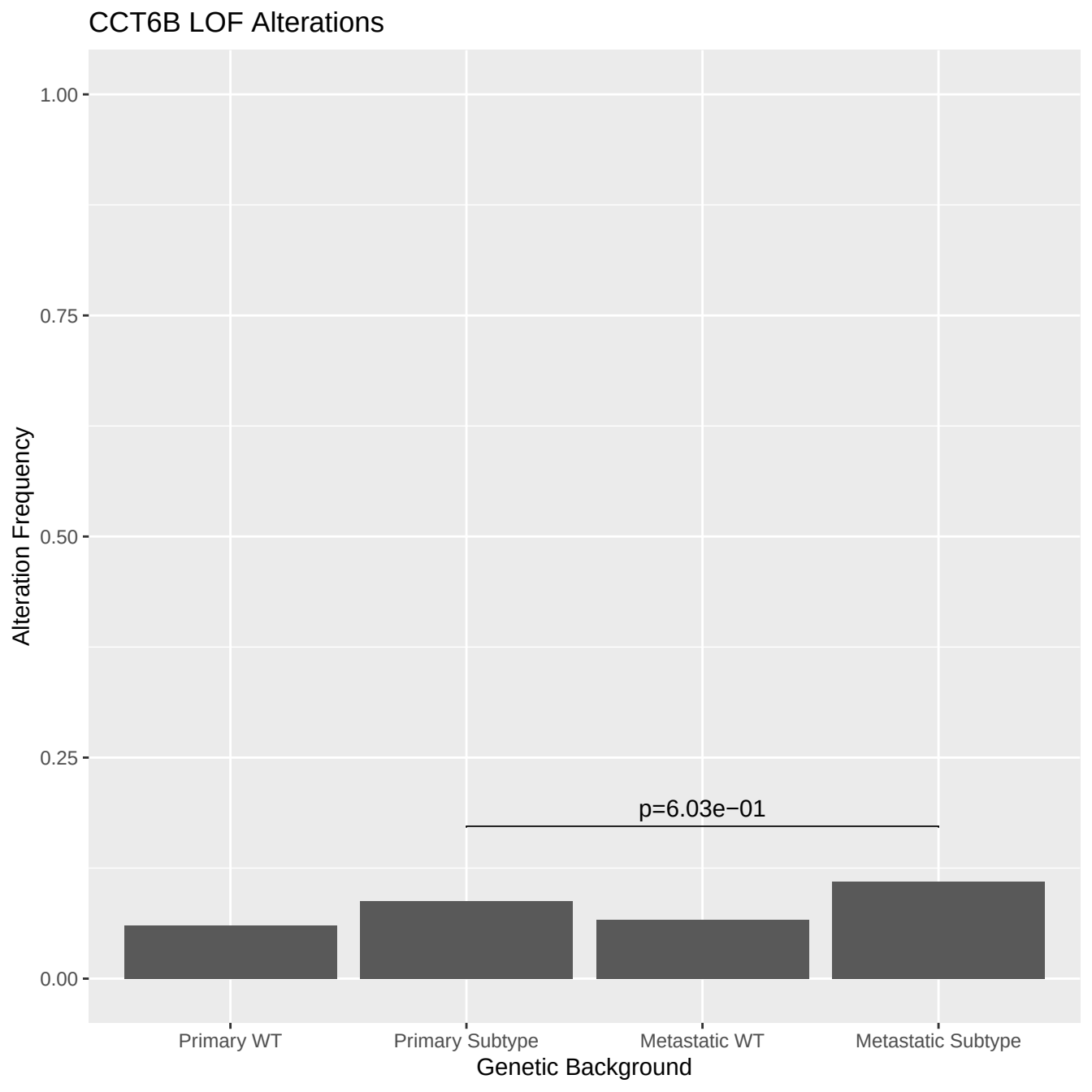

MTA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

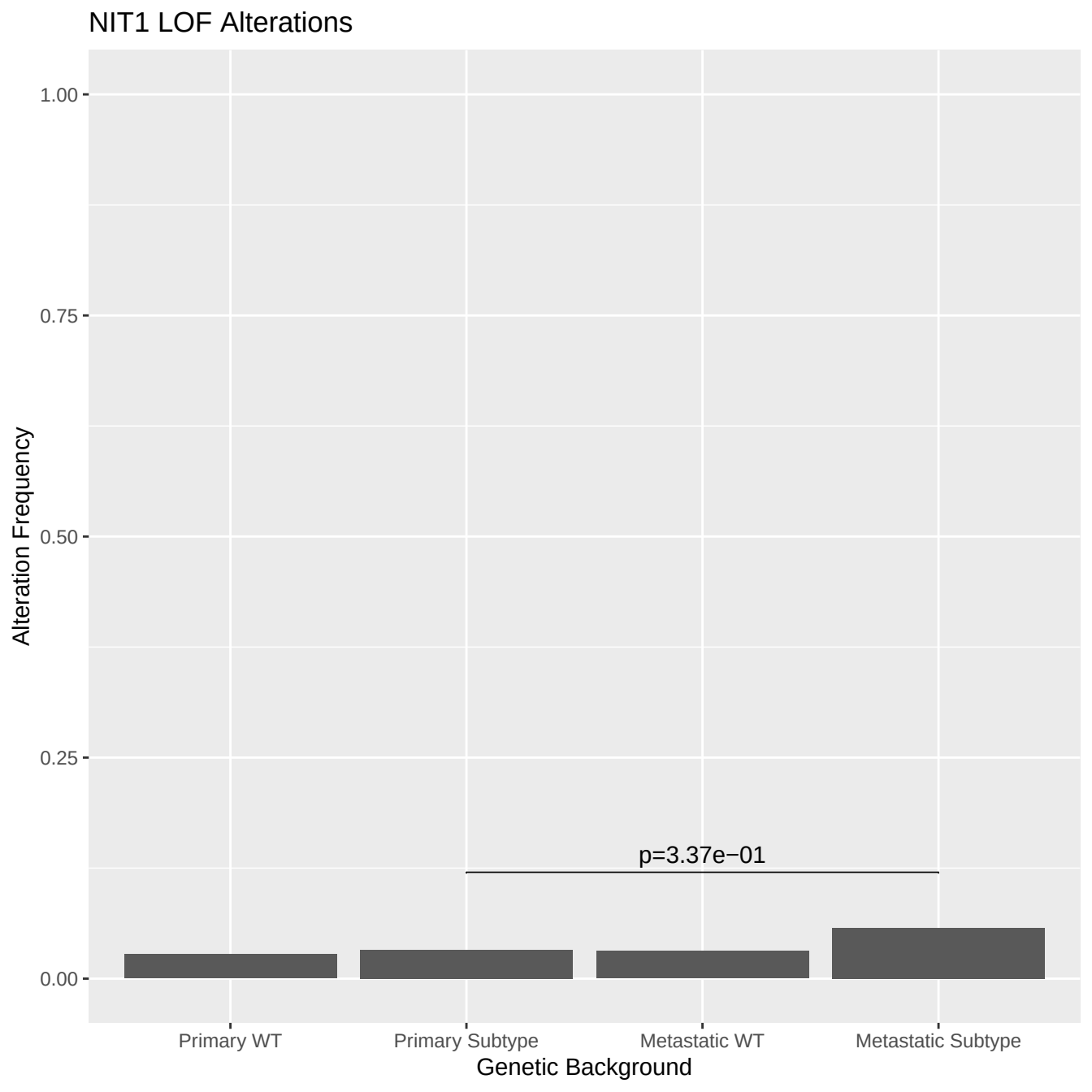

SSR2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

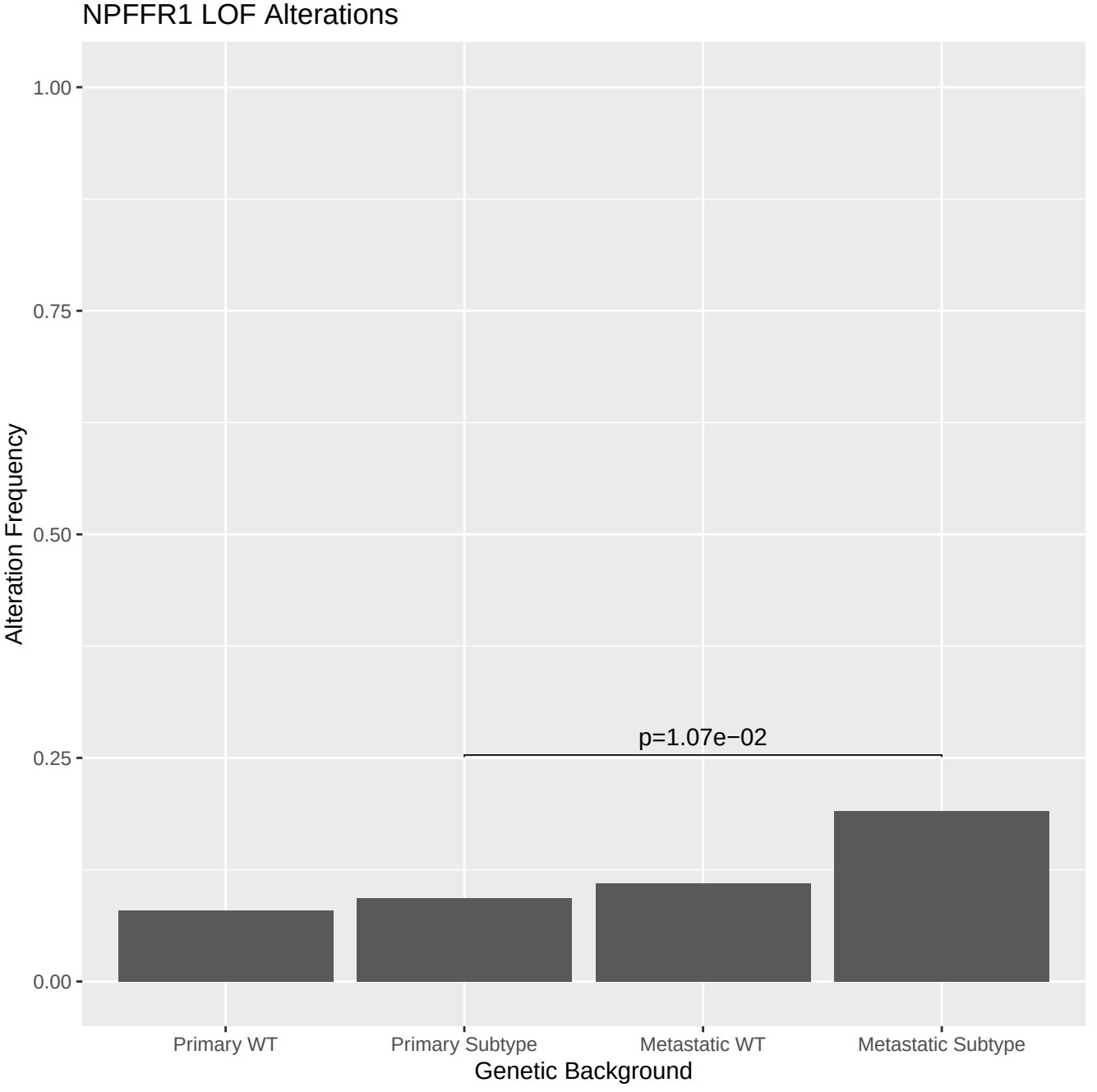

CYC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

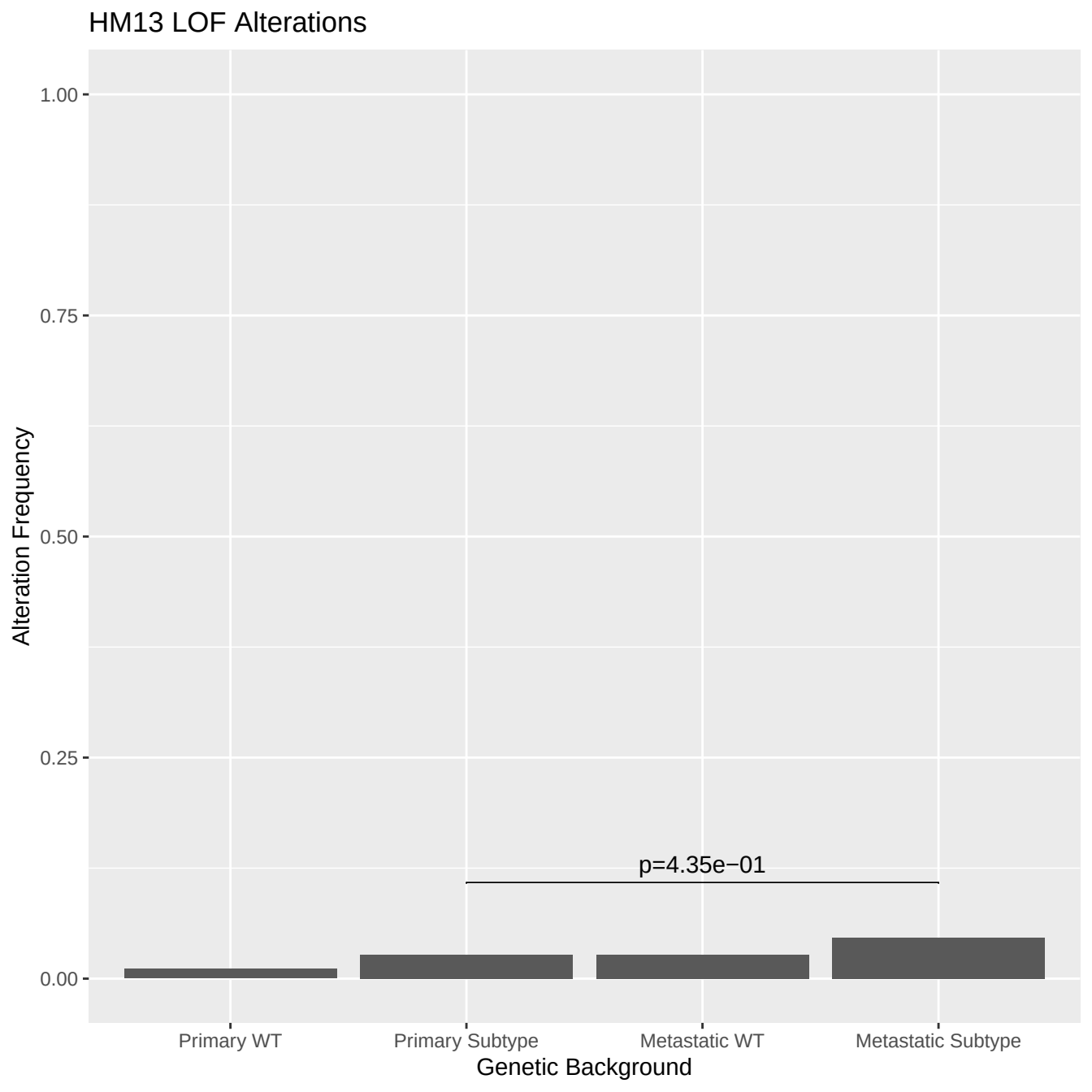

ARL6IP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.52e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

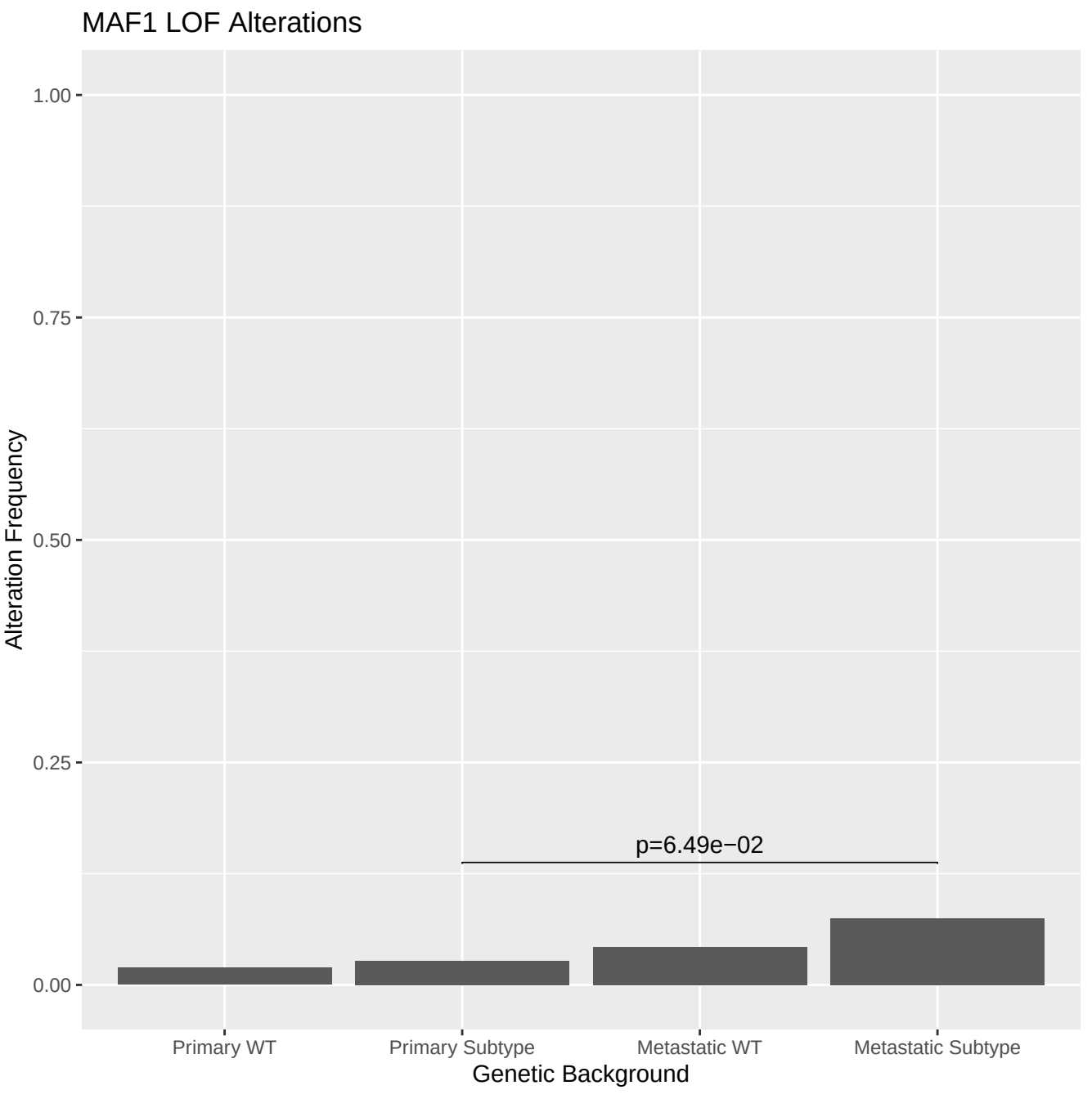

PAPOLA LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

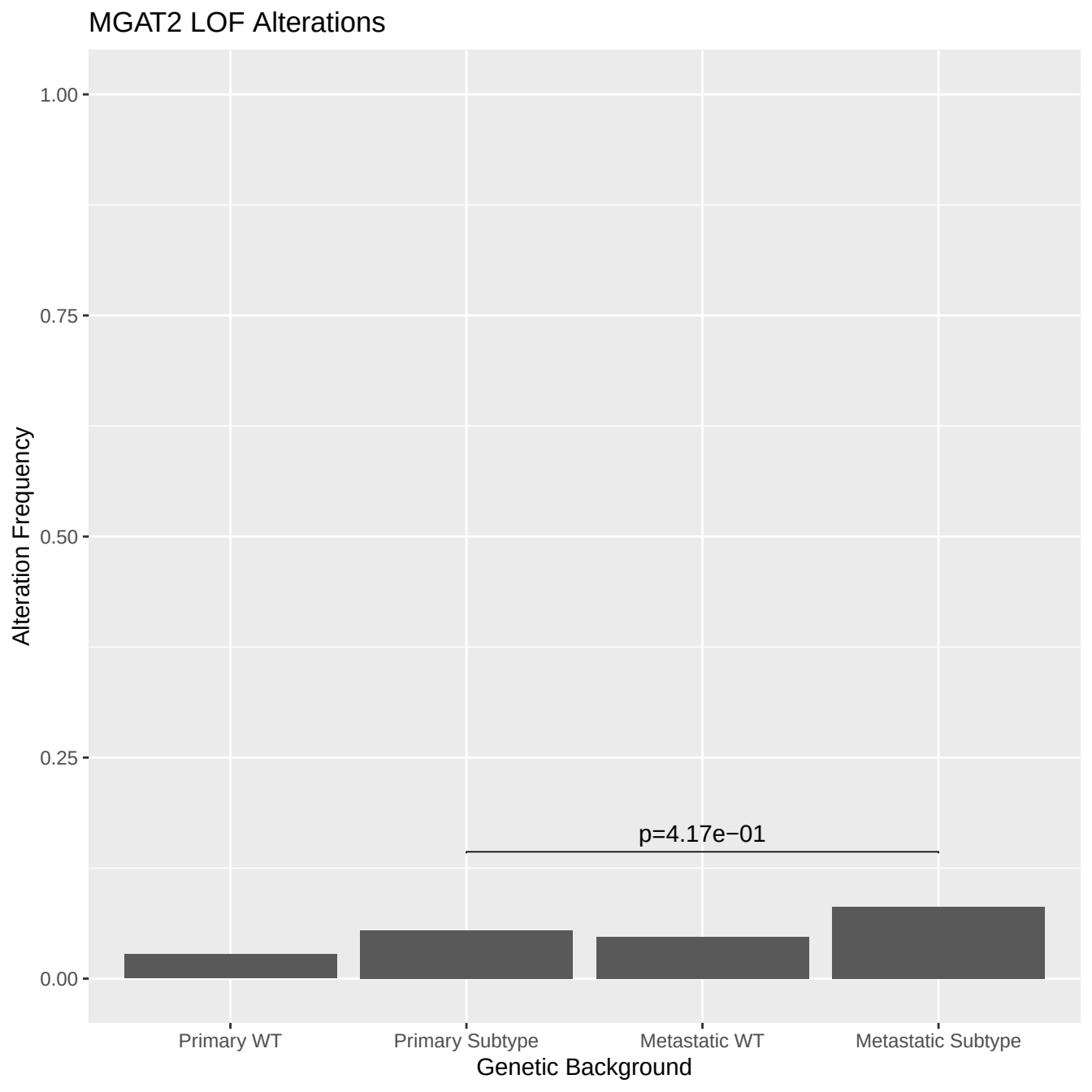

CCT6B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

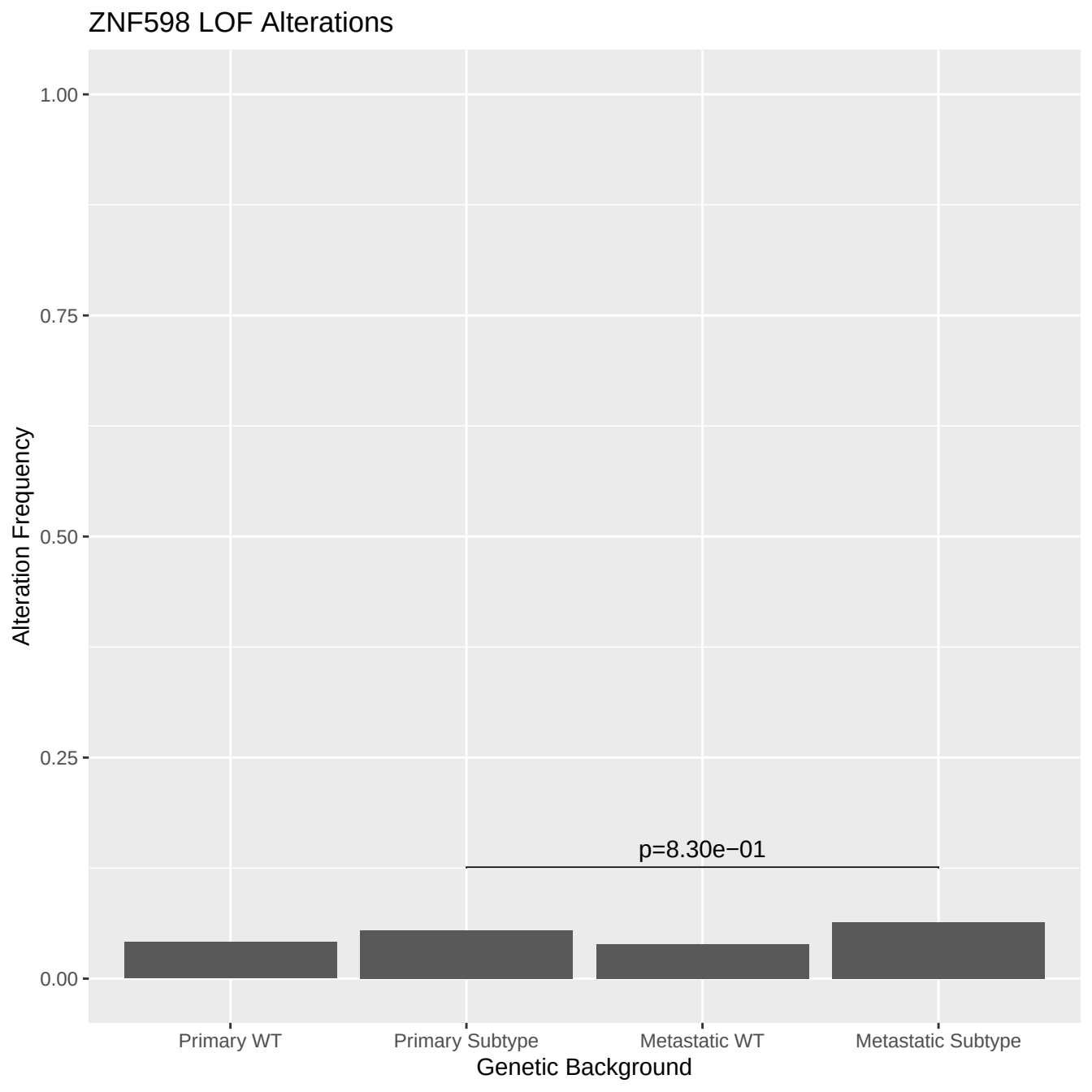

NIT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

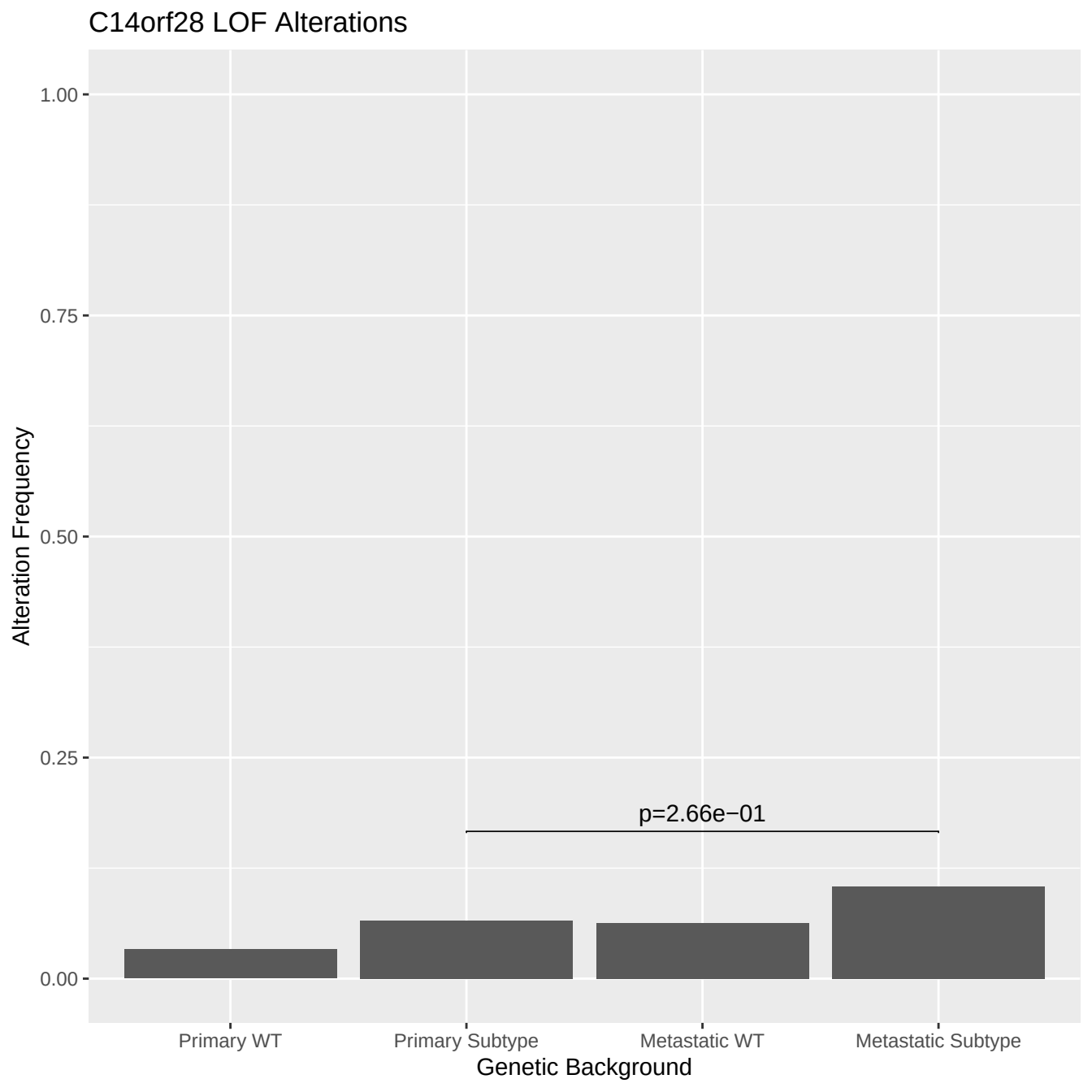

NPFFR1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.07e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

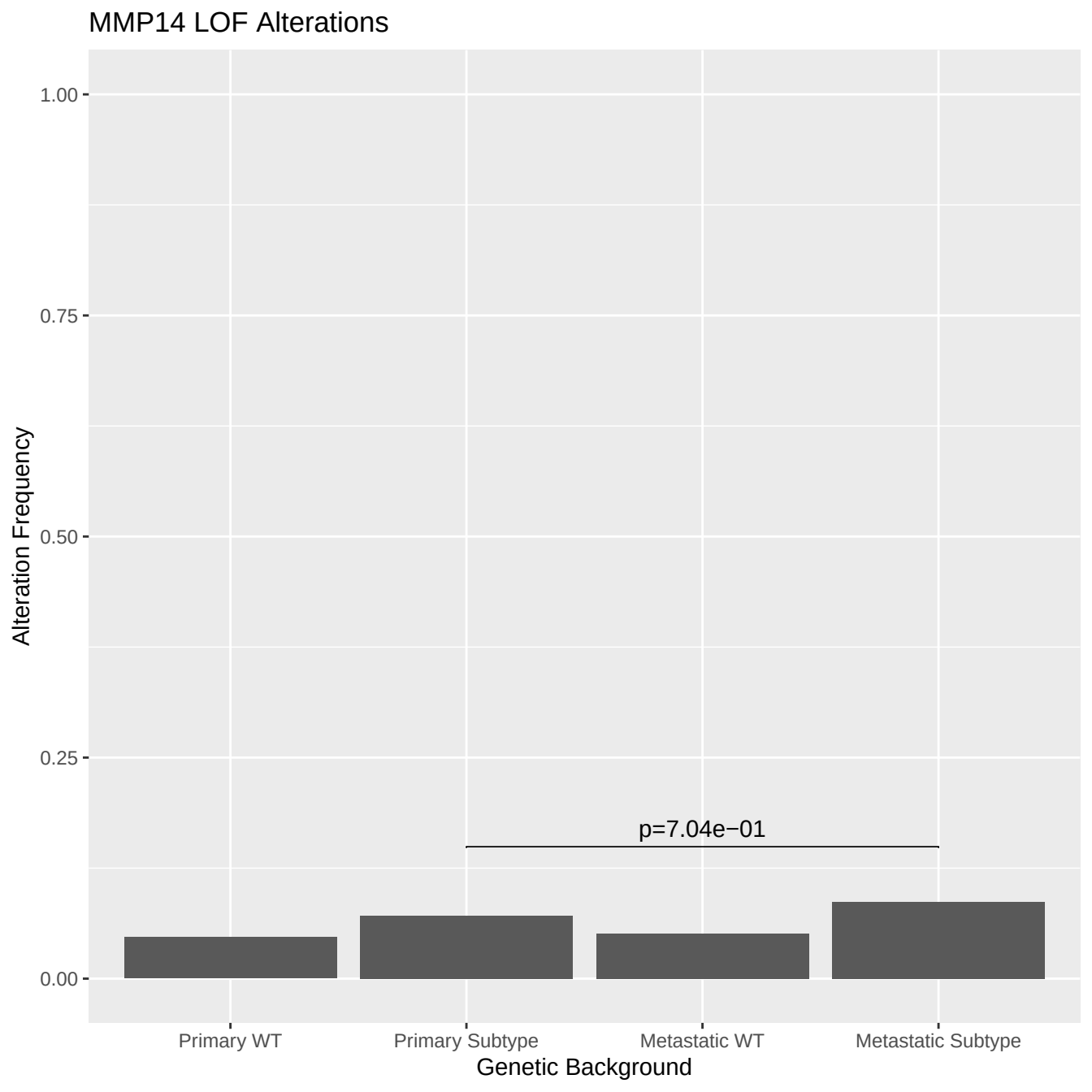

HM13 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

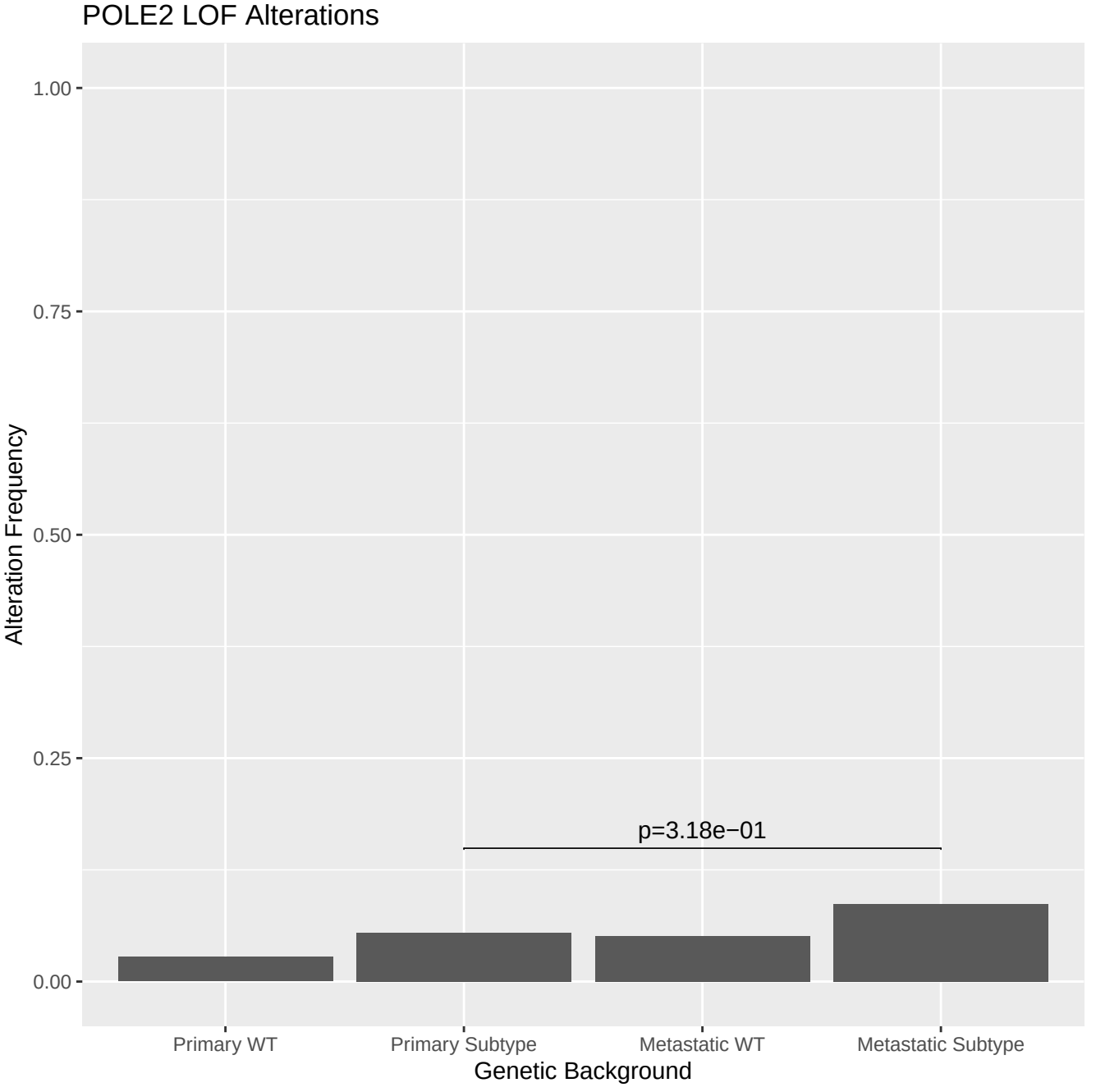

MAF1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

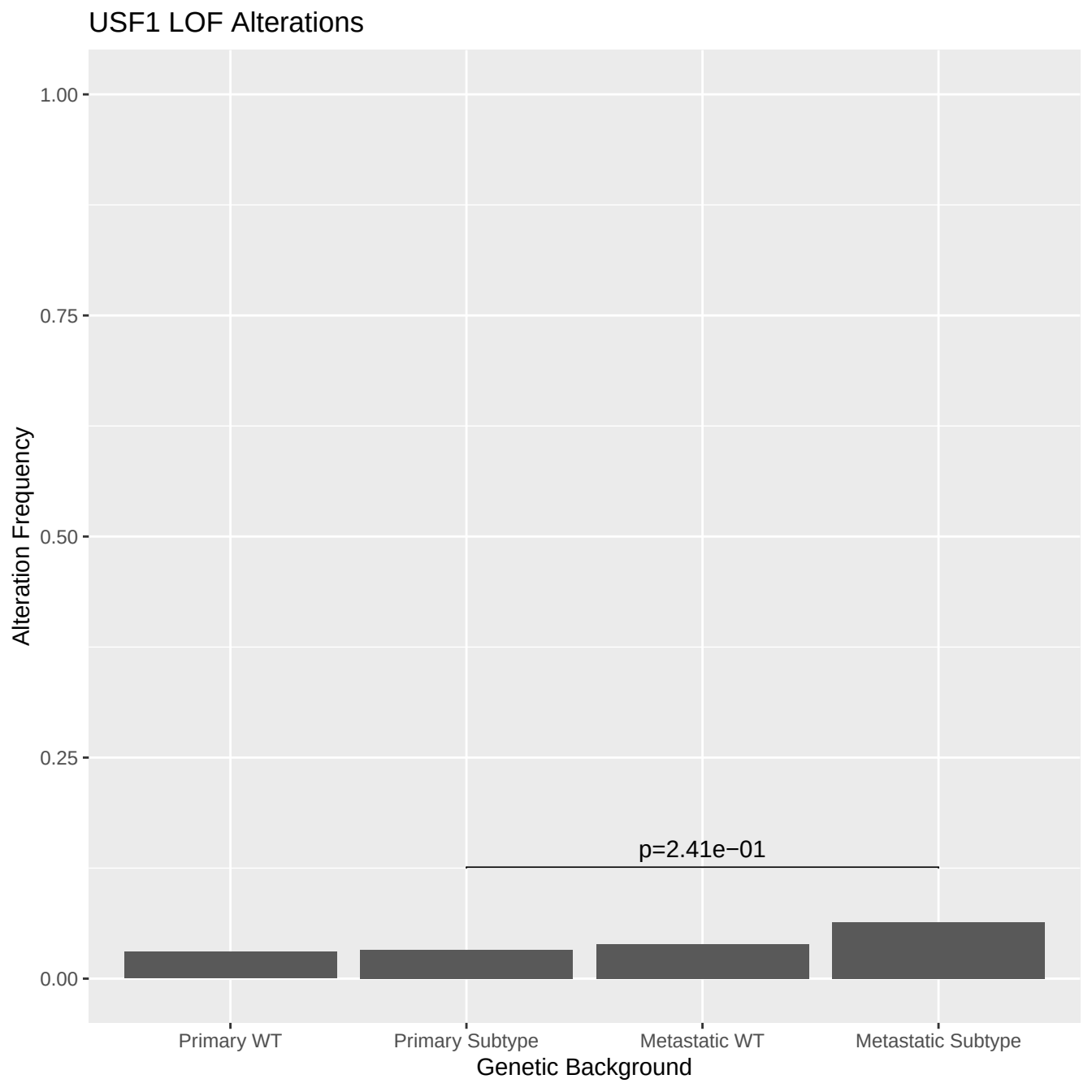

MGAT2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

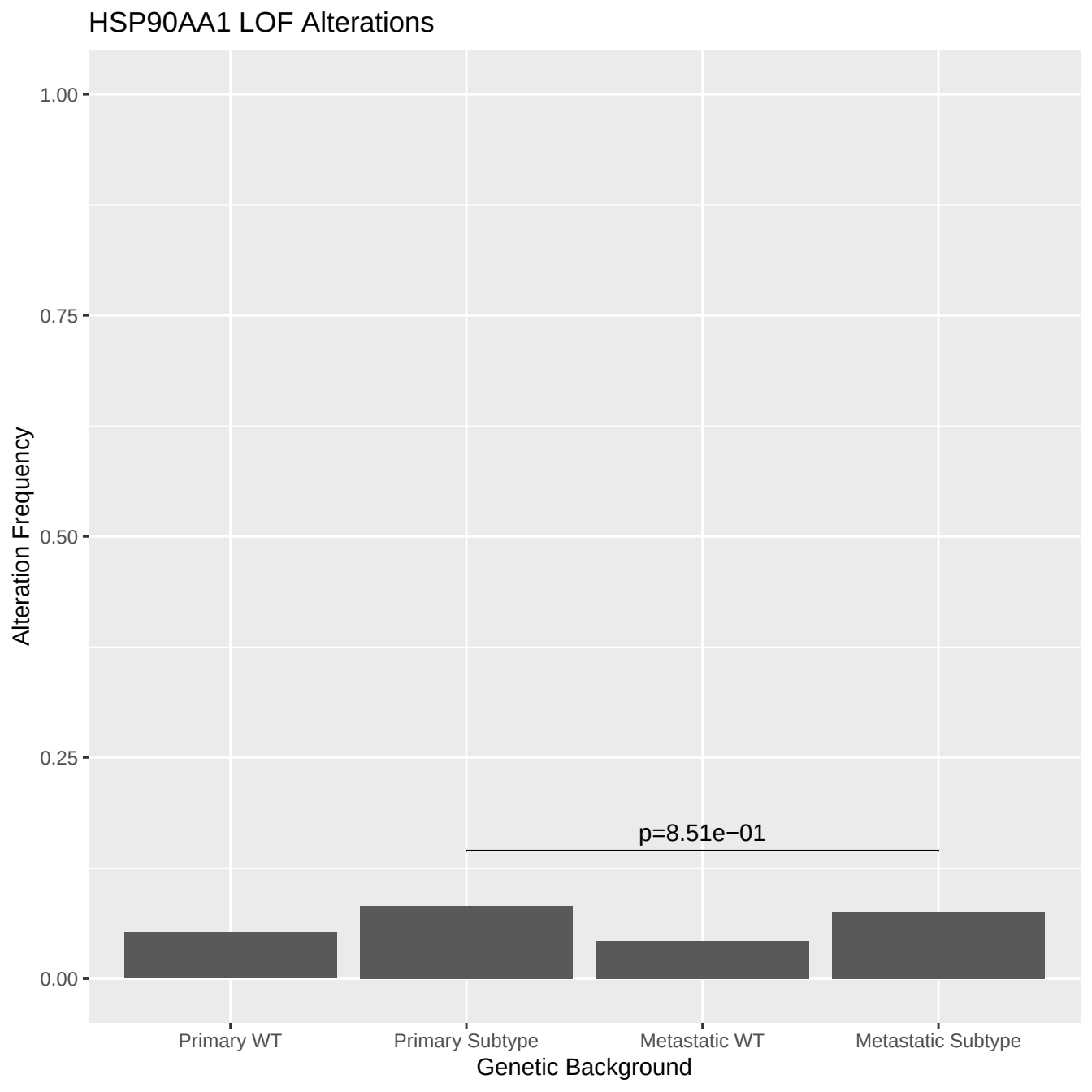

ZNF598 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

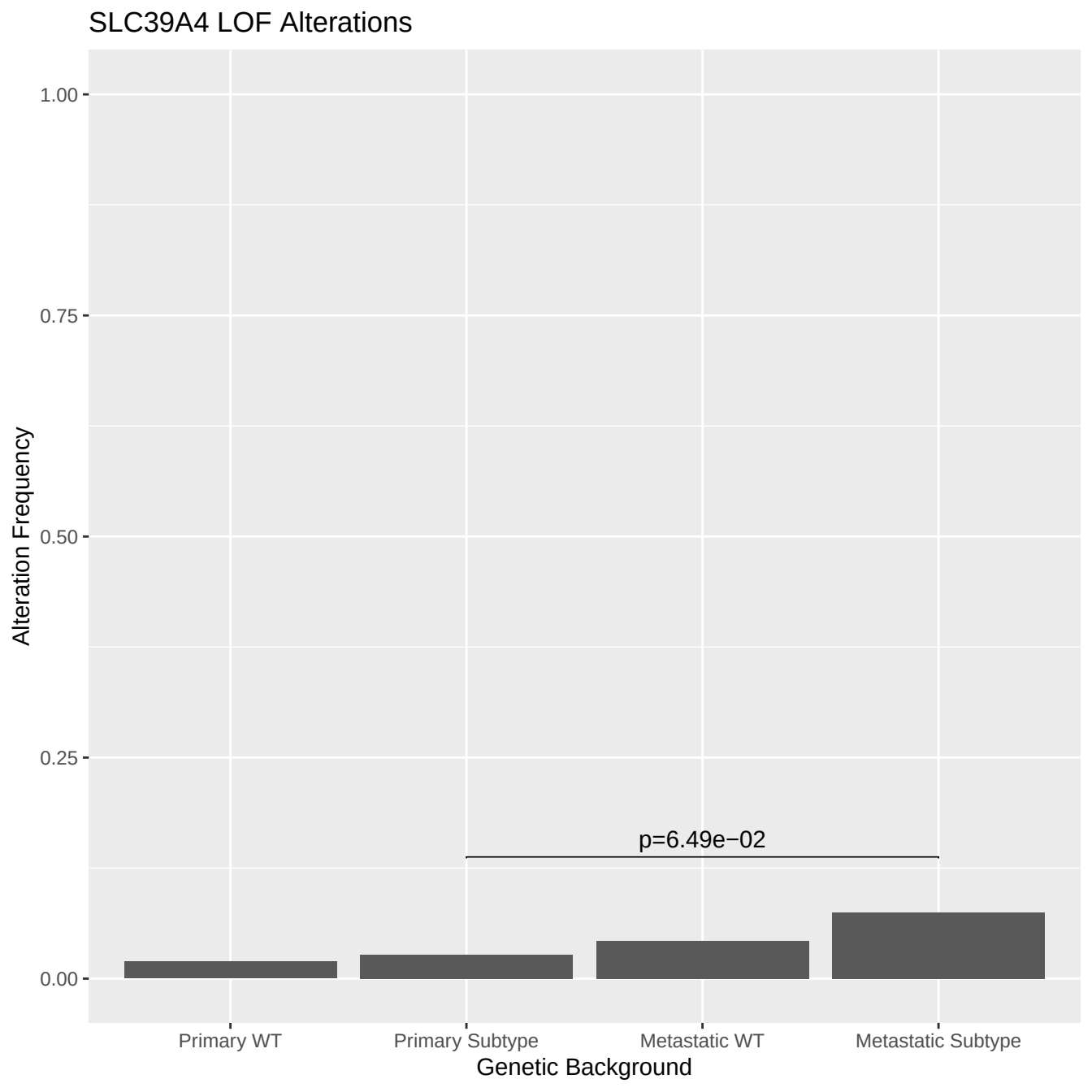

C14orf28 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

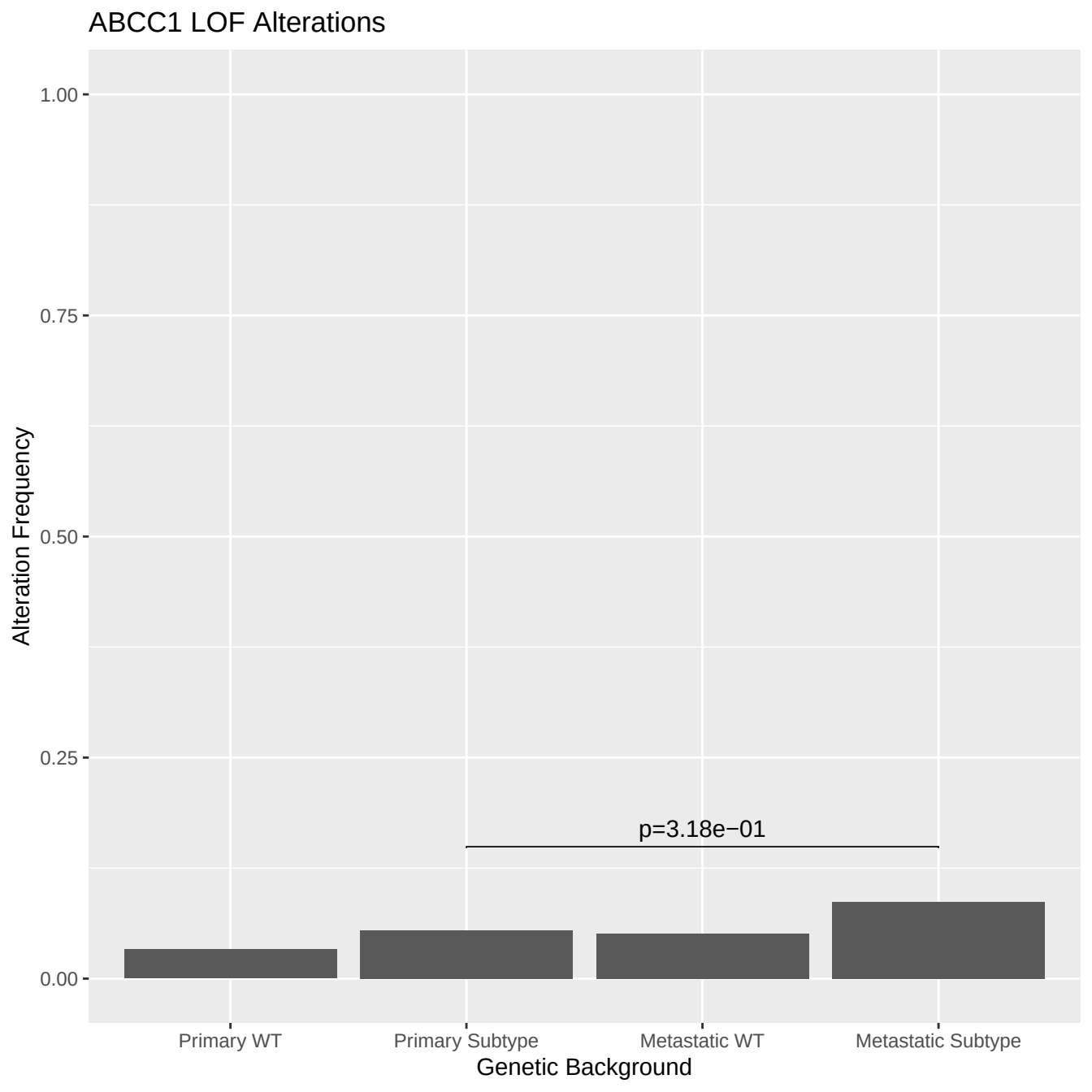

MMP14 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.04e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

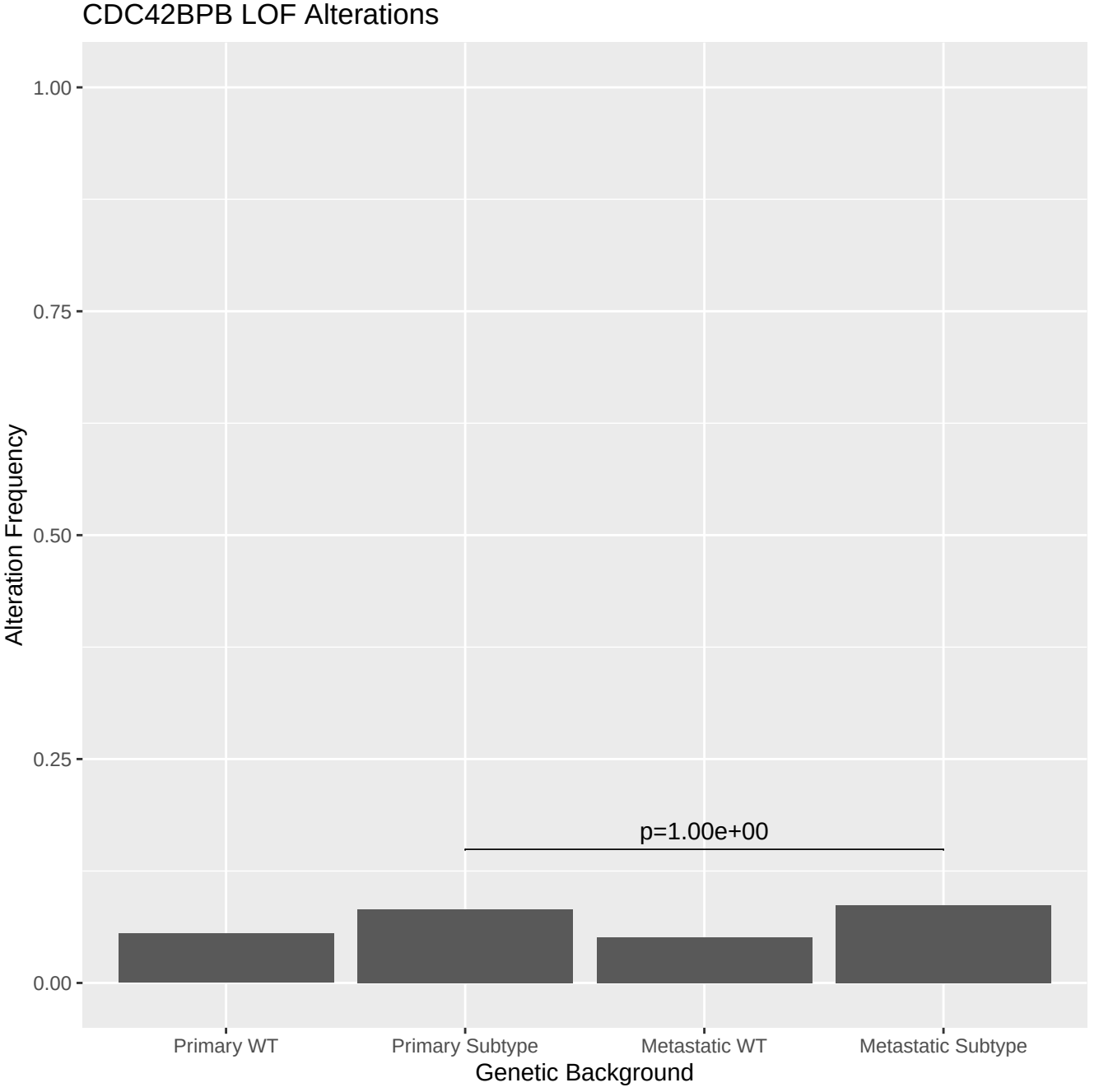

POLE2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

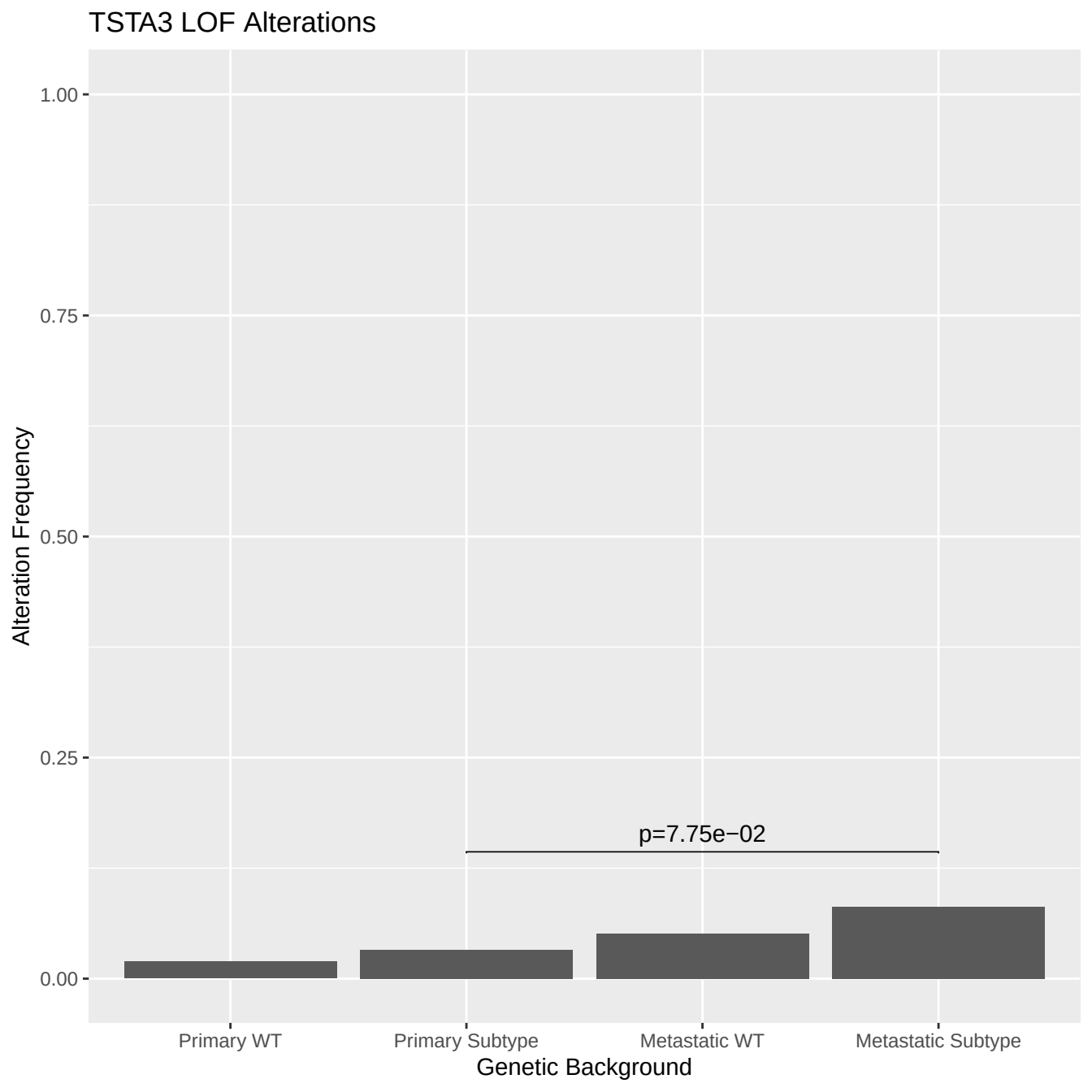

USF1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

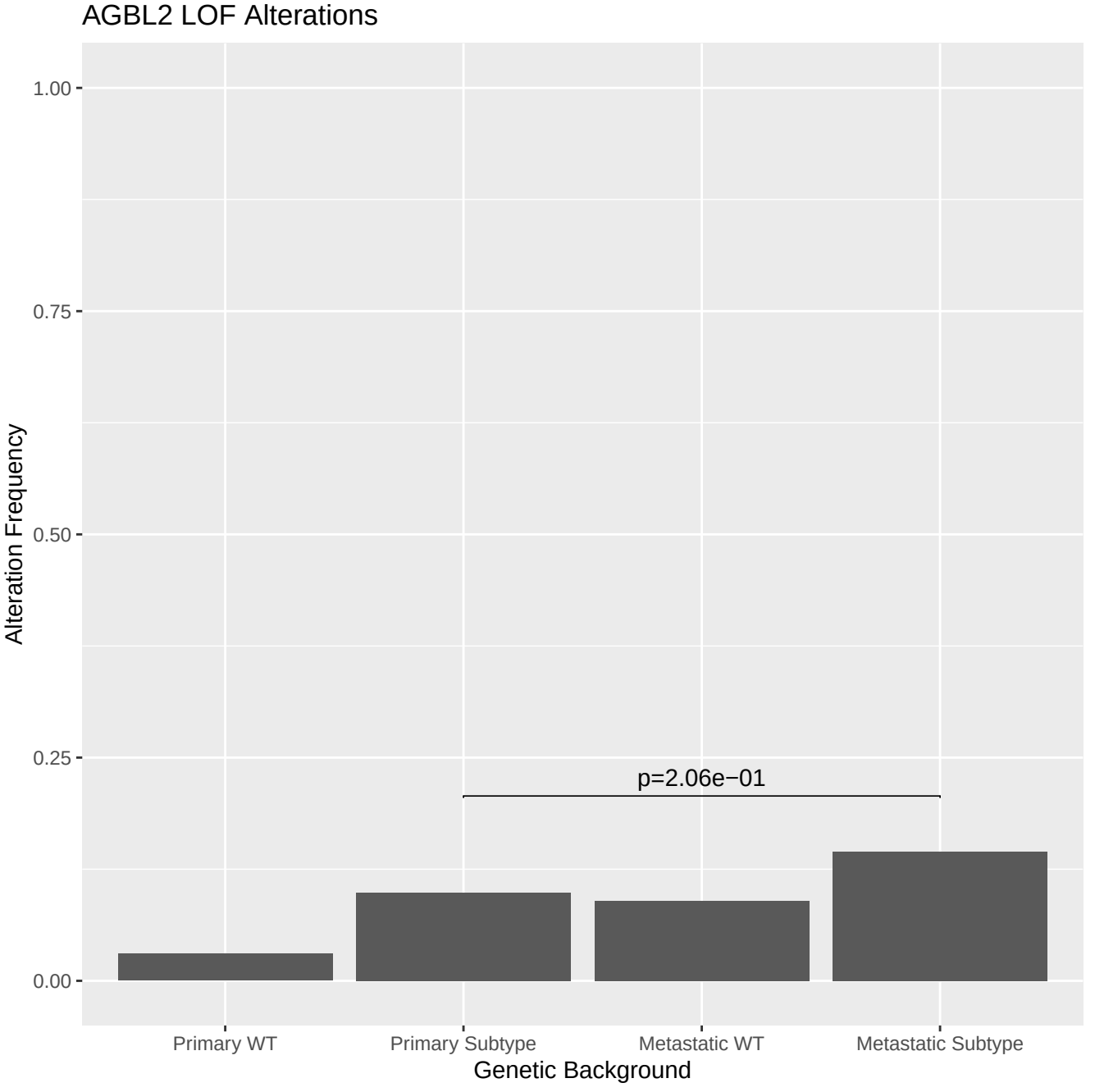

HSP90AA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

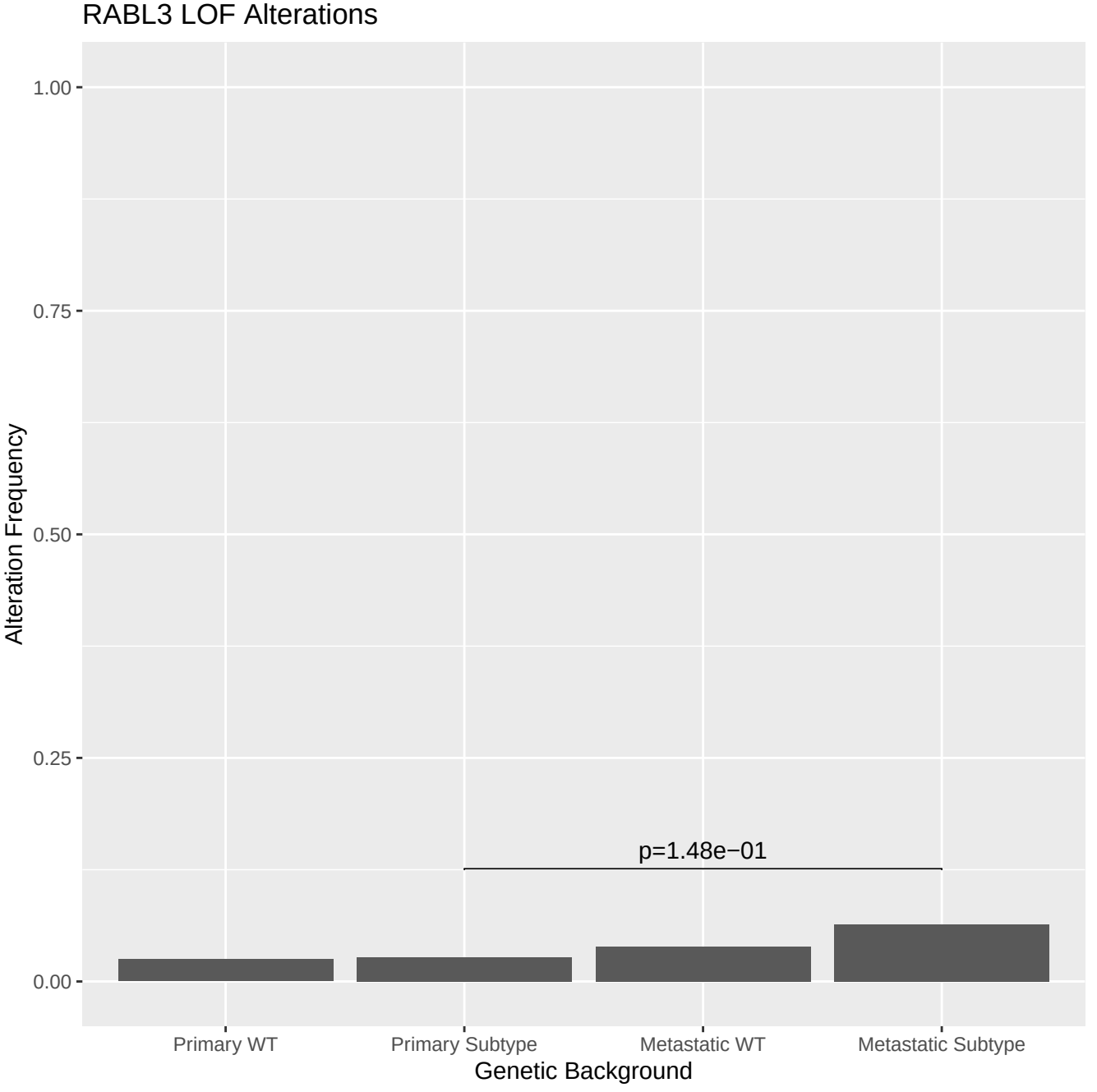

SLC39A4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

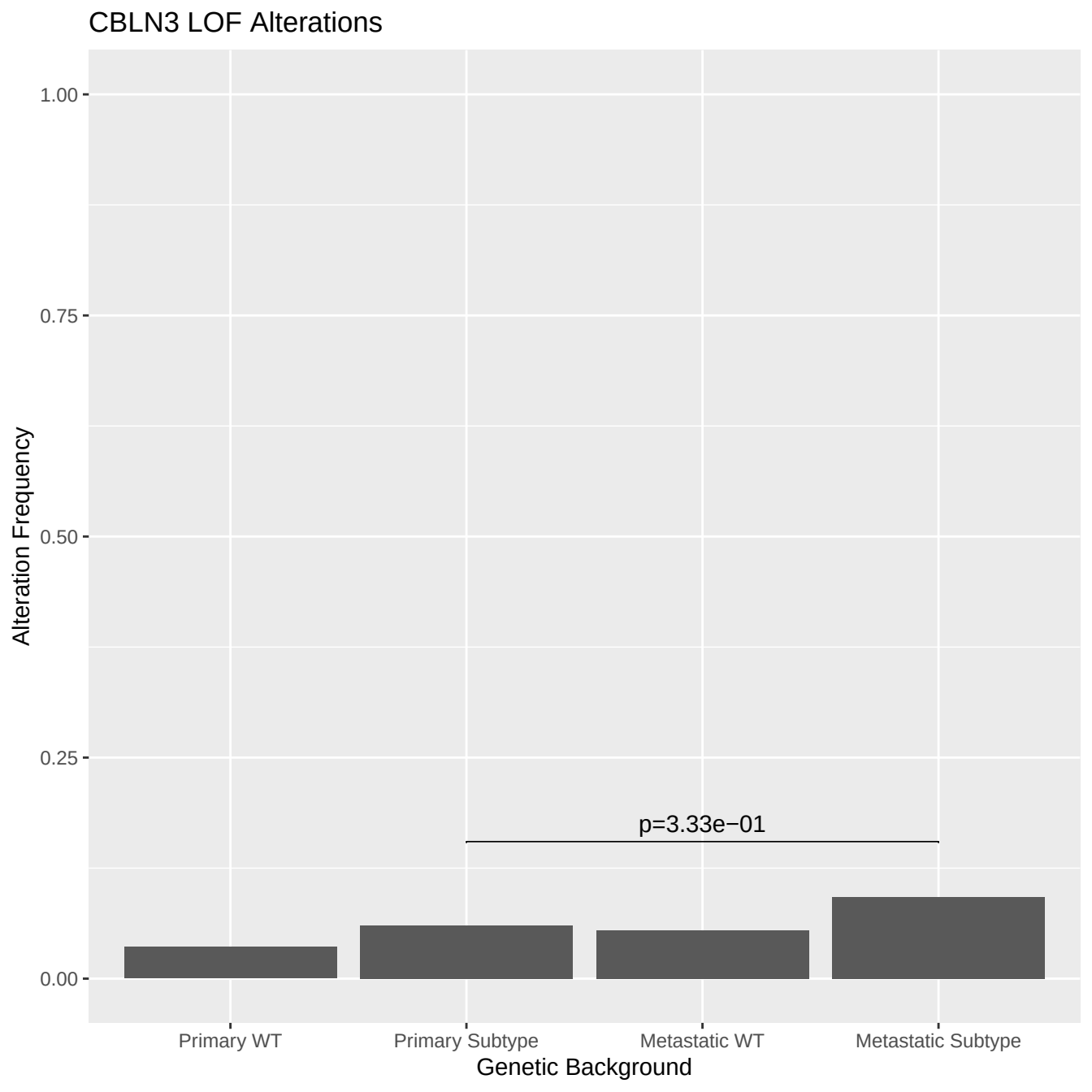

ABCC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

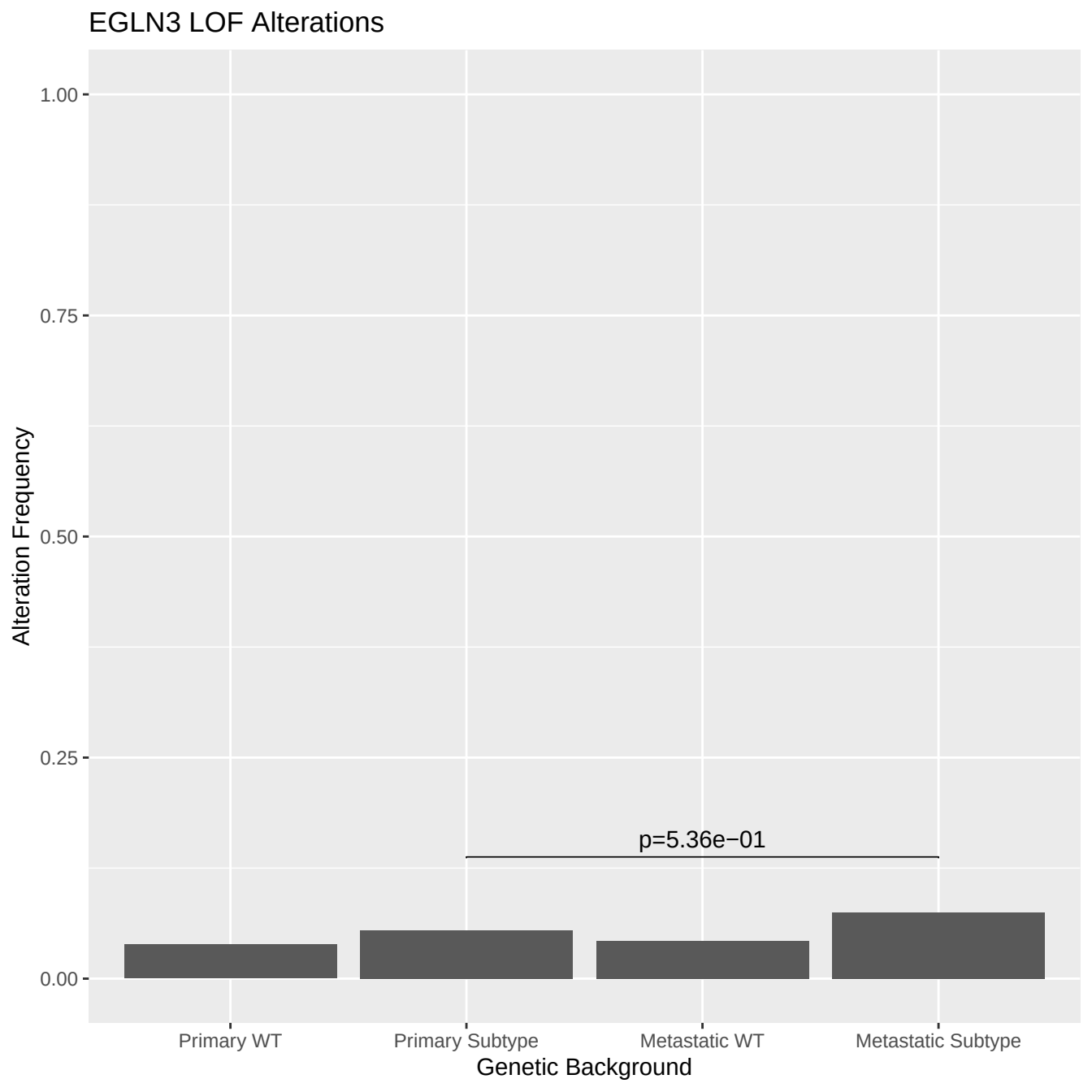

CDC42BPB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

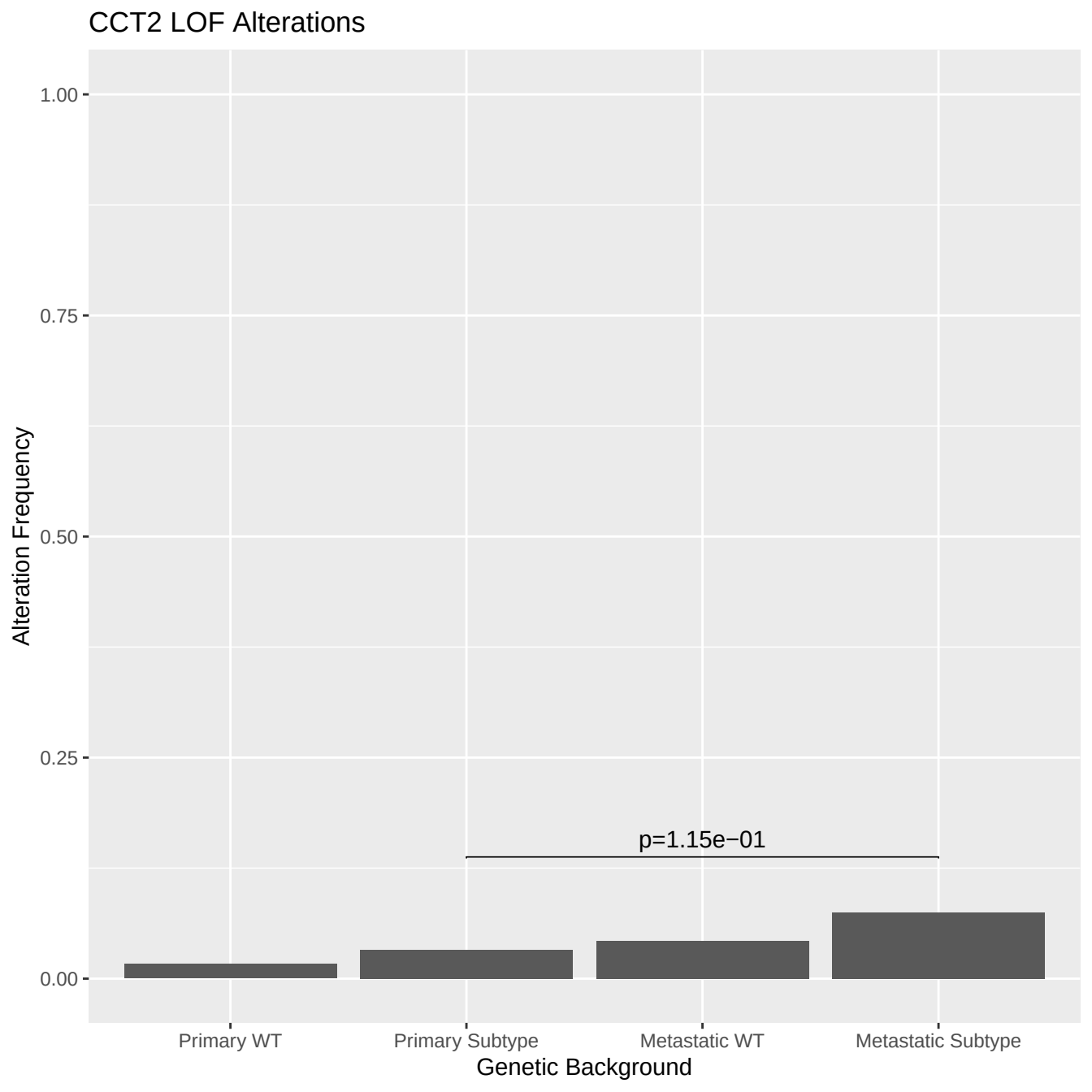

TSTA3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.75e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

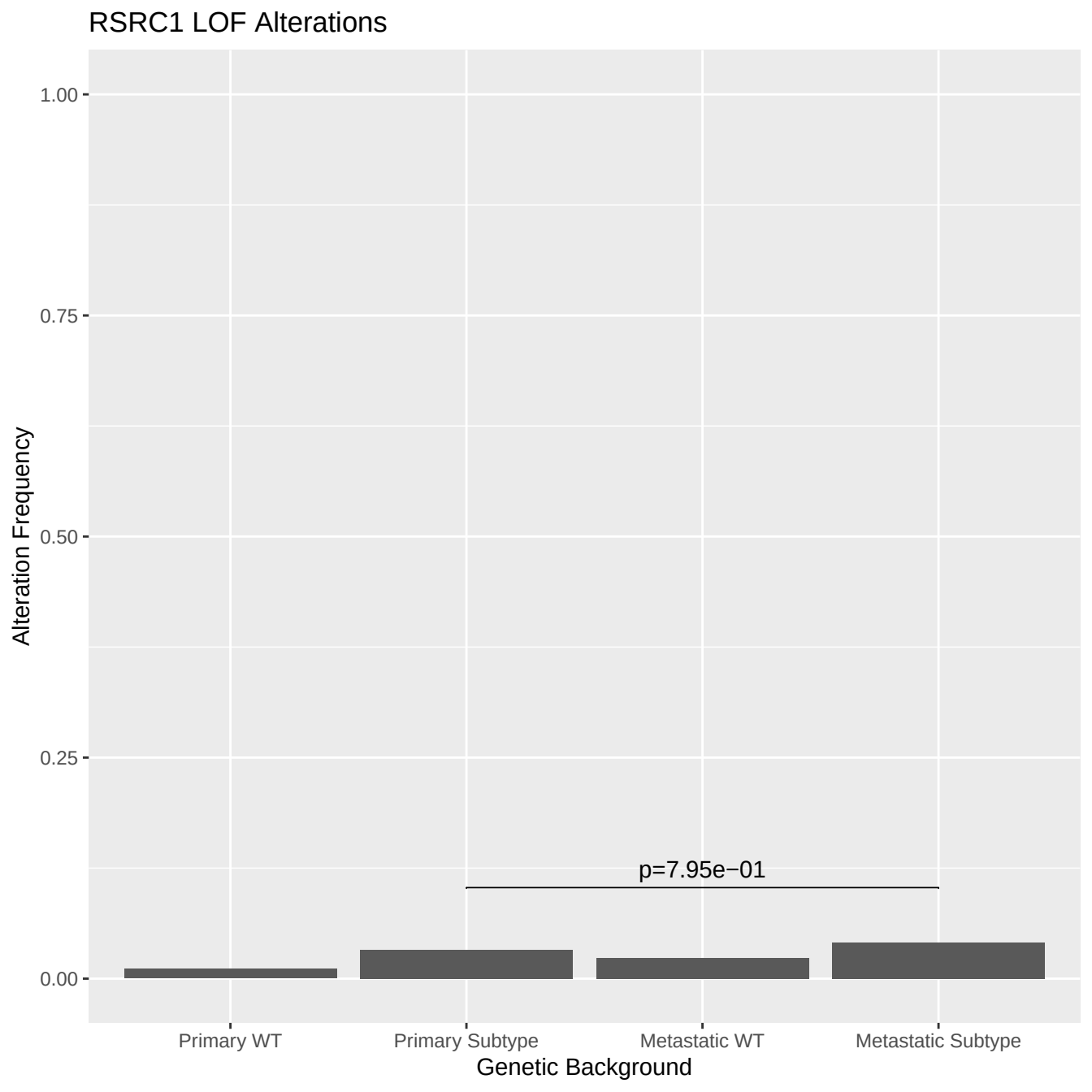

AGBL2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

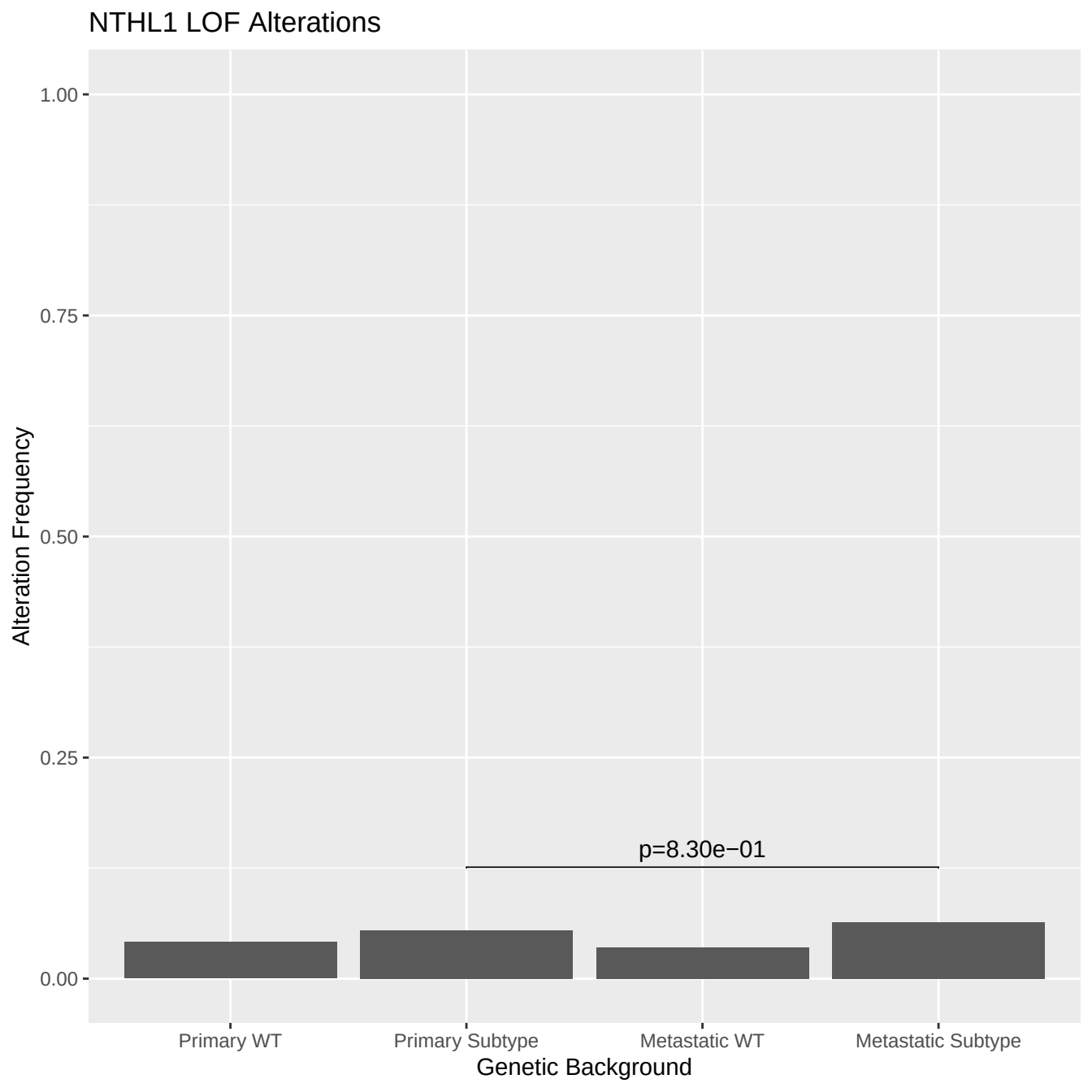

RABL3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

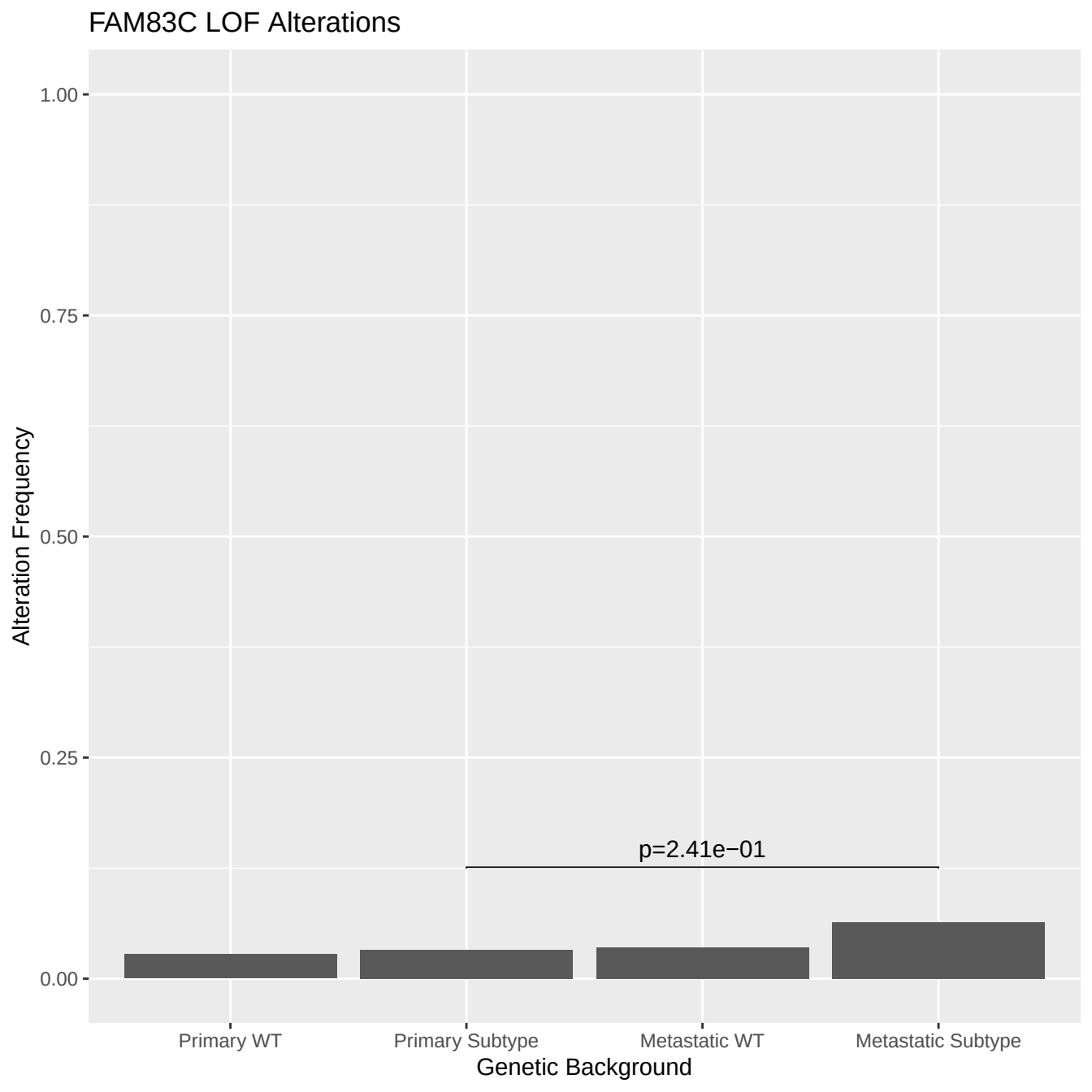

CBLN3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

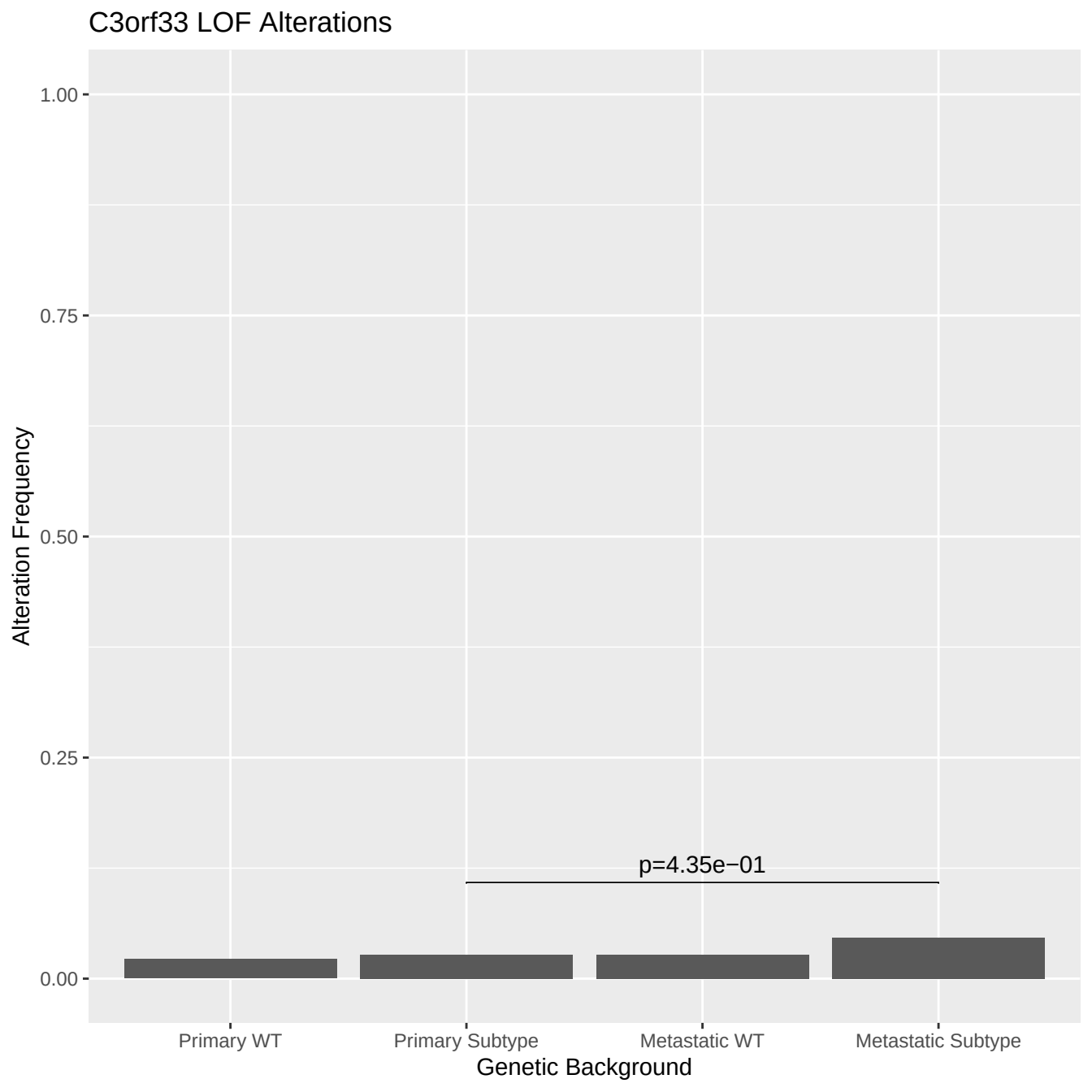

EGLN3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.36e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

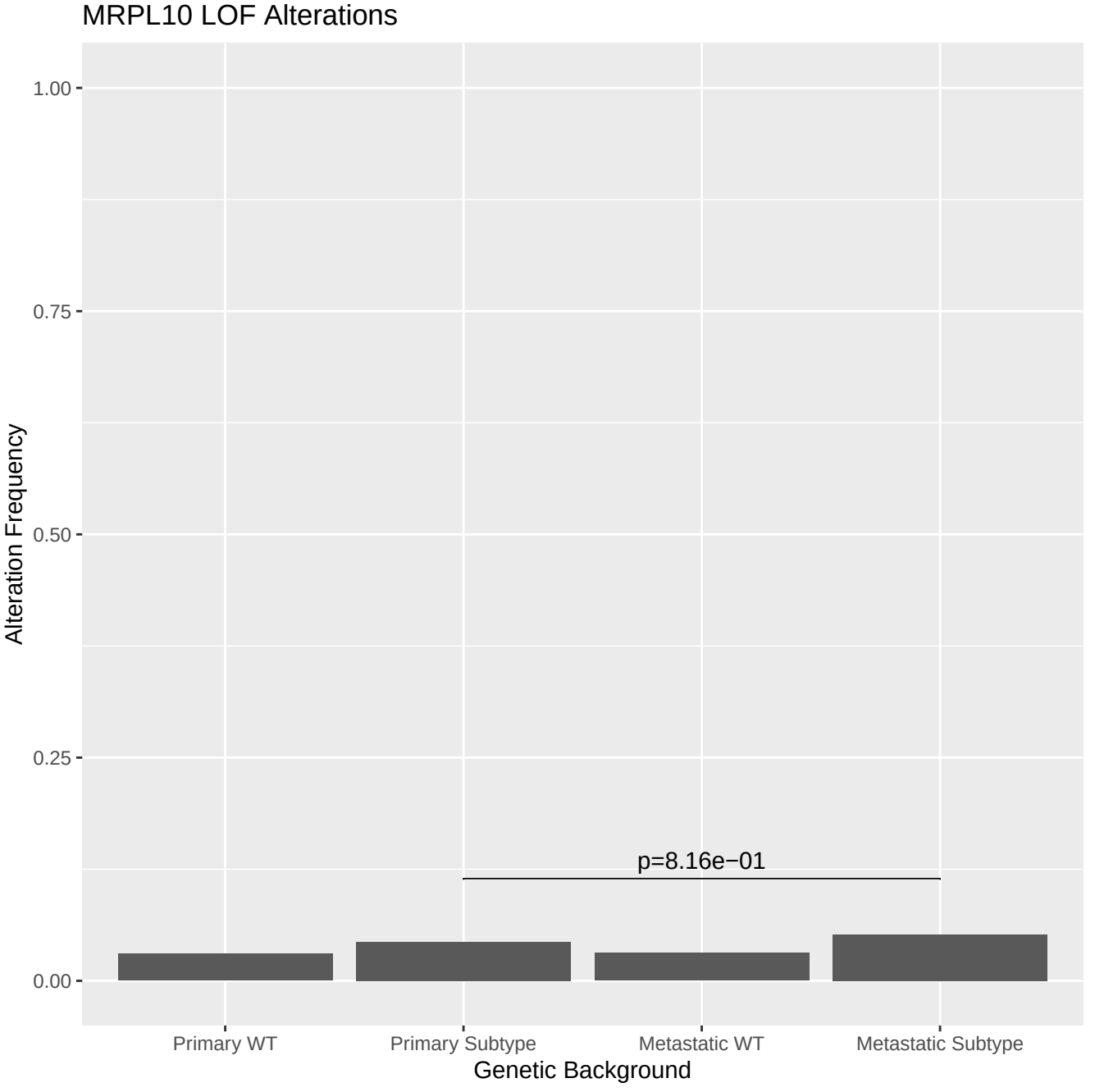

CCT2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.15e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

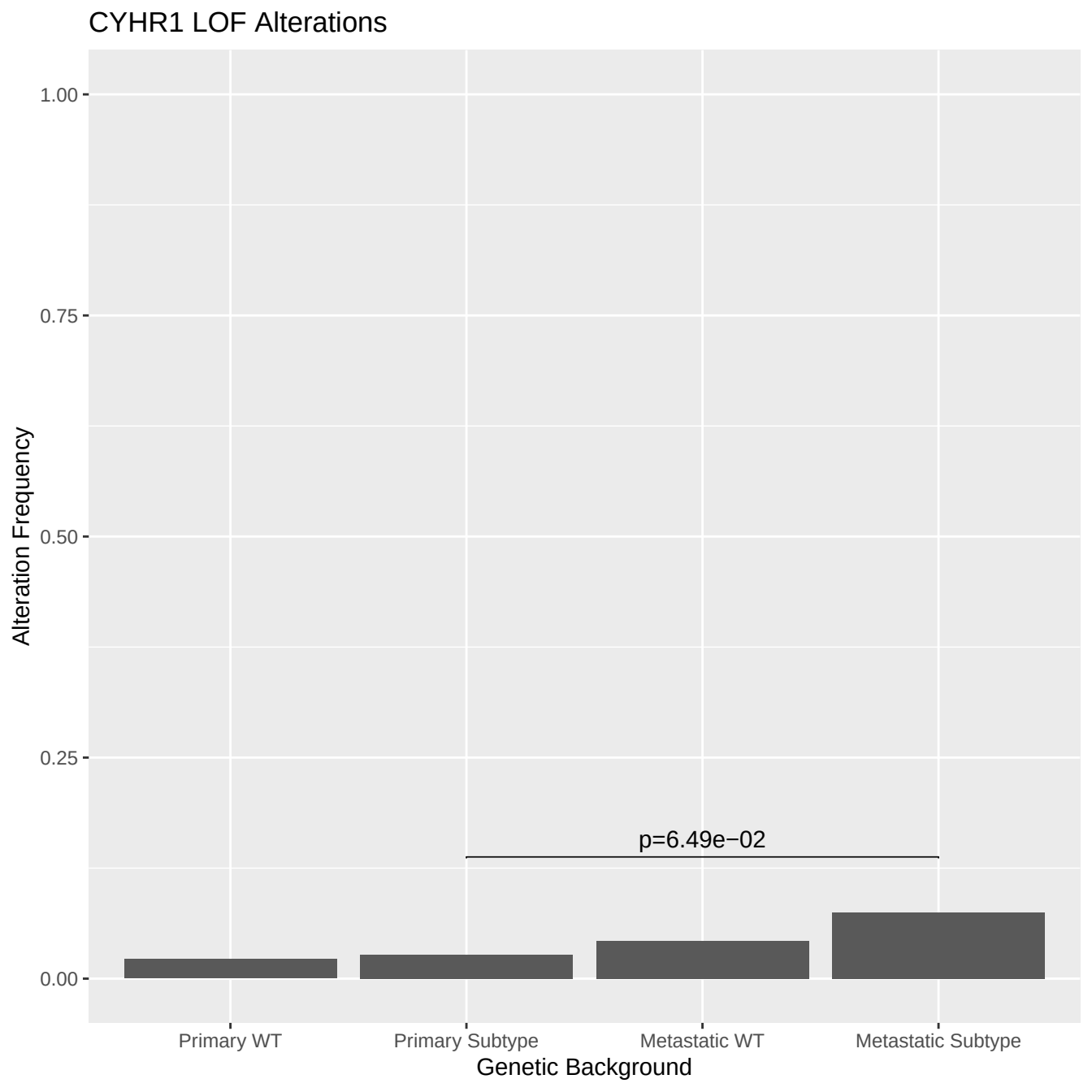

RSRC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.95e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

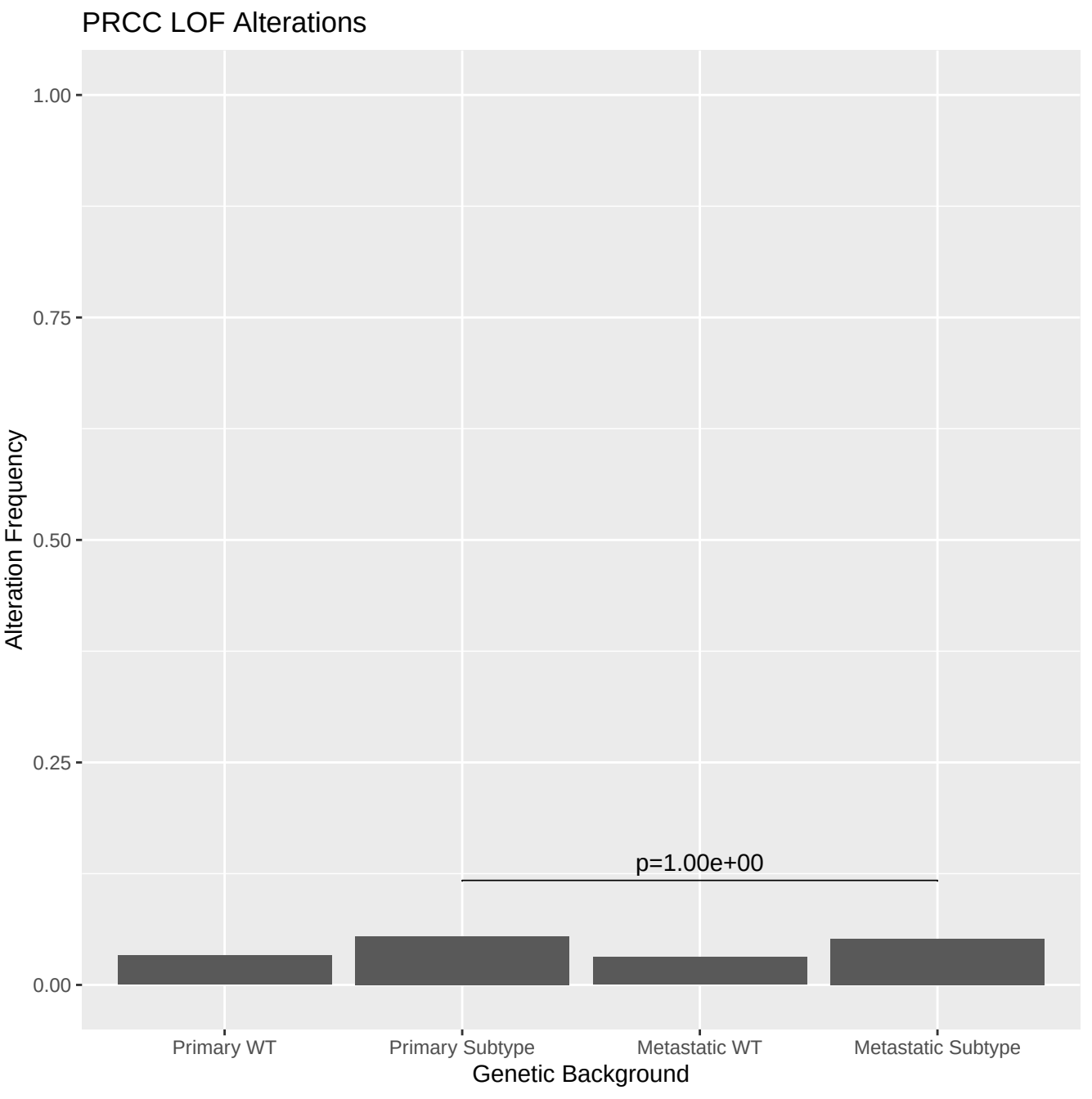

NTHL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

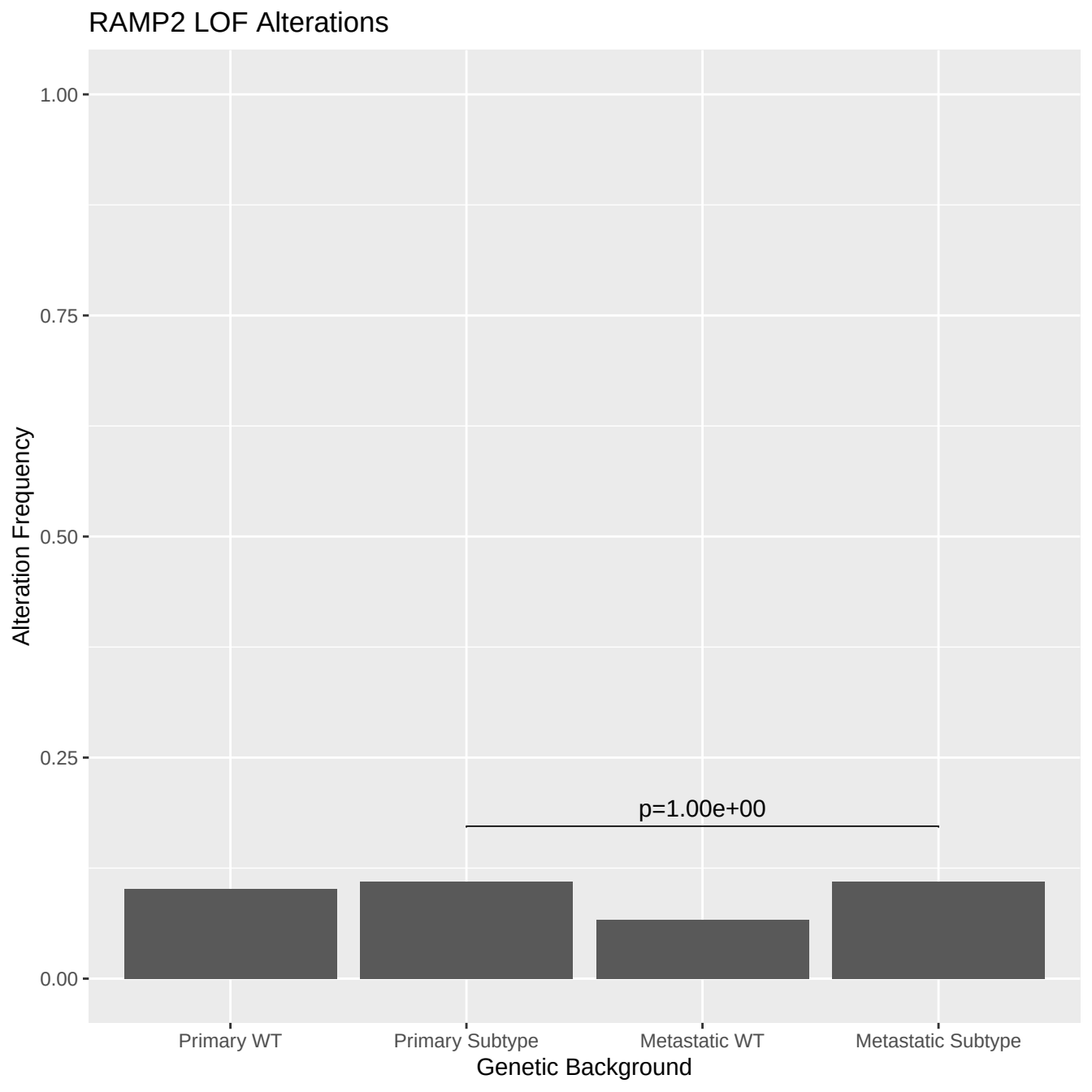

FAM83C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

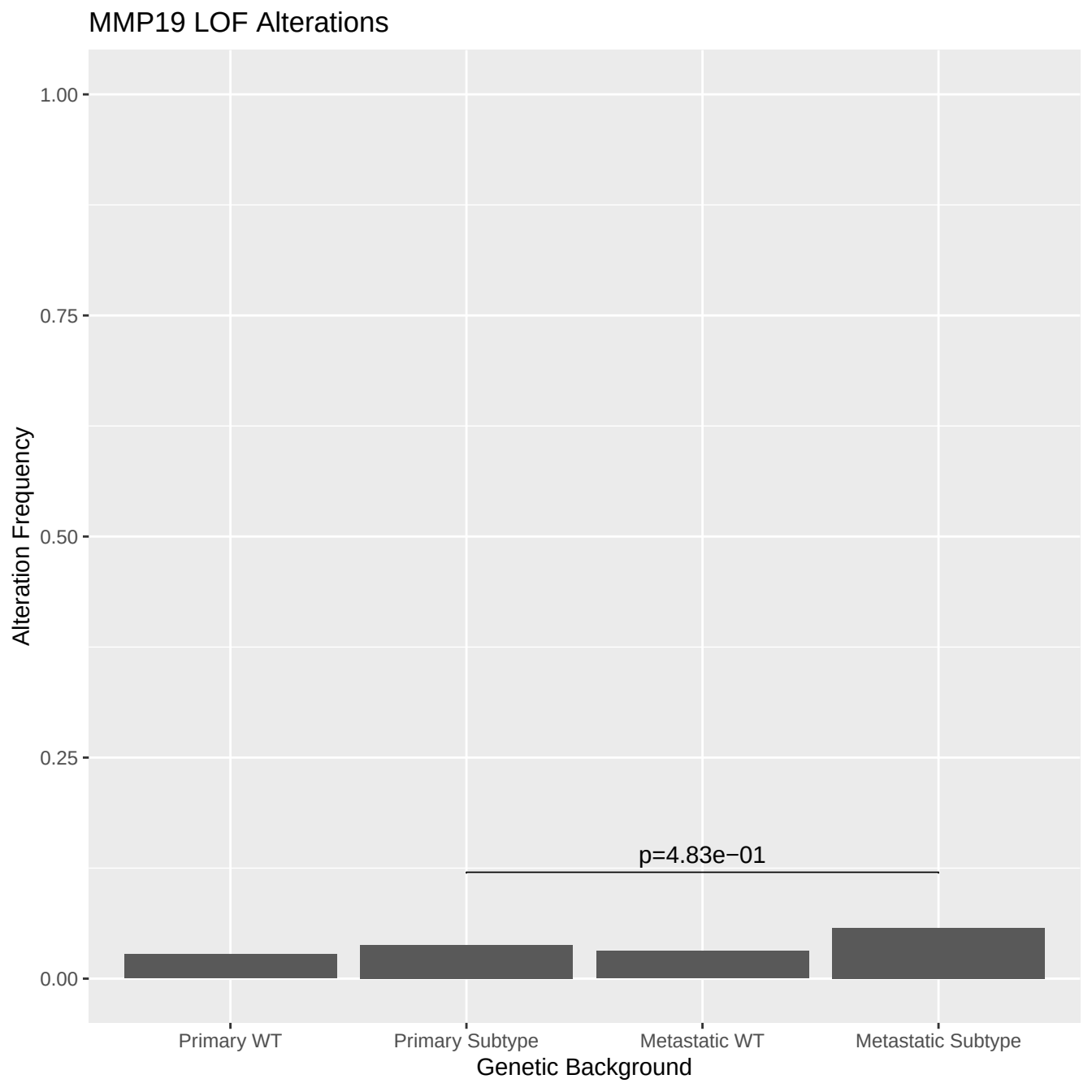

C3orf33 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

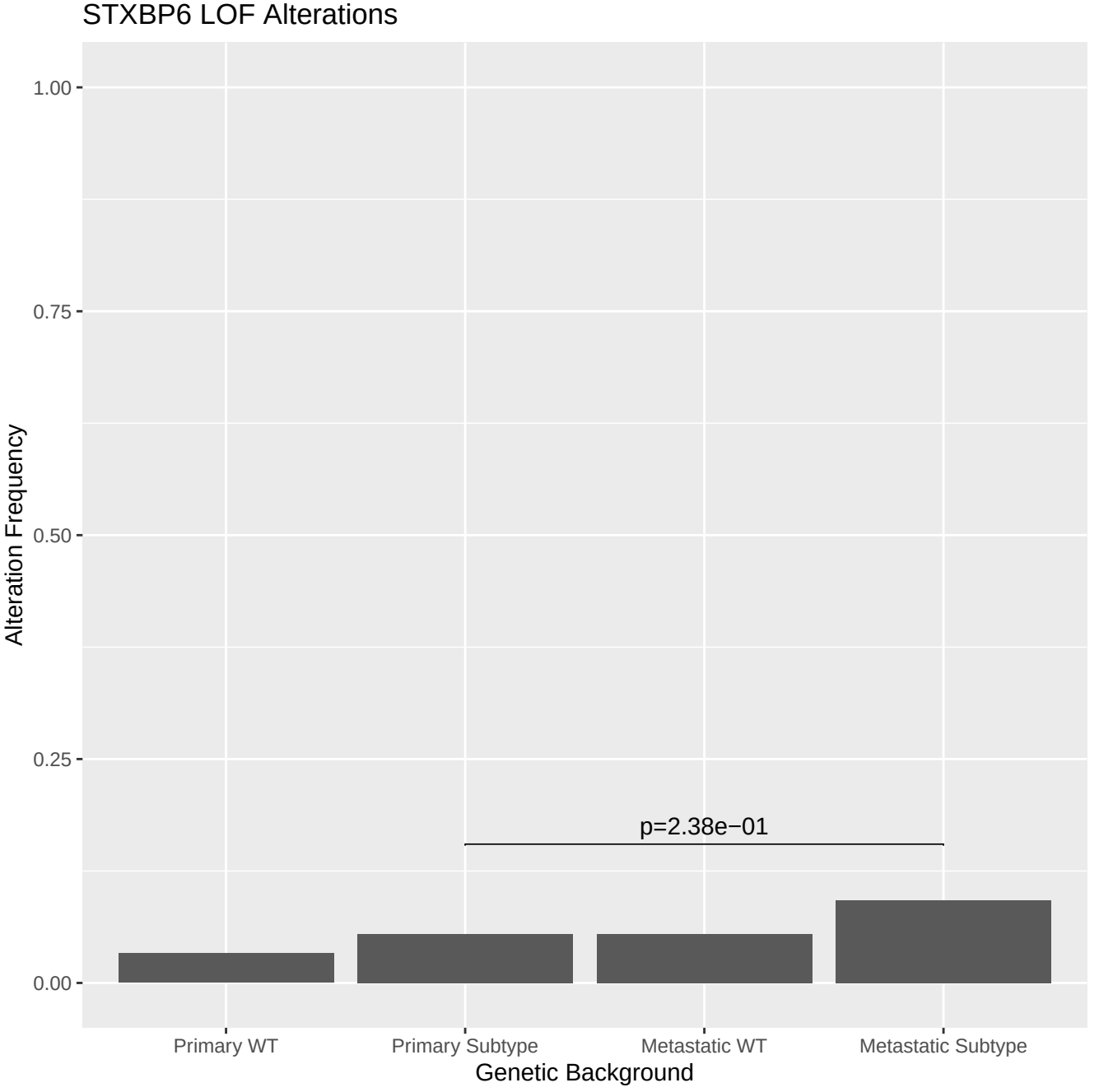

MRPL10 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.16e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

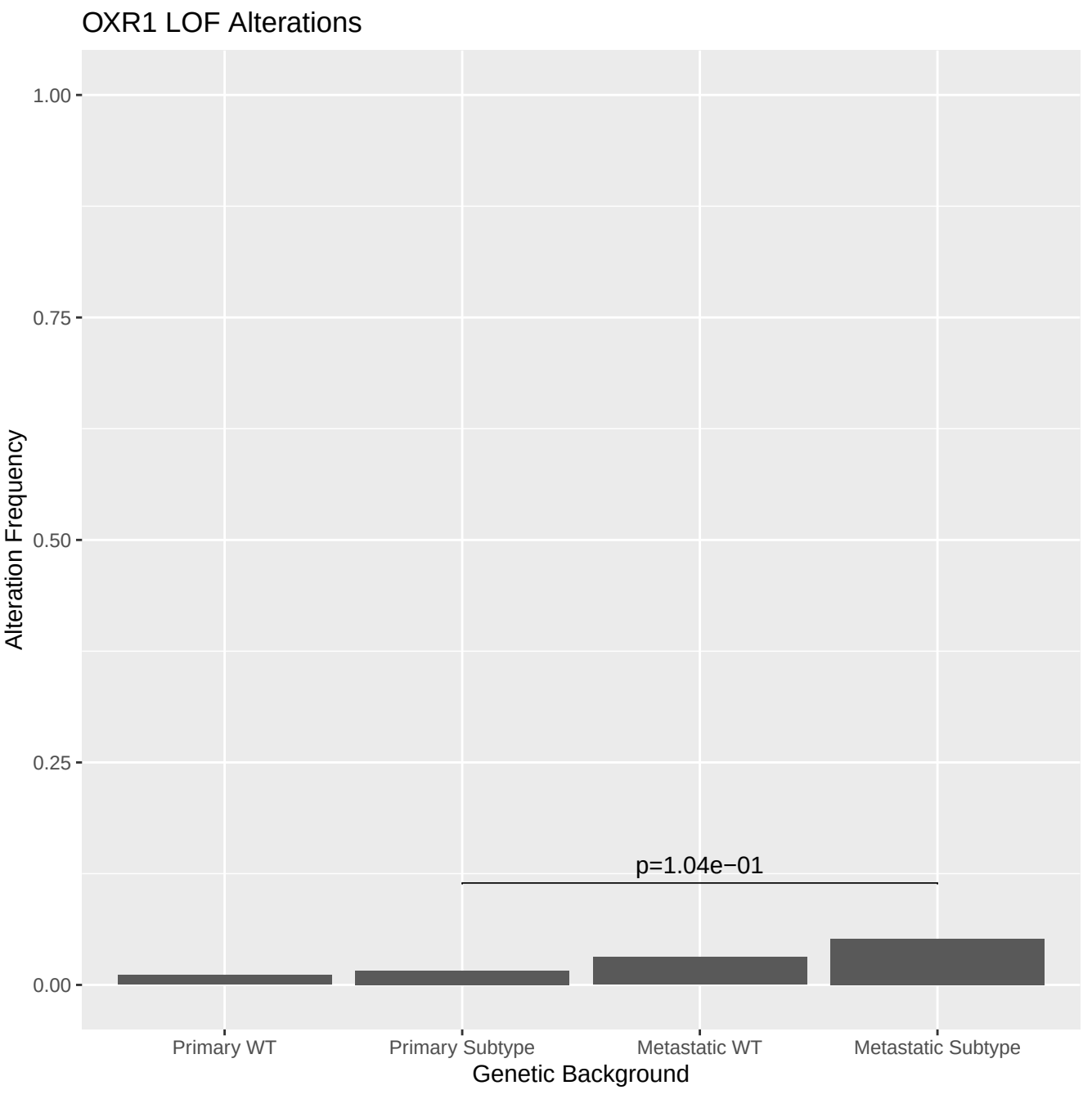

CYHR1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

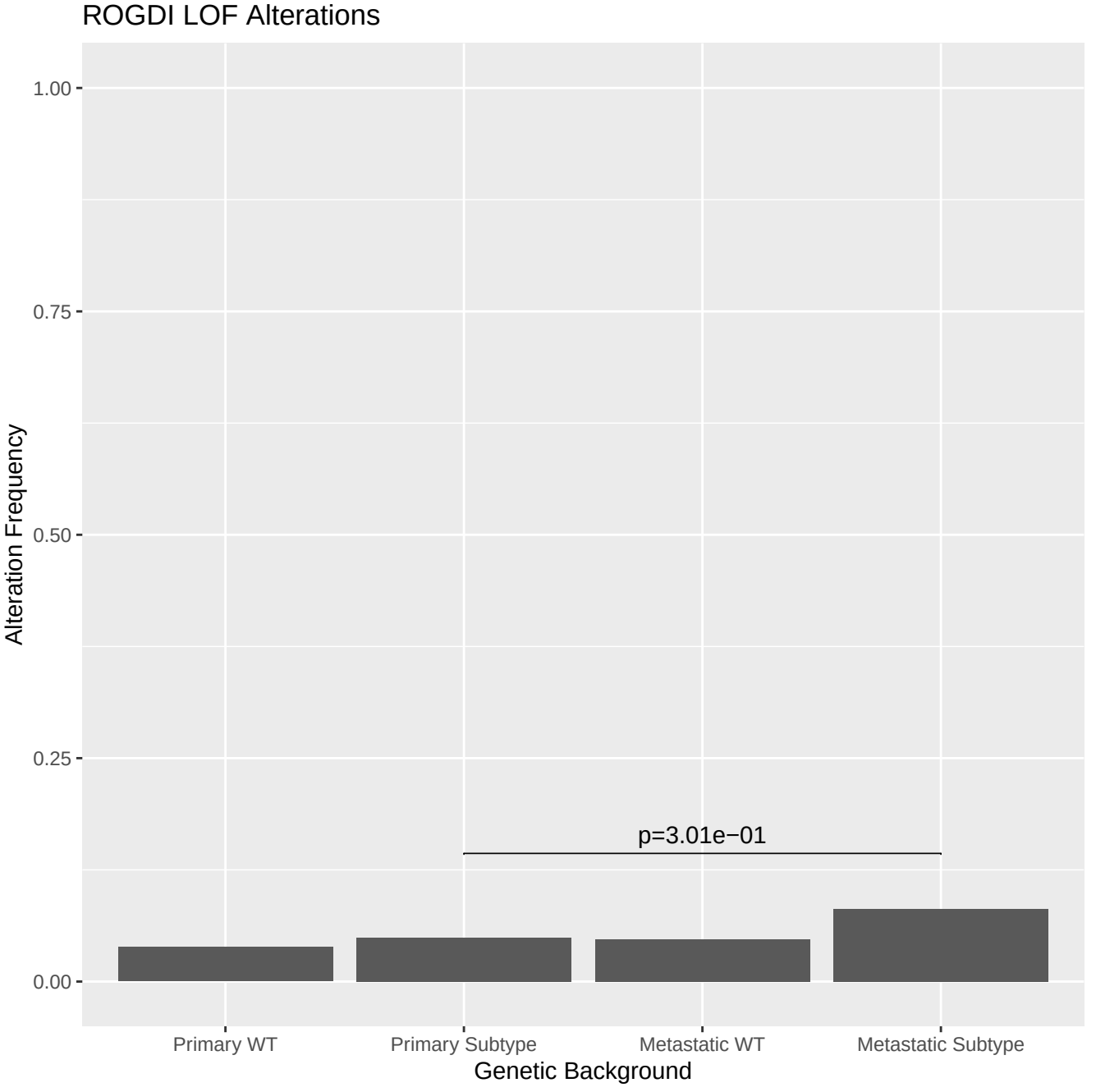

PRCC LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

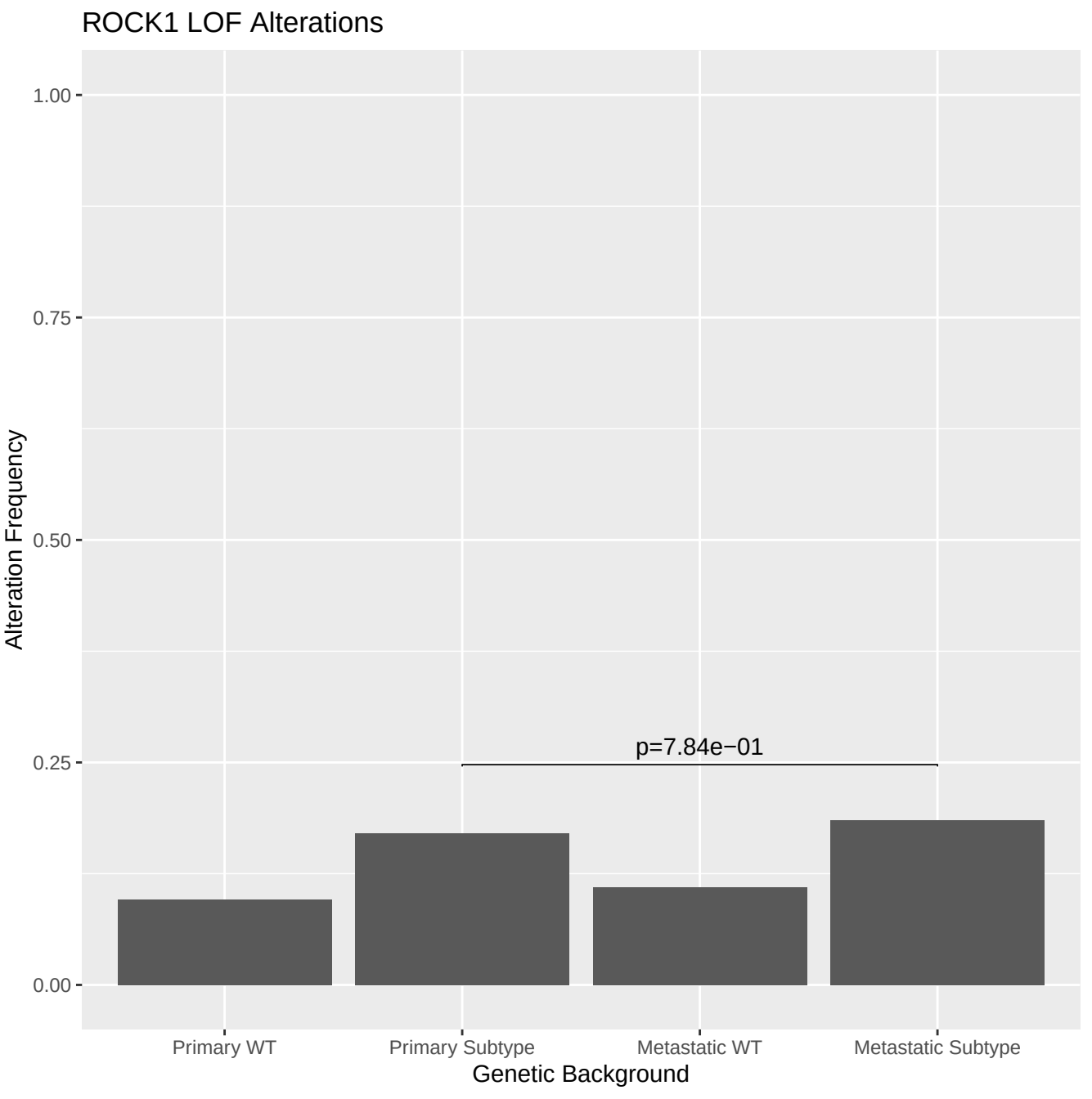

RAMP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

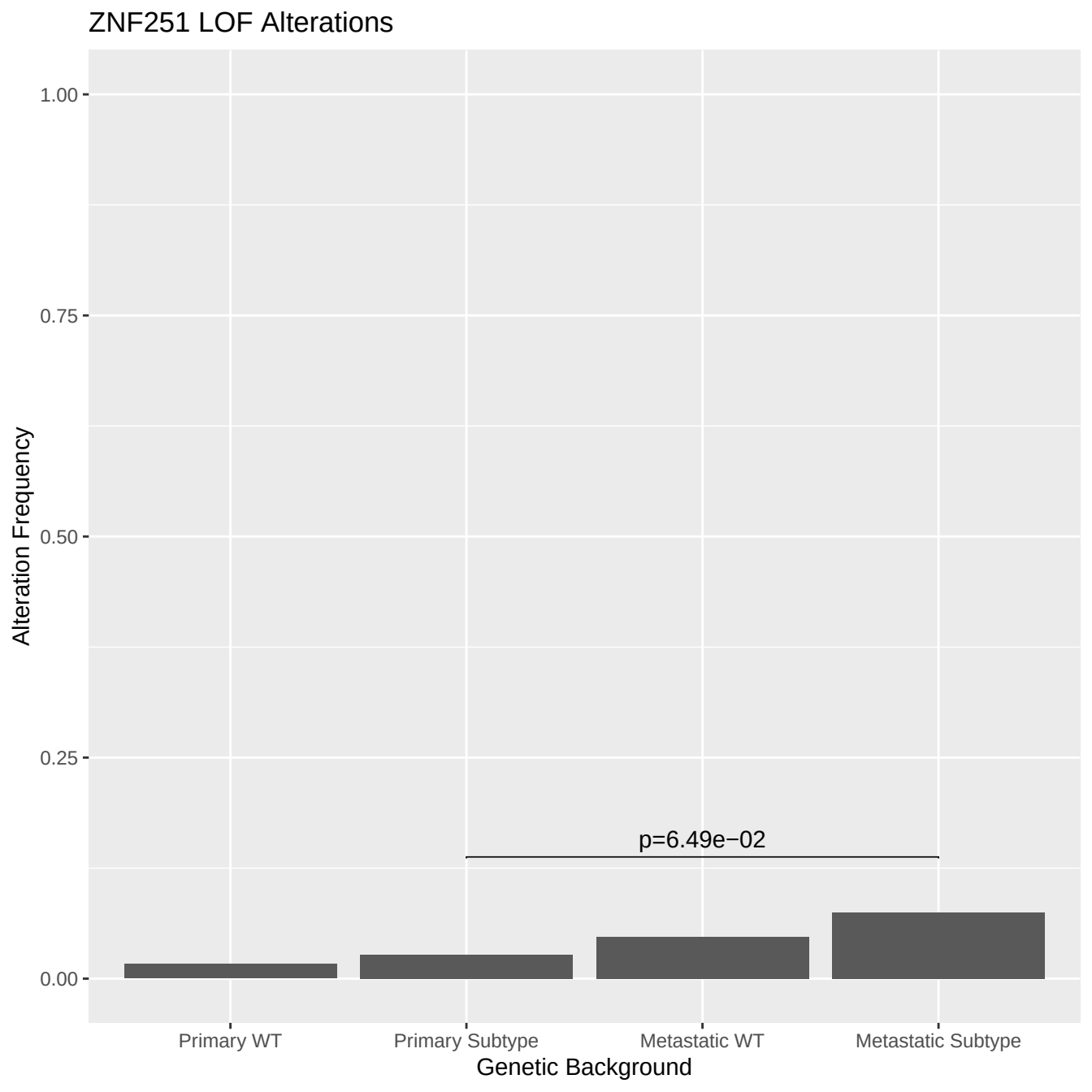

MMP19 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

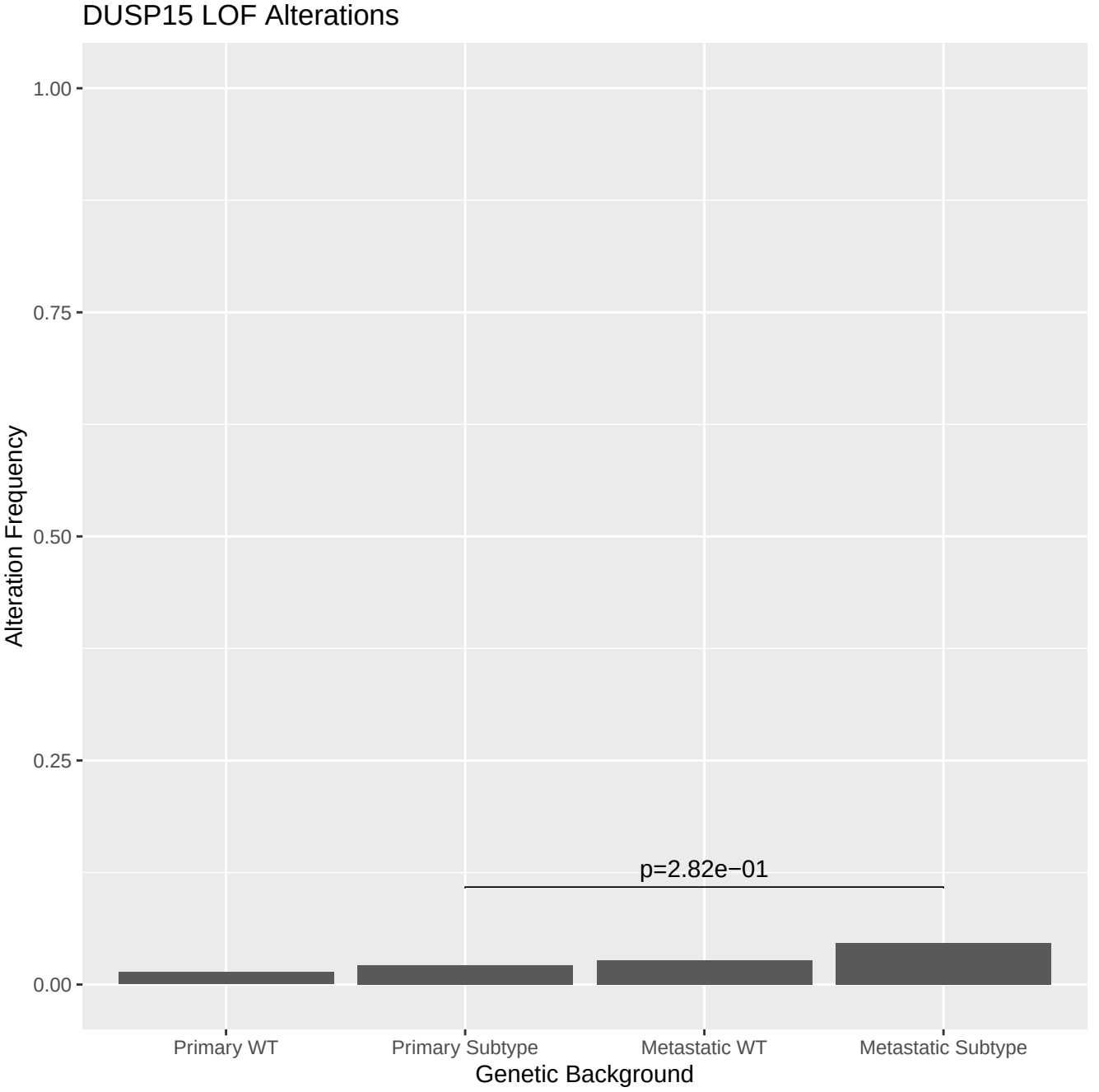

STXBP6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.38e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

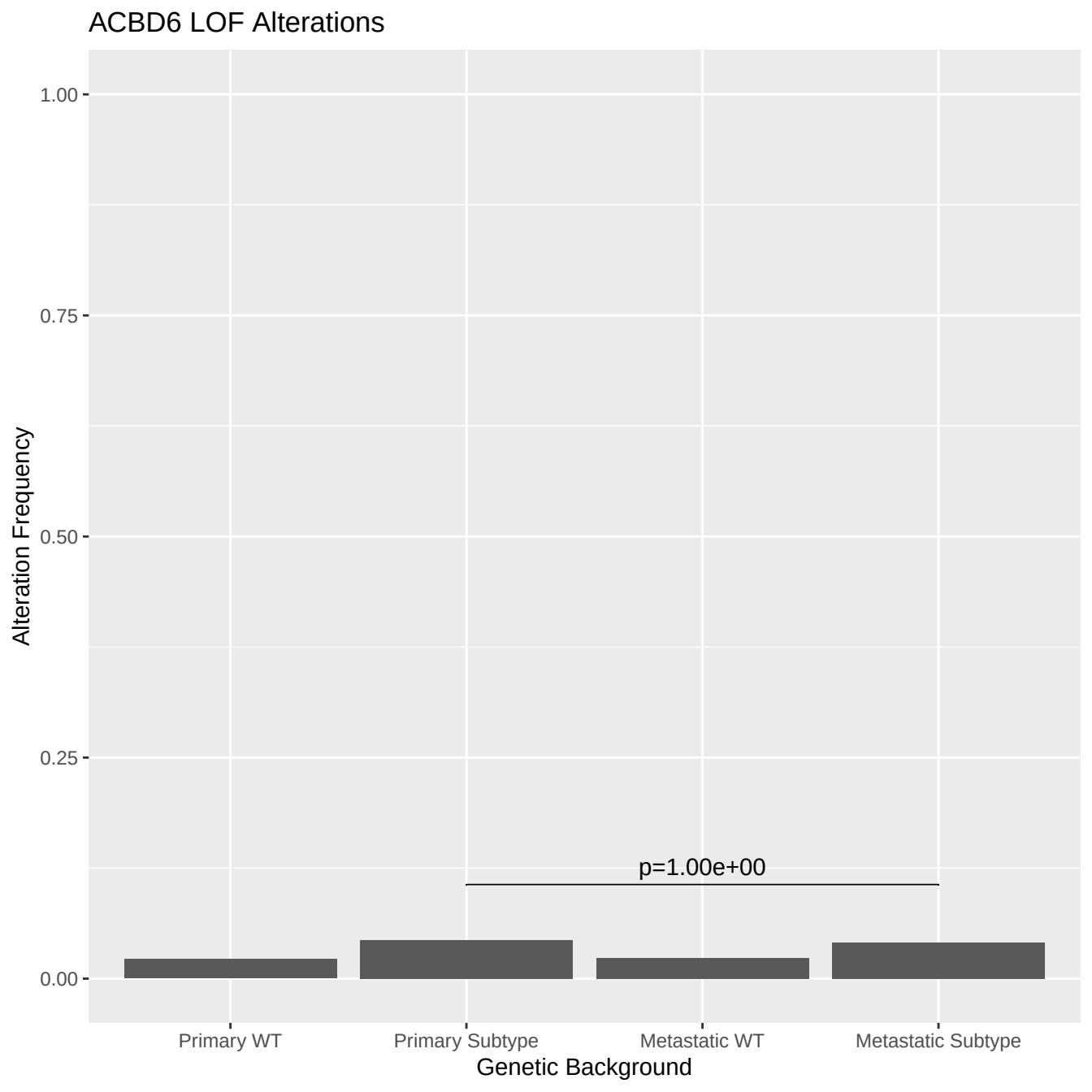

OXR1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.04e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

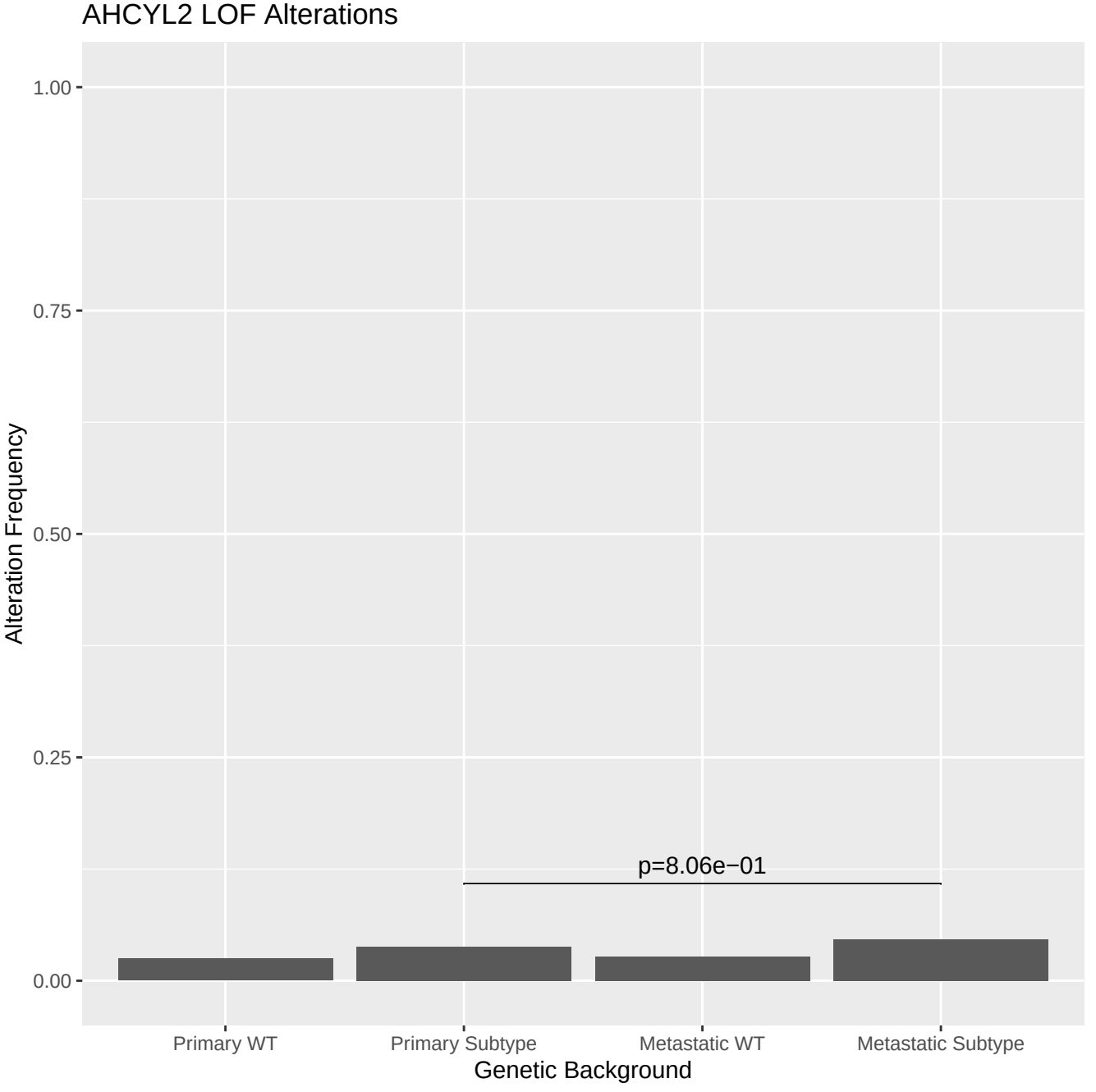

ROGDI LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.01e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

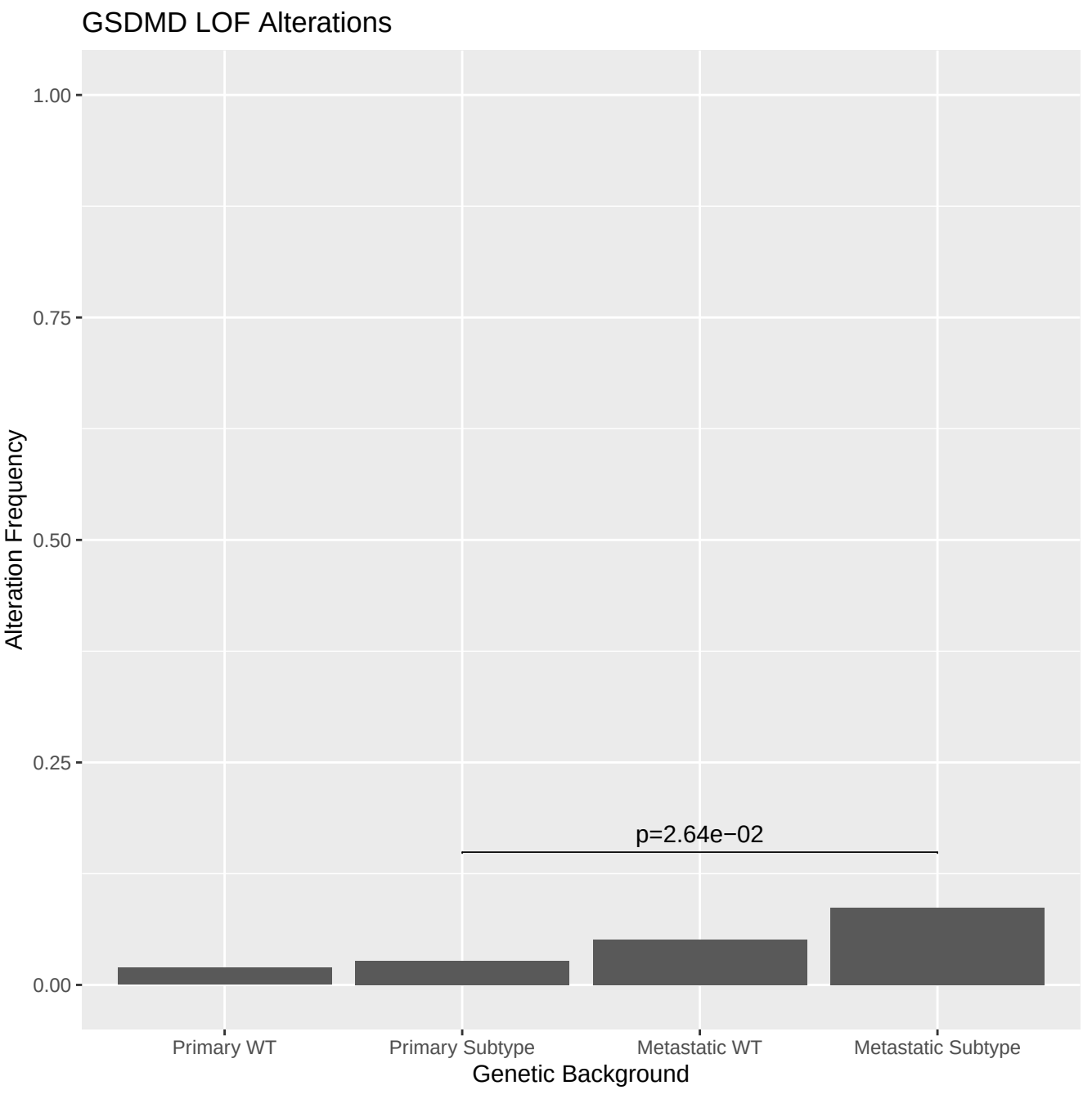

ROCK1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.84e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

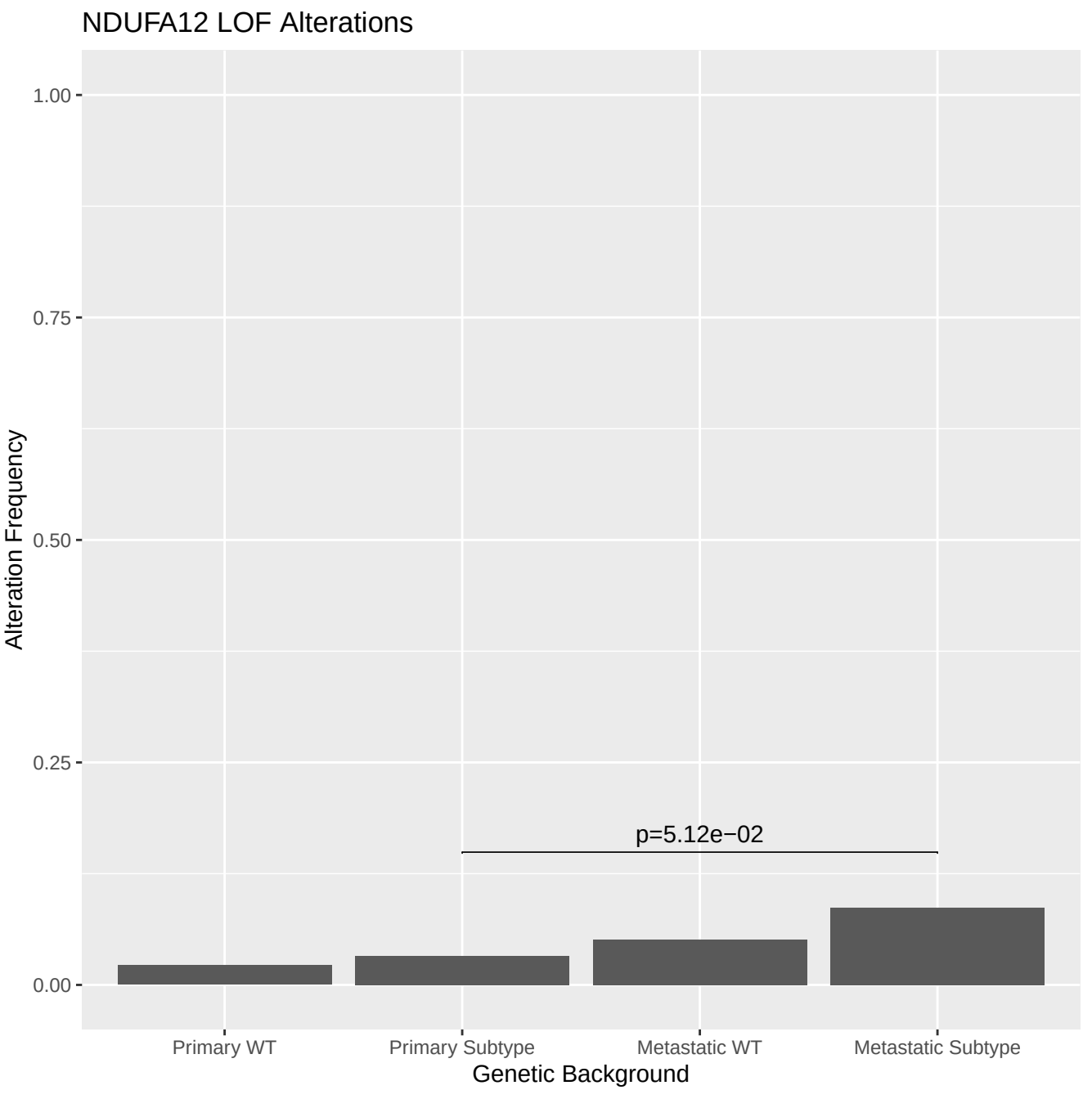

ZNF251 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

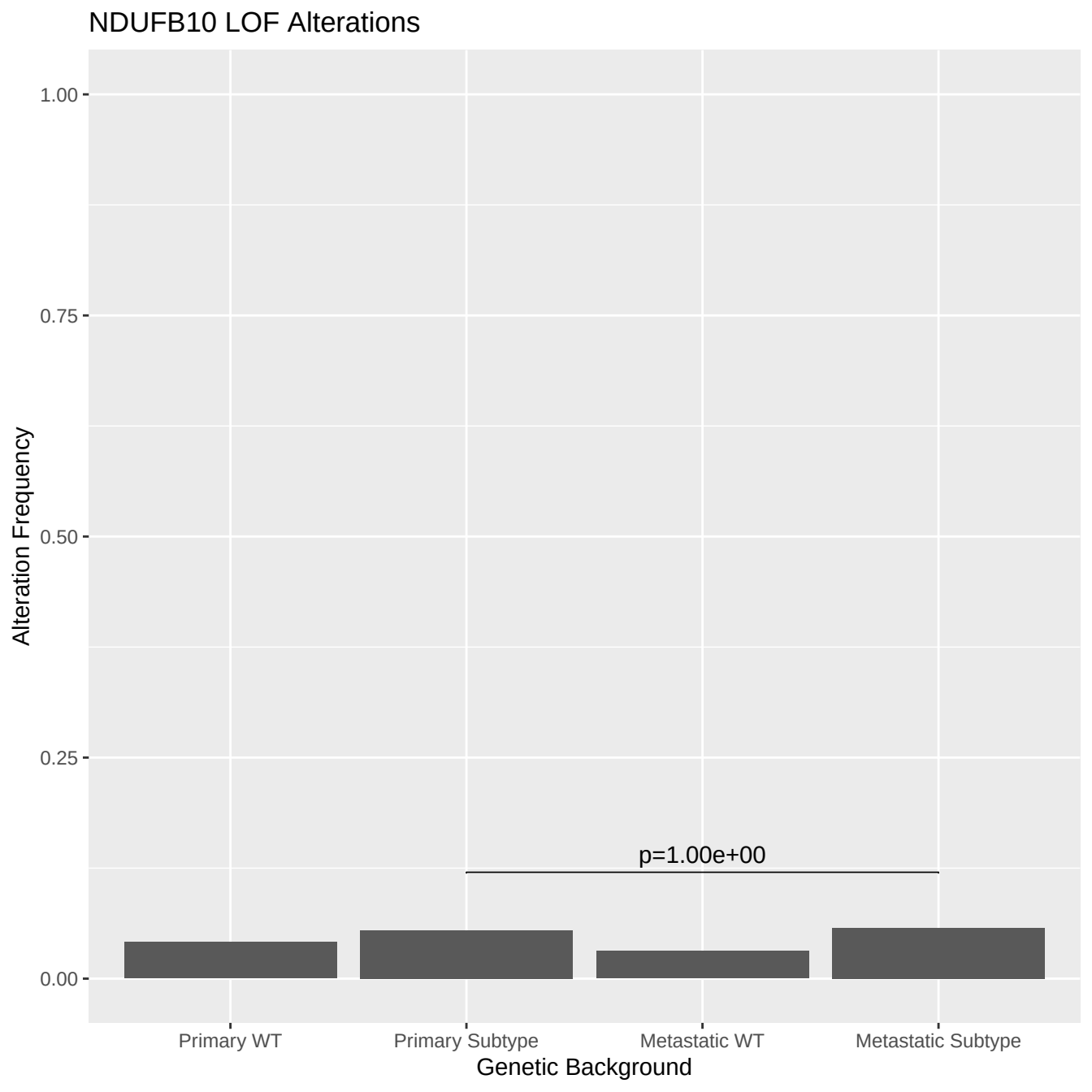

DUSP15 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.82e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

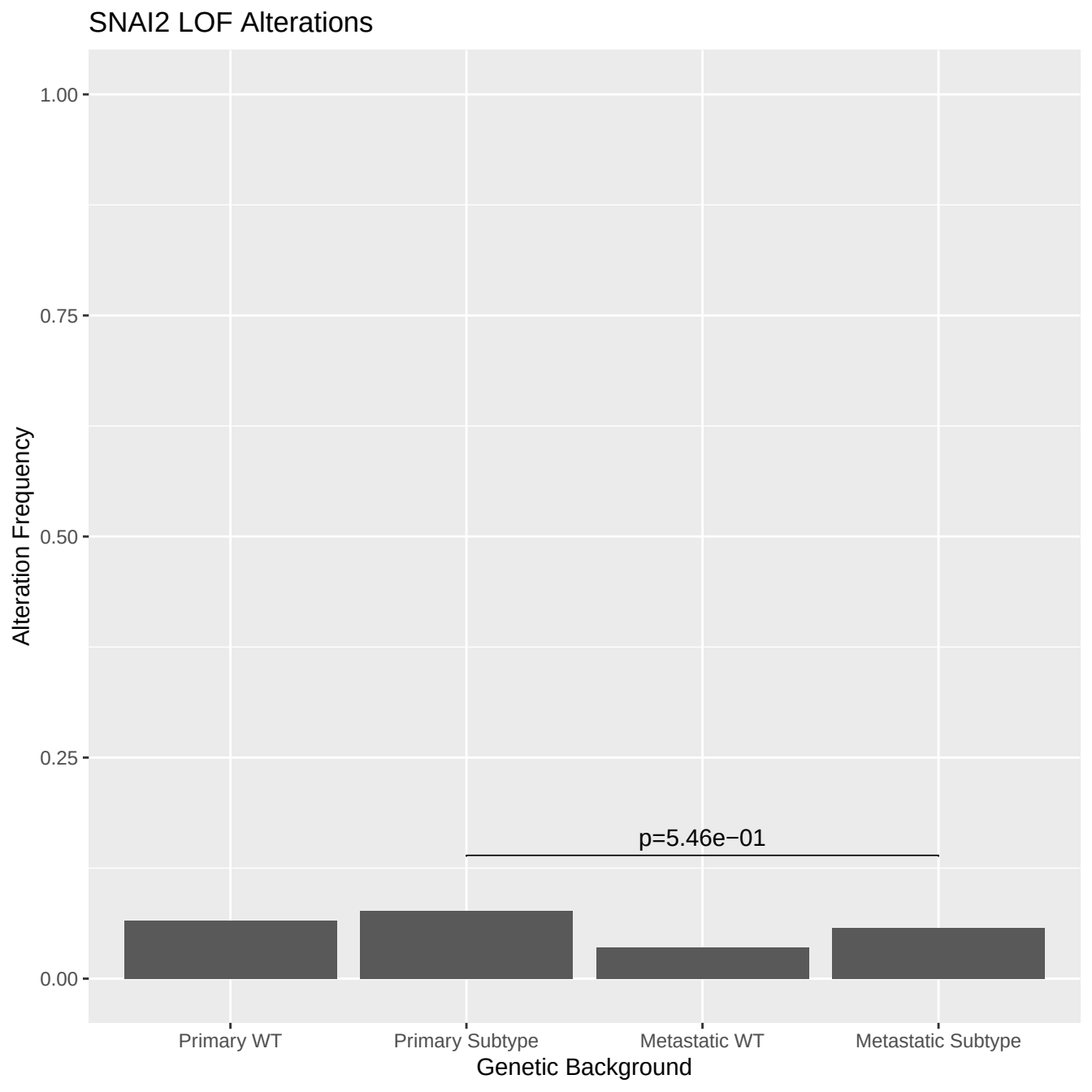

ACBD6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

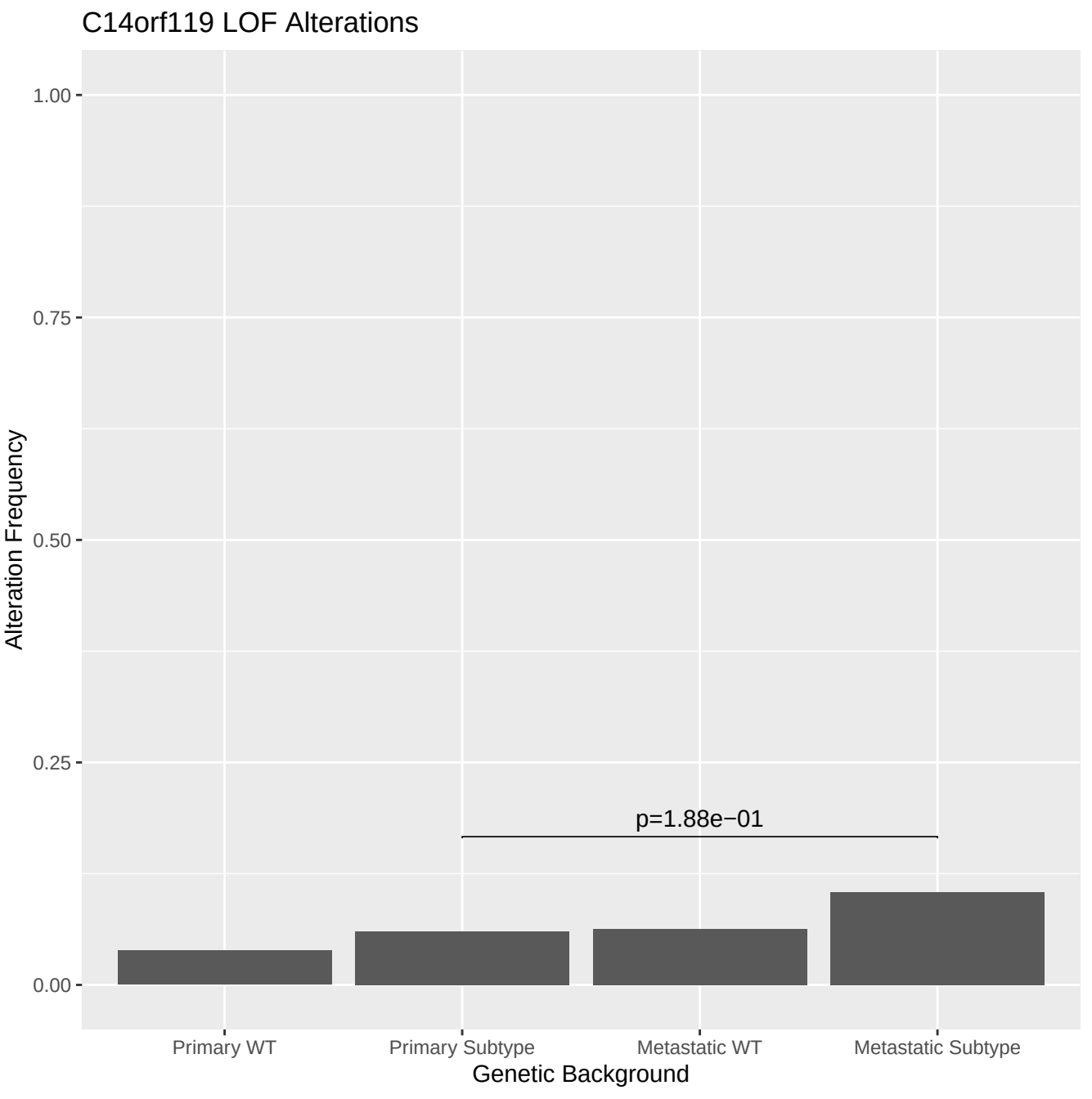

AHCYL2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

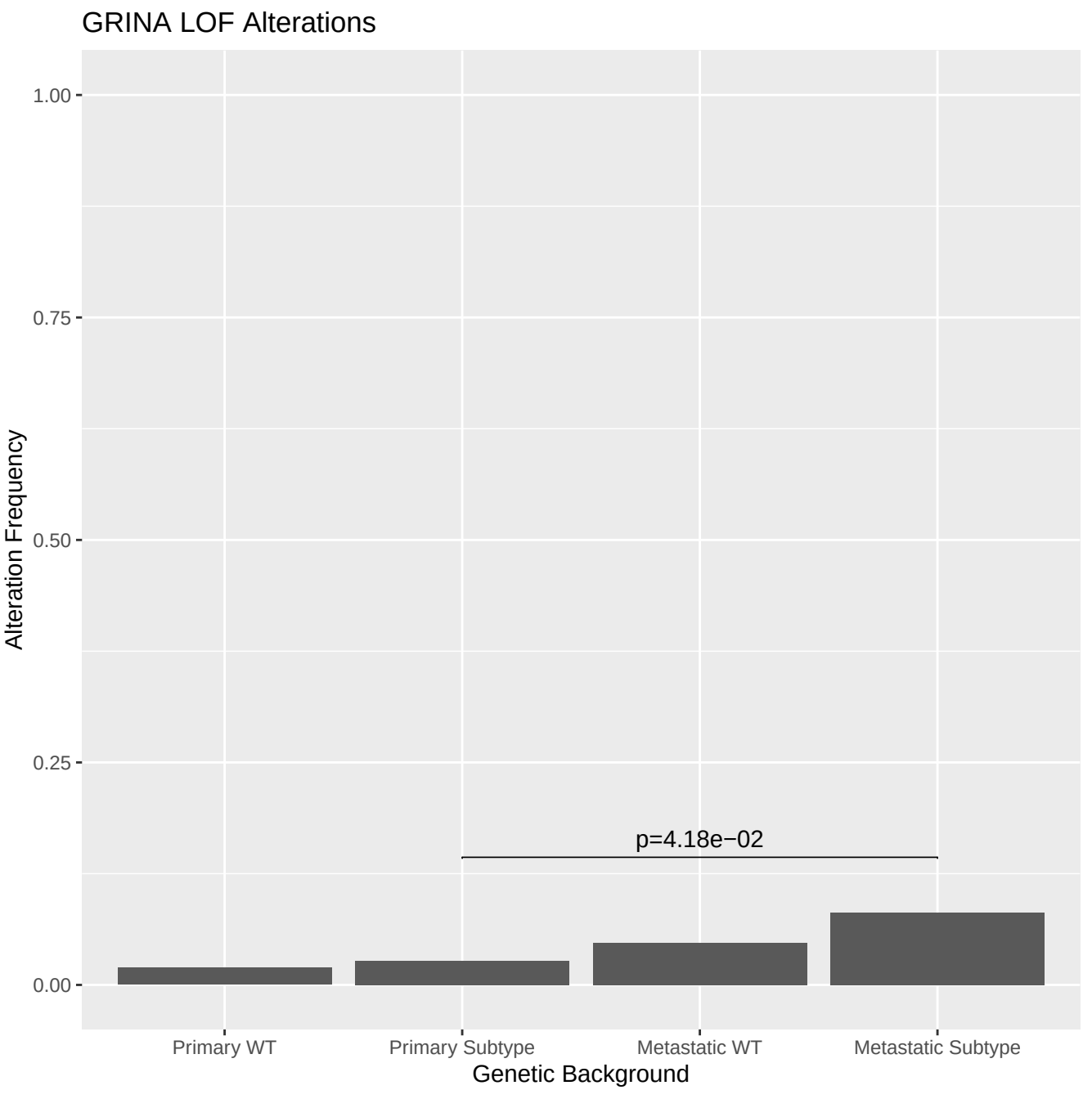

GSDMD LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.64e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

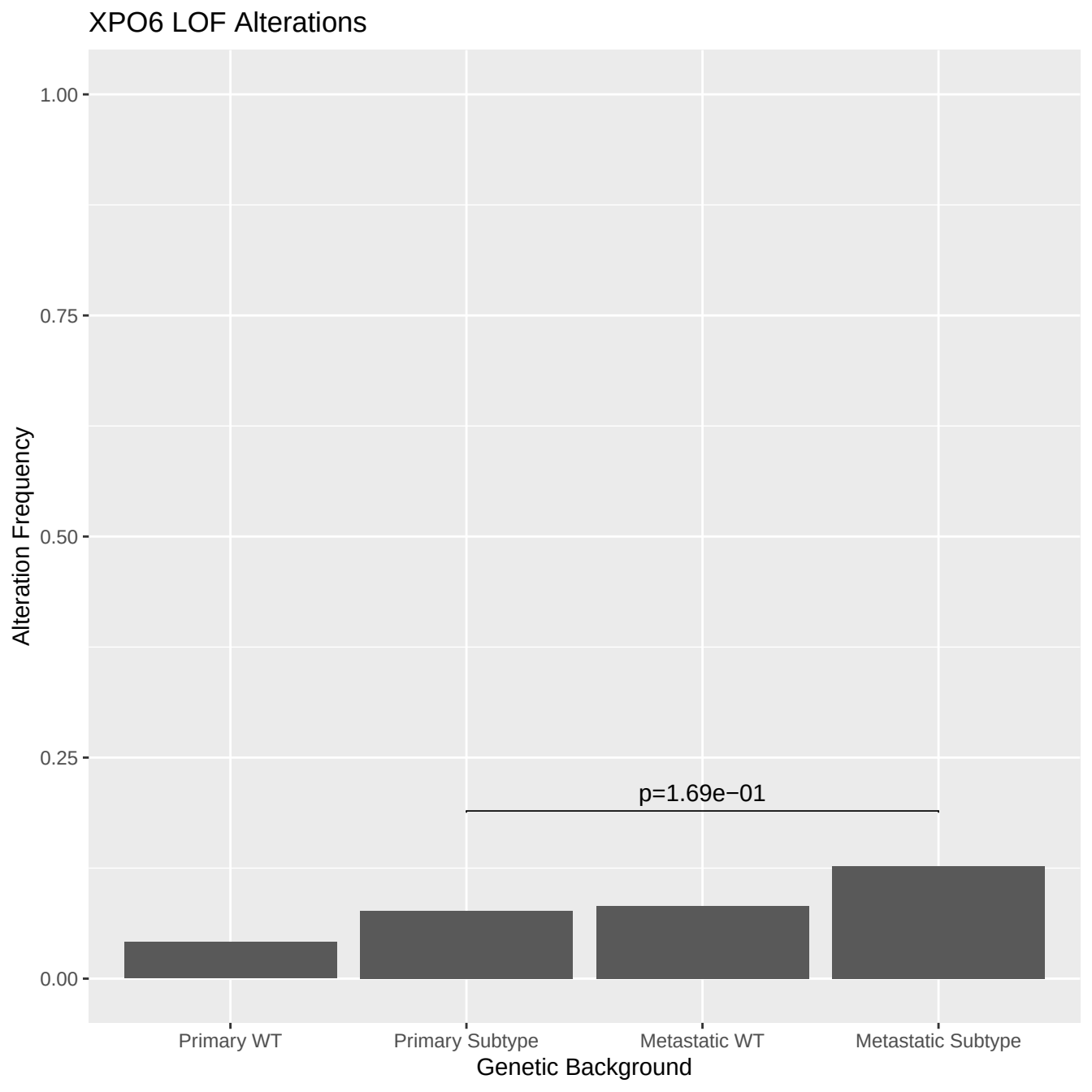

NDUFA12 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.12e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

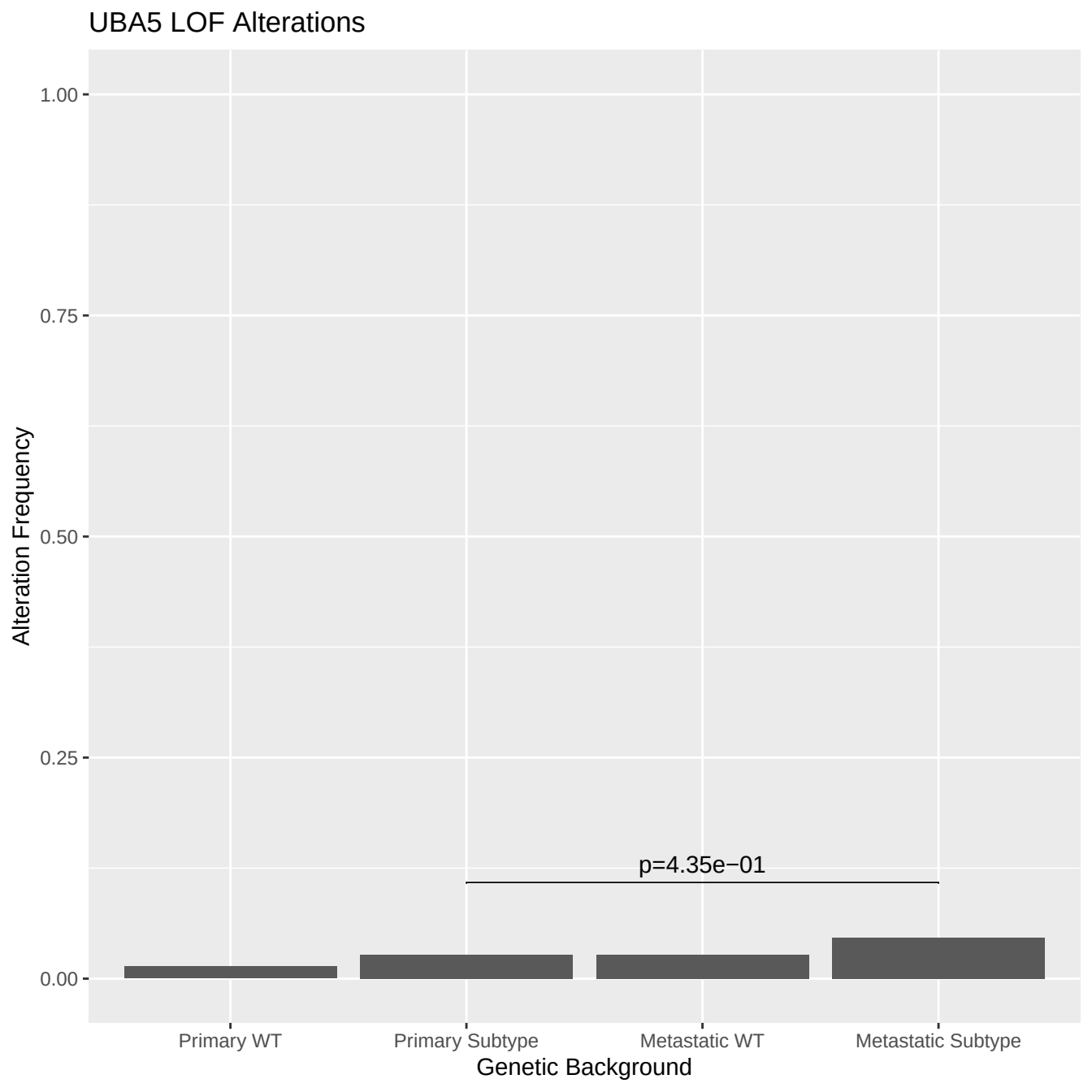

NDUFB10 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

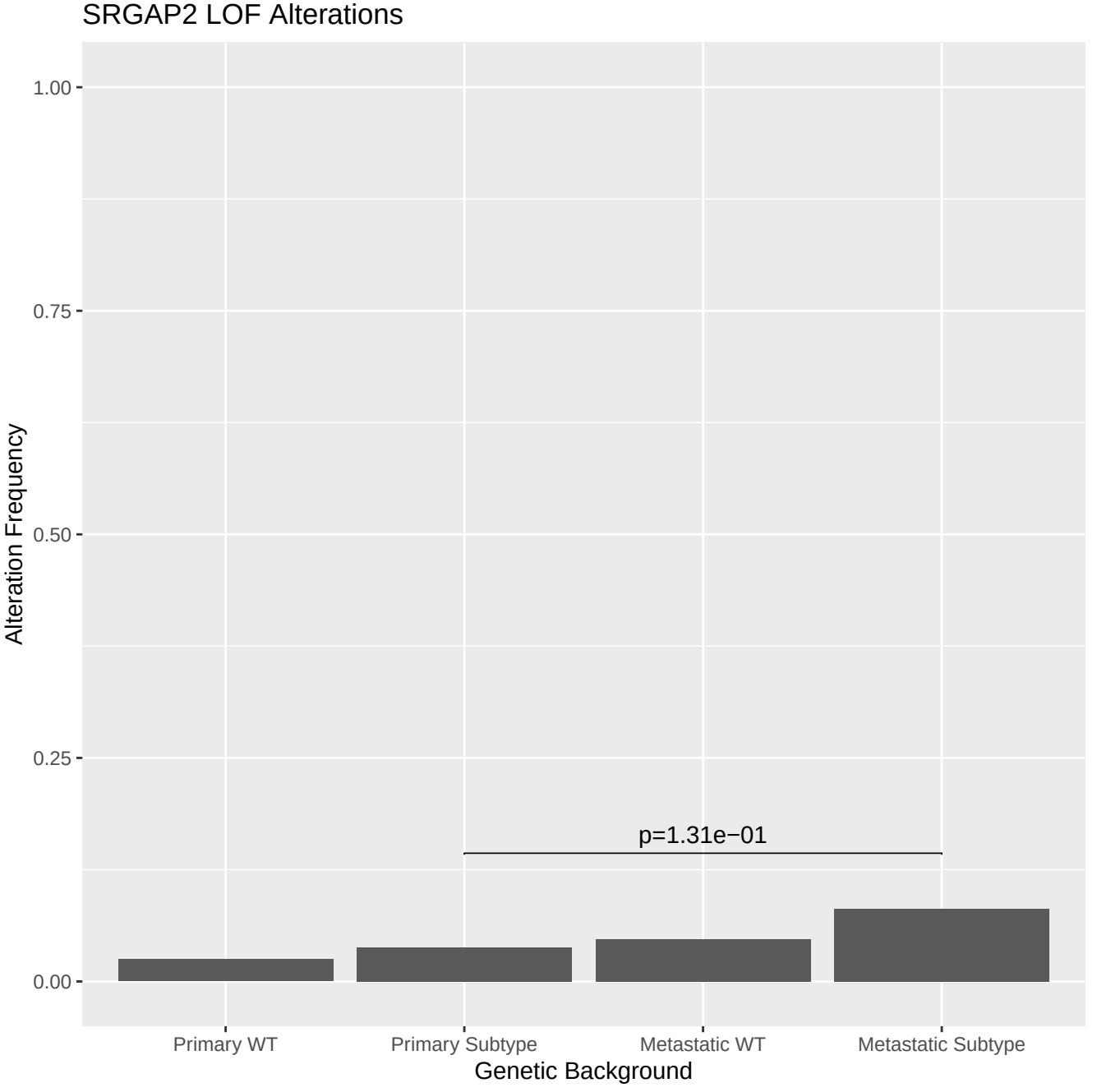

SNAI2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.46e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

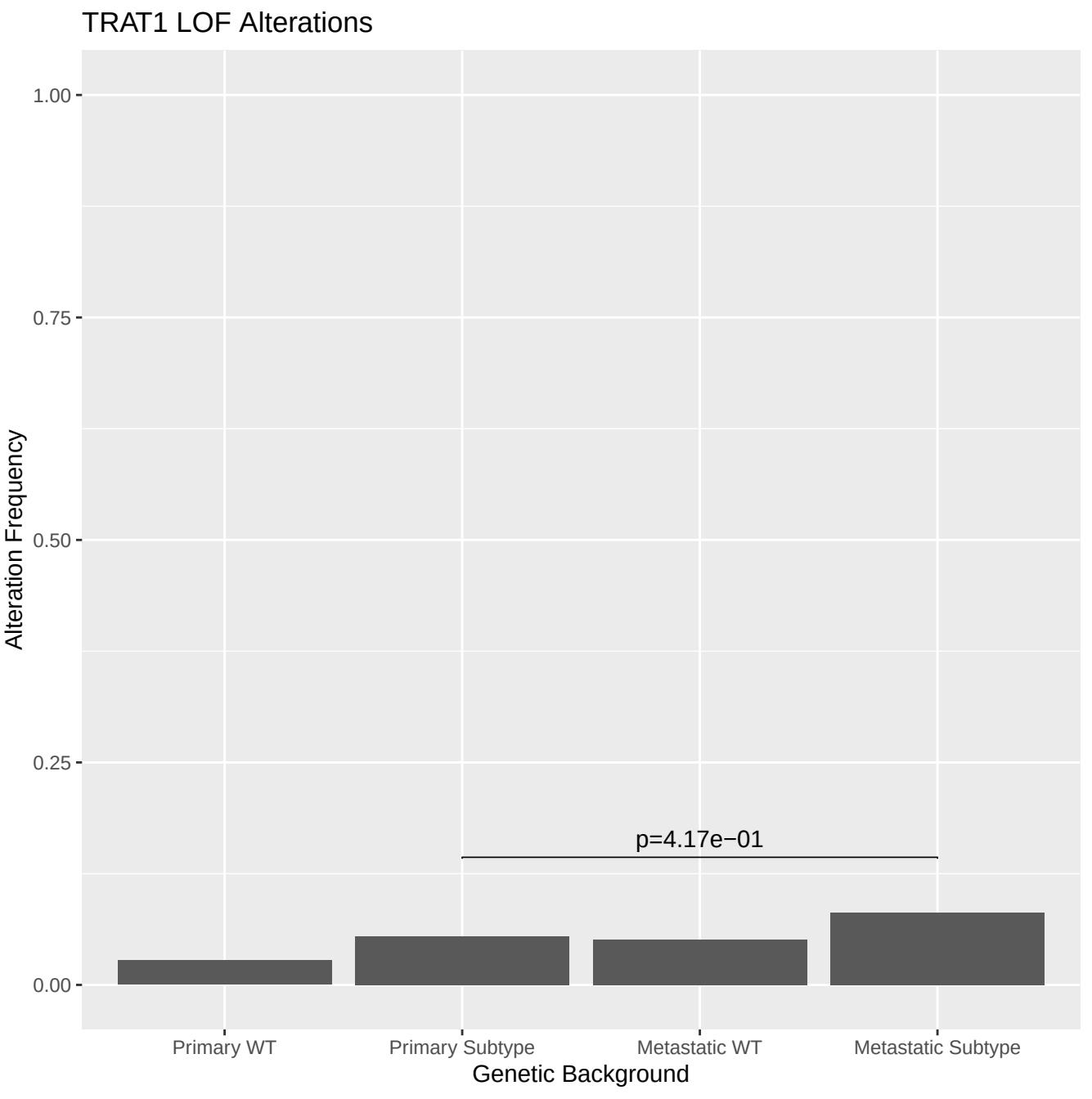

C14orf119 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

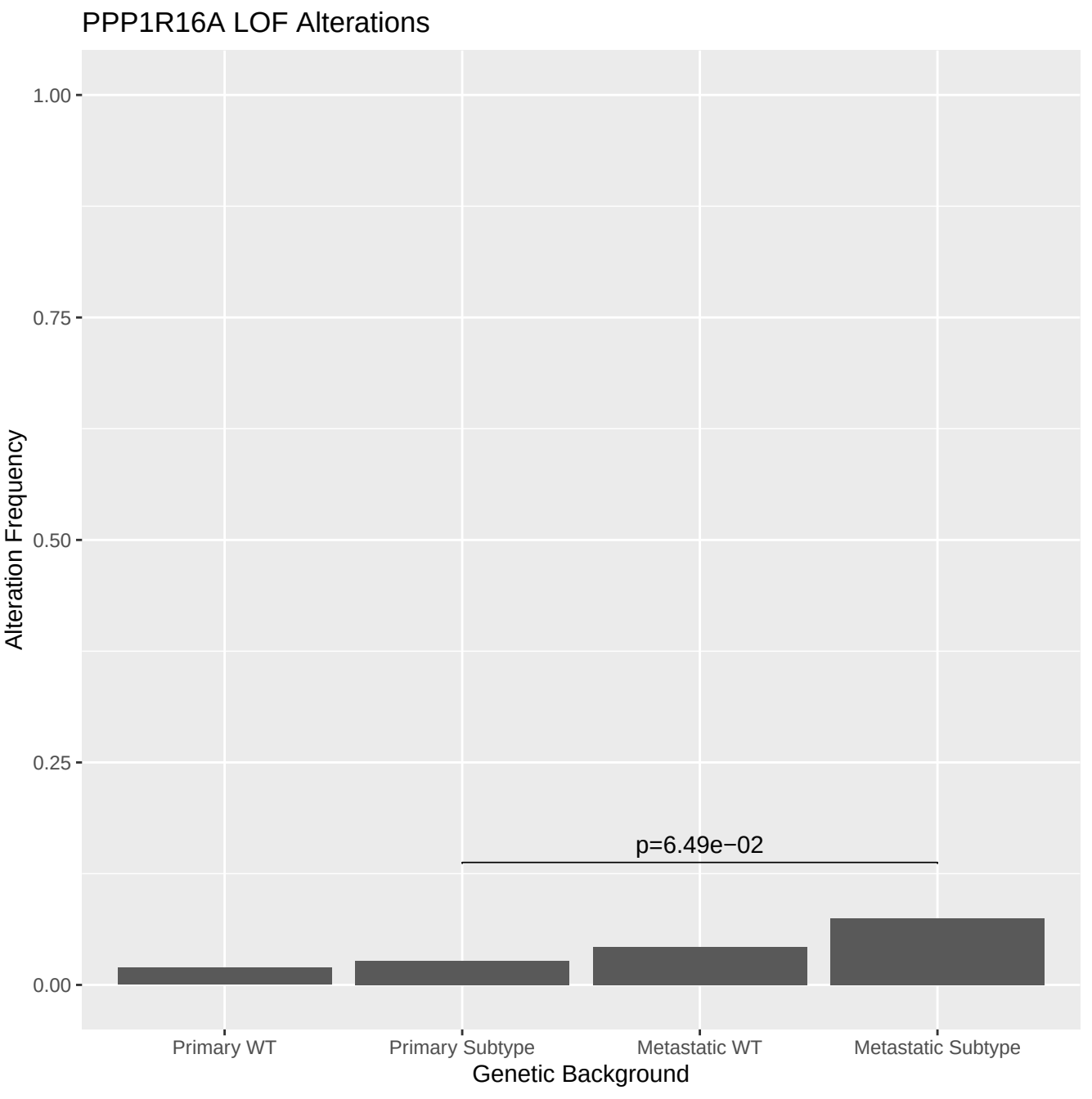

GRINA LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.18e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

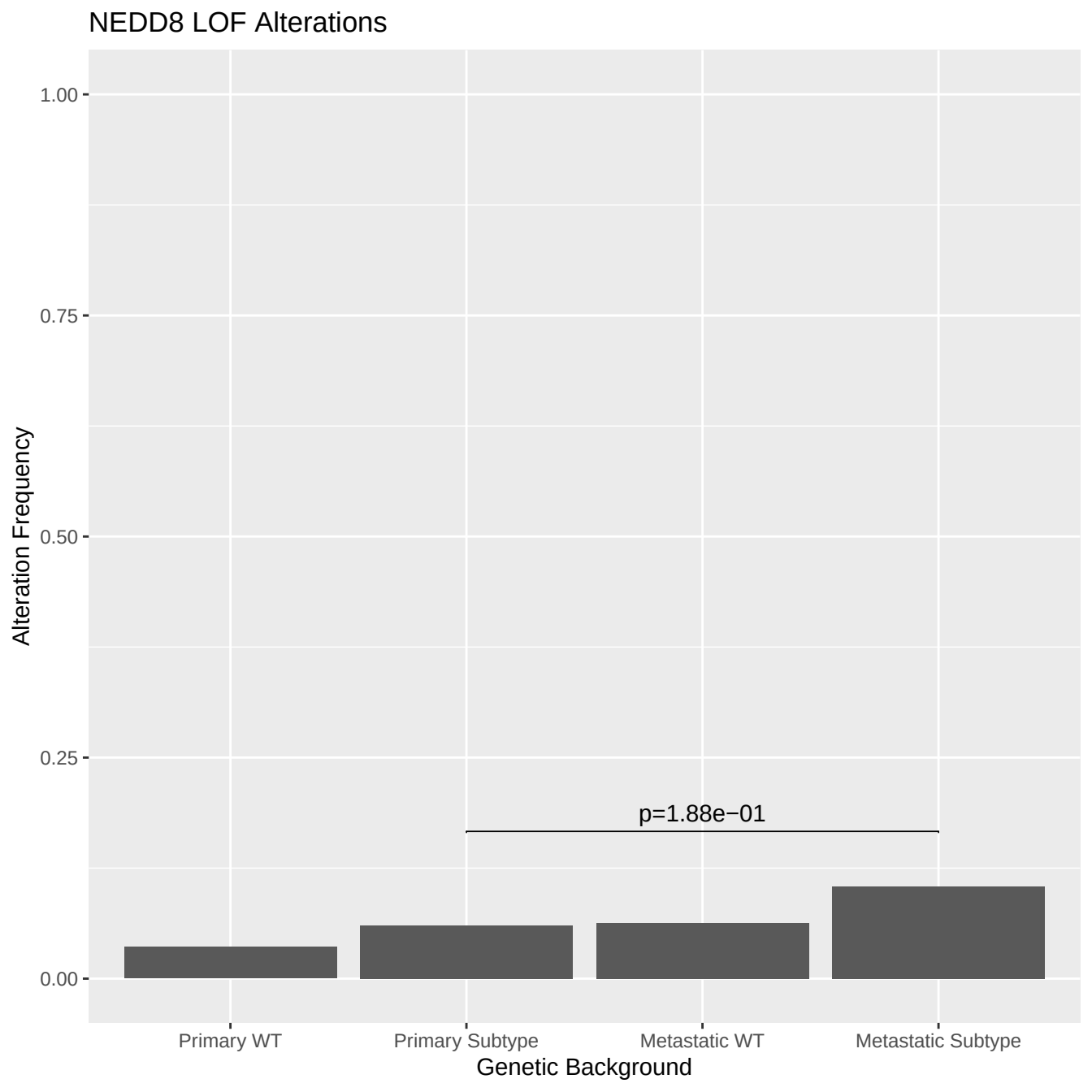

XPO6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.69e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

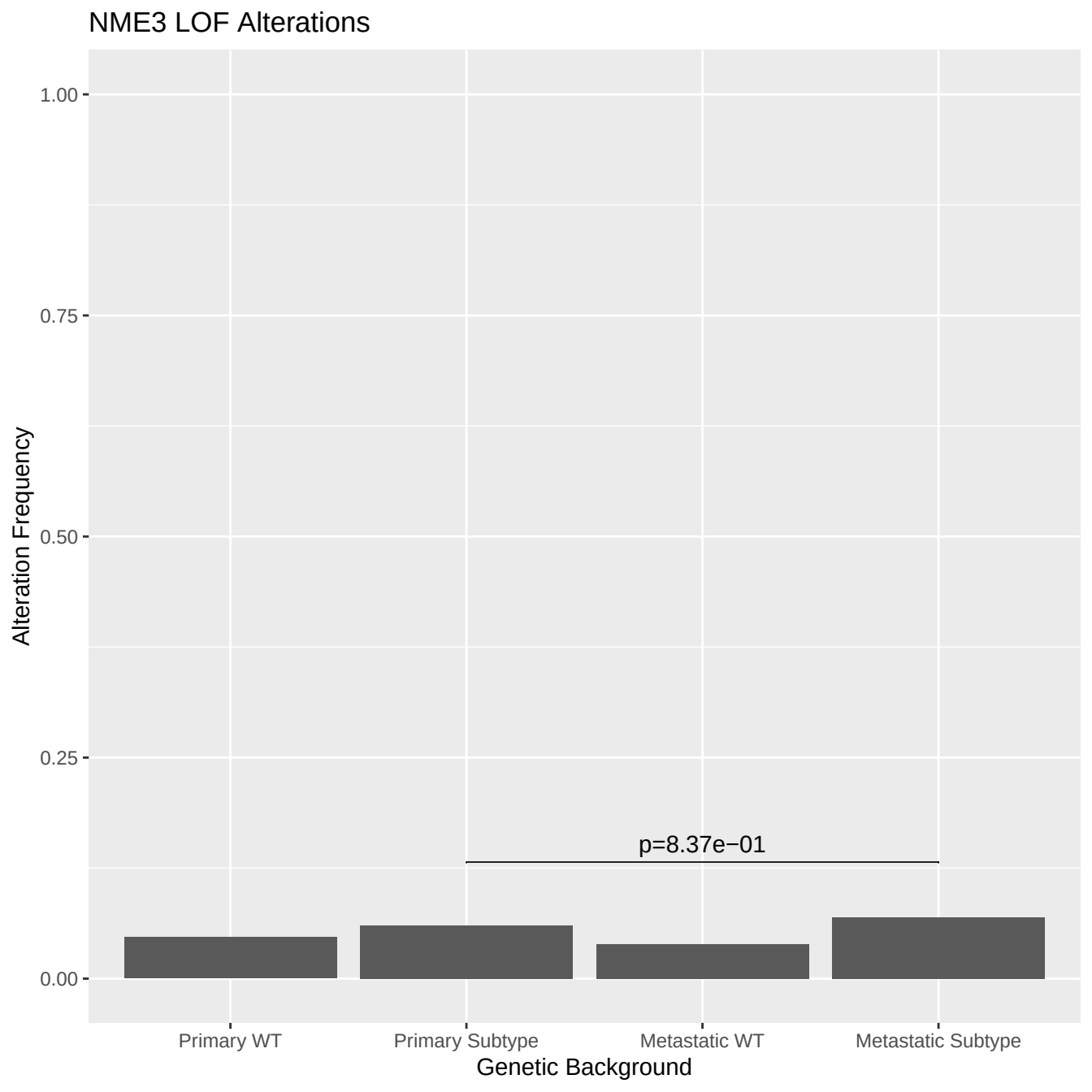

UBA5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

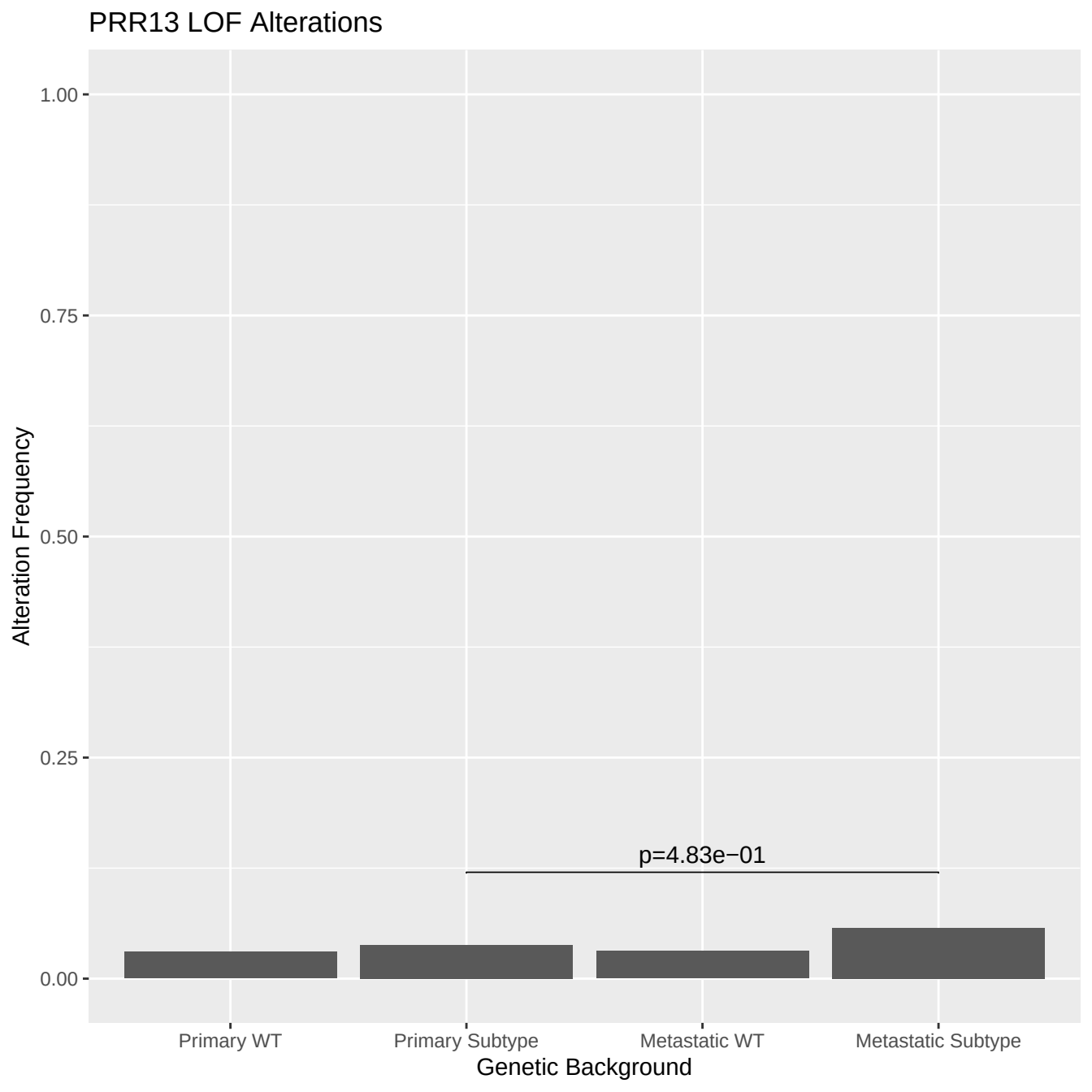

SRGAP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.31e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

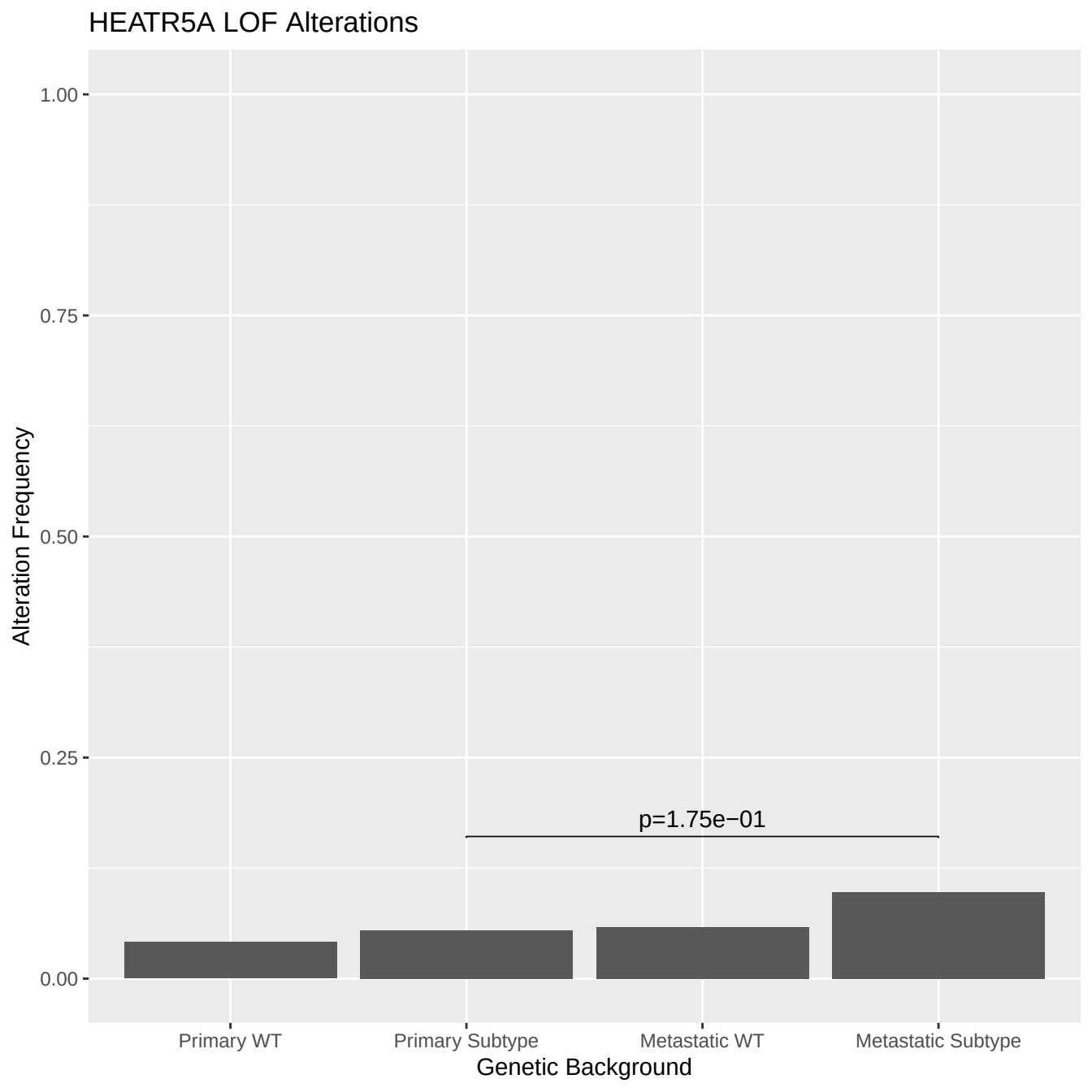

TRAT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

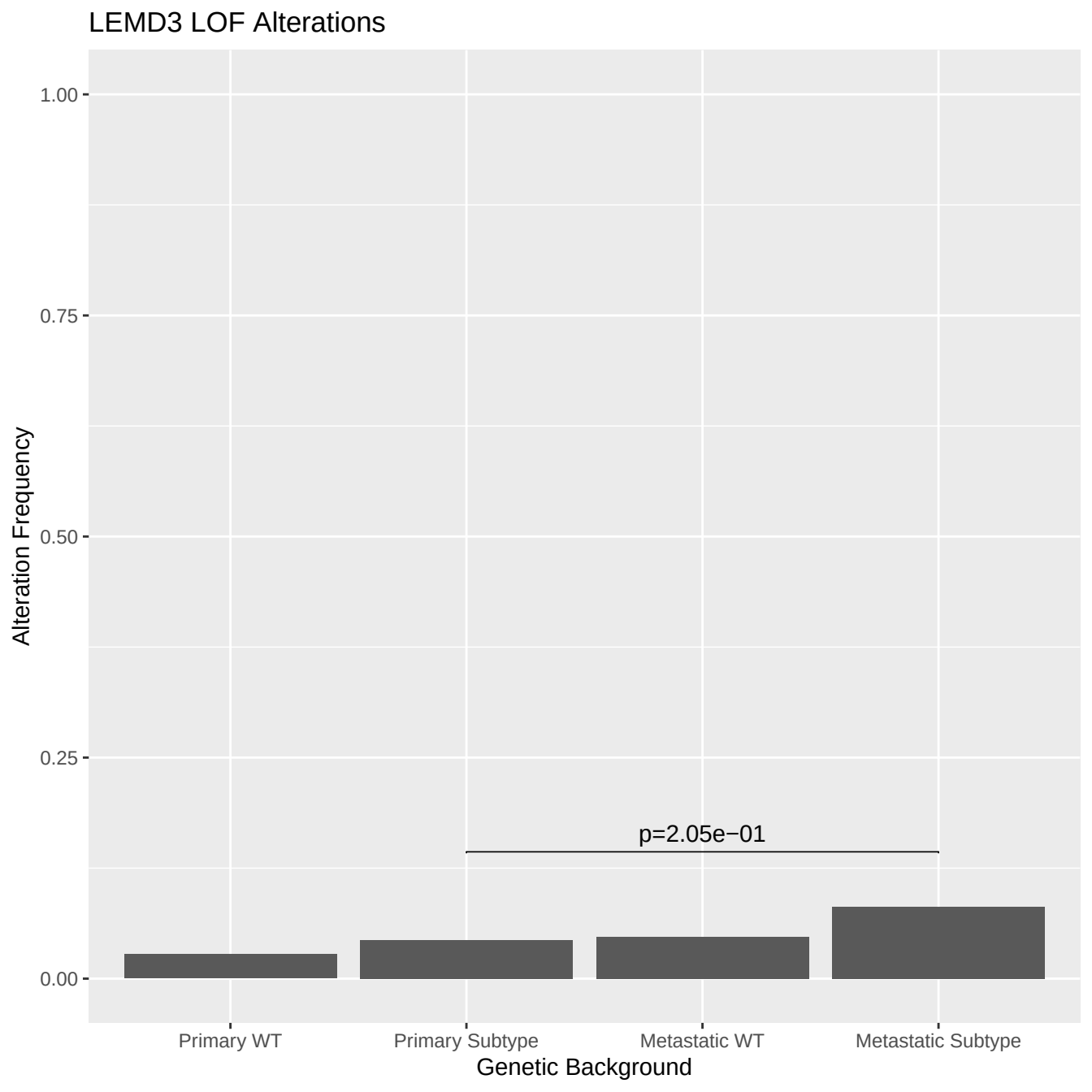

PPP1R16A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

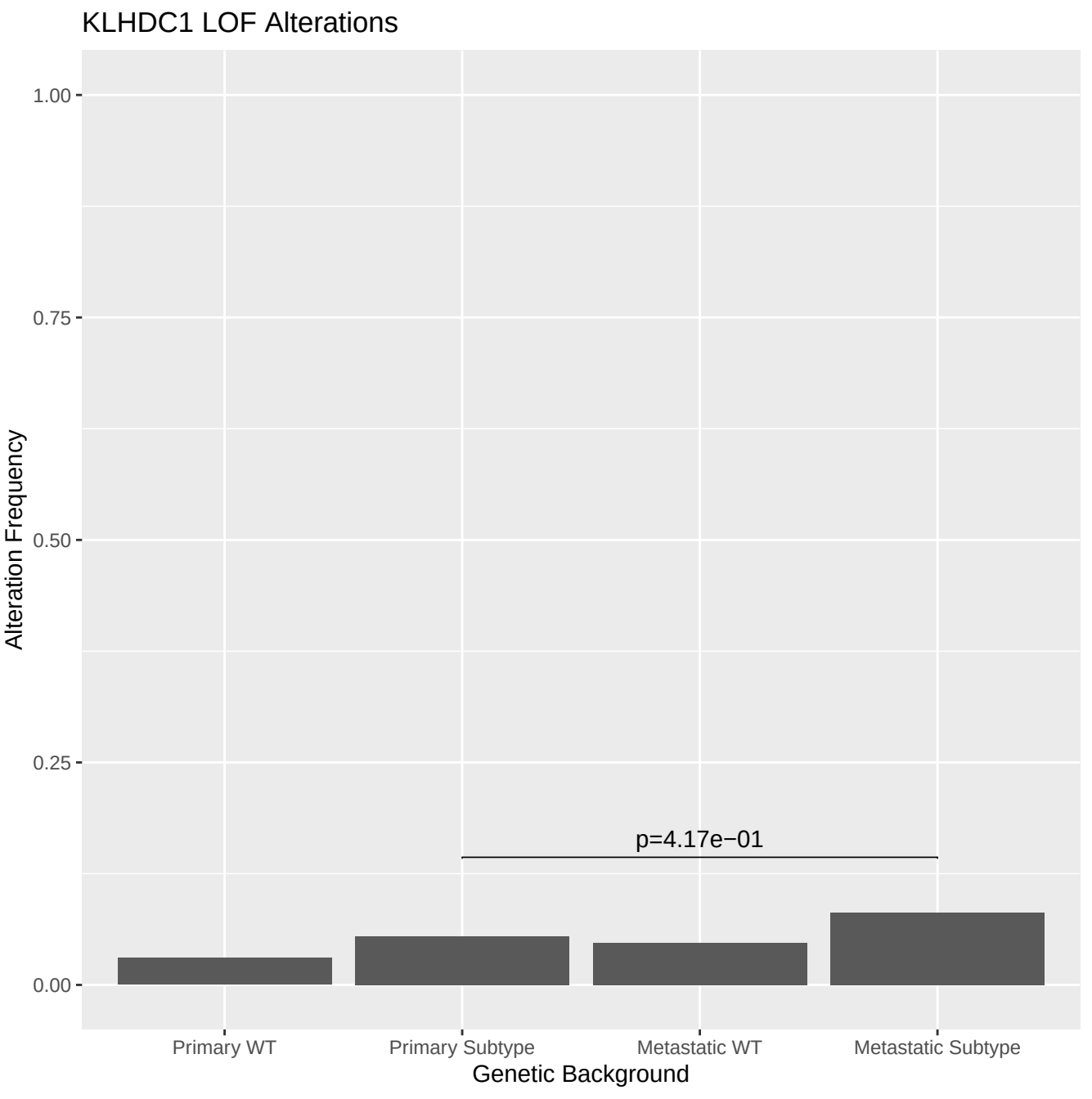

NEDD8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

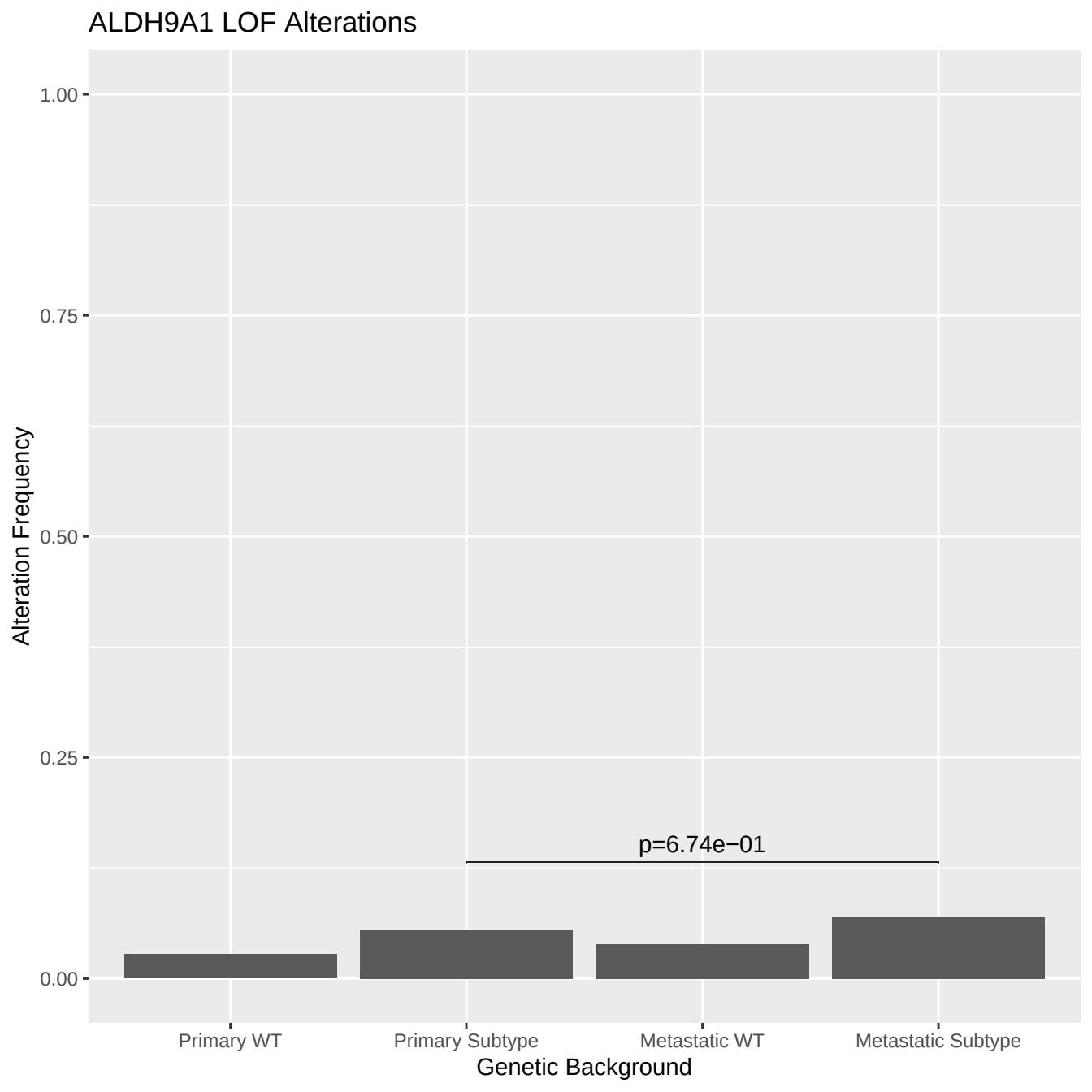

NME3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

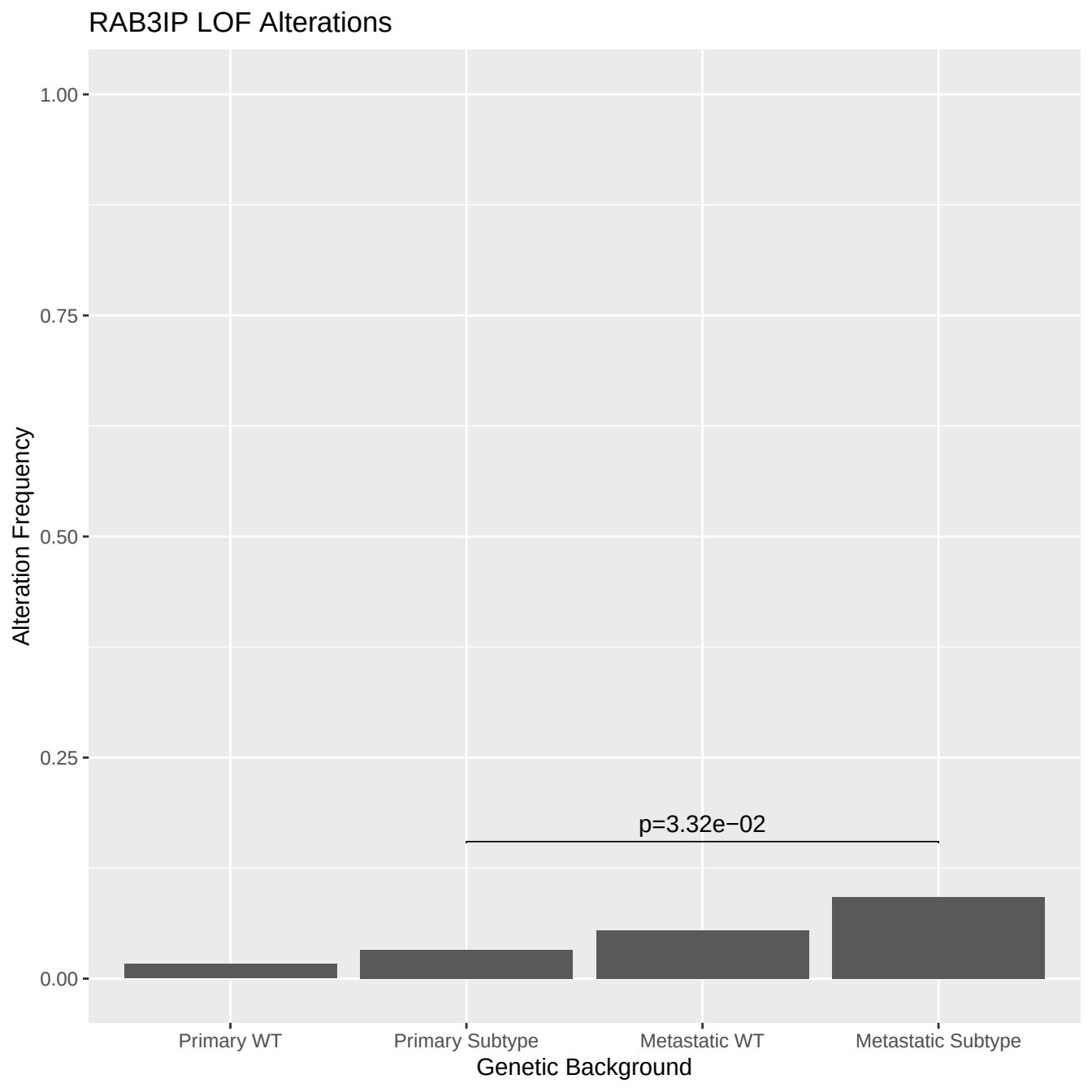

PRR13 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

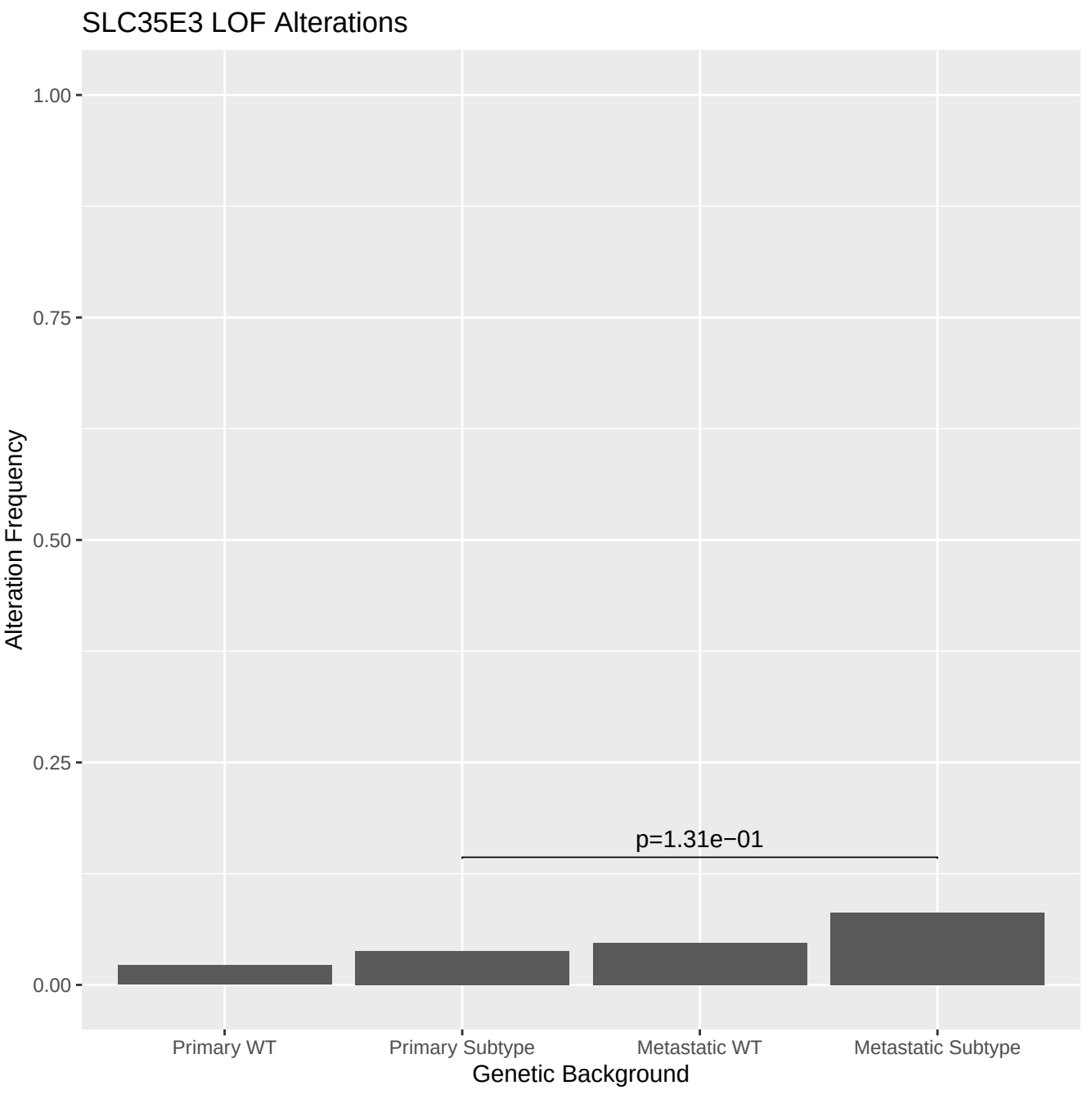

HEATR5A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.75e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

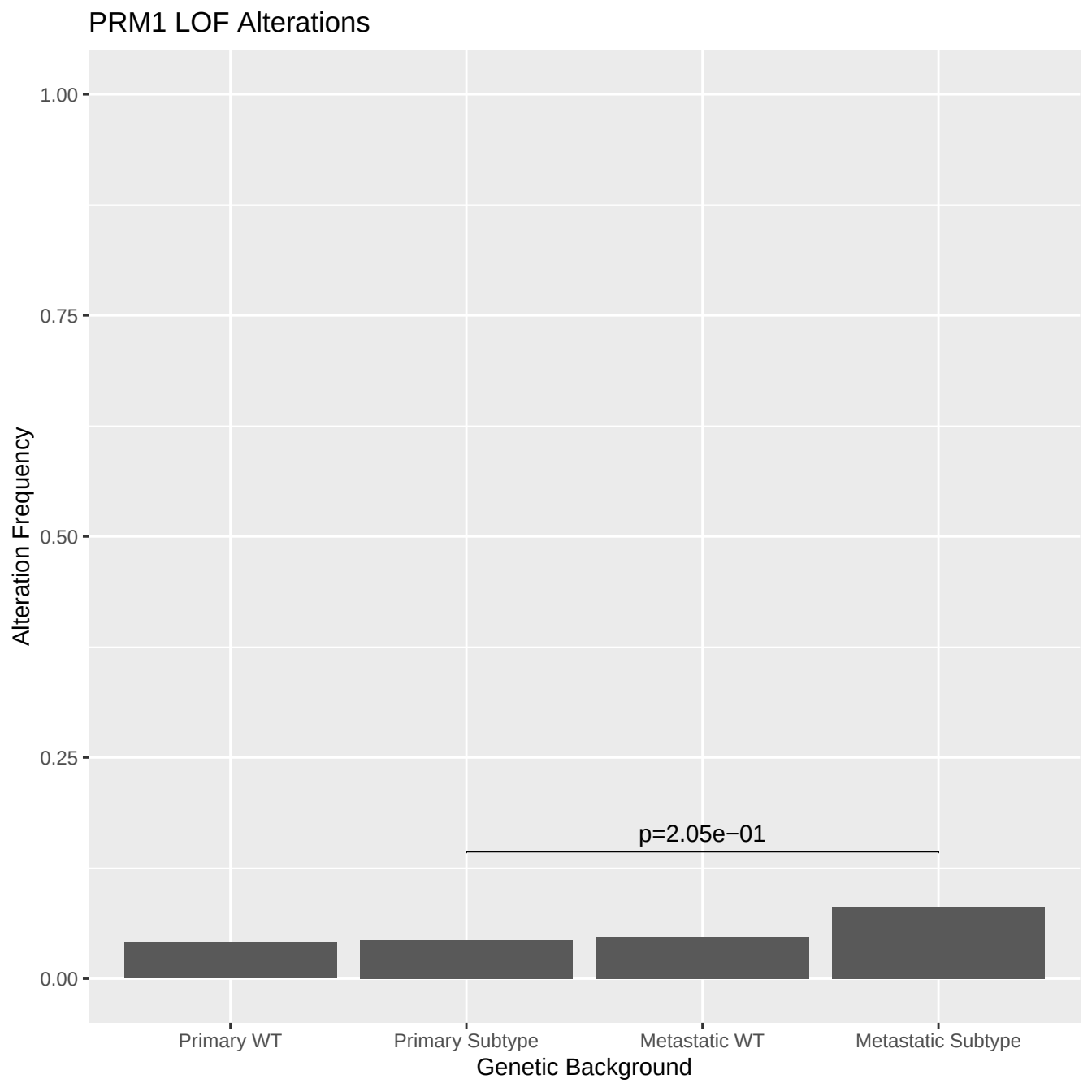

LEMD3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.05e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

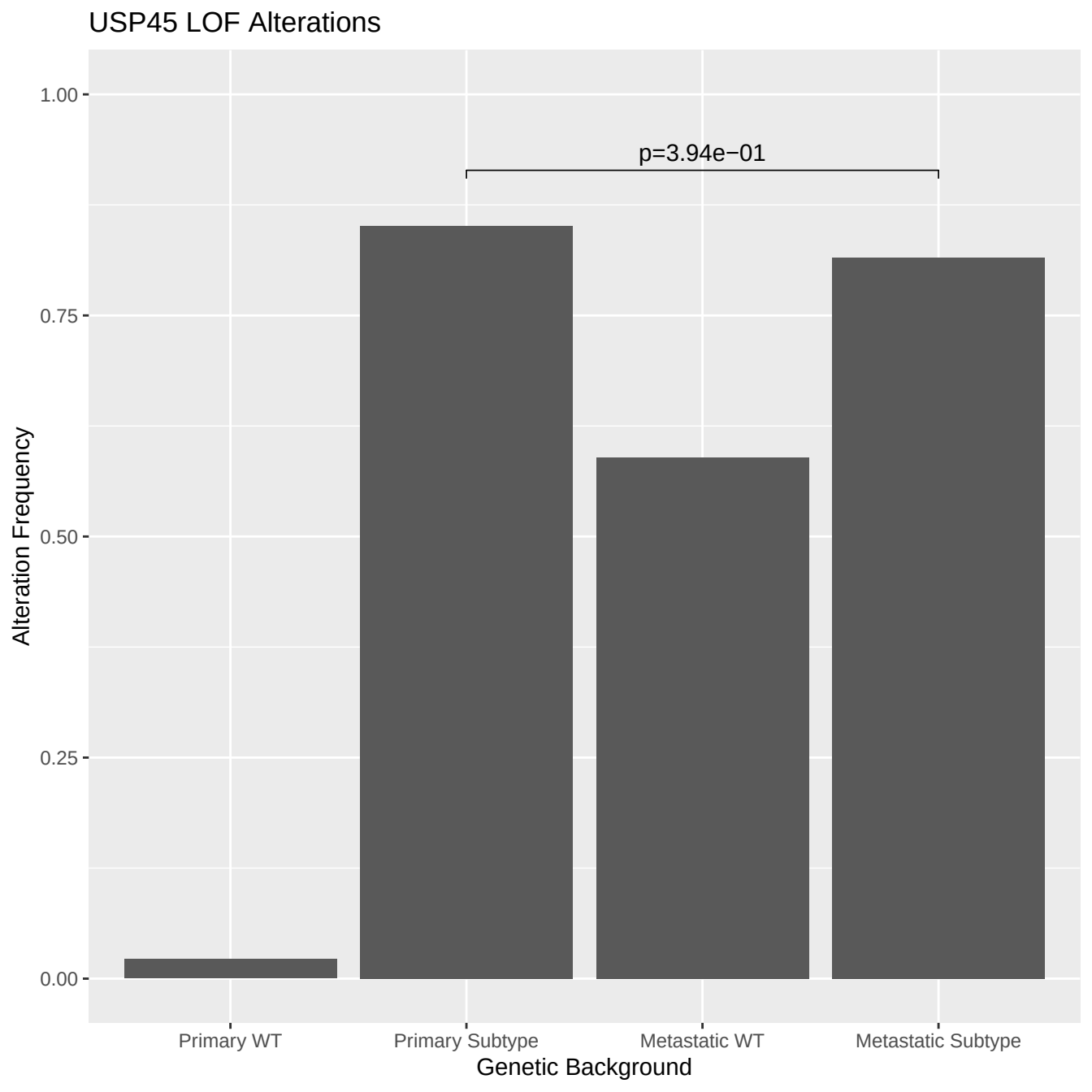

KLHDC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

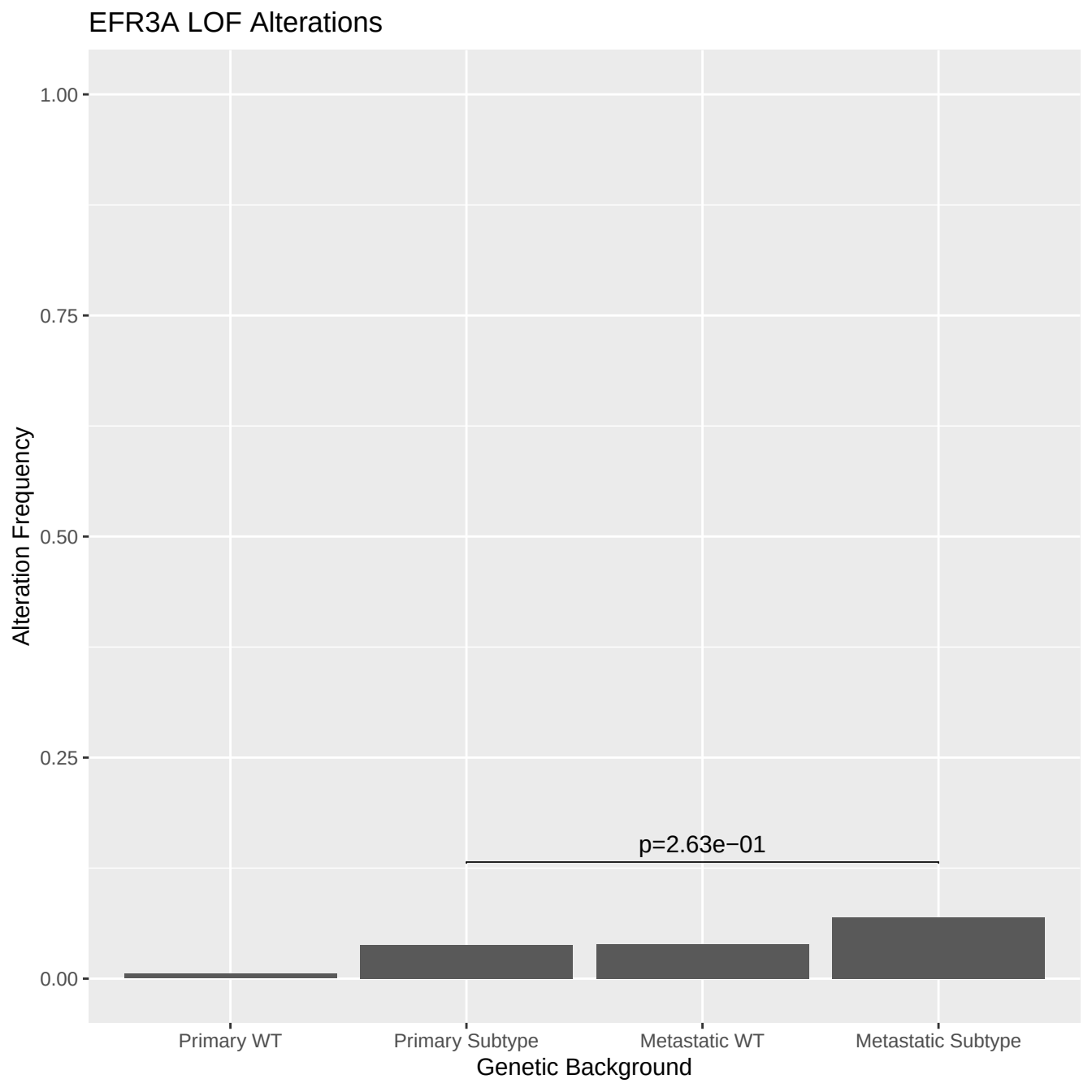

ALDH9A1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

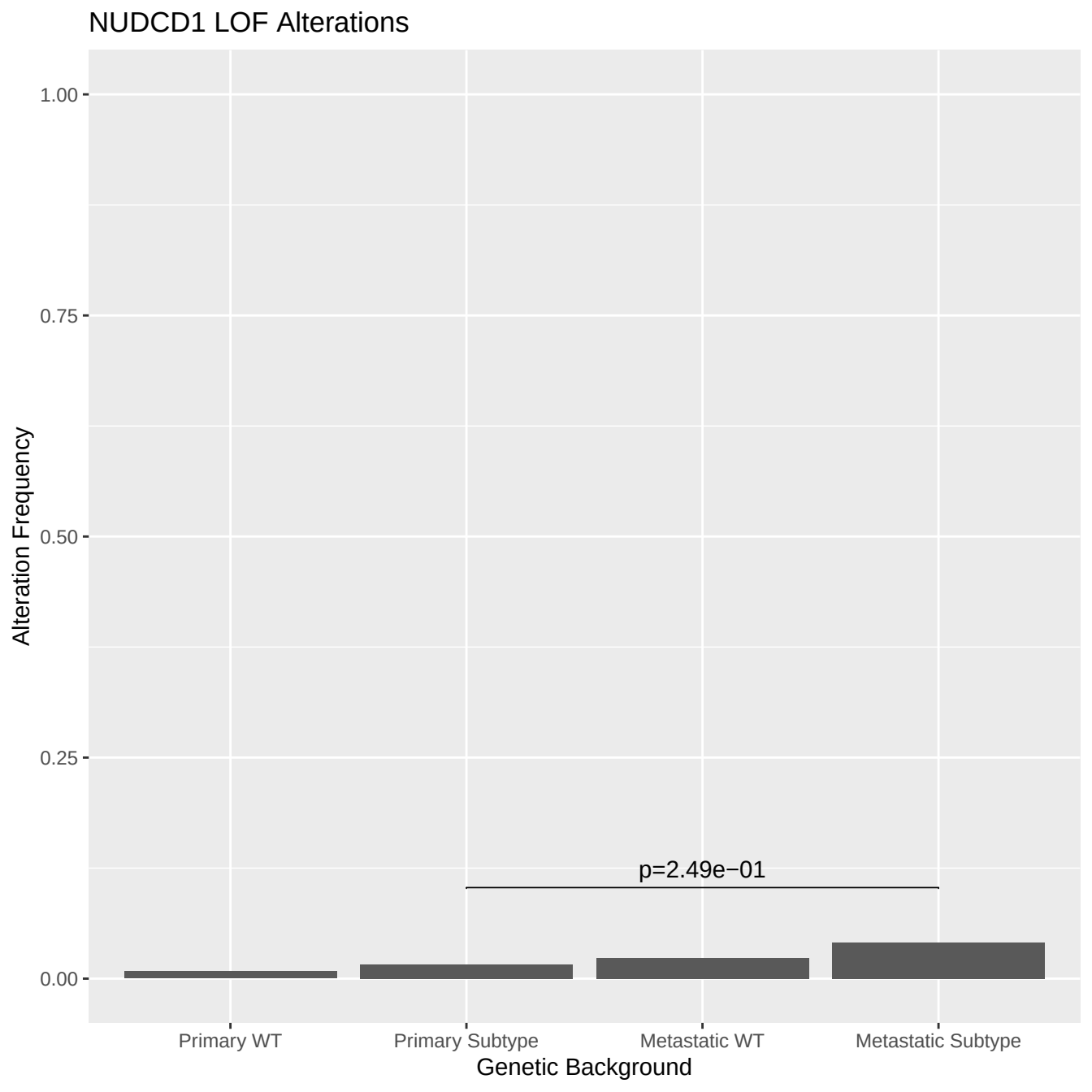

RAB3IP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.32e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

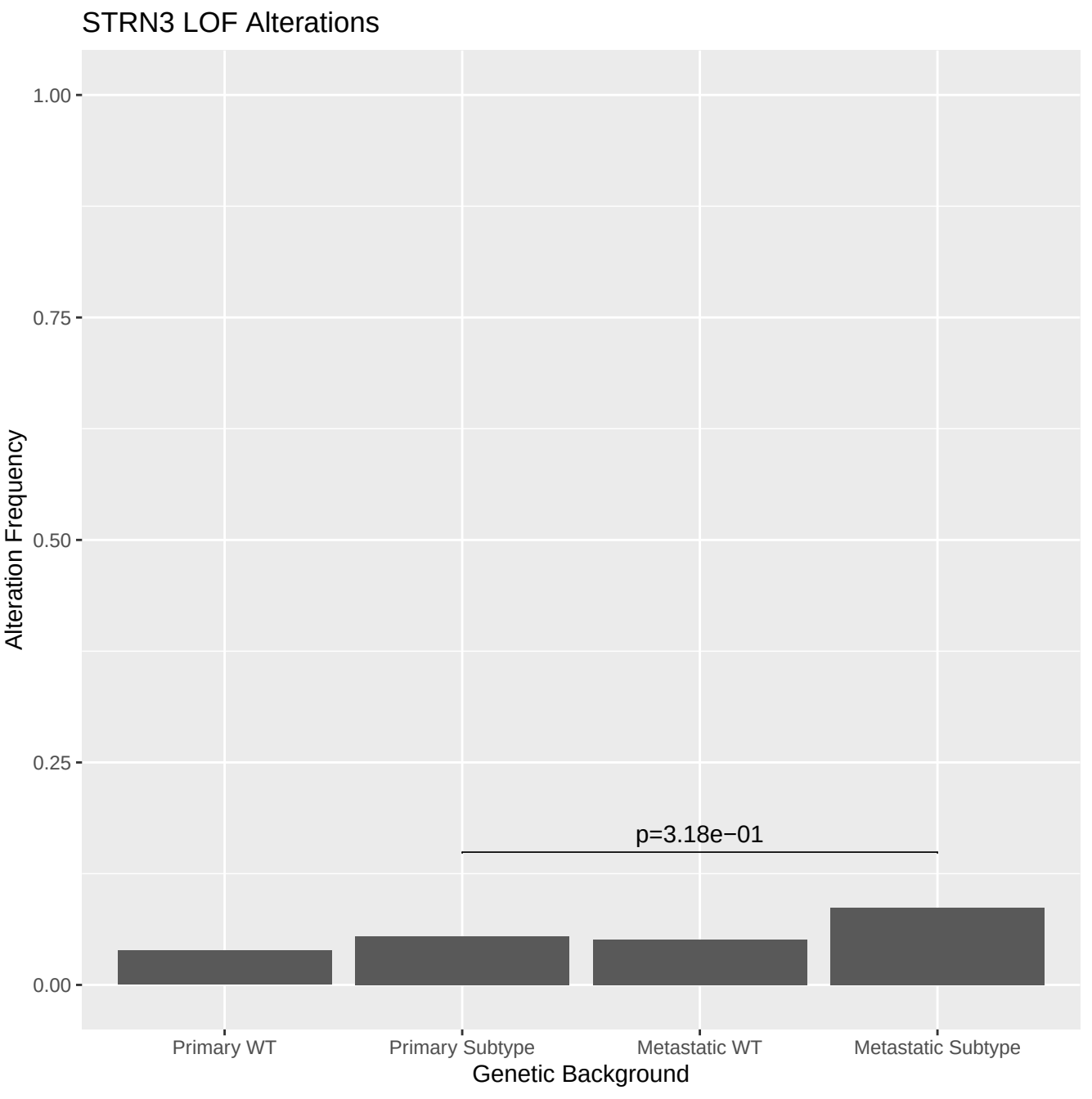

SLC35E3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.31e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

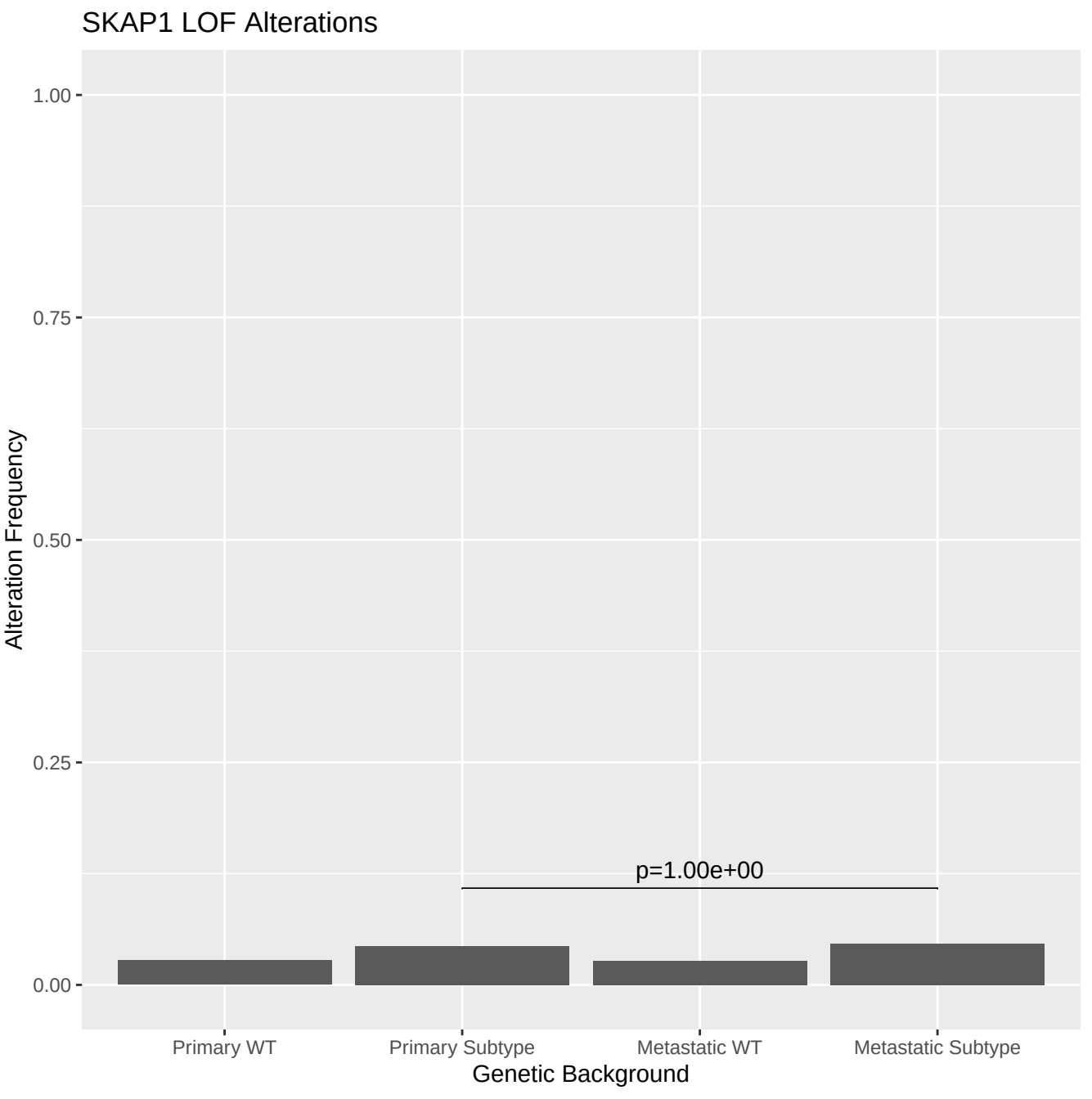

PRM1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.05e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

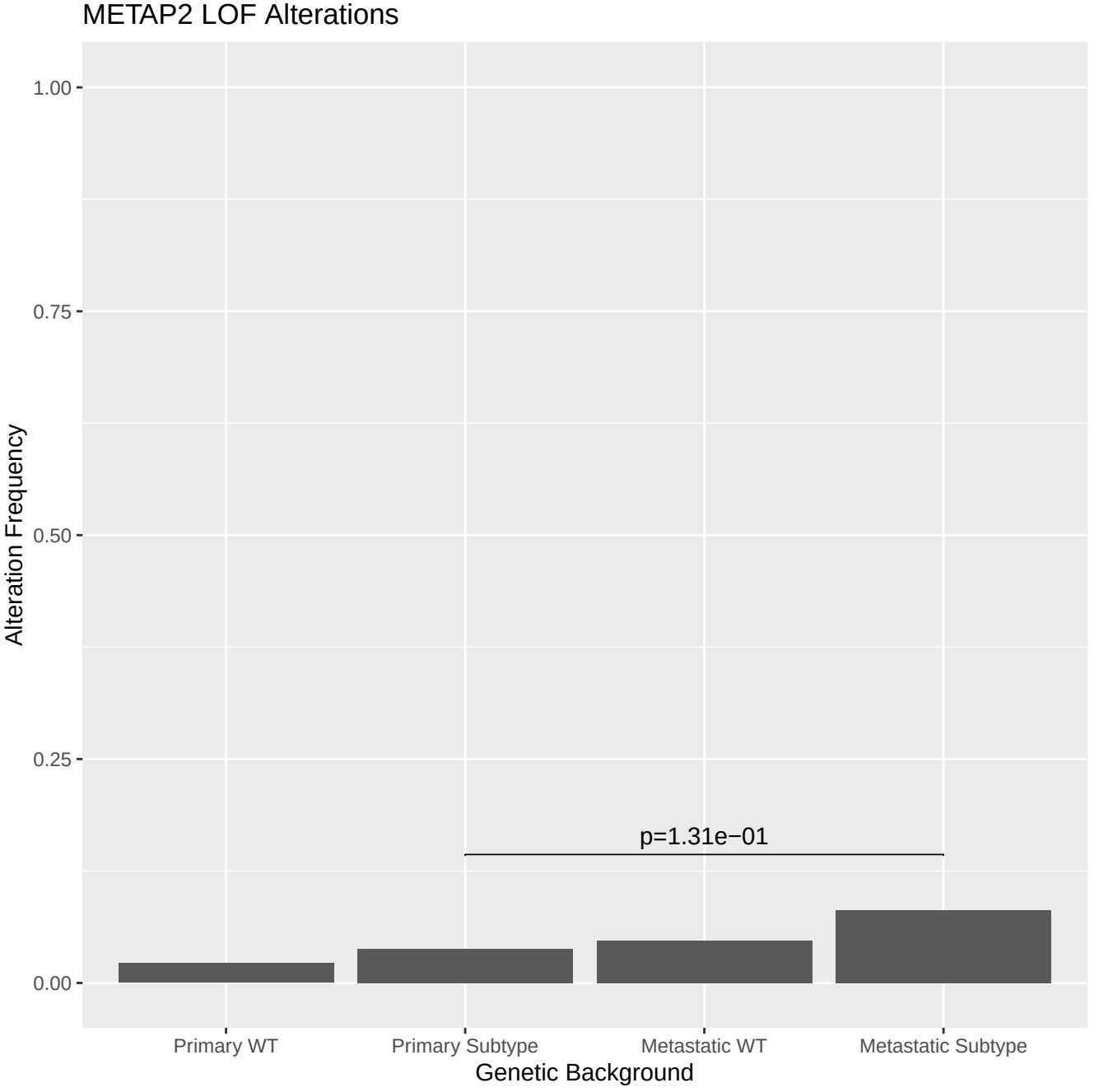

USP45 LOF Alterations
p=3.94e−01
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

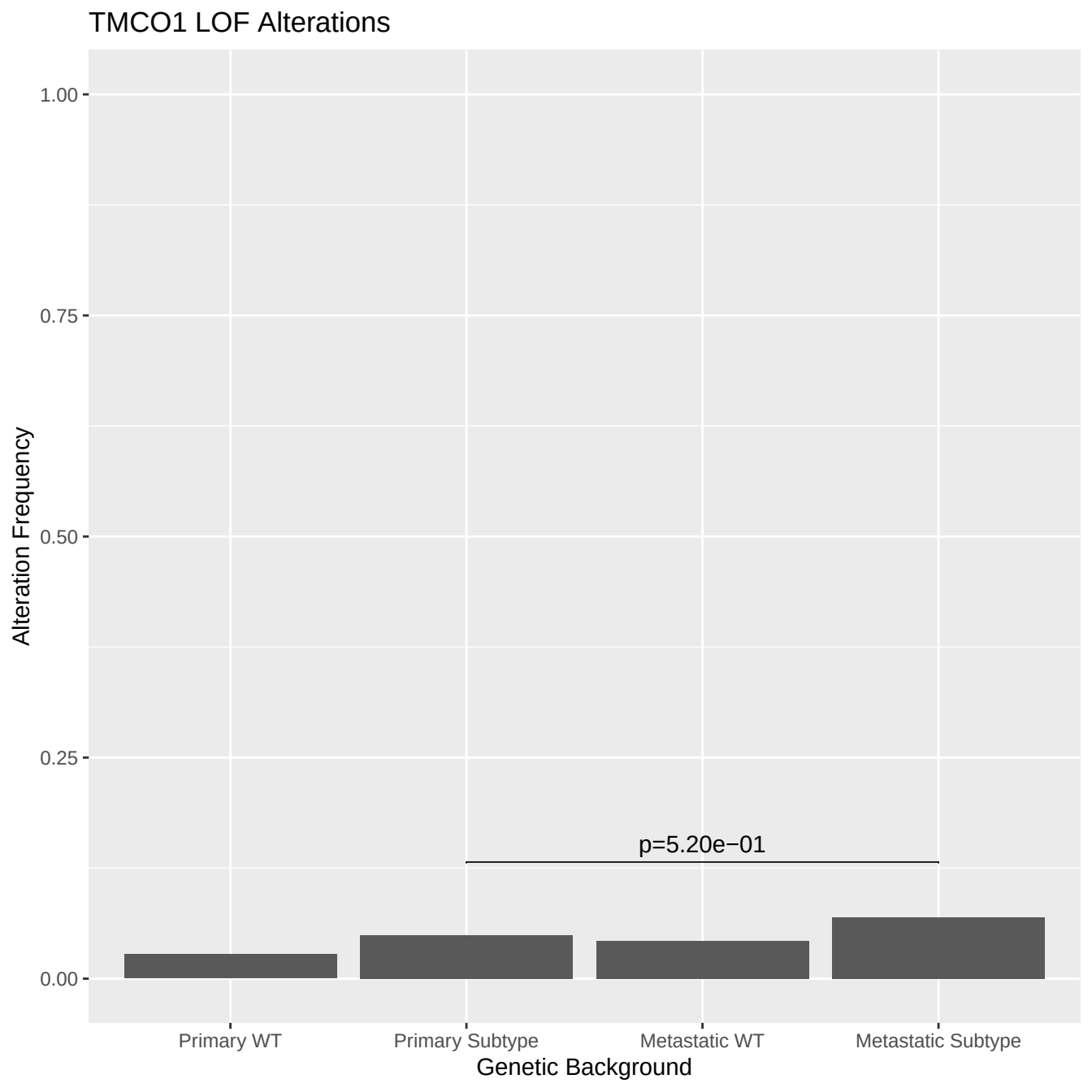

EFR3A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.63e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

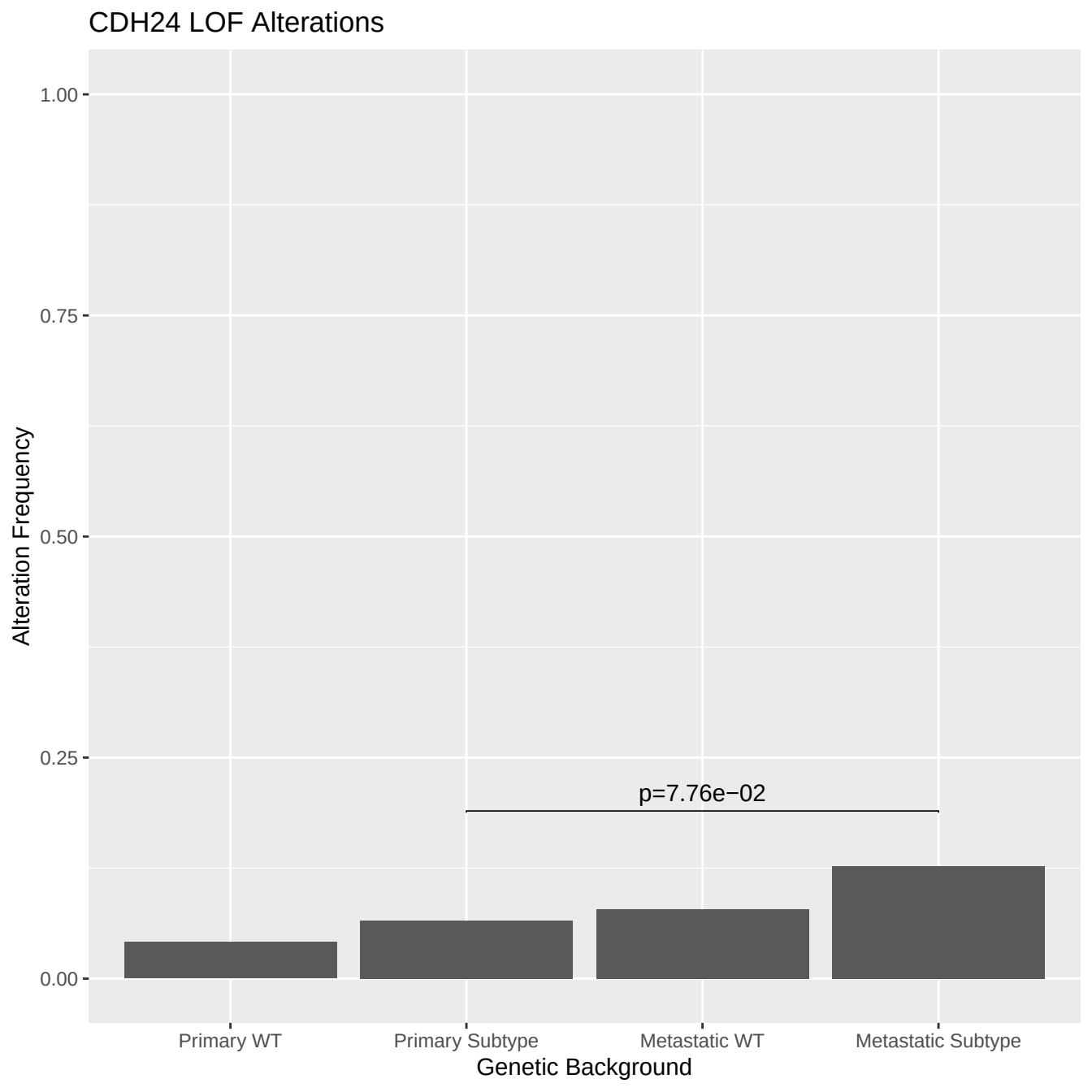

NUDCD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

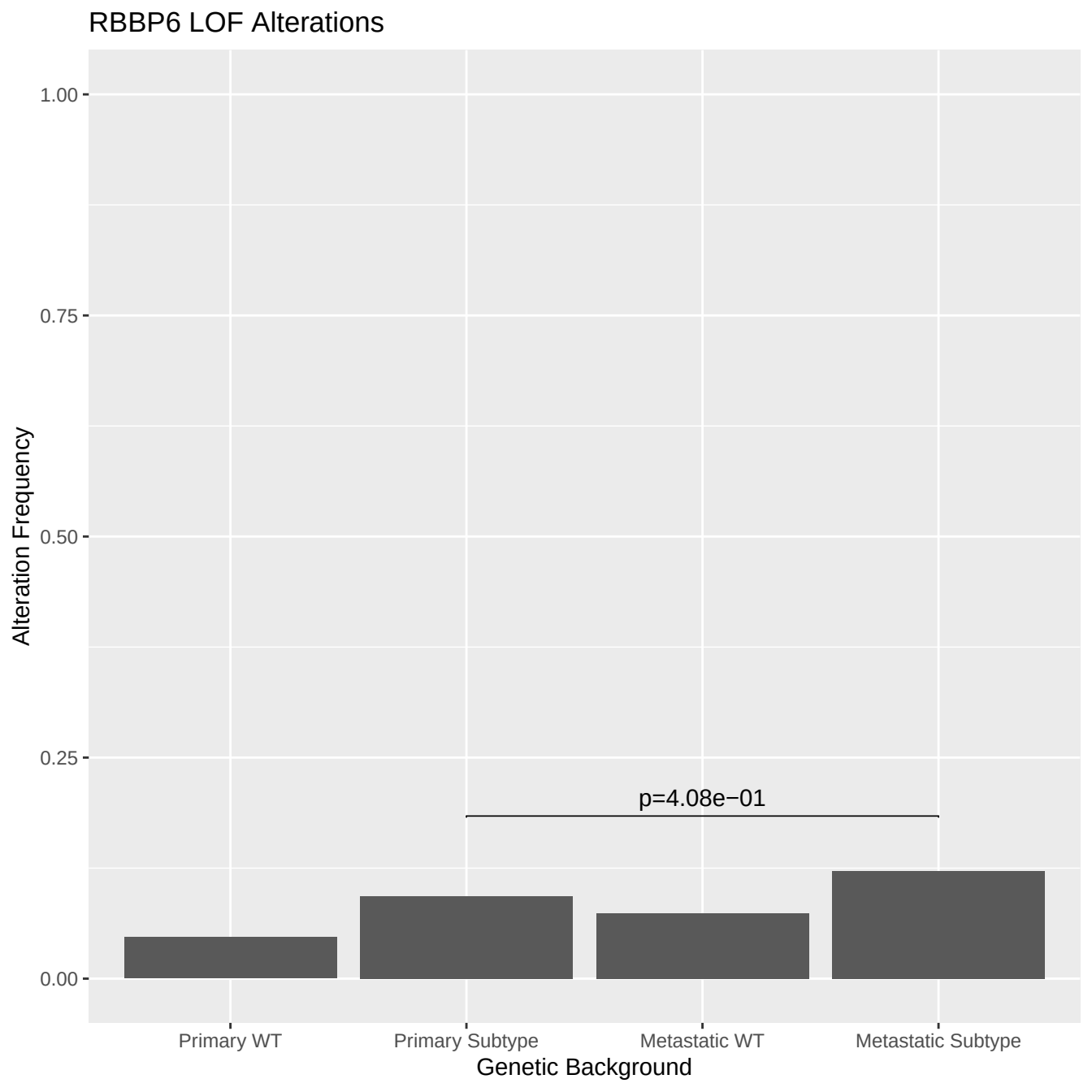

STRN3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

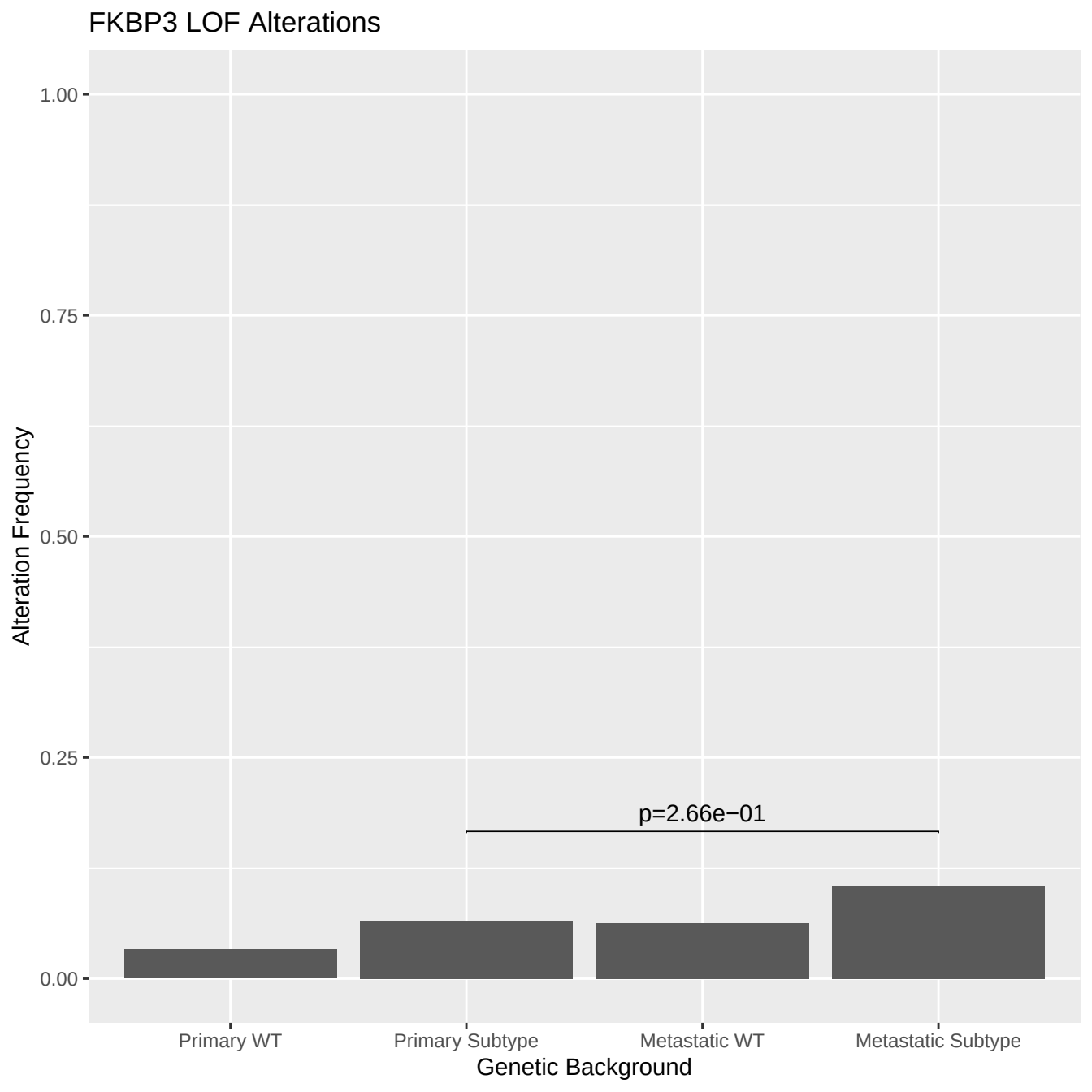

SKAP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

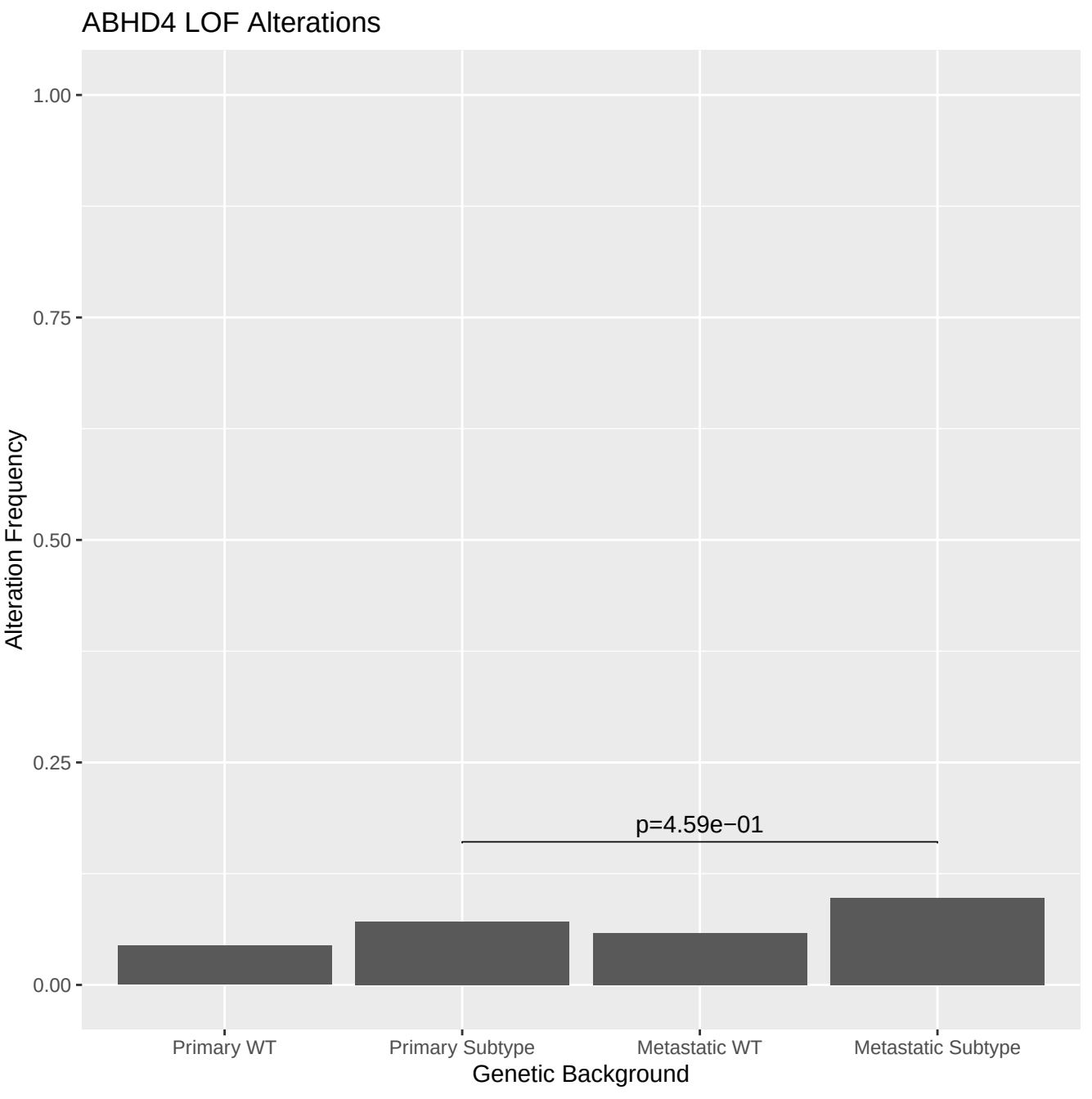

METAP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.31e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

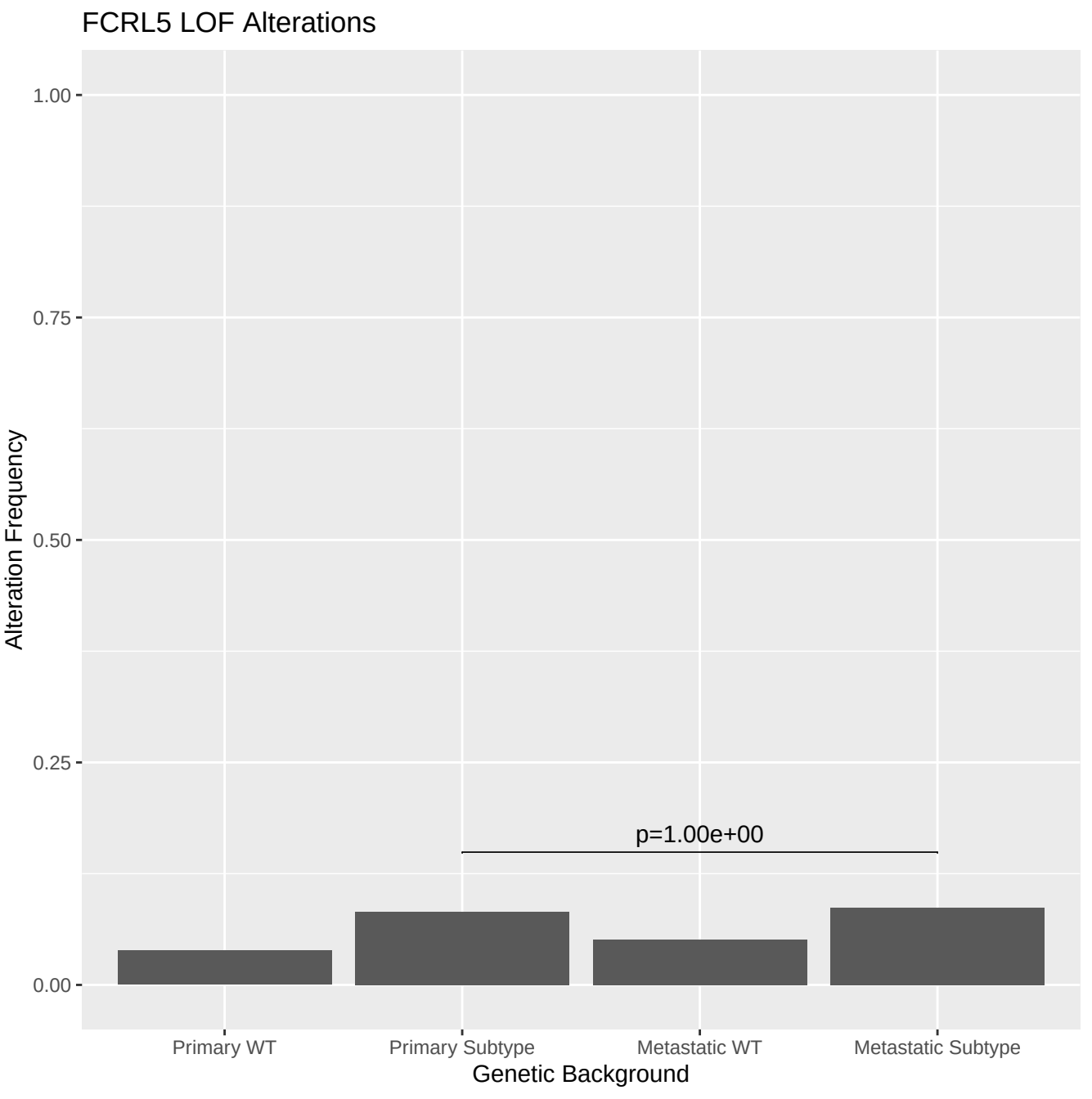

TMCO1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.20e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

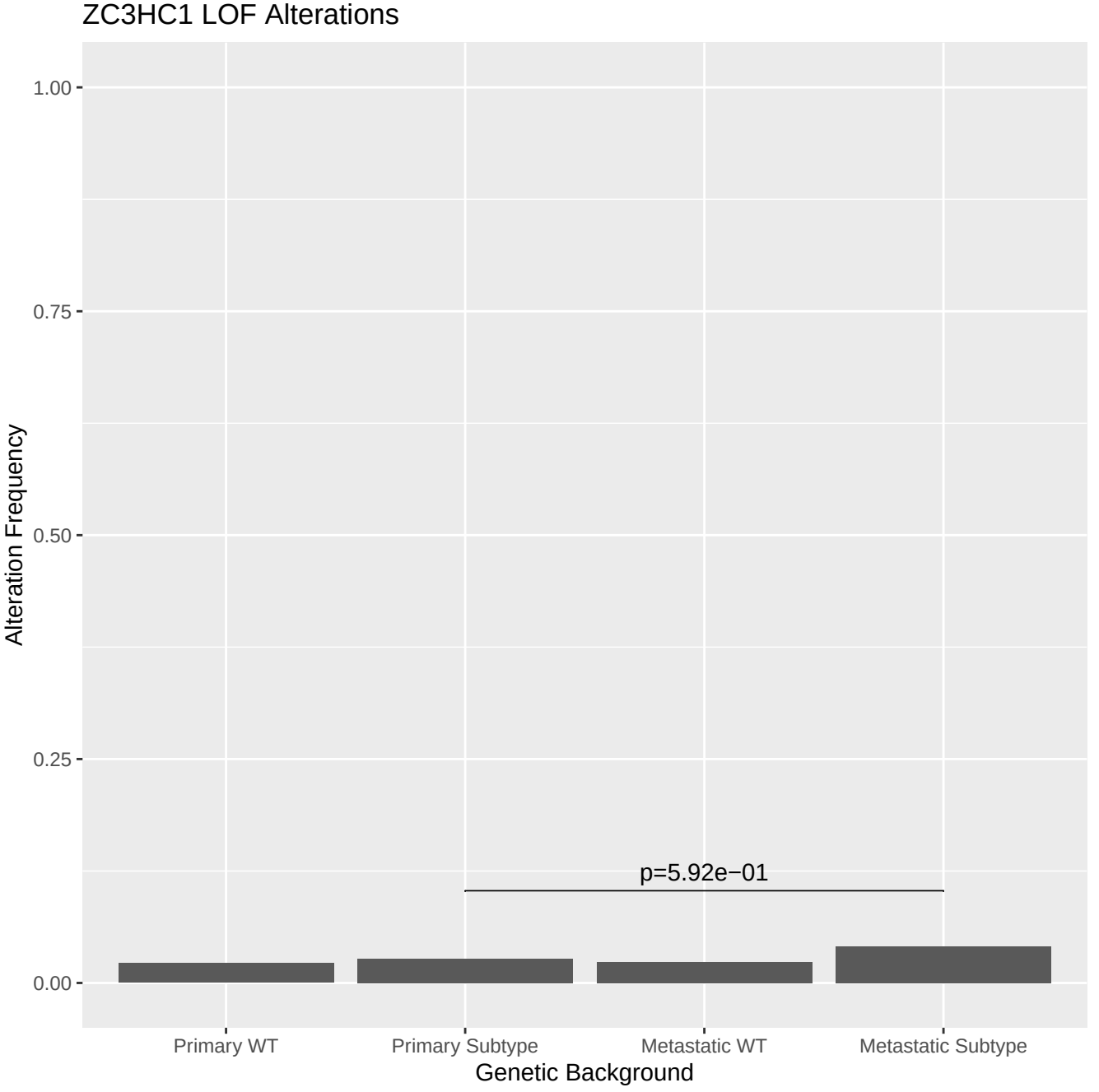

CDH24 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.76e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

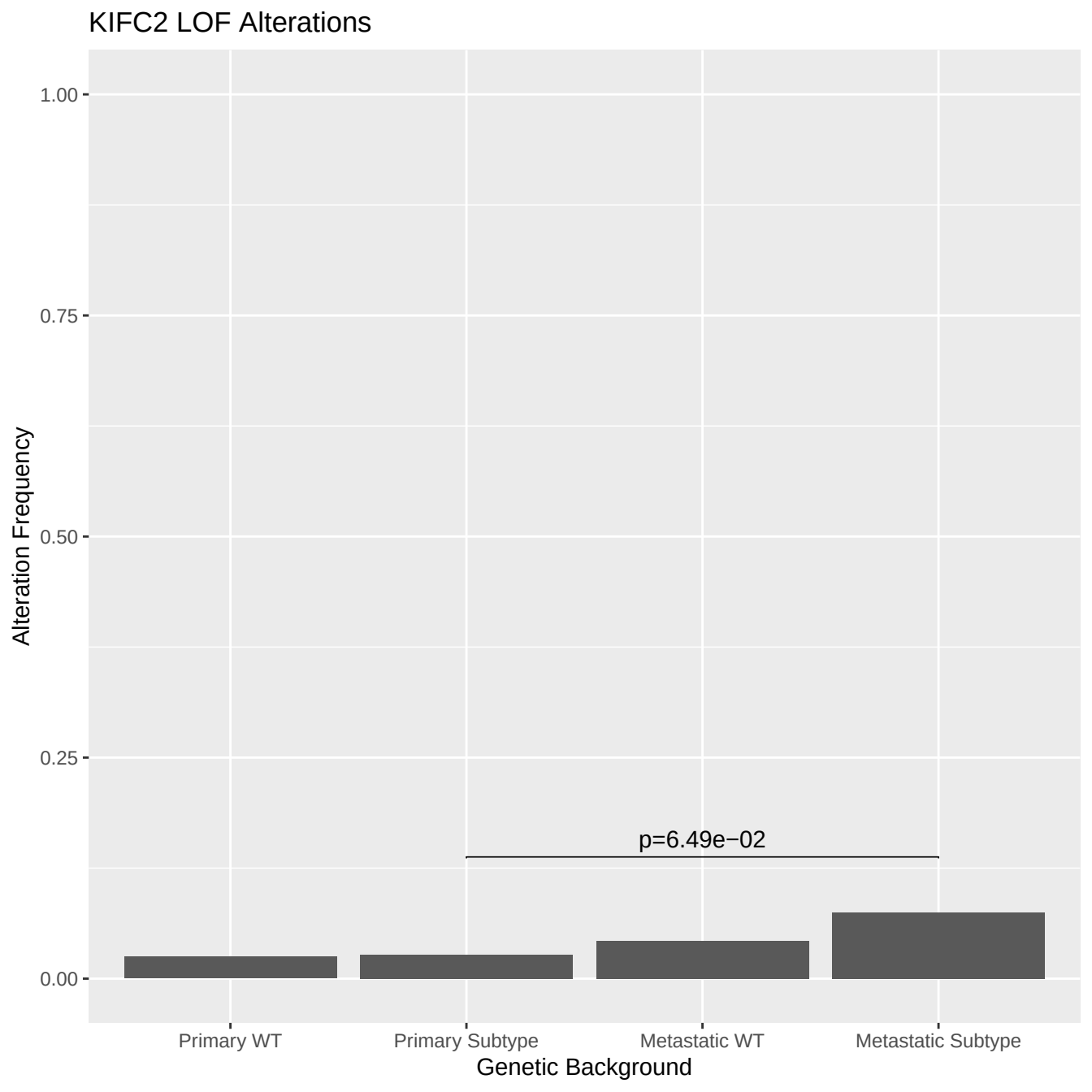

RBBP6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.08e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

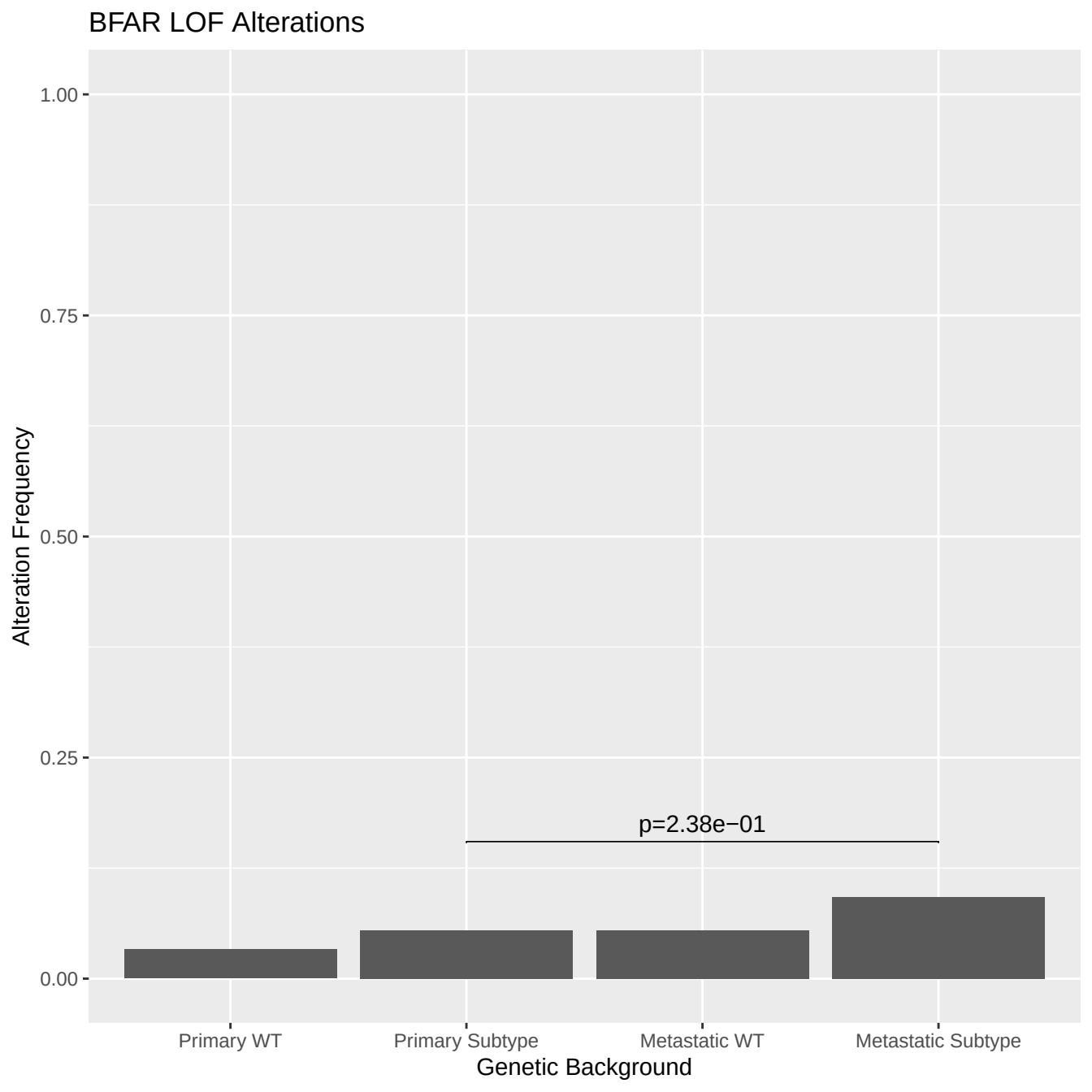

FKBP3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

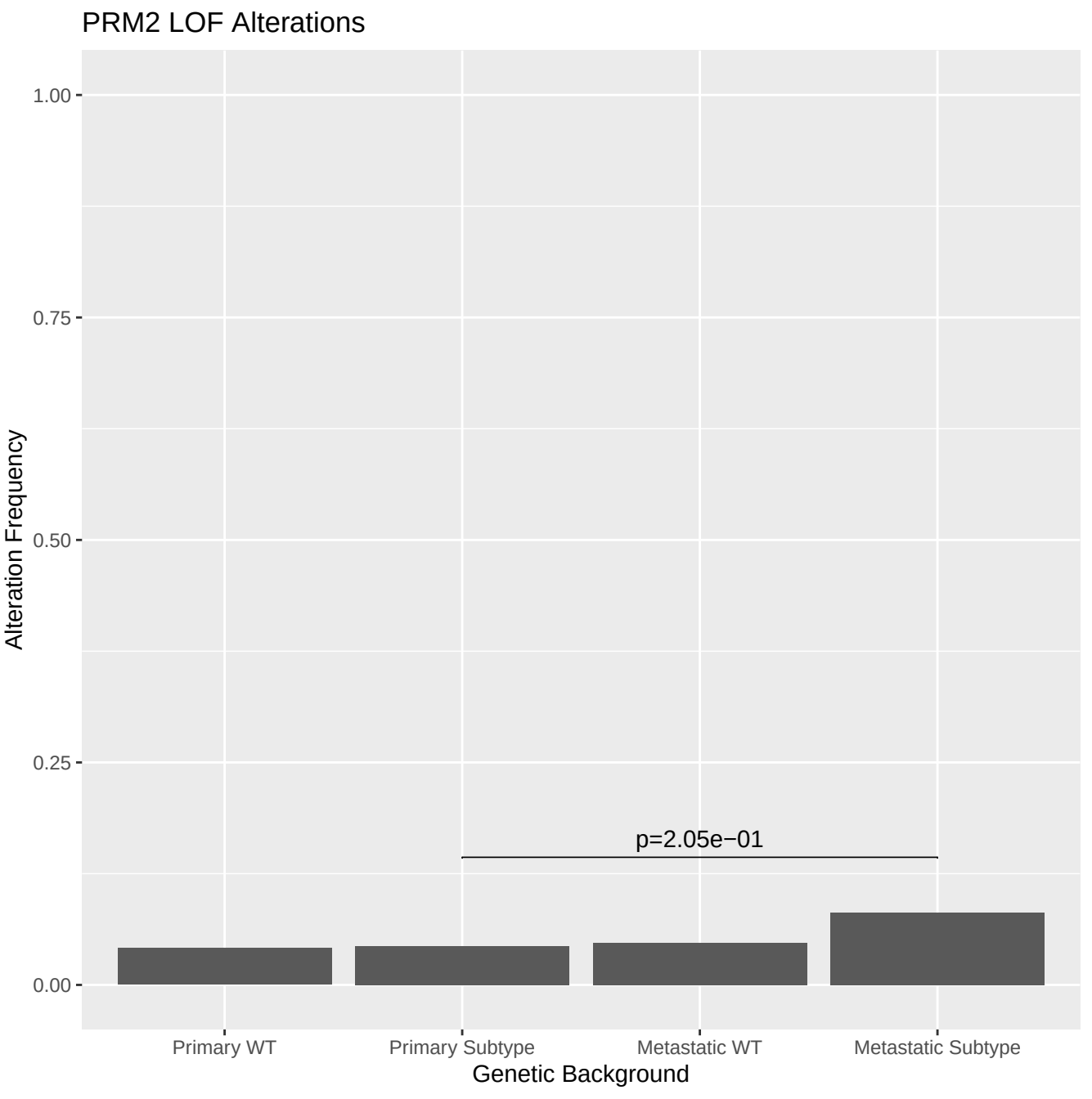

ABHD4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.59e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

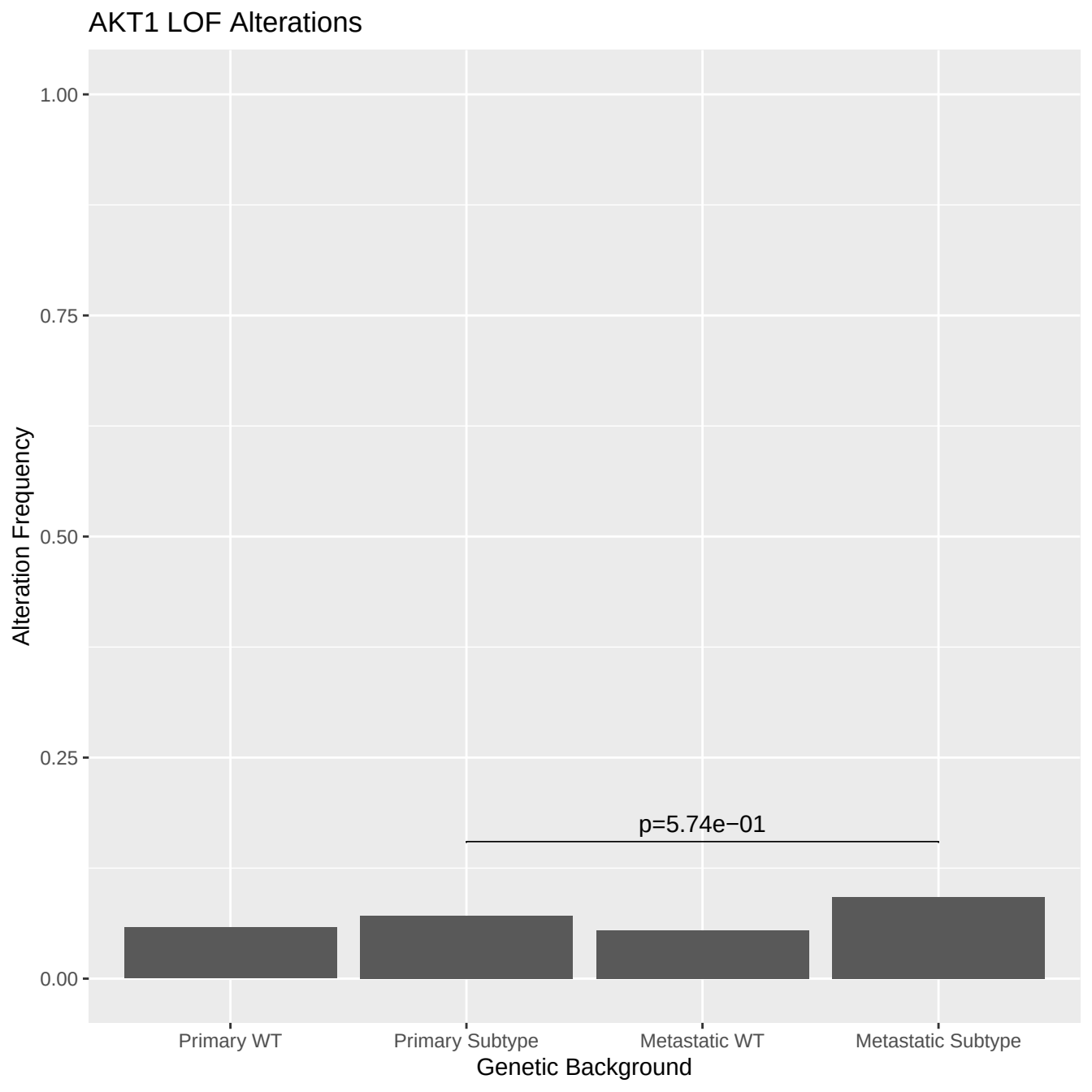

FCRL5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

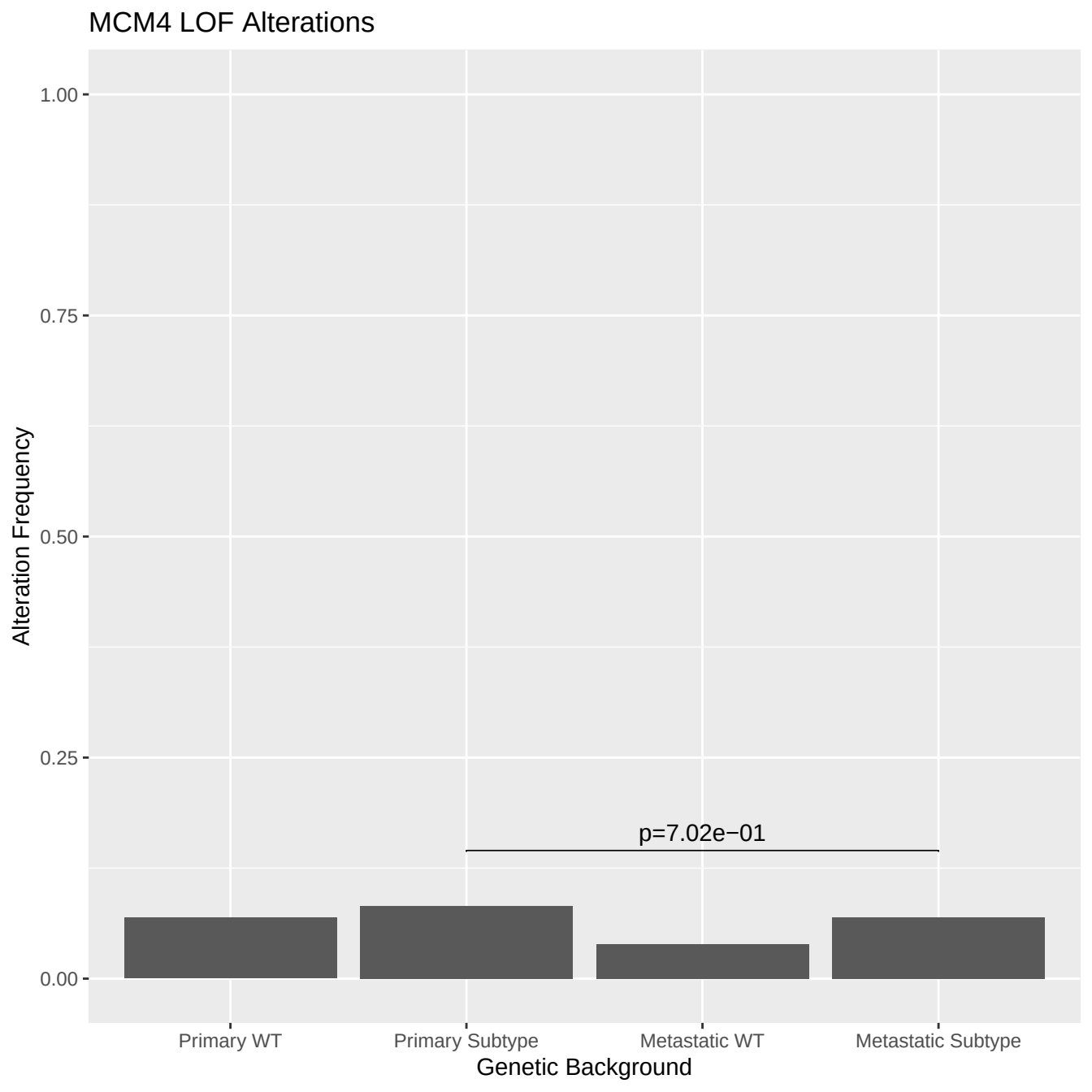

ZC3HC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.92e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

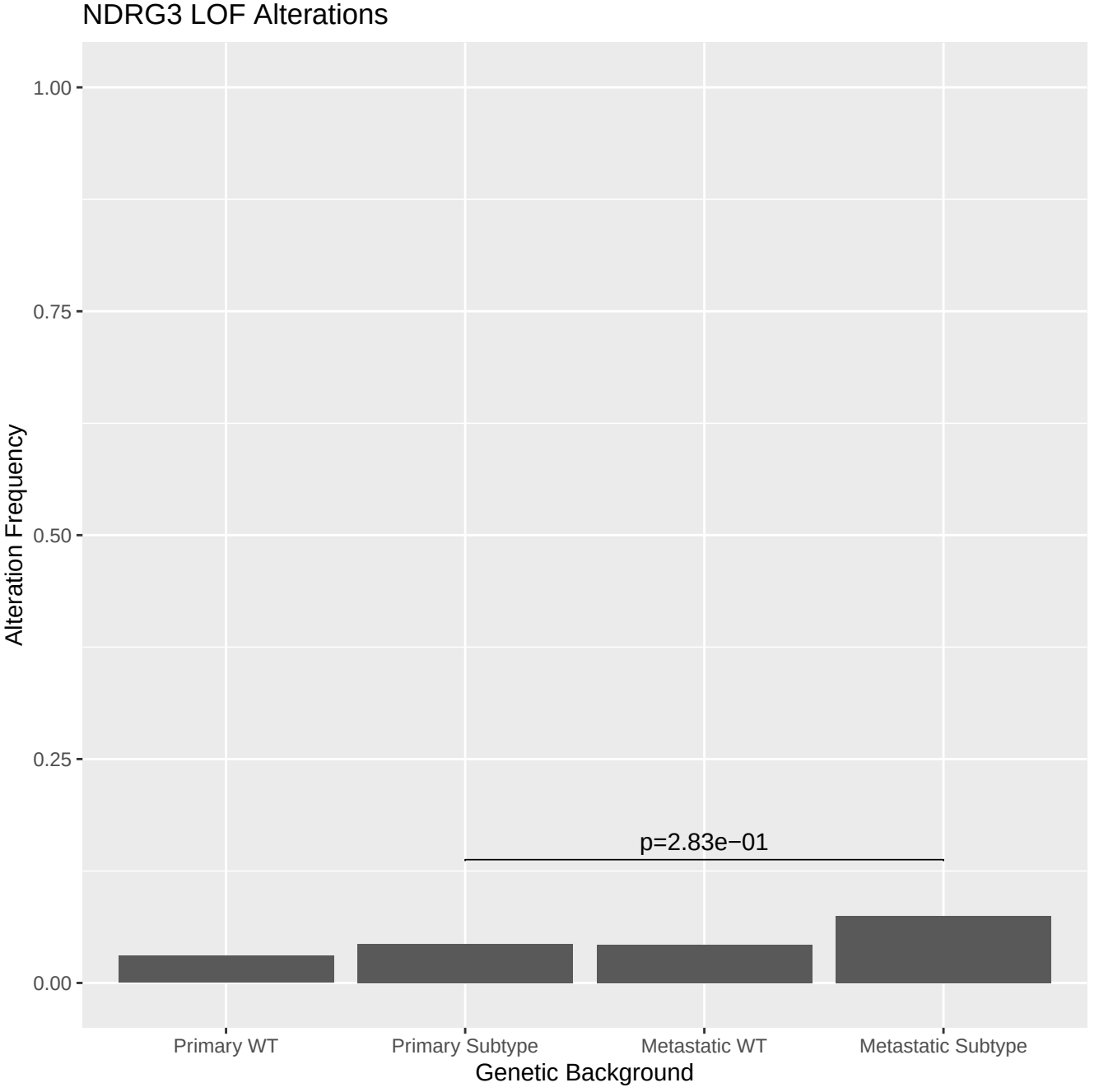

KIFC2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

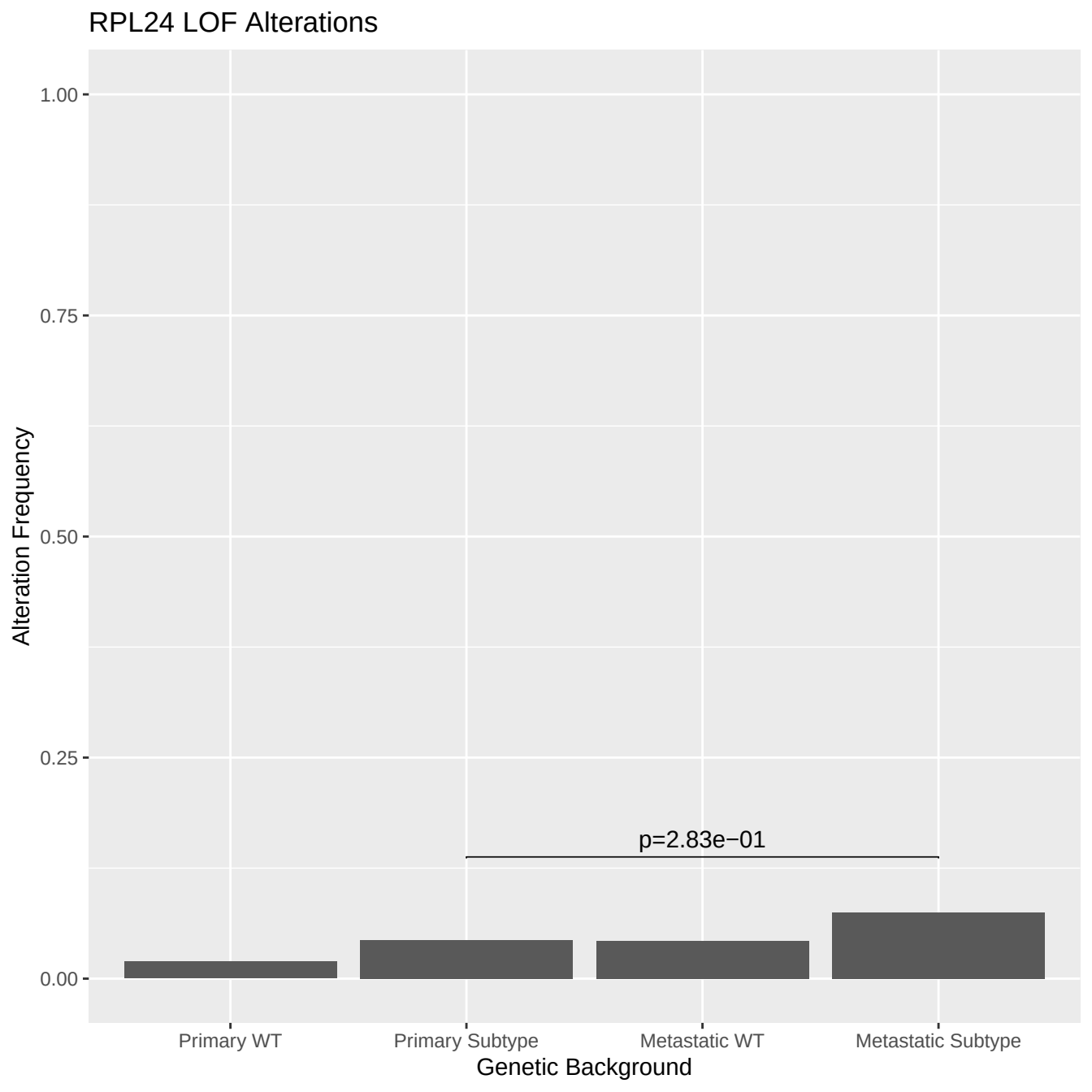

BFAR LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.38e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

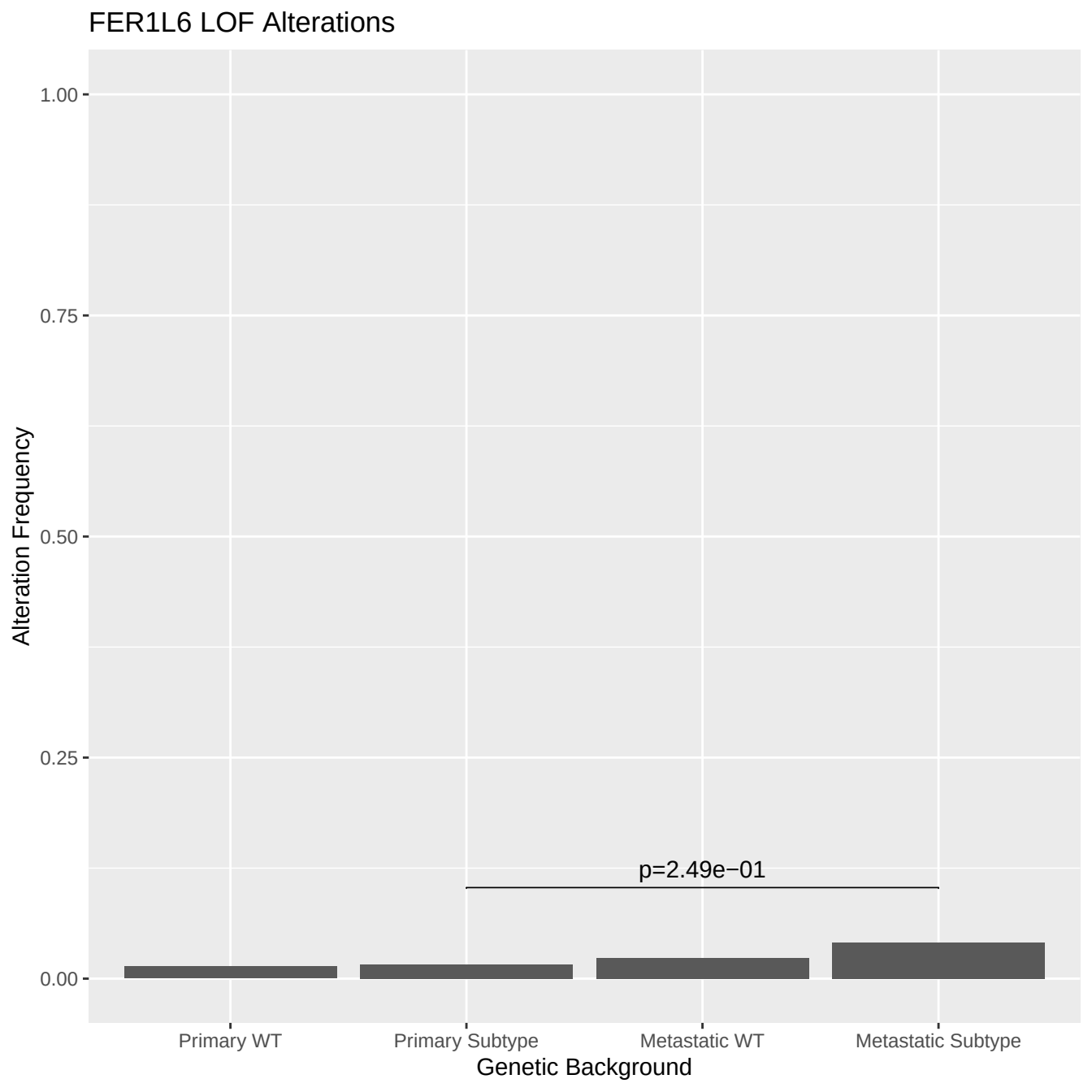

PRM2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.05e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

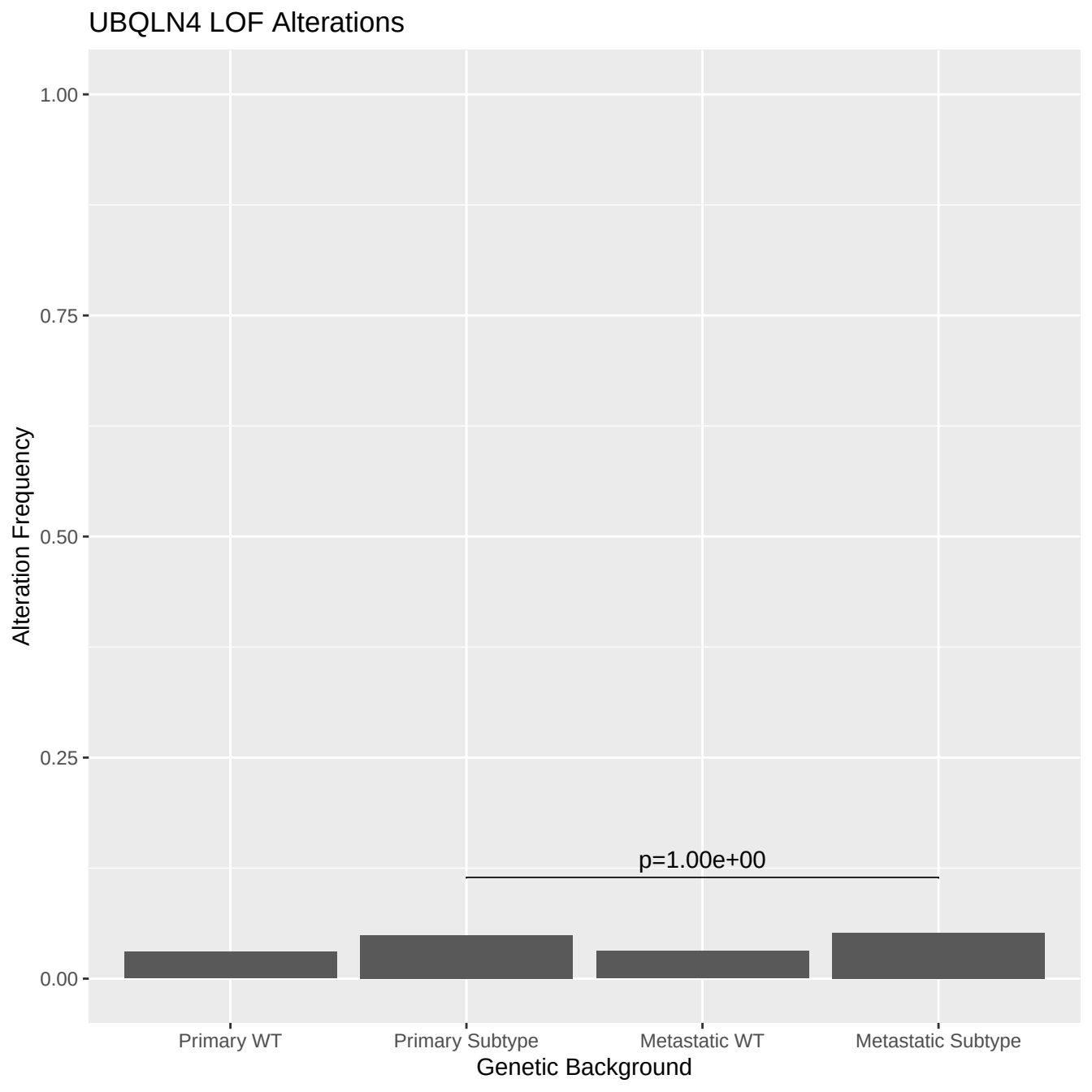

AKT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

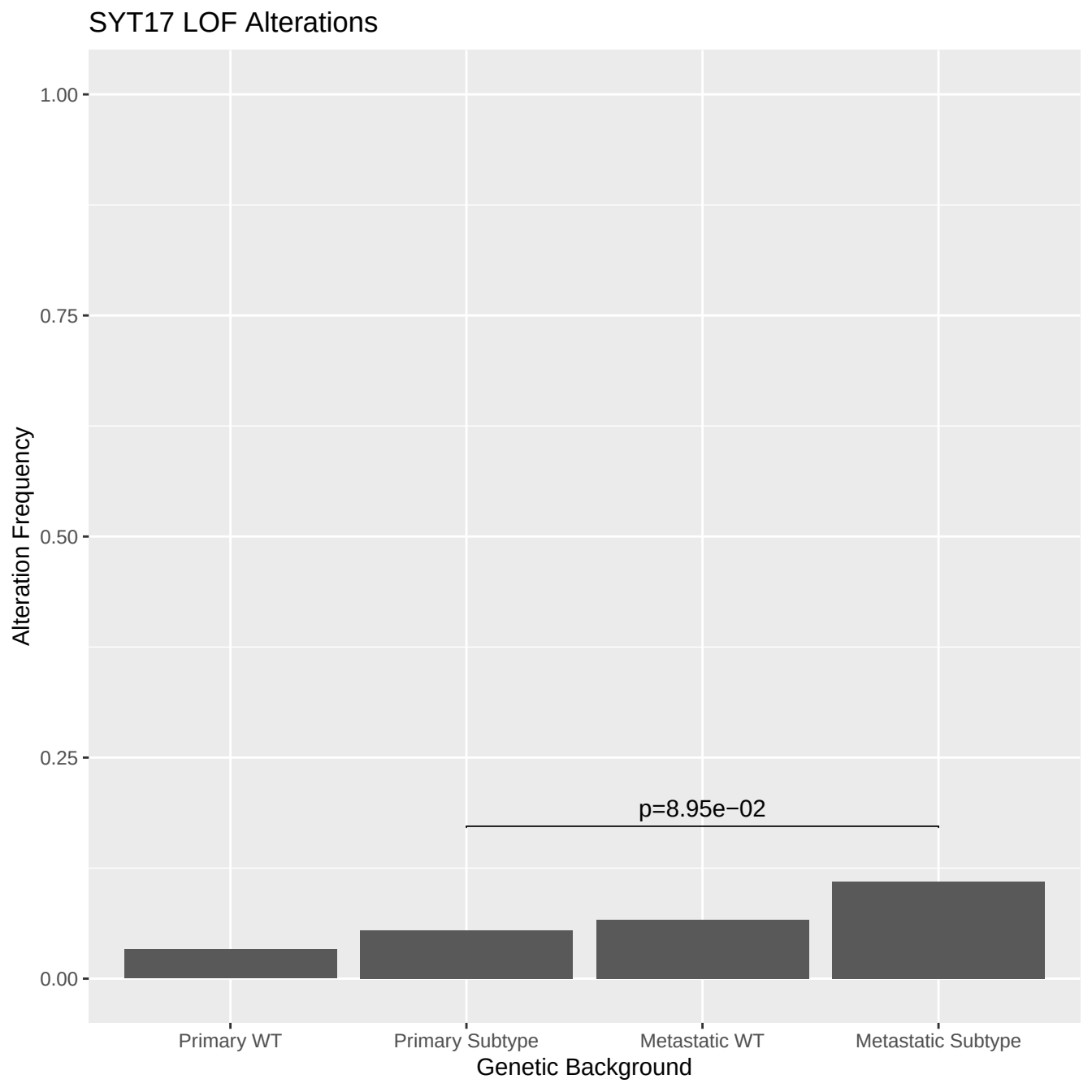

MCM4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.02e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

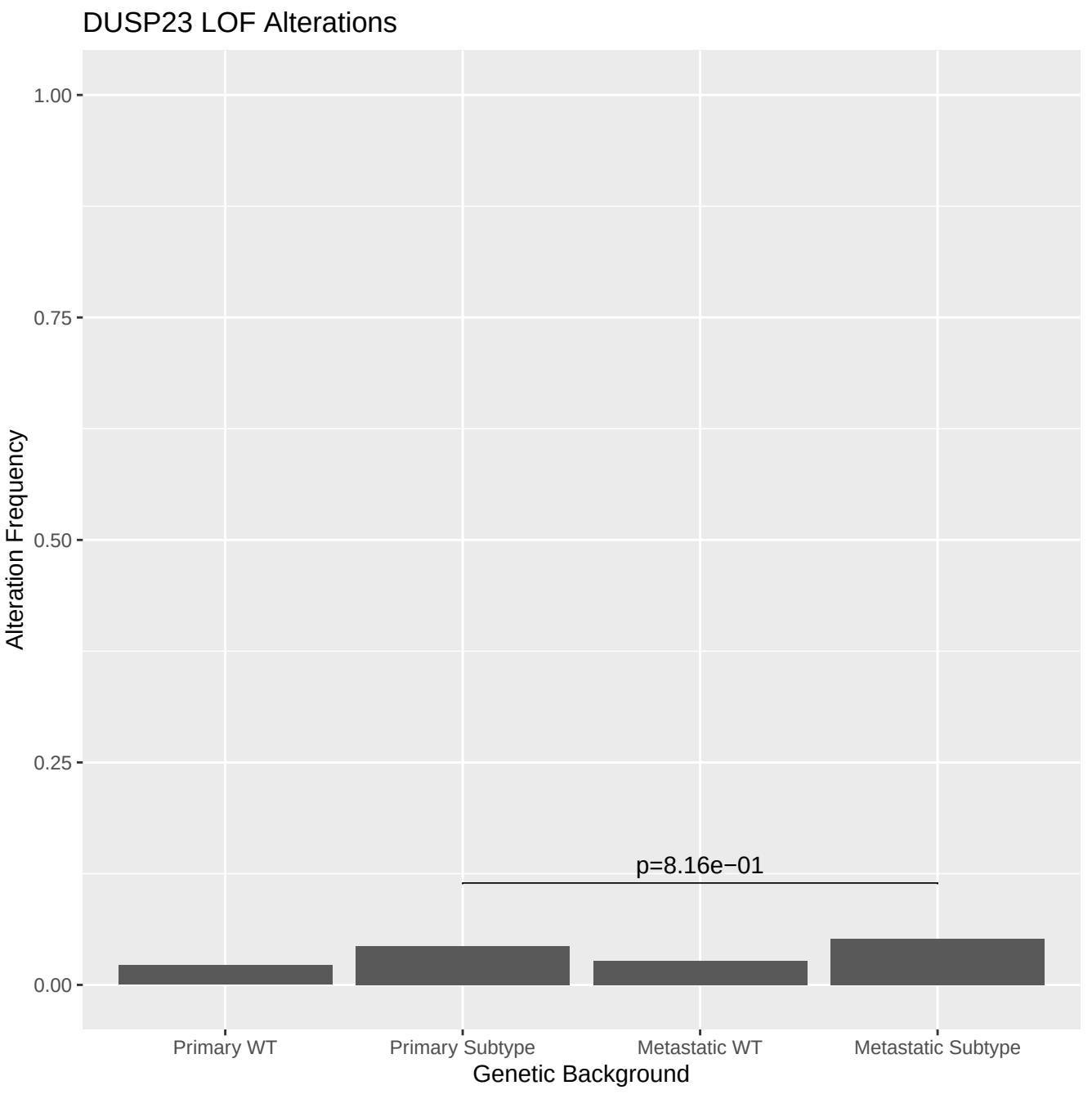

NDRG3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

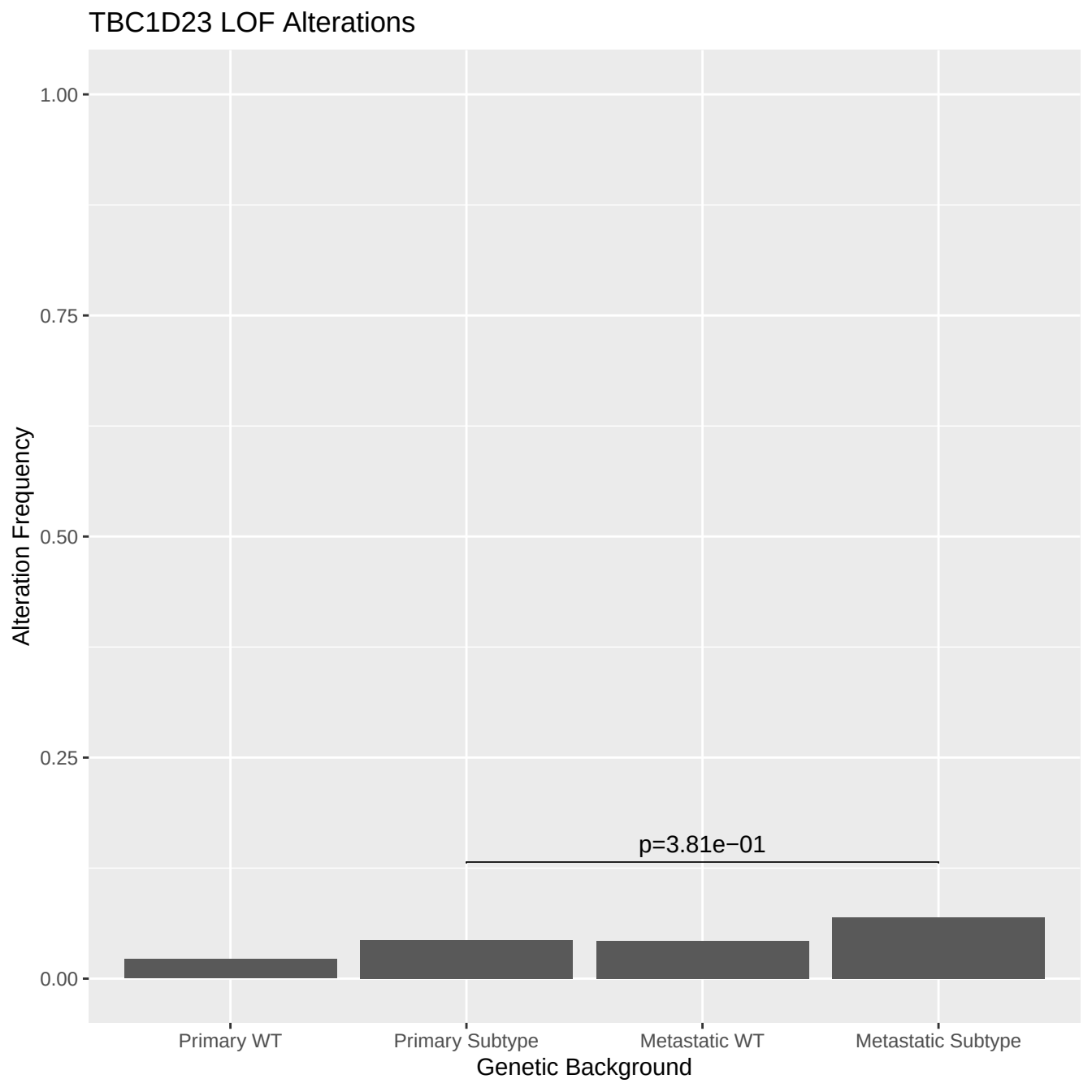

RPL24 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

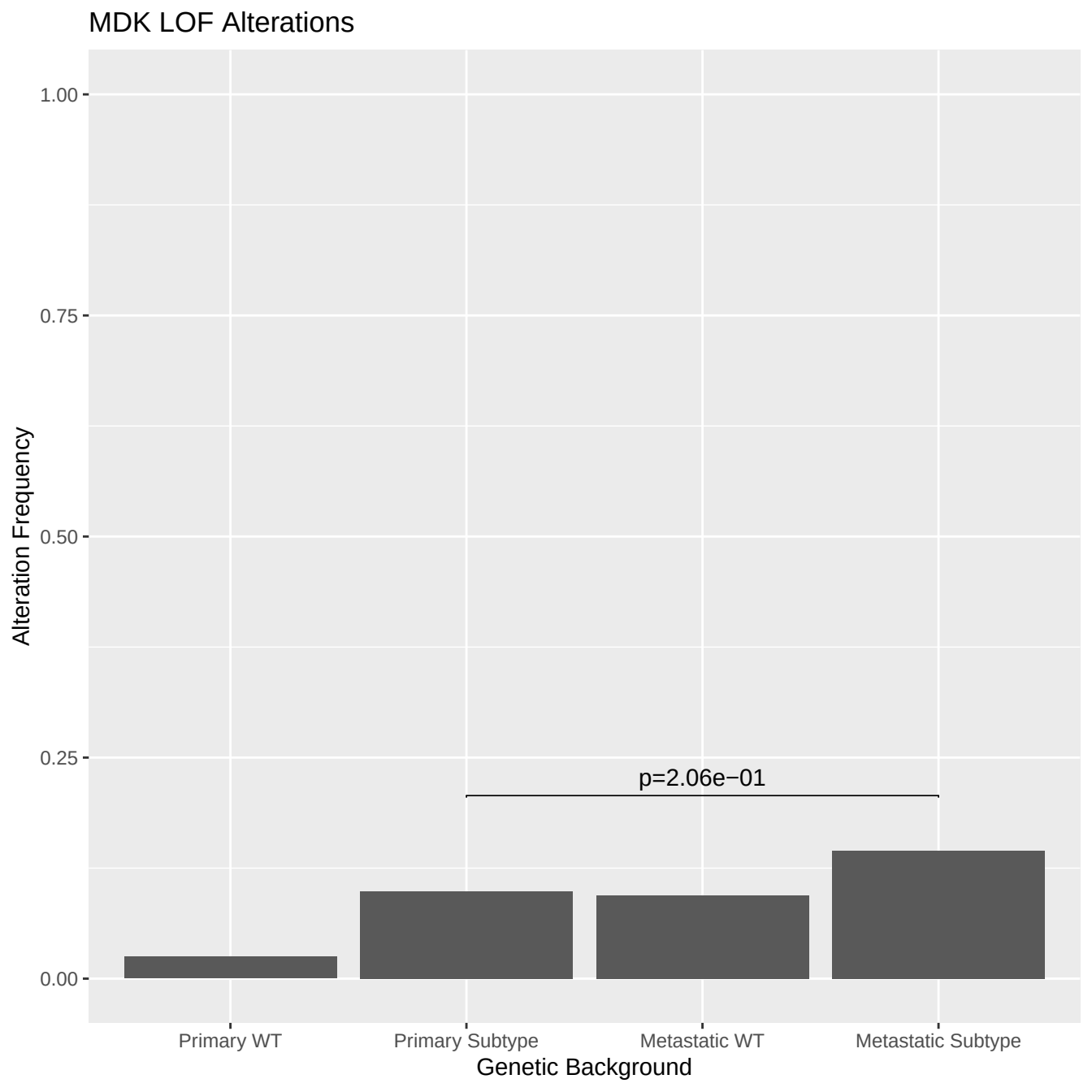

FER1L6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

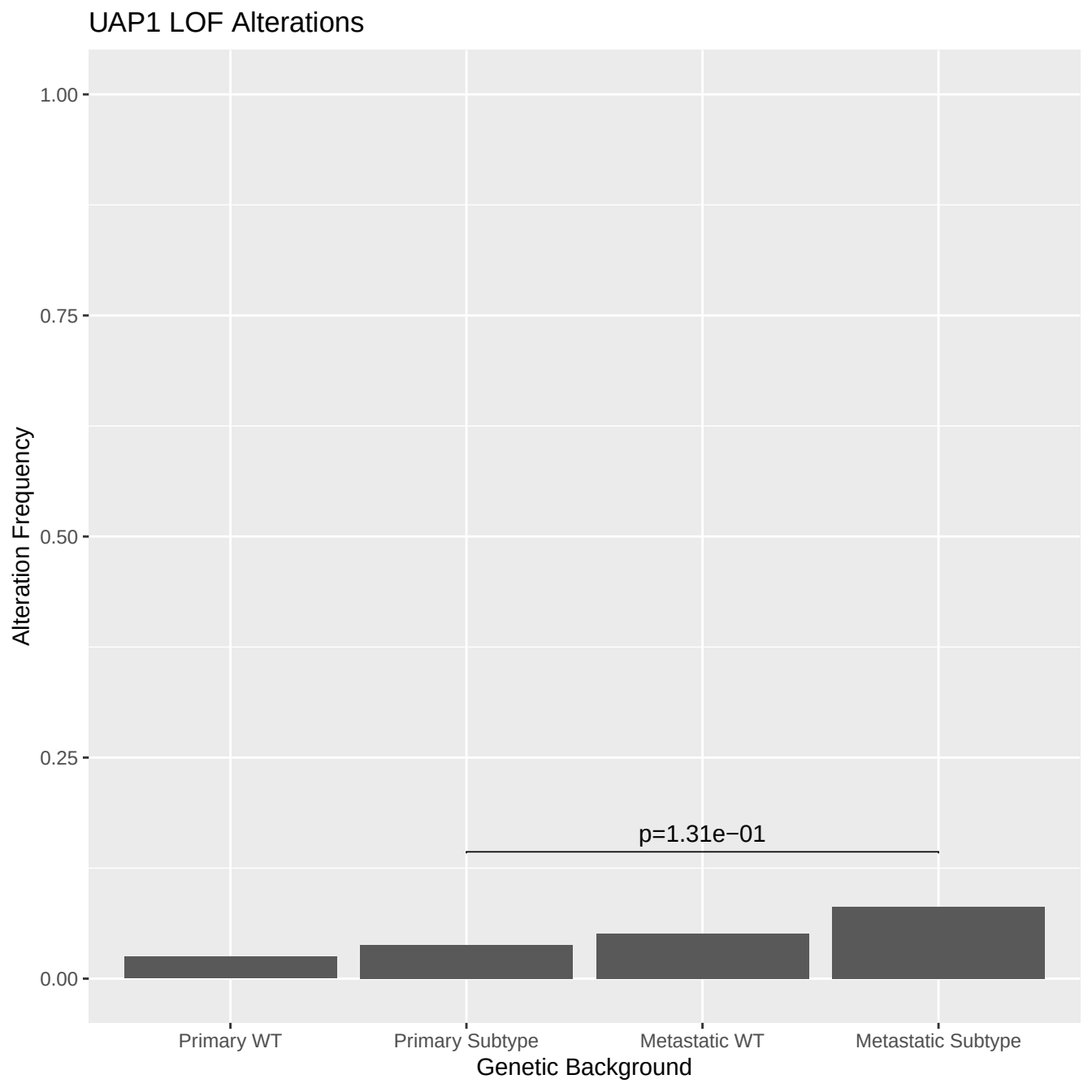

UBQLN4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

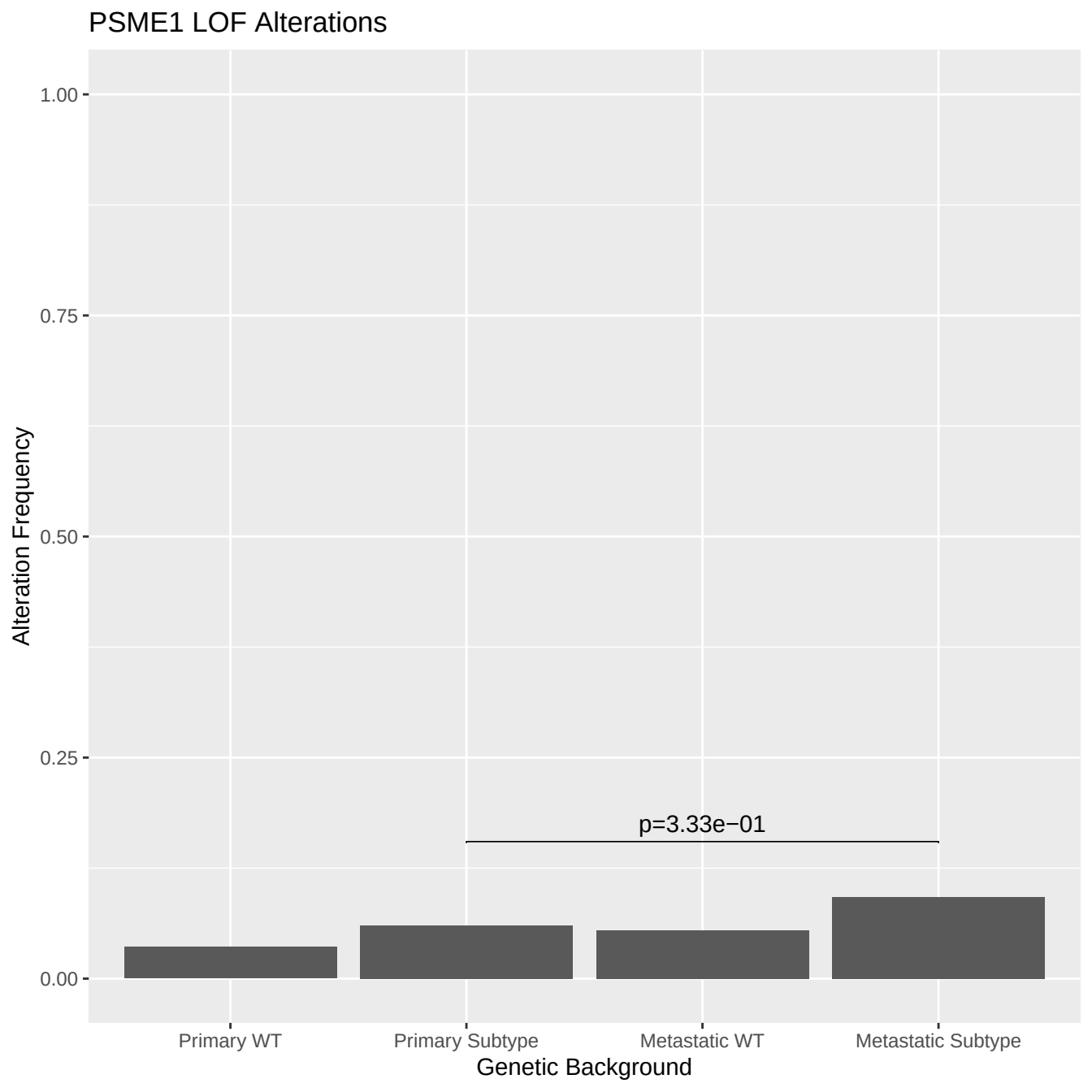

SYT17 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.95e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

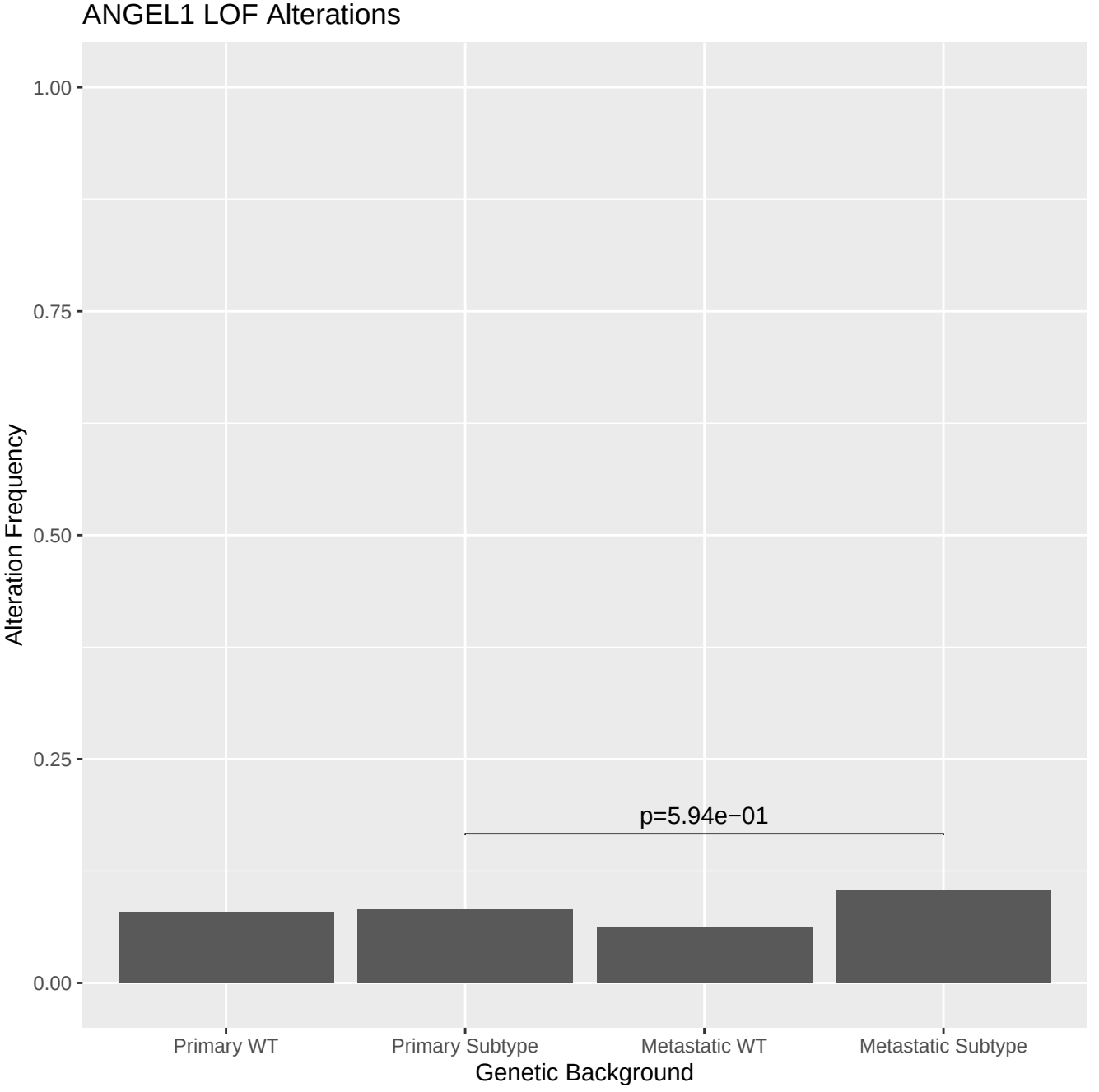

DUSP23 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.16e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

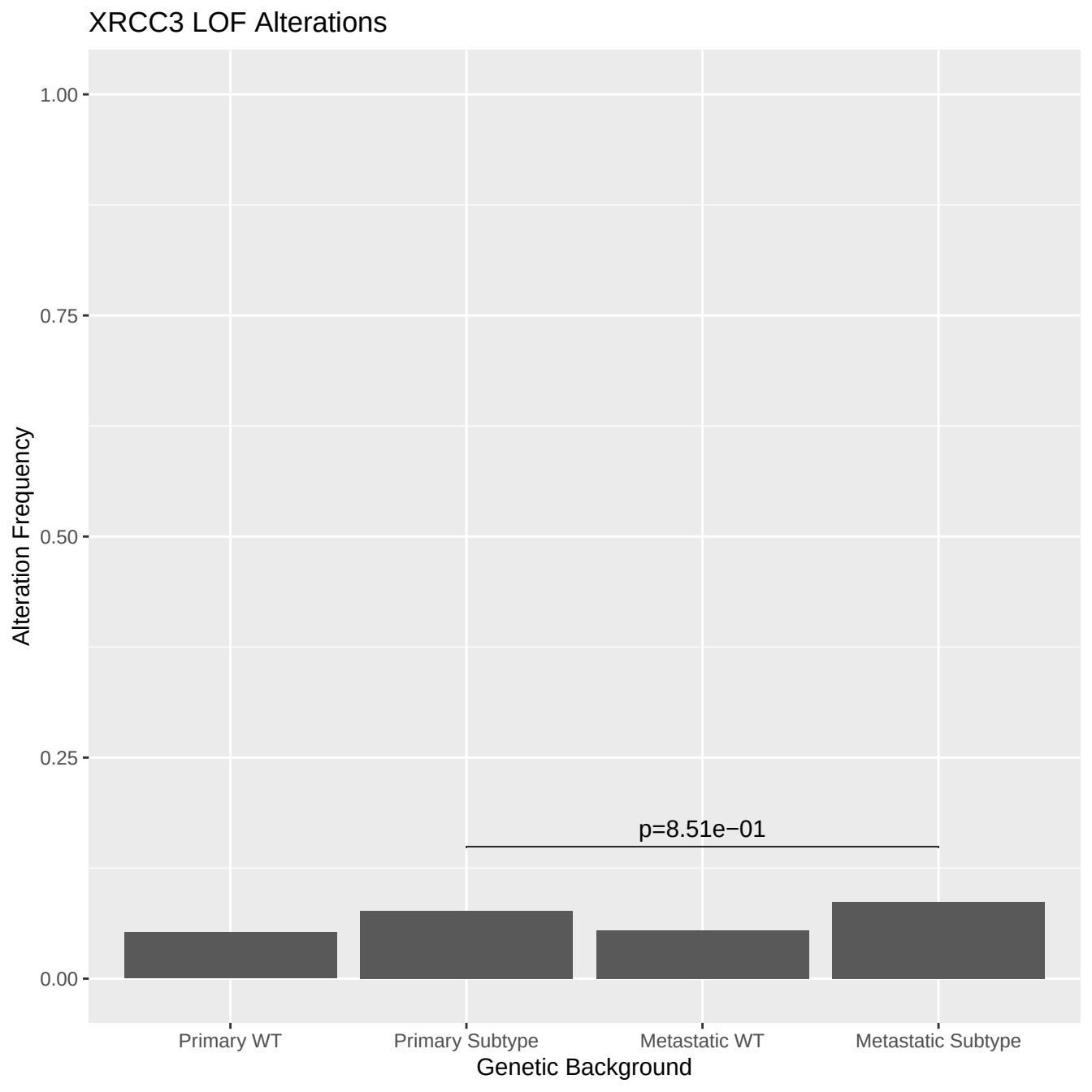

TBC1D23 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

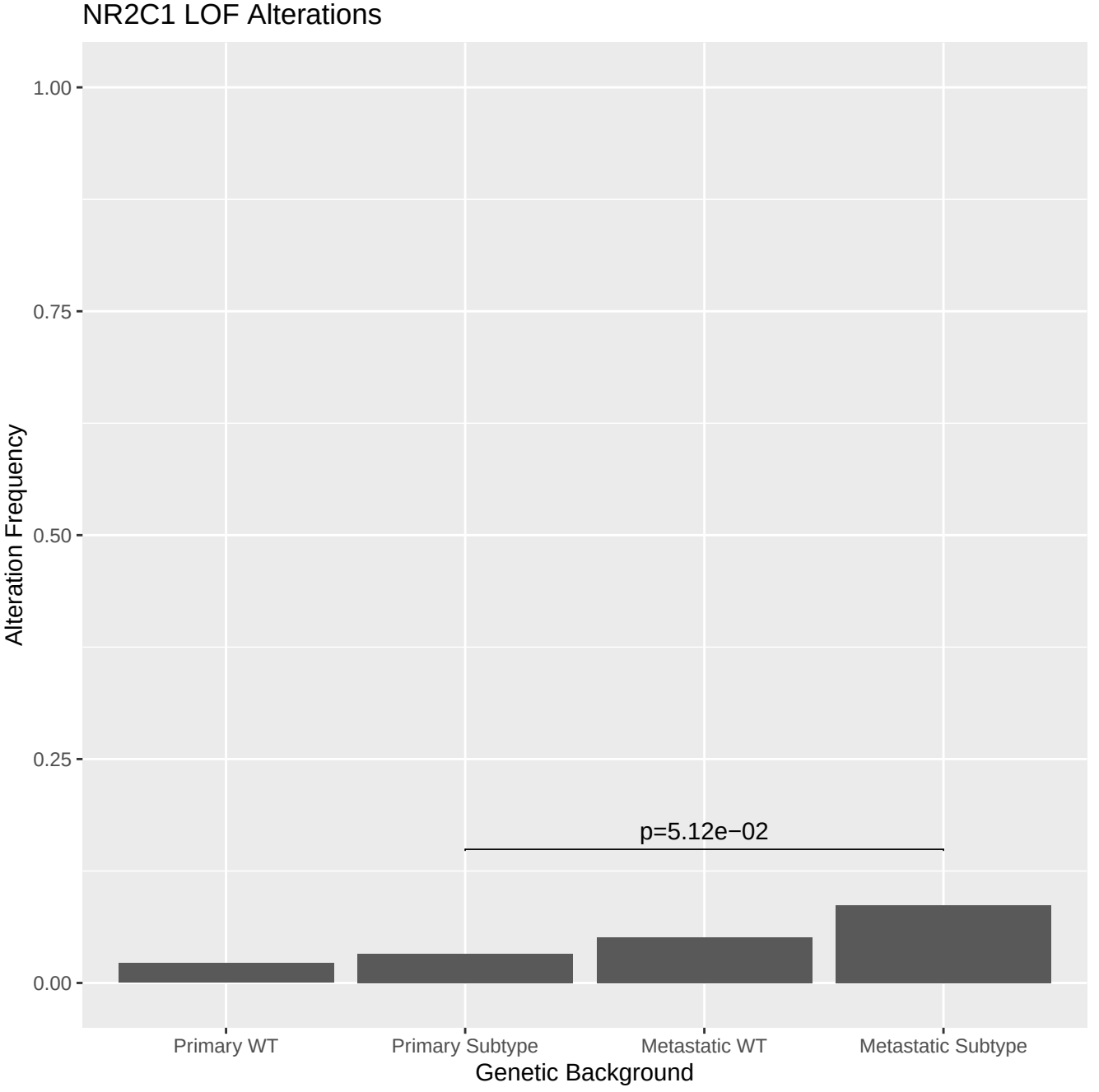

MDK LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

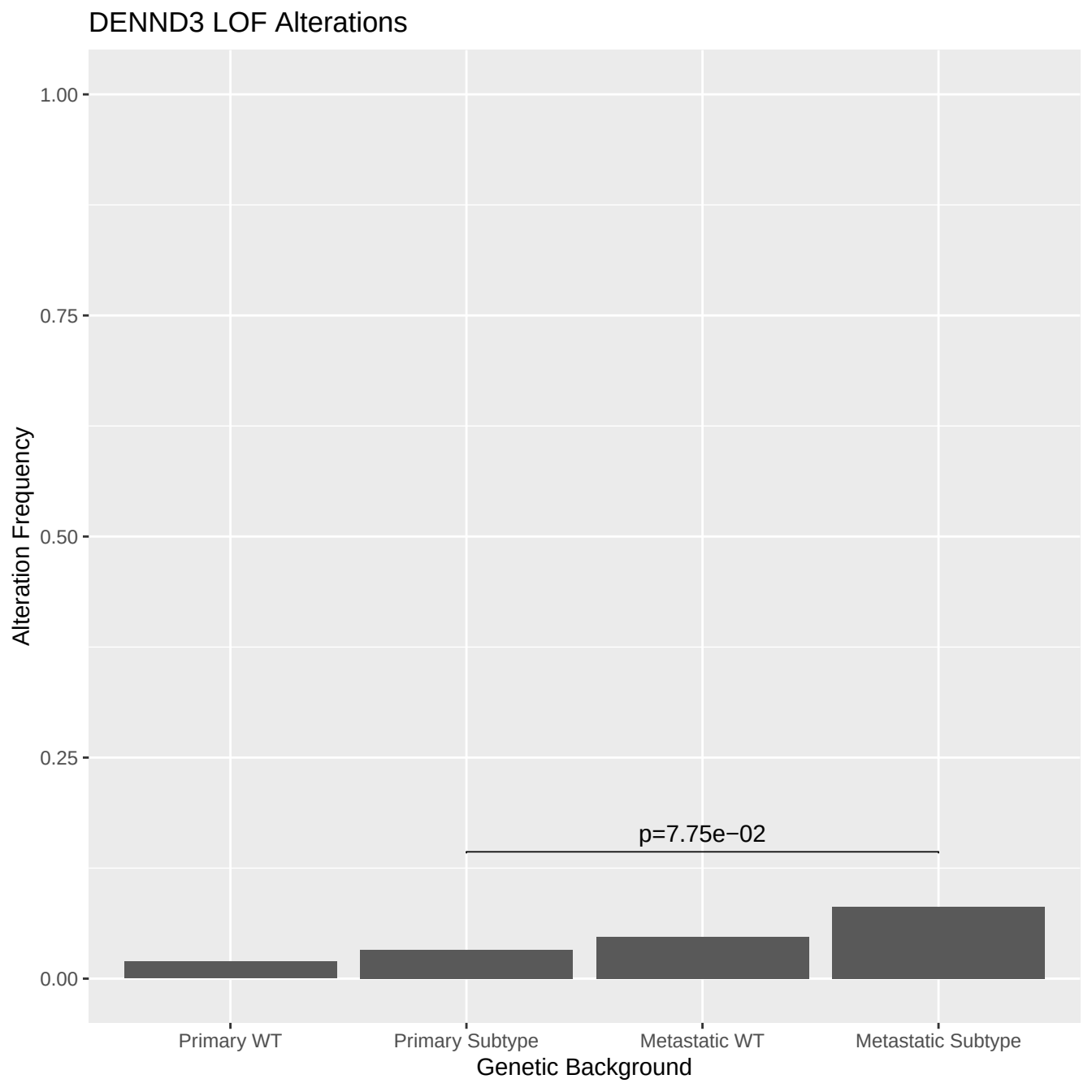

UAP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.31e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

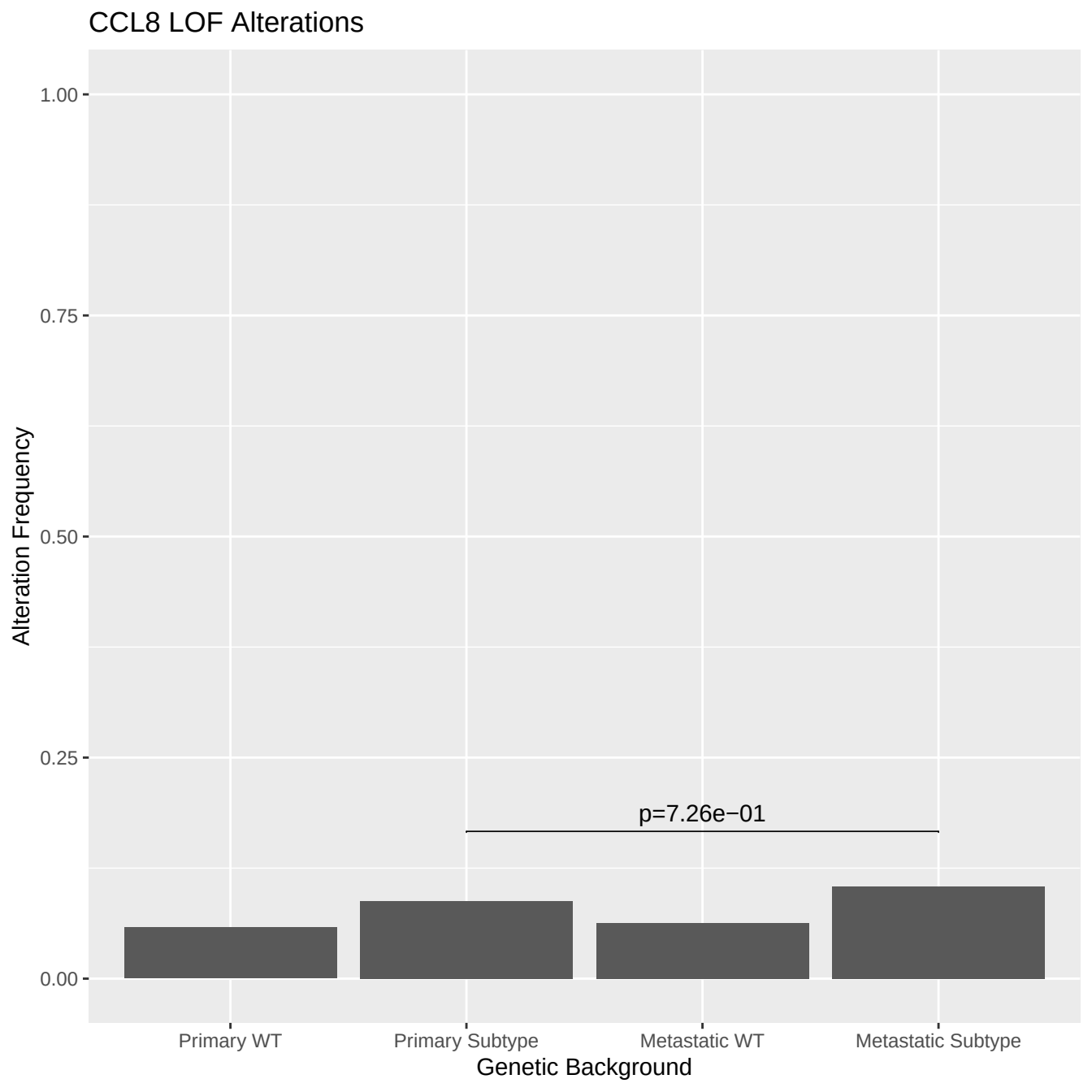

PSME1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

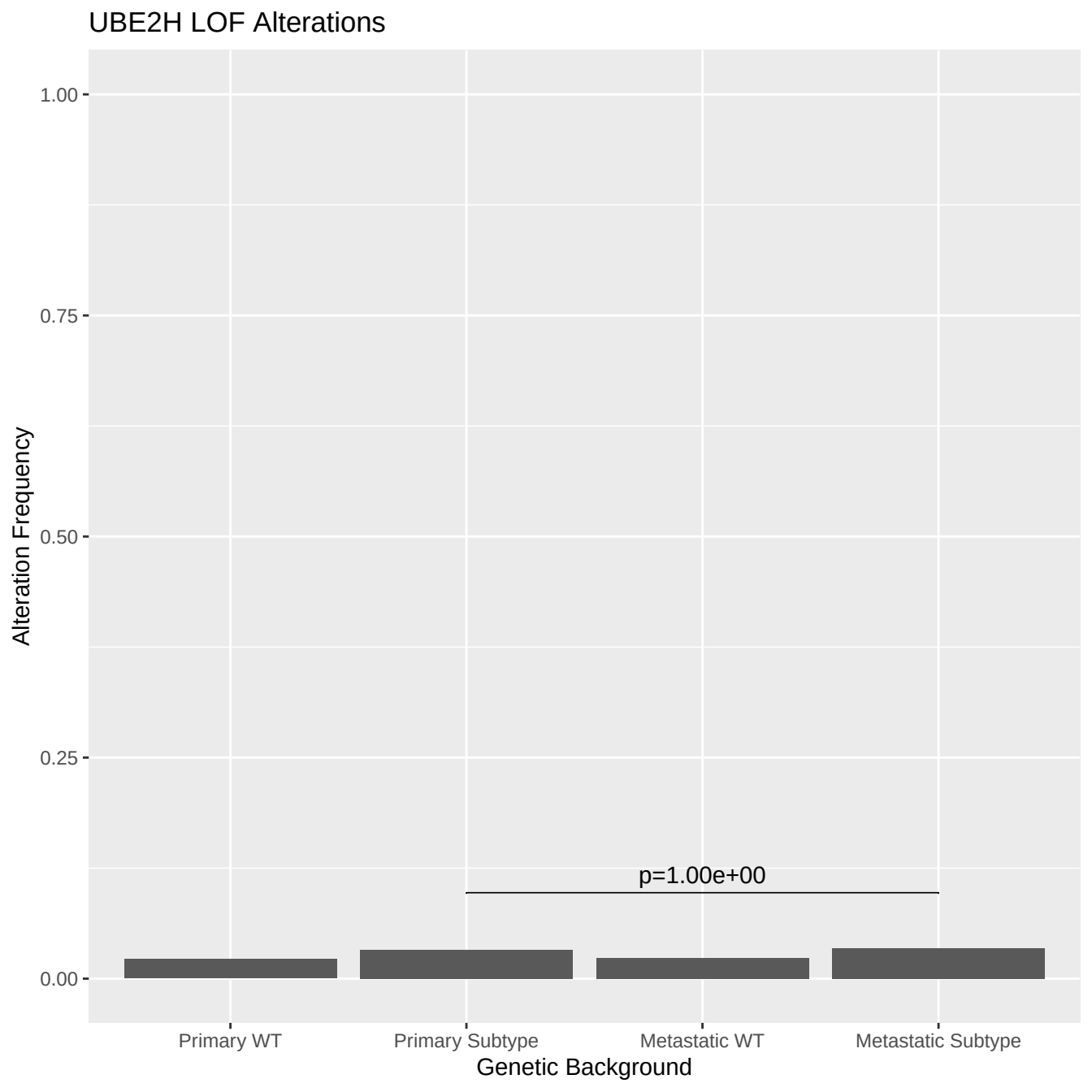

ANGEL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.94e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

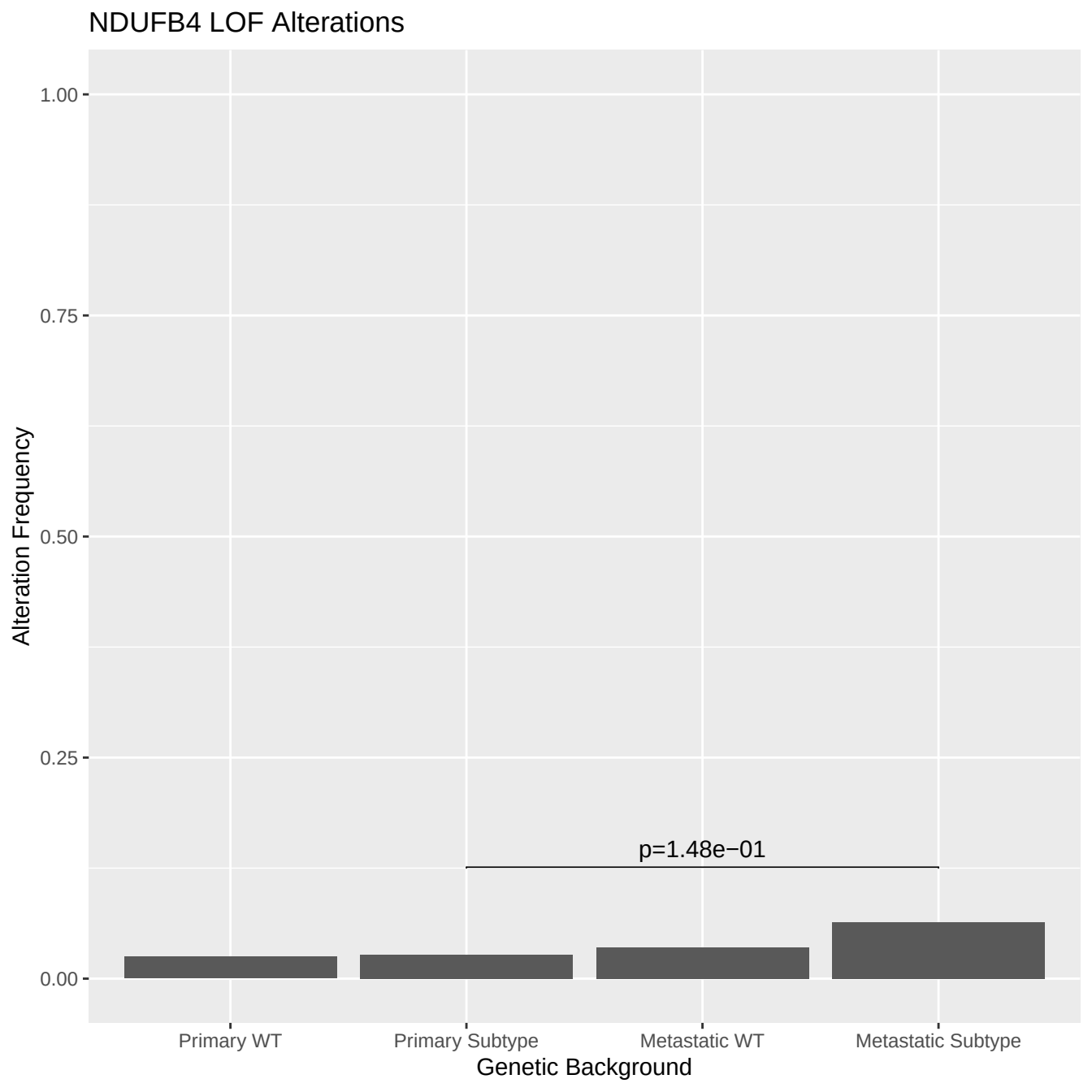

XRCC3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

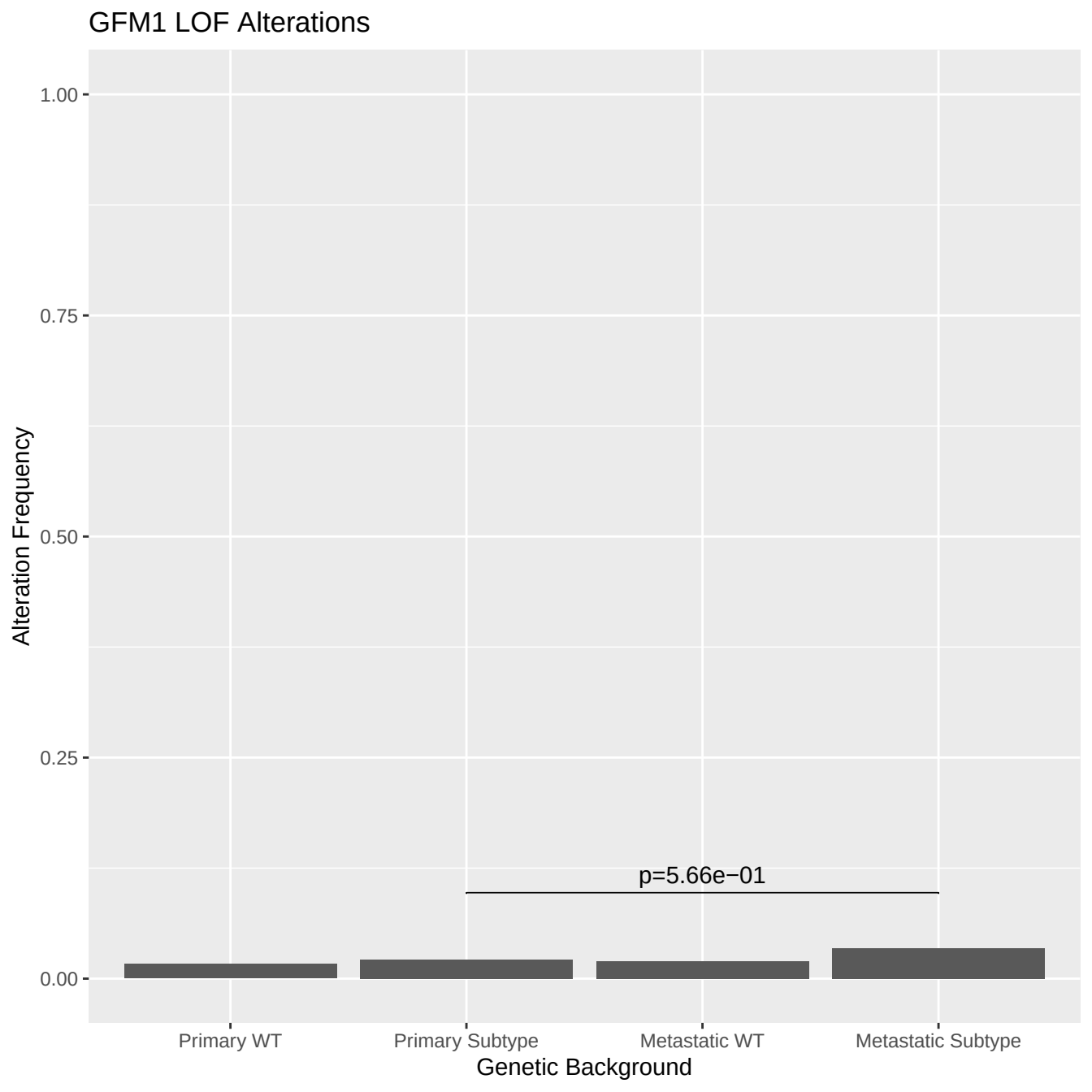

NR2C1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.12e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

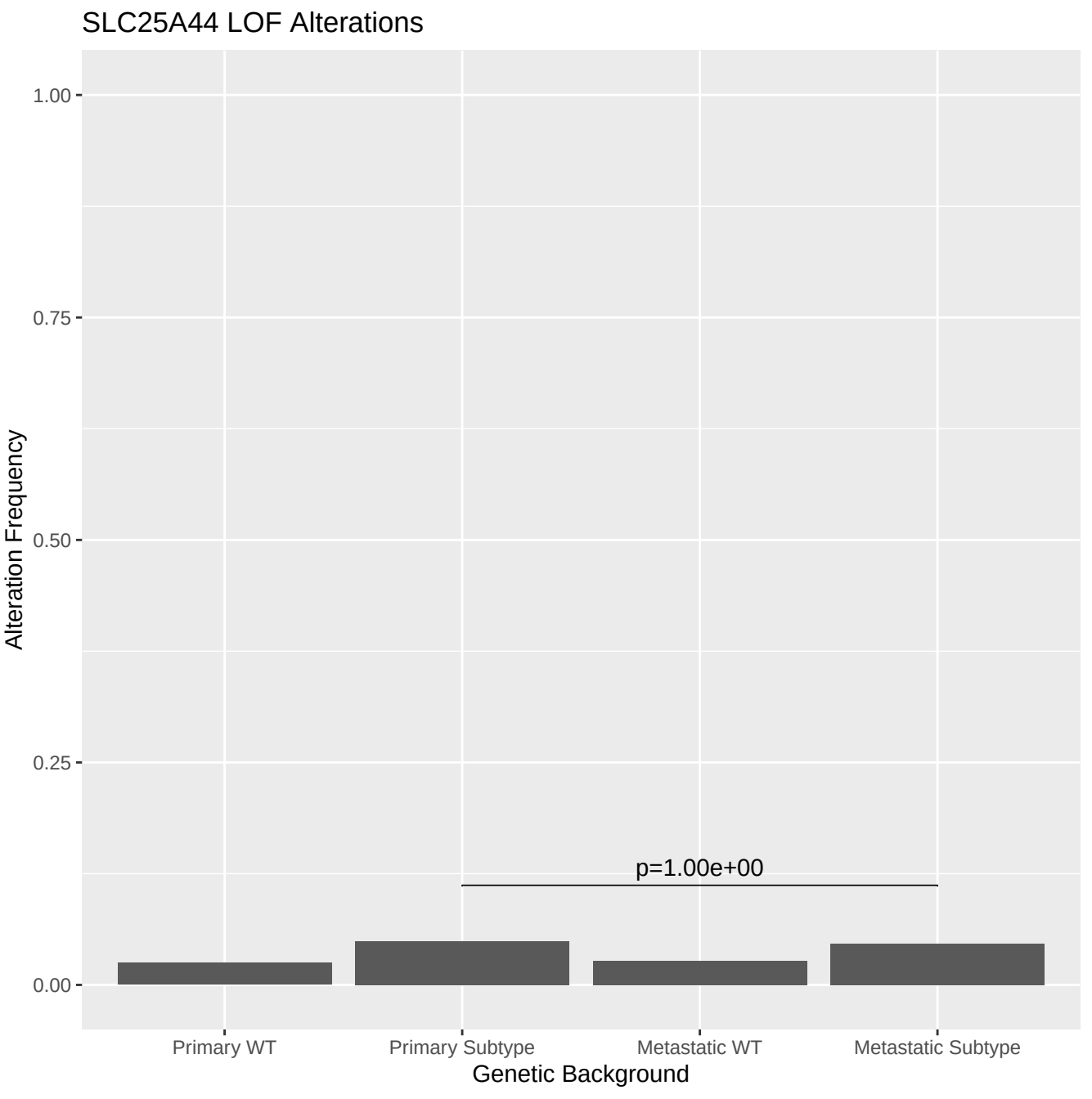

DENND3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.75e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

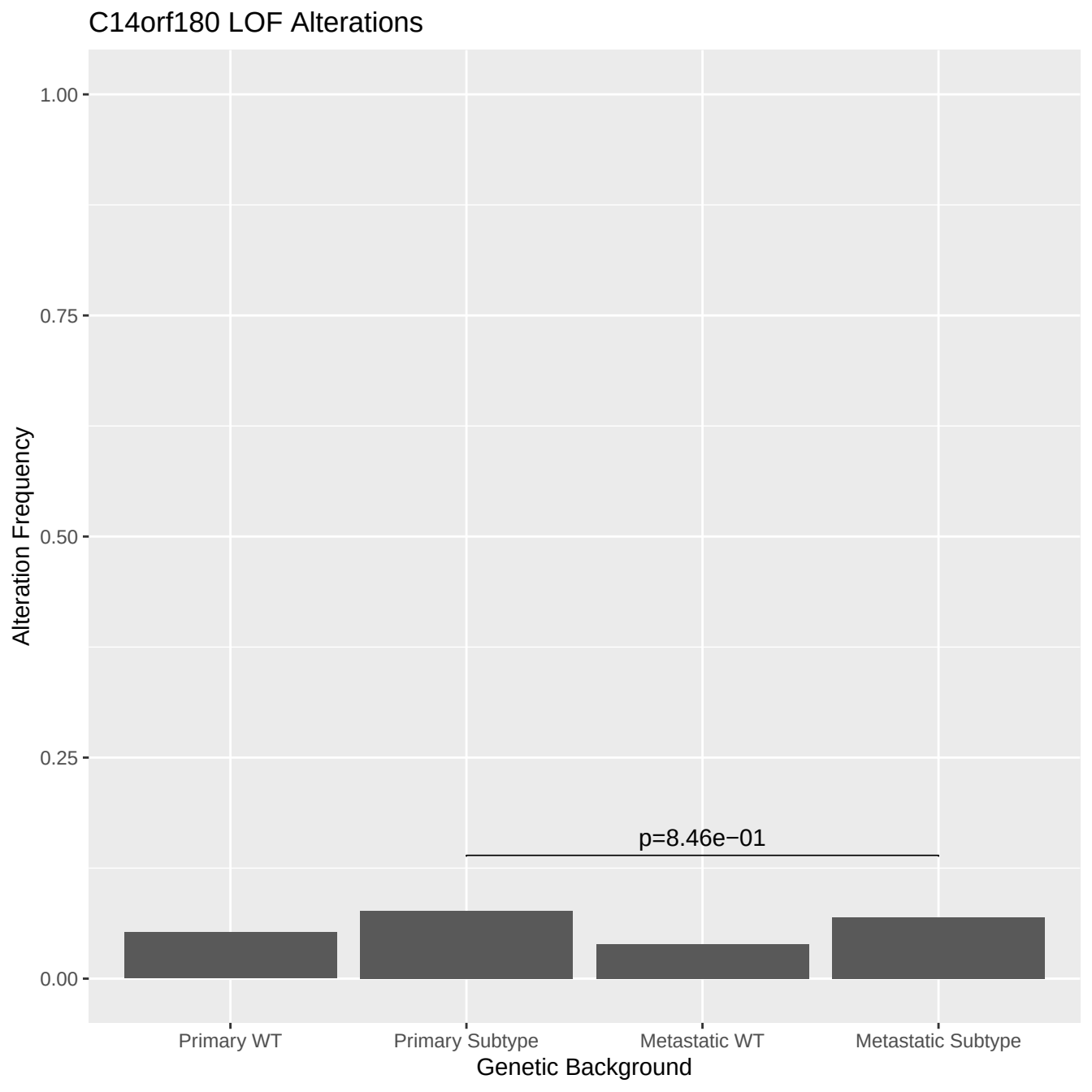

CCL8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.26e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

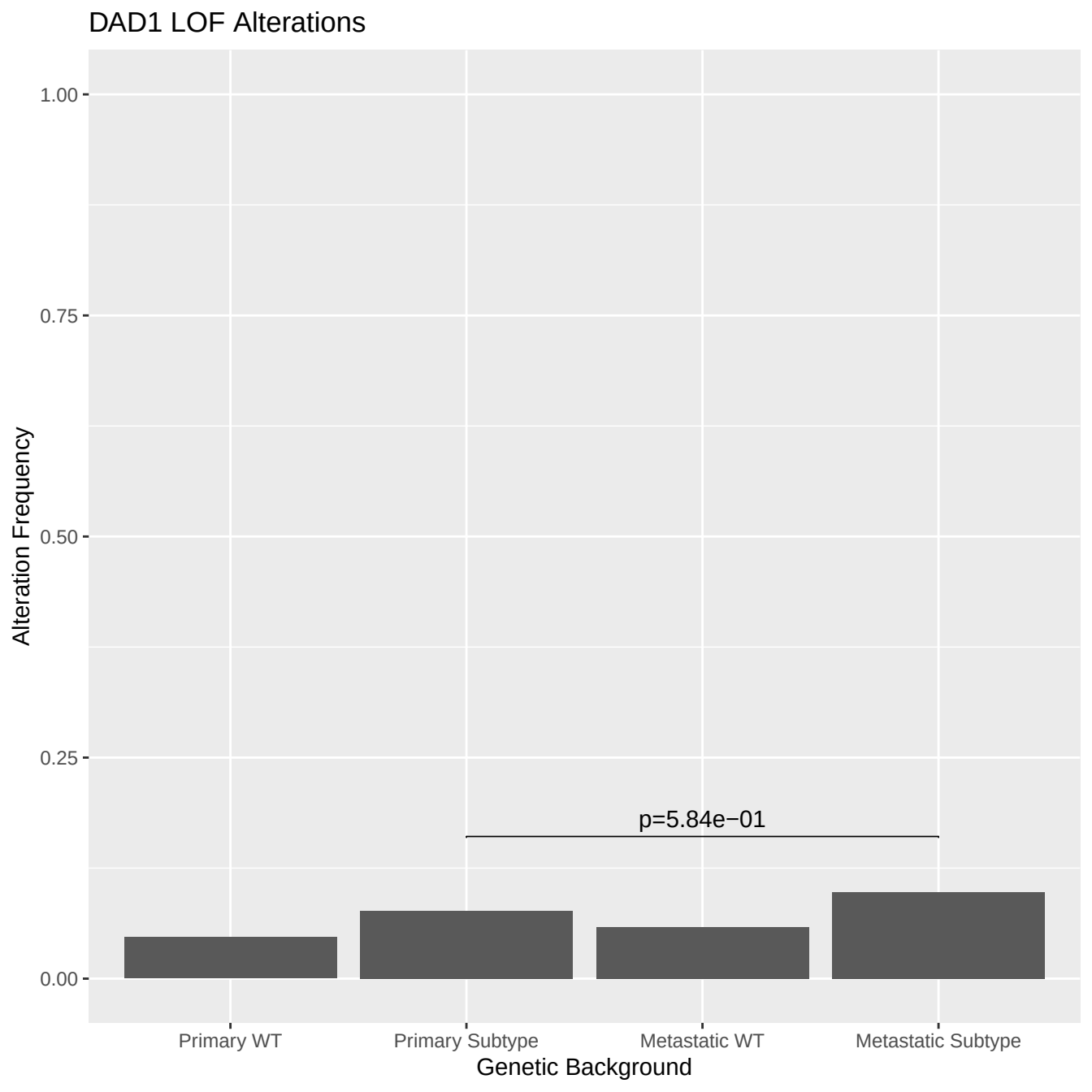

UBE2H LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

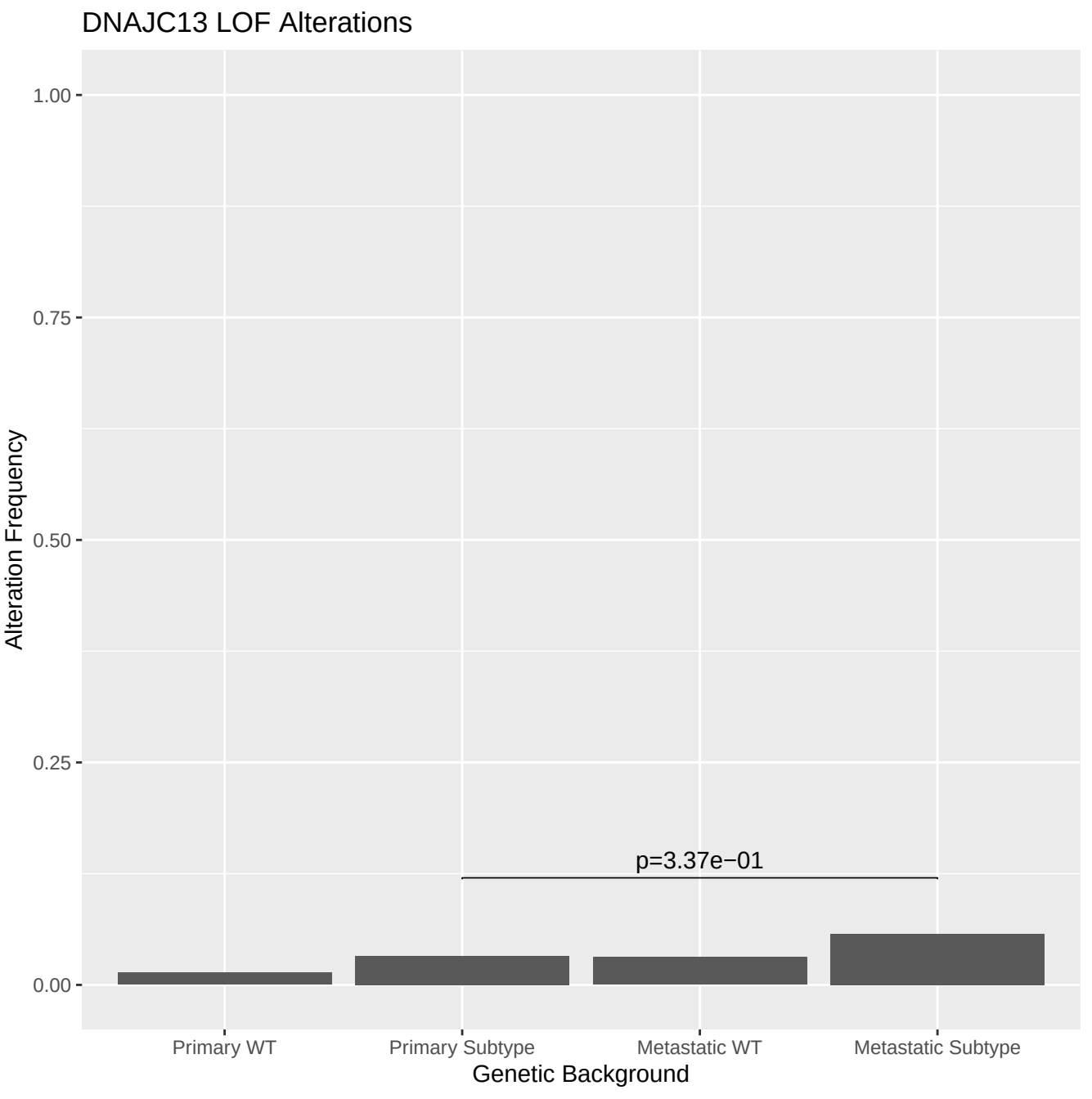

NDUFB4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

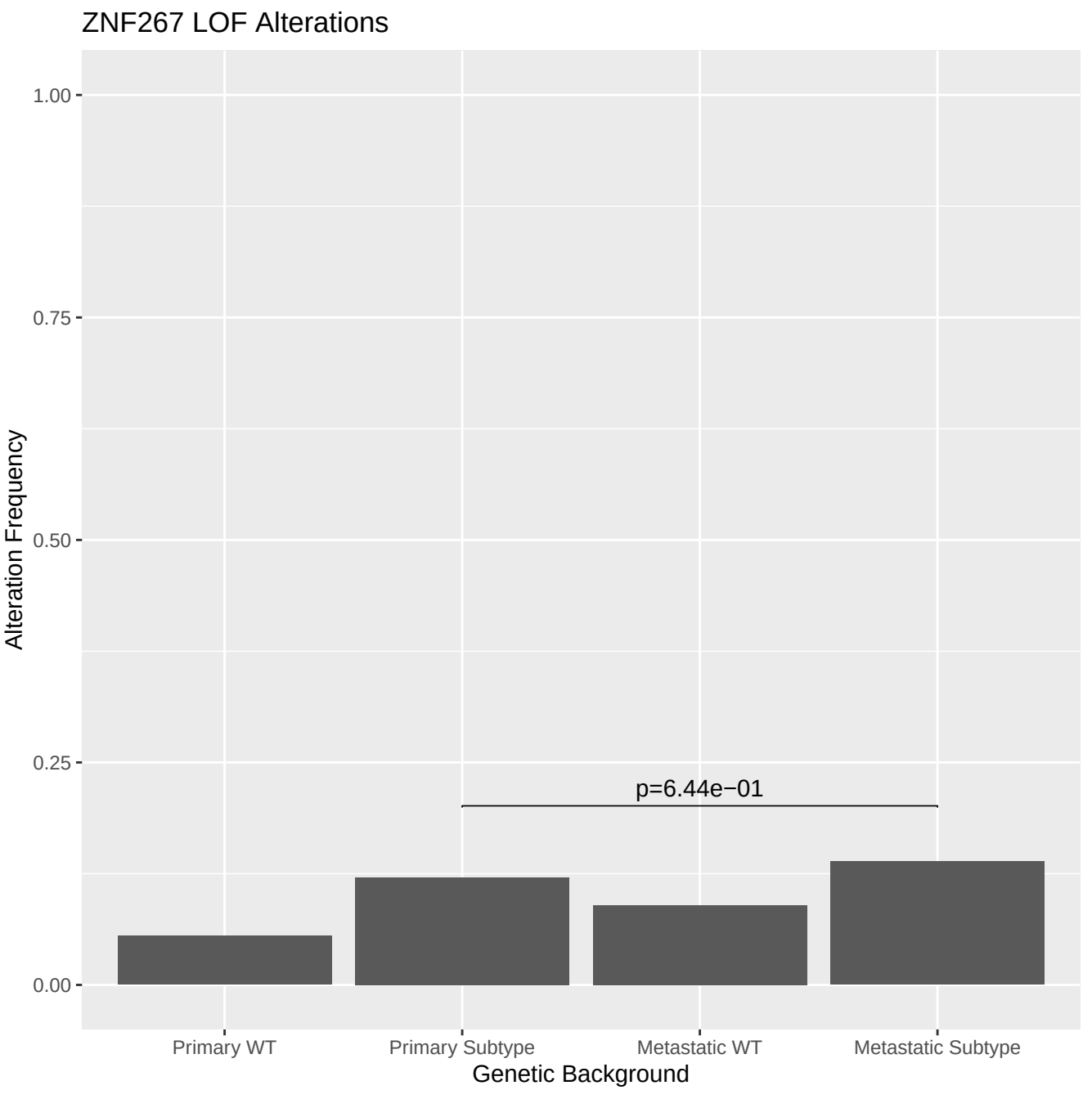

GFM1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

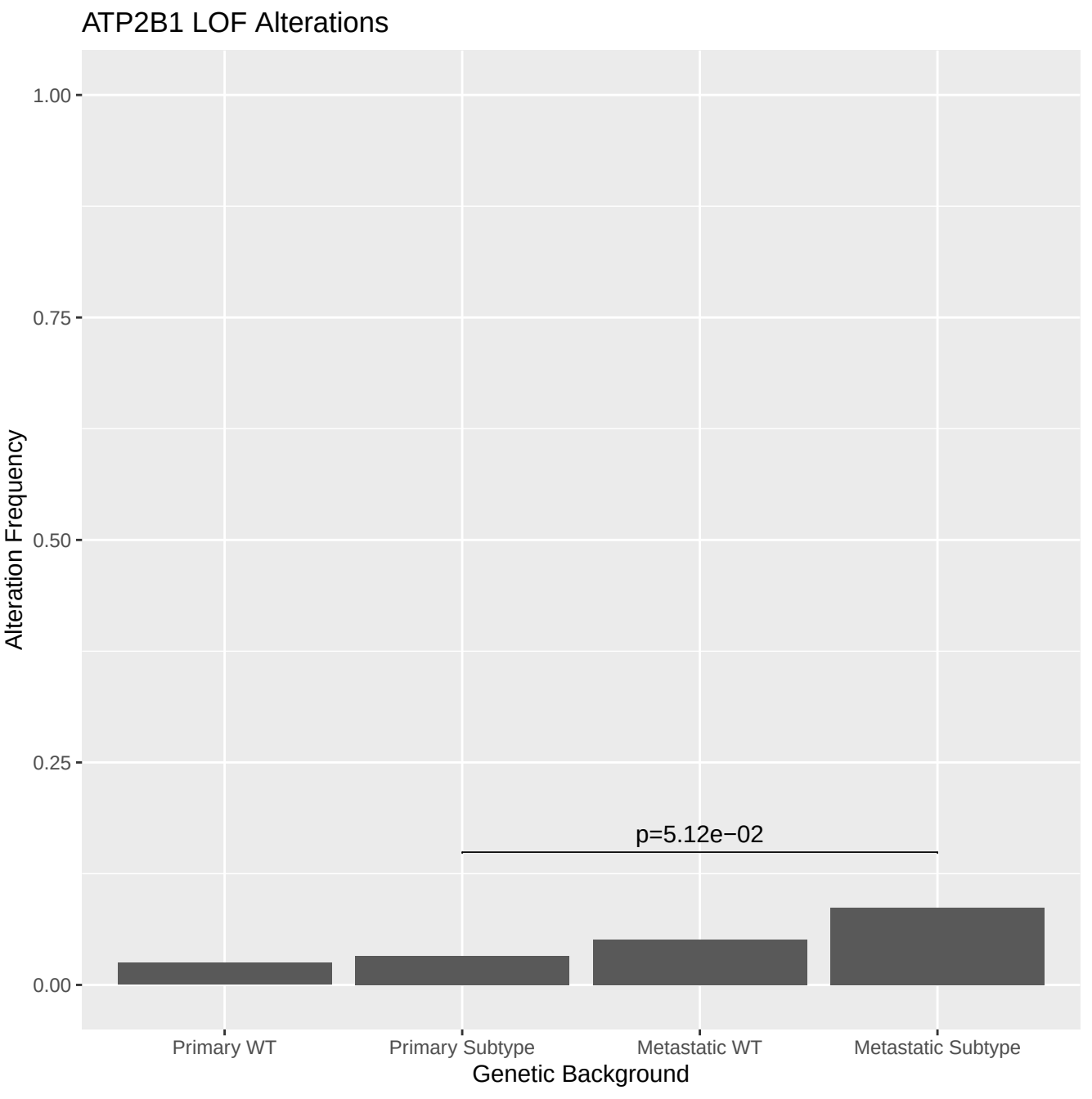

SLC25A44 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

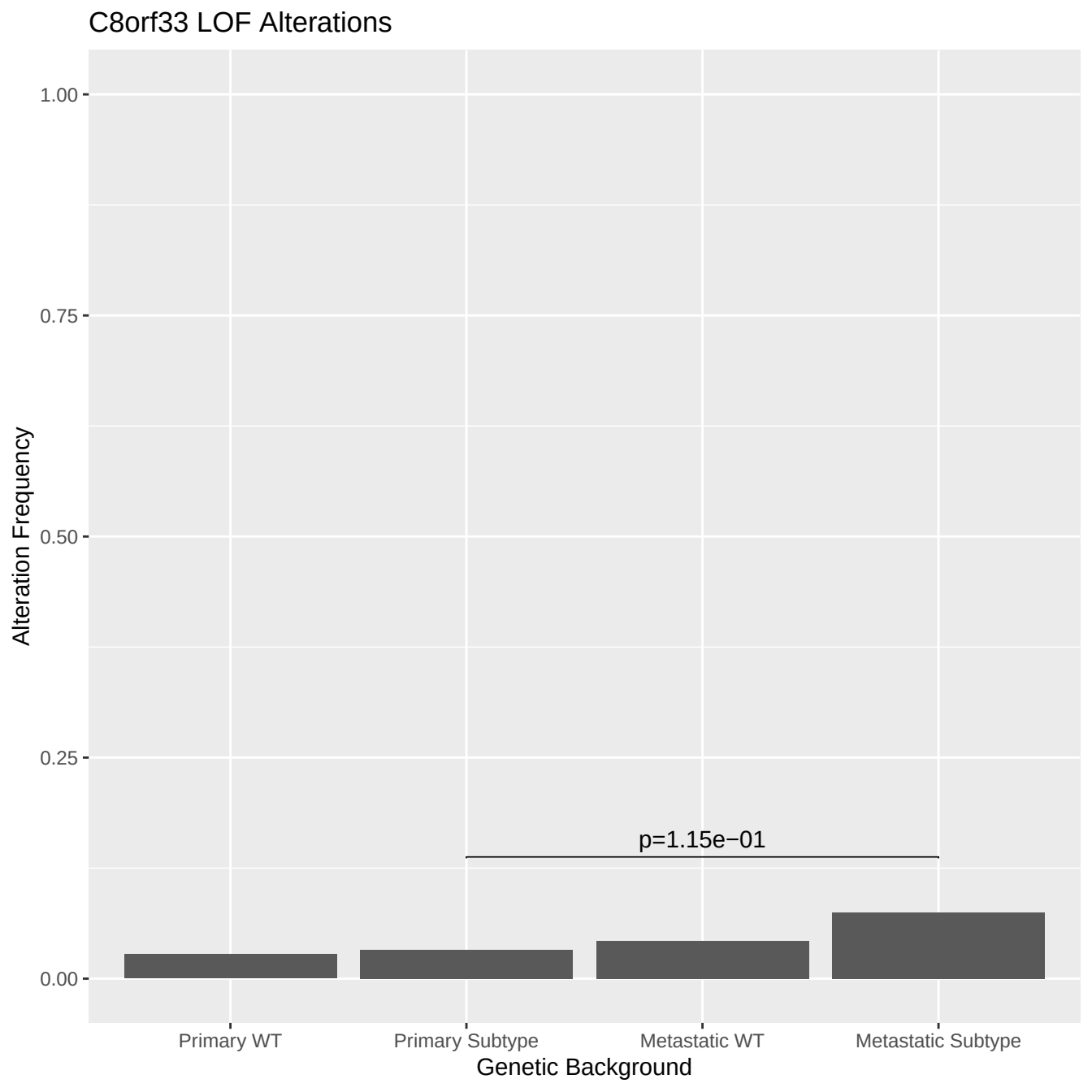

C14orf180 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.46e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

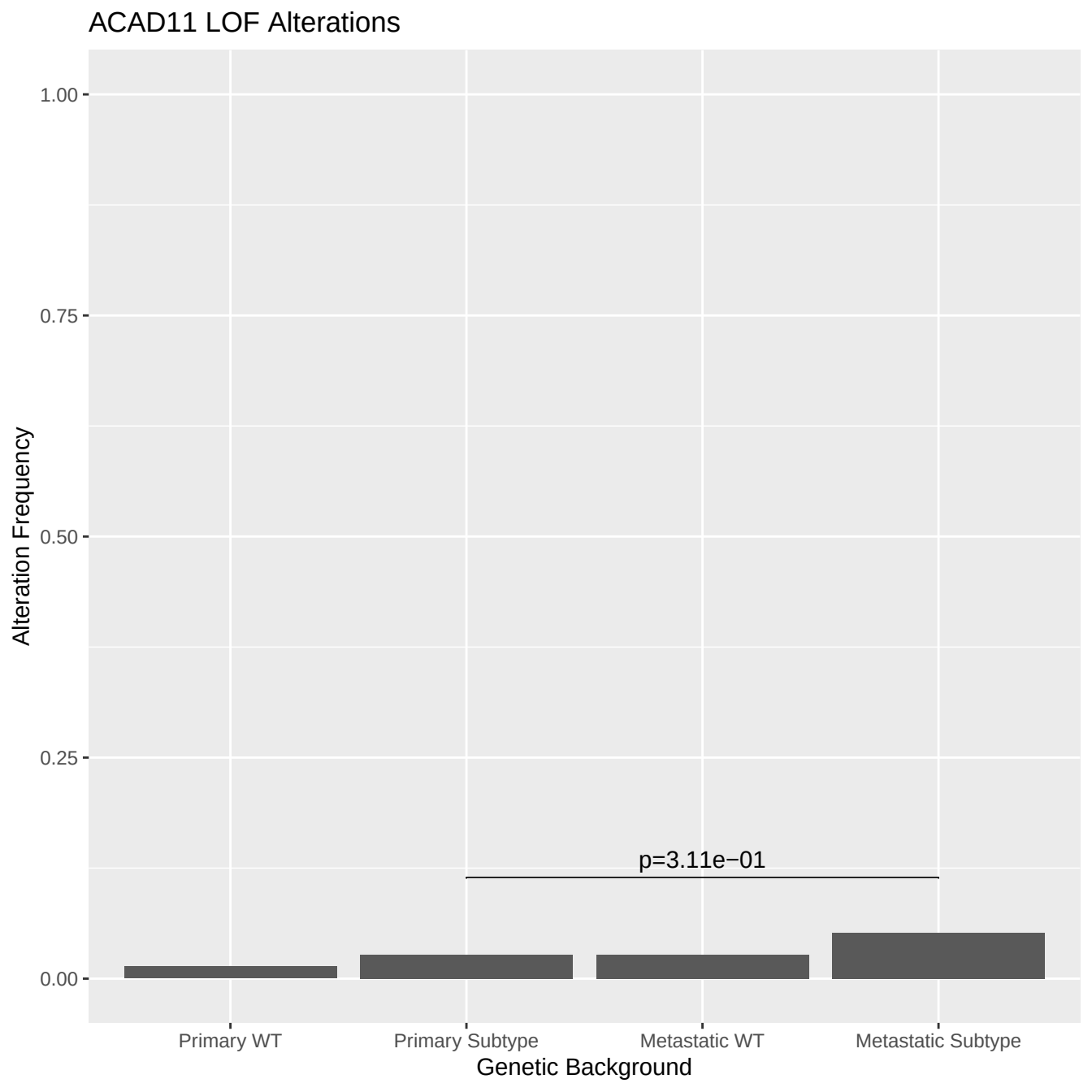

DAD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.84e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

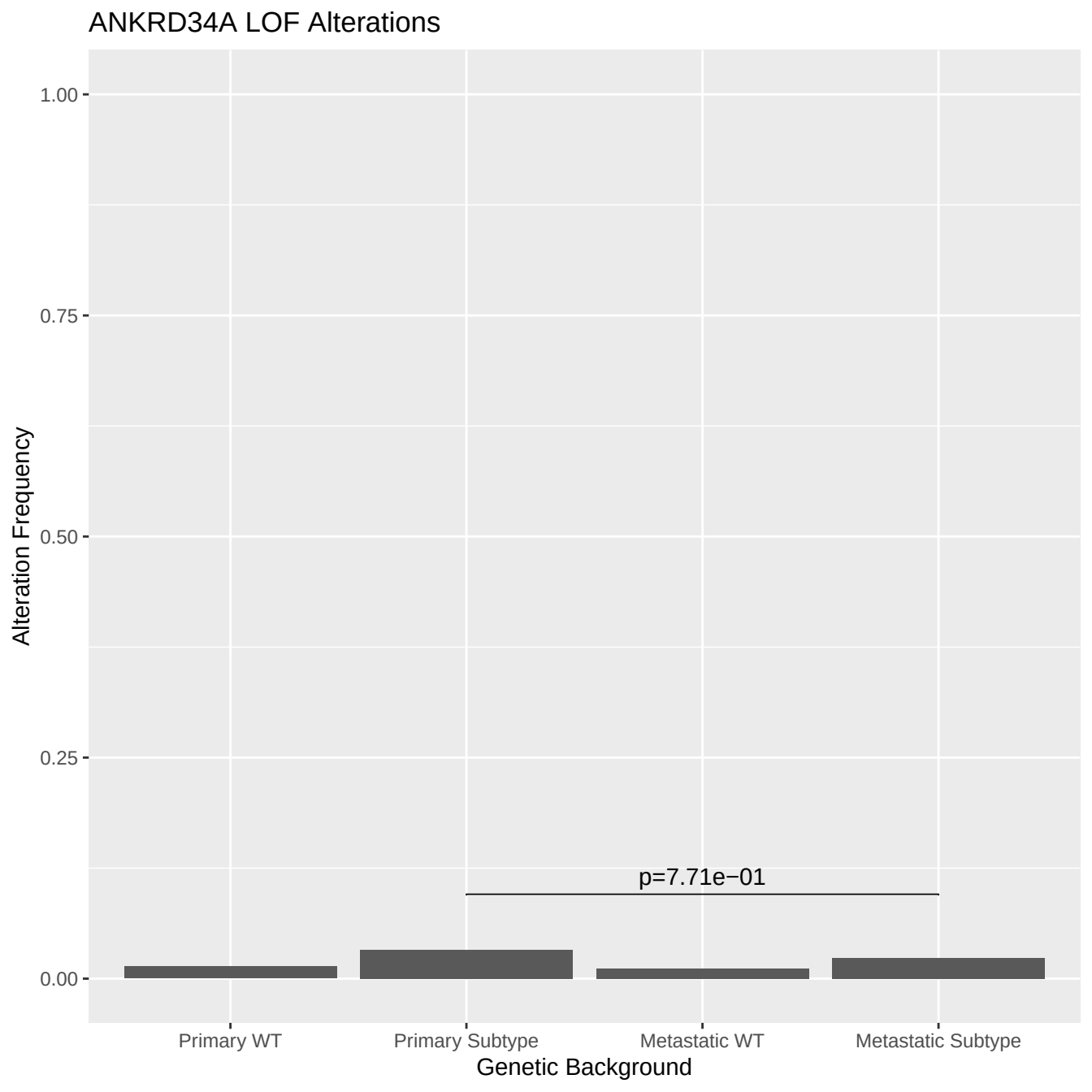

DNAJC13 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

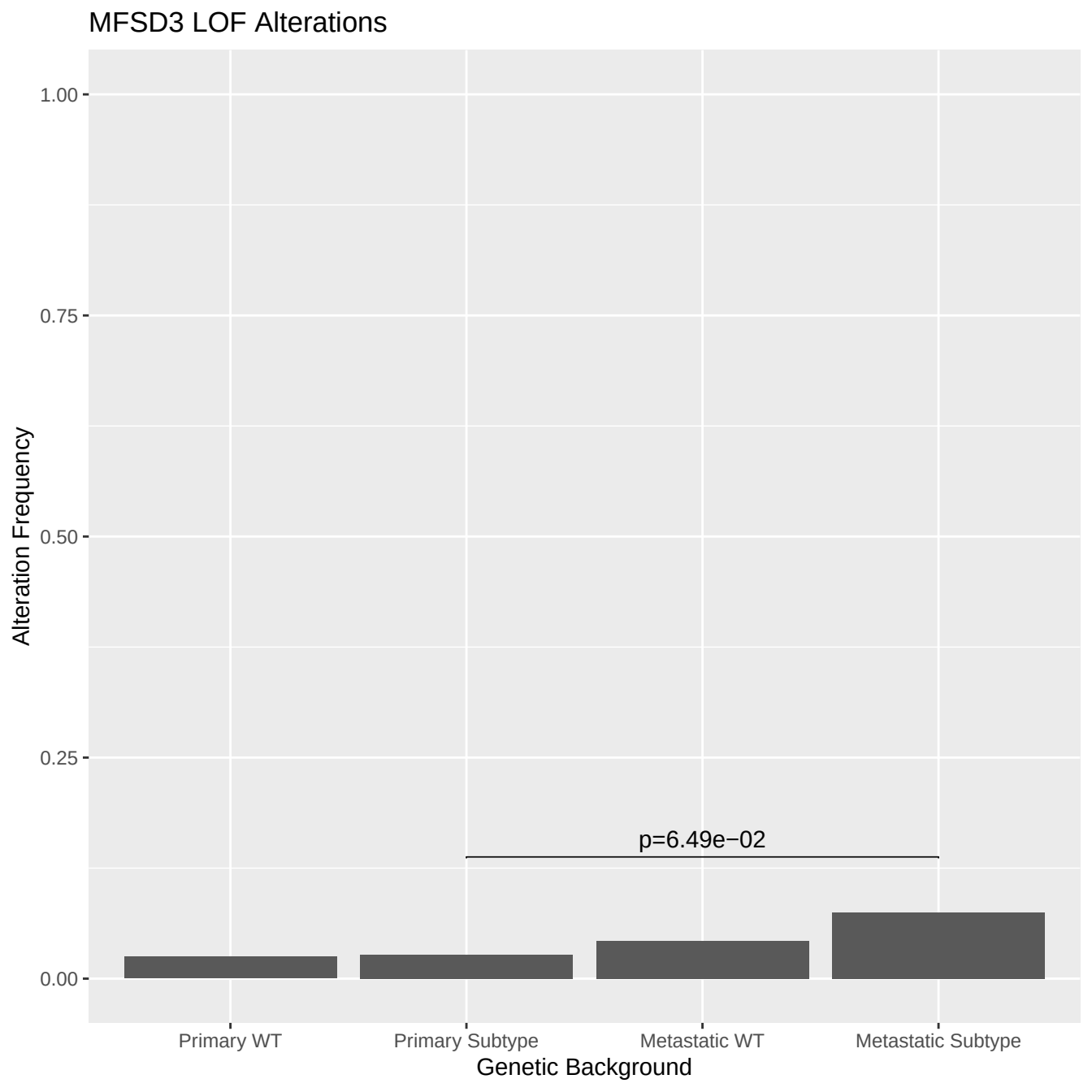

ZNF267 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.44e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

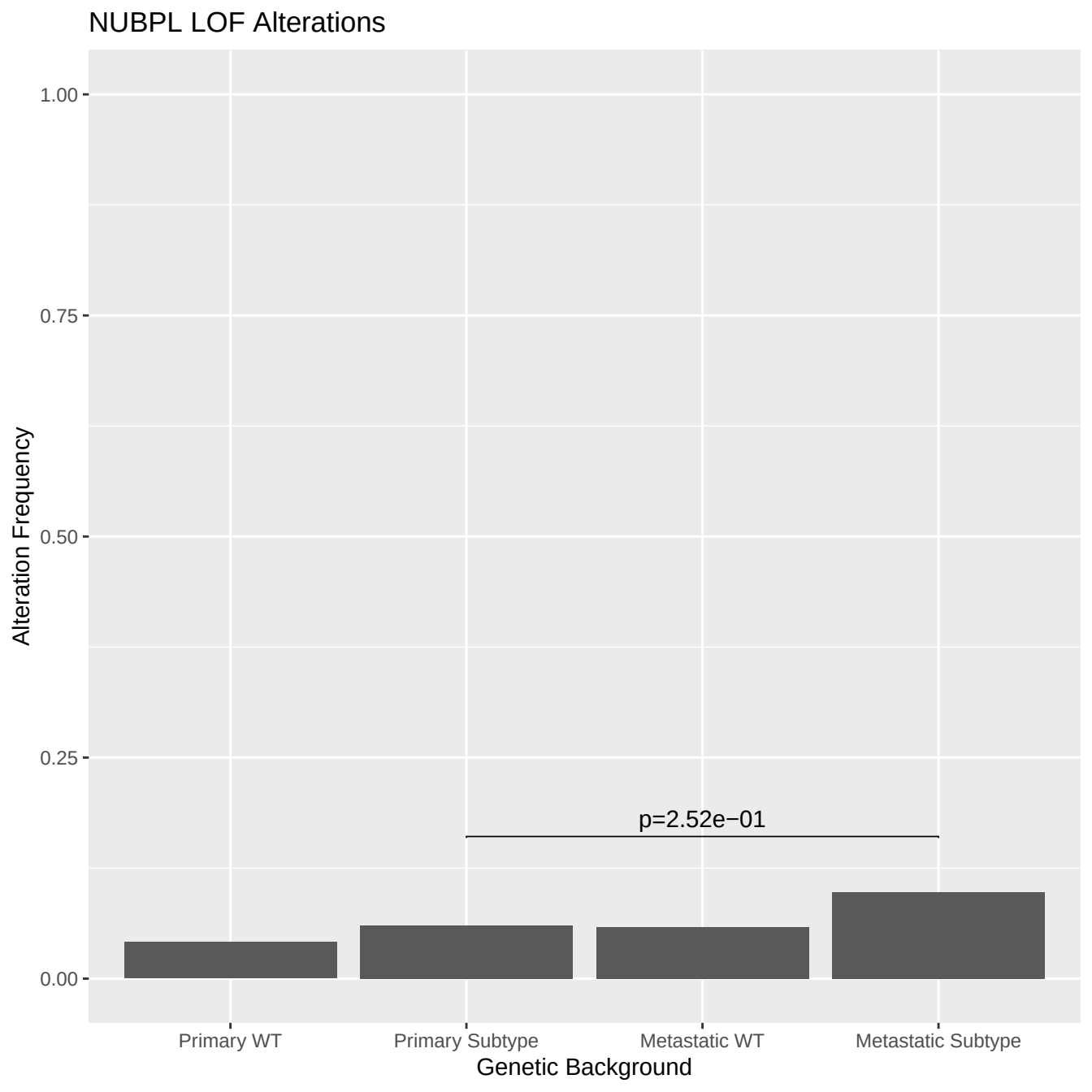

ATP2B1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.12e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

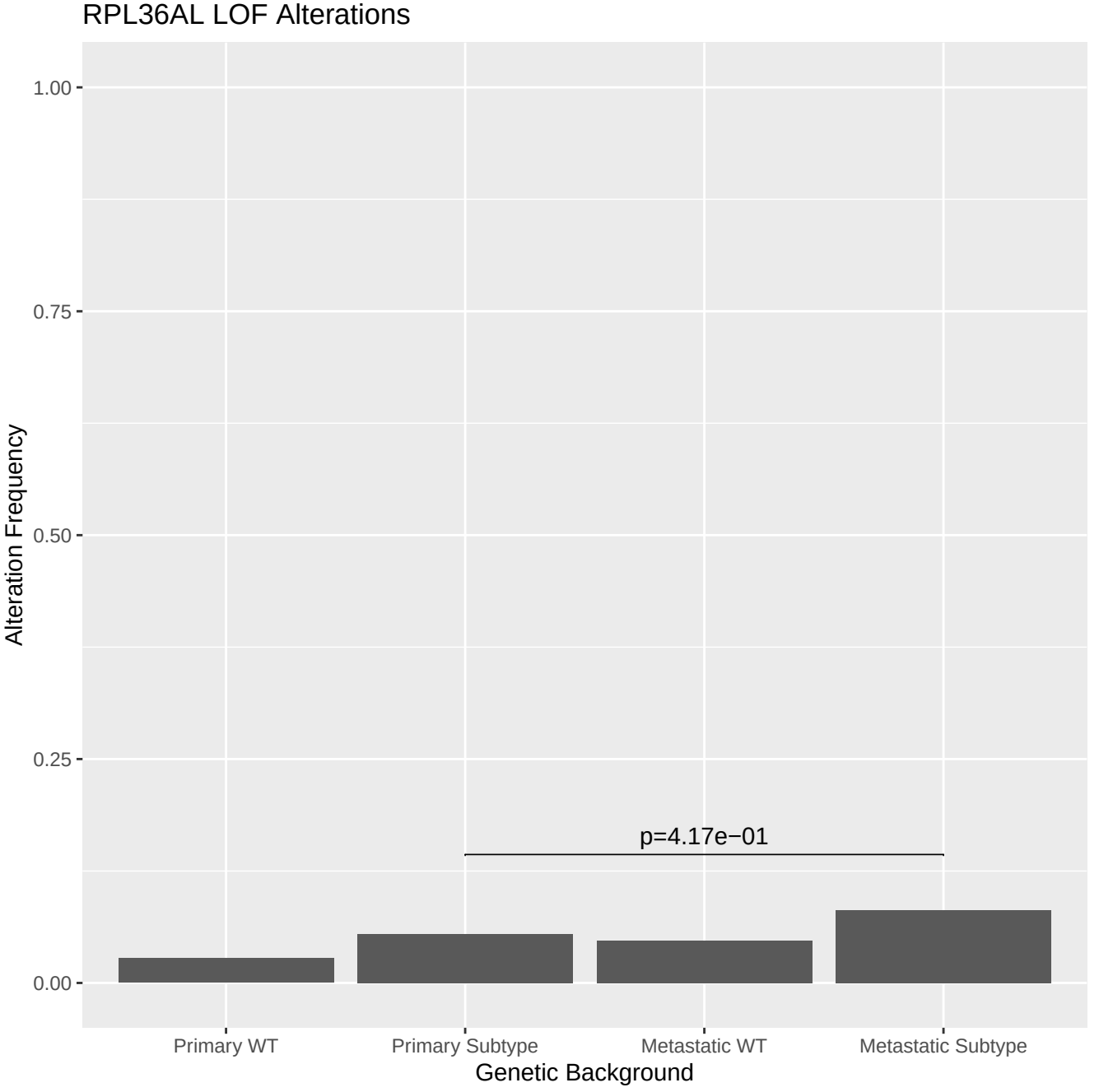

C8orf33 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.15e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

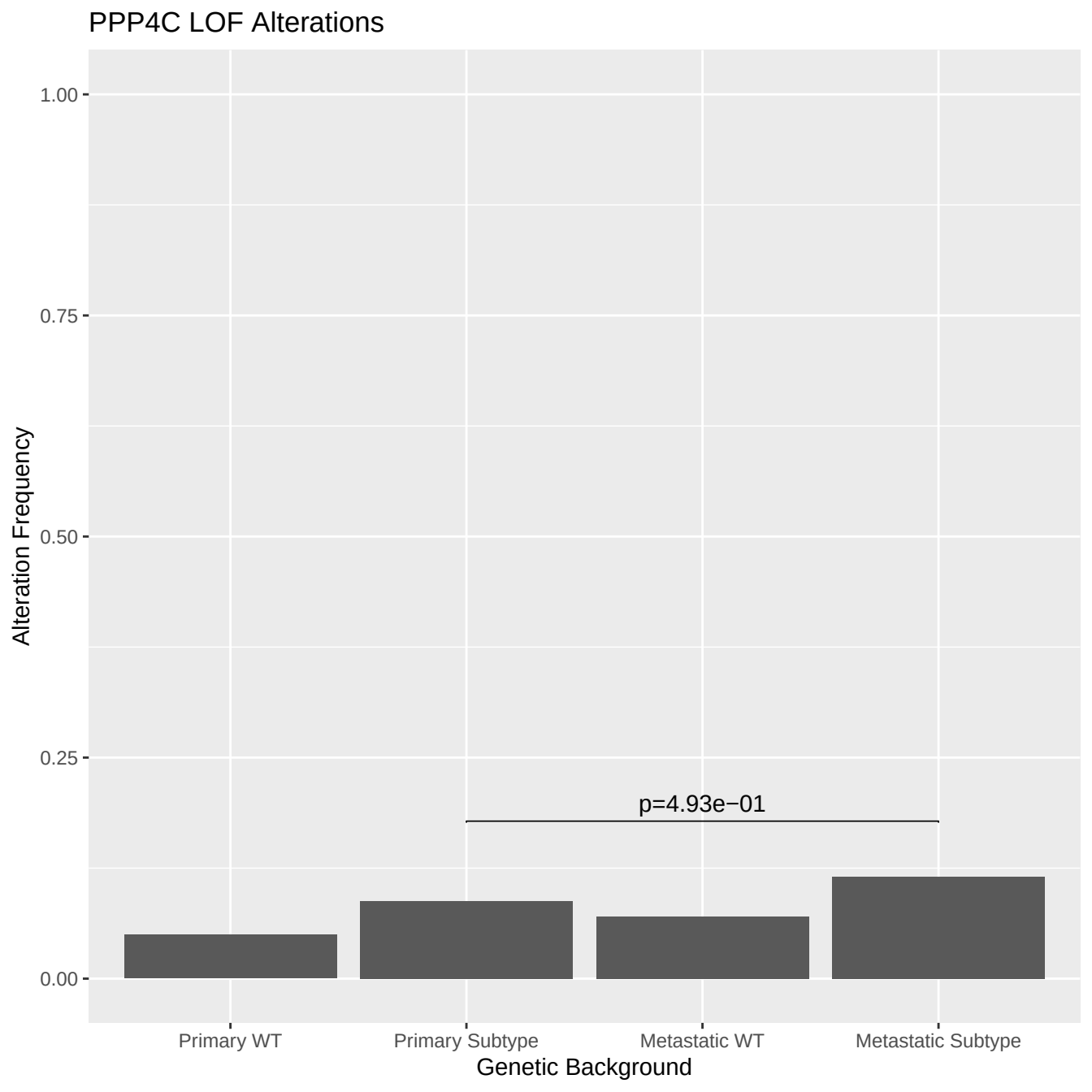

ACAD11 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

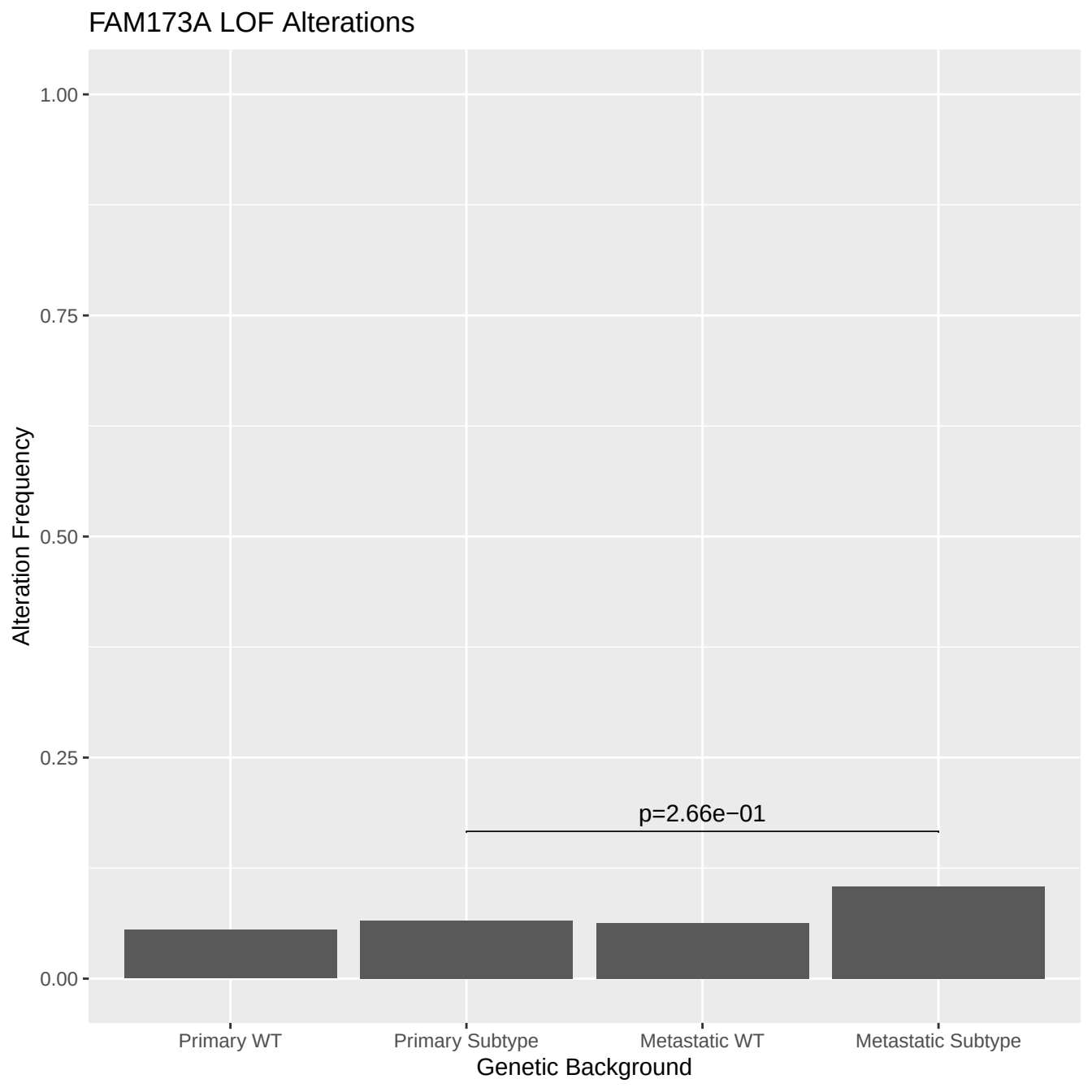

ANKRD34A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

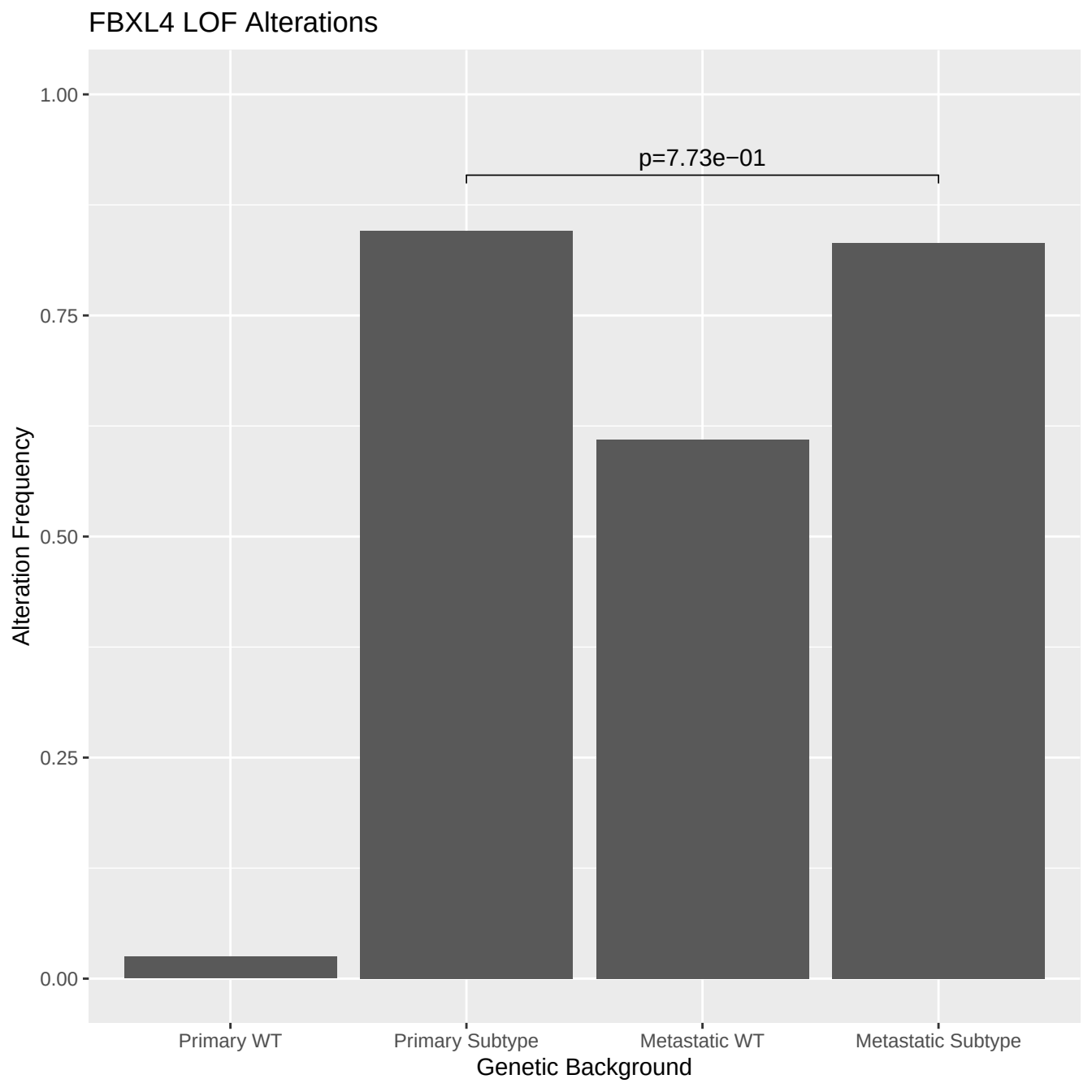

MFSD3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.49e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

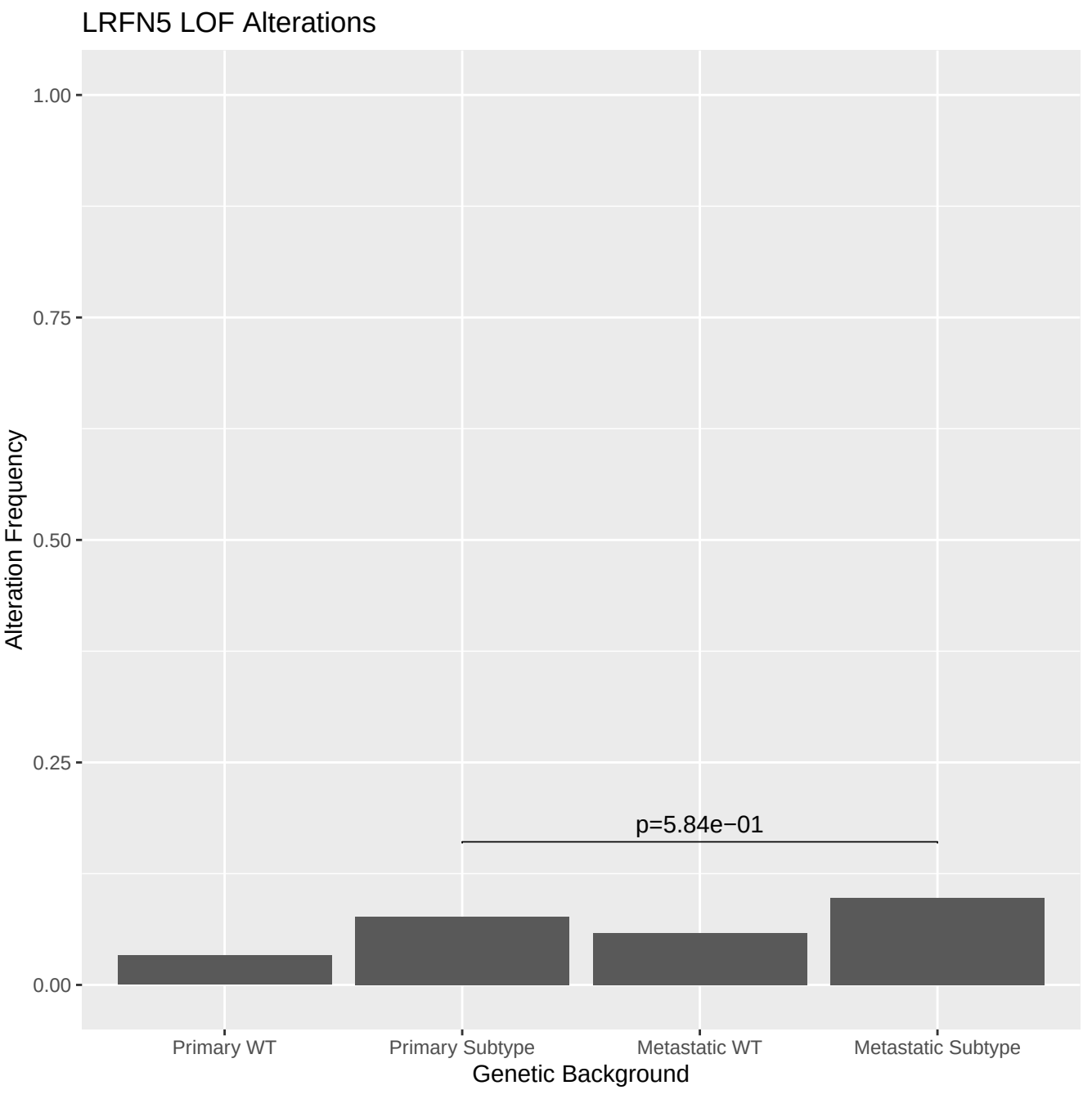

NUBPL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.52e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

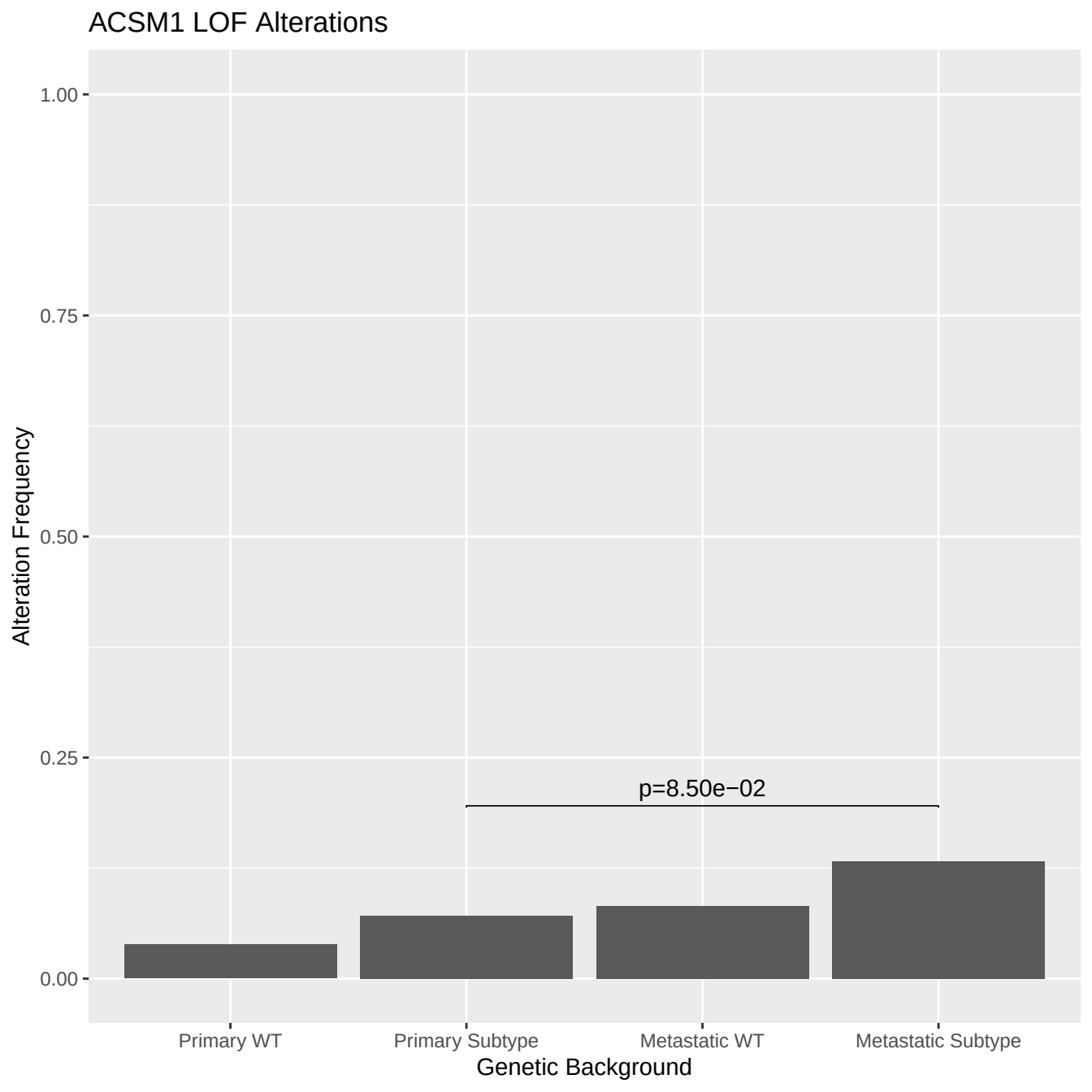

RPL36AL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

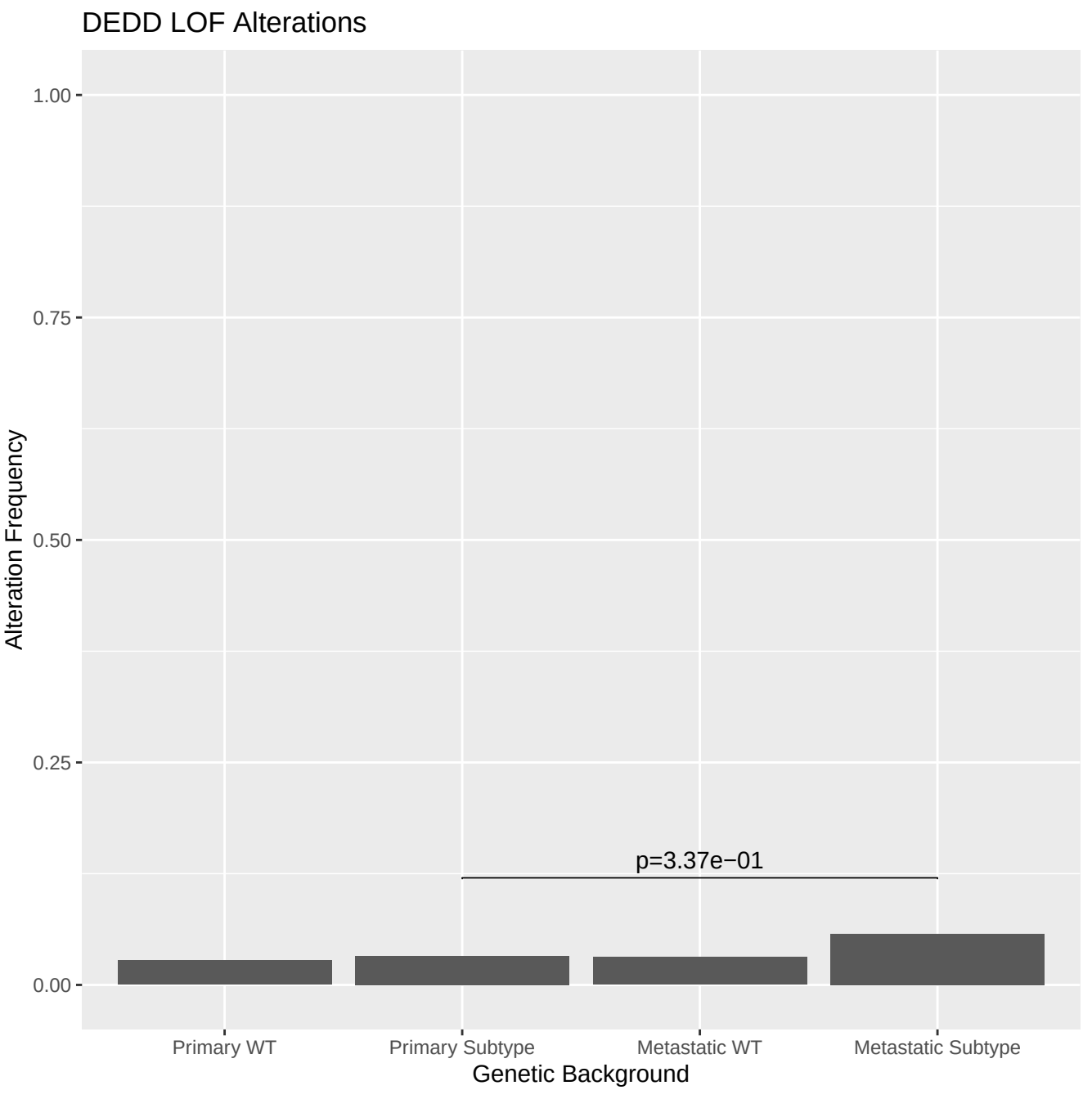

PPP4C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.93e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

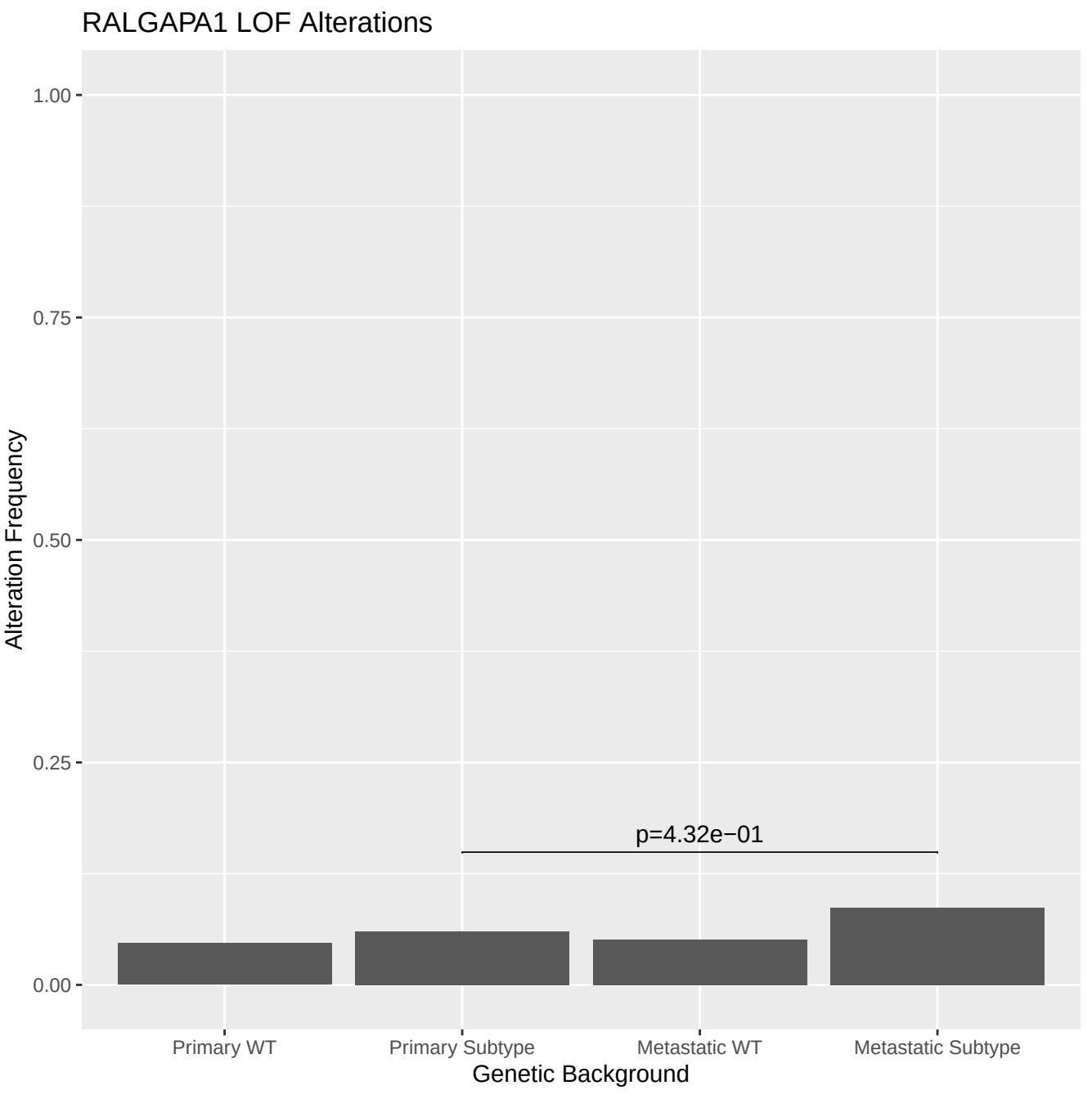

FAM173A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

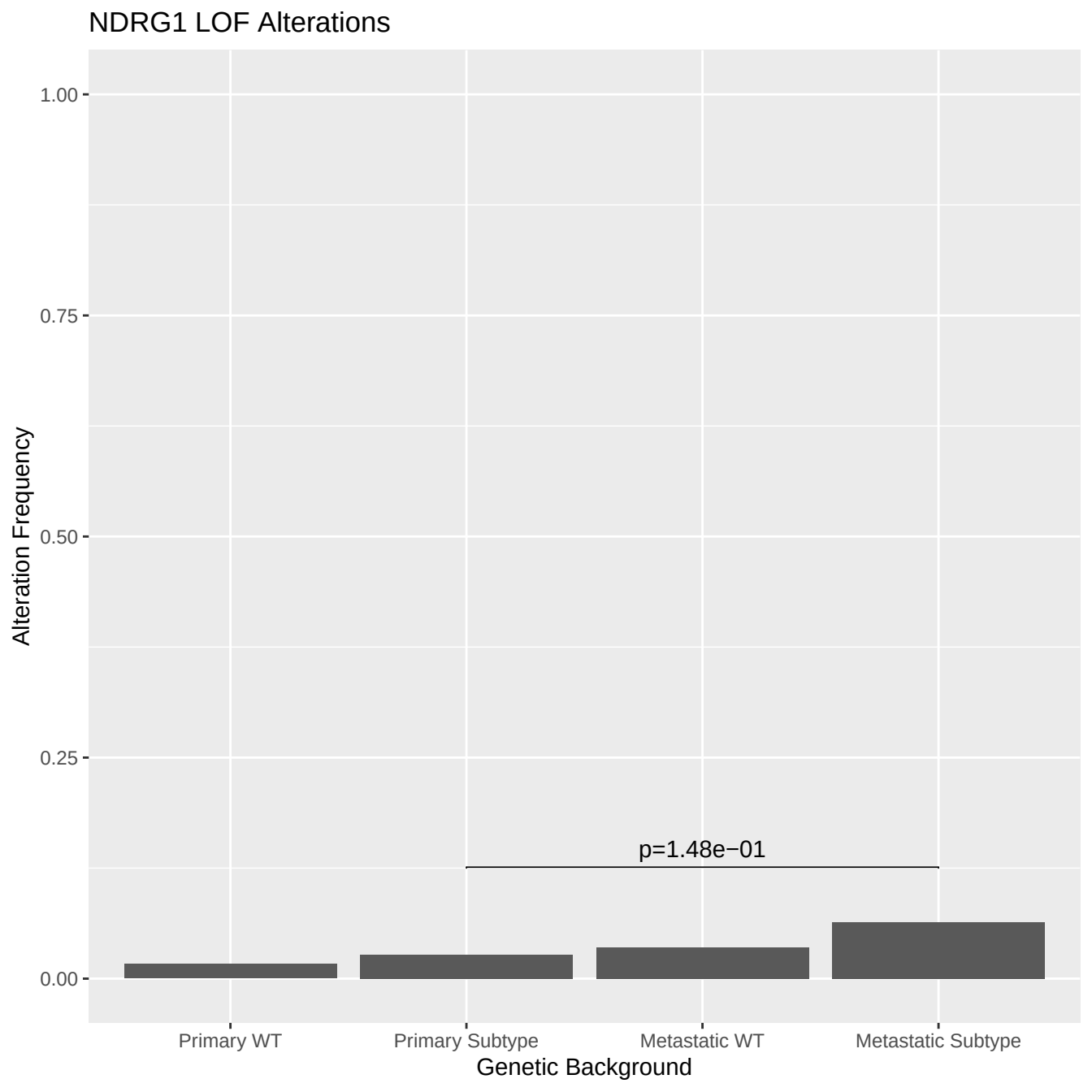

FBXL4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.73e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

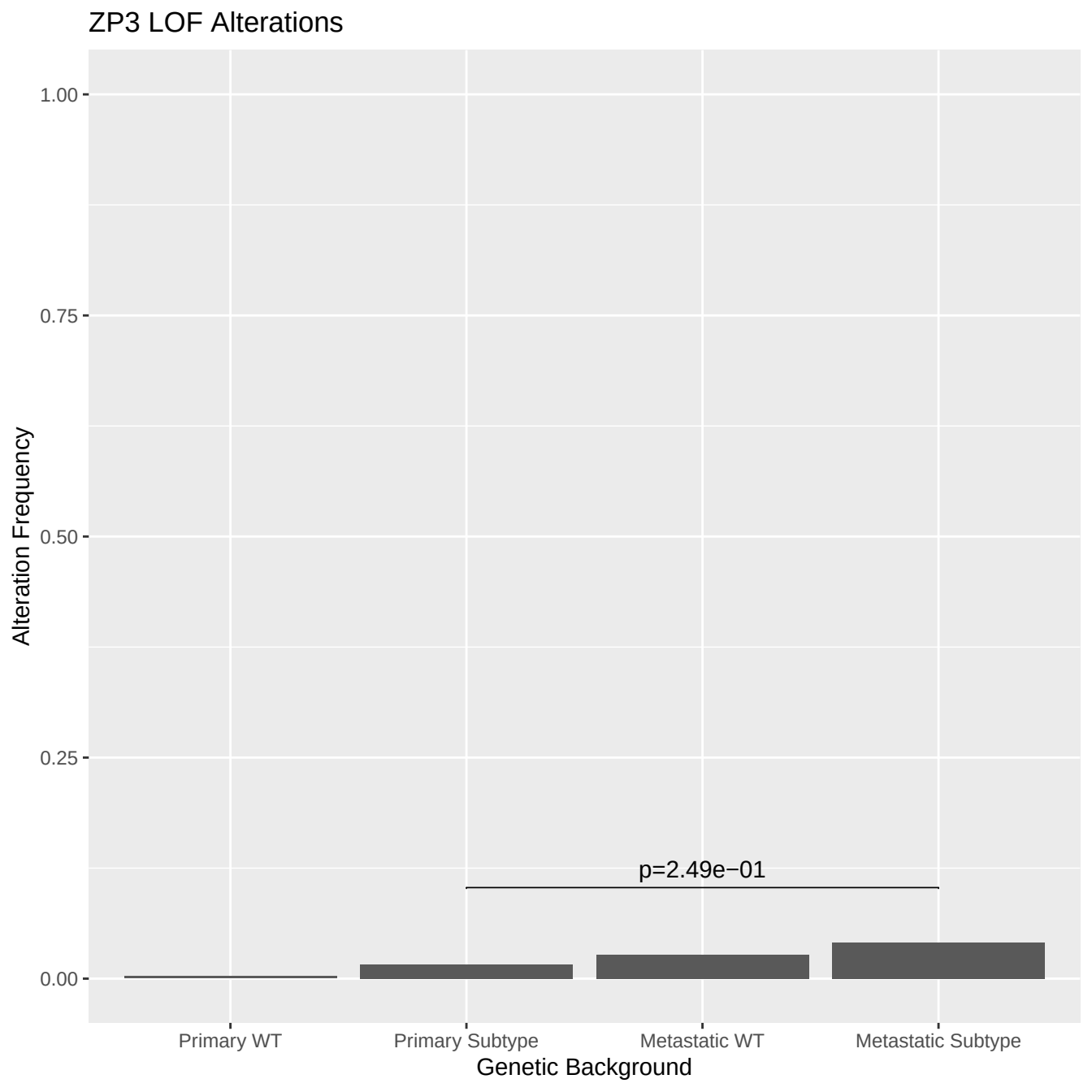

LRFN5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.84e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

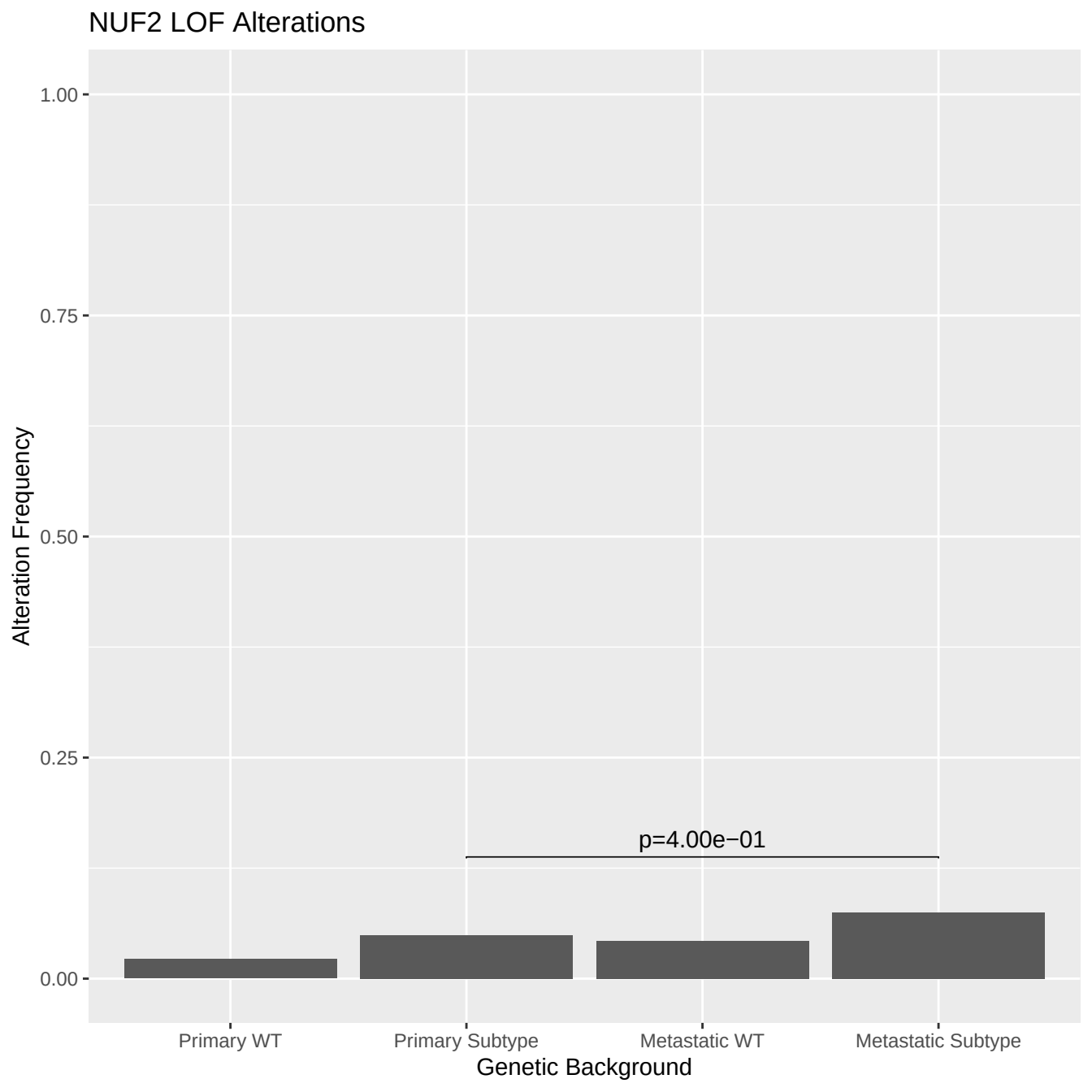

ACSM1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.50e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

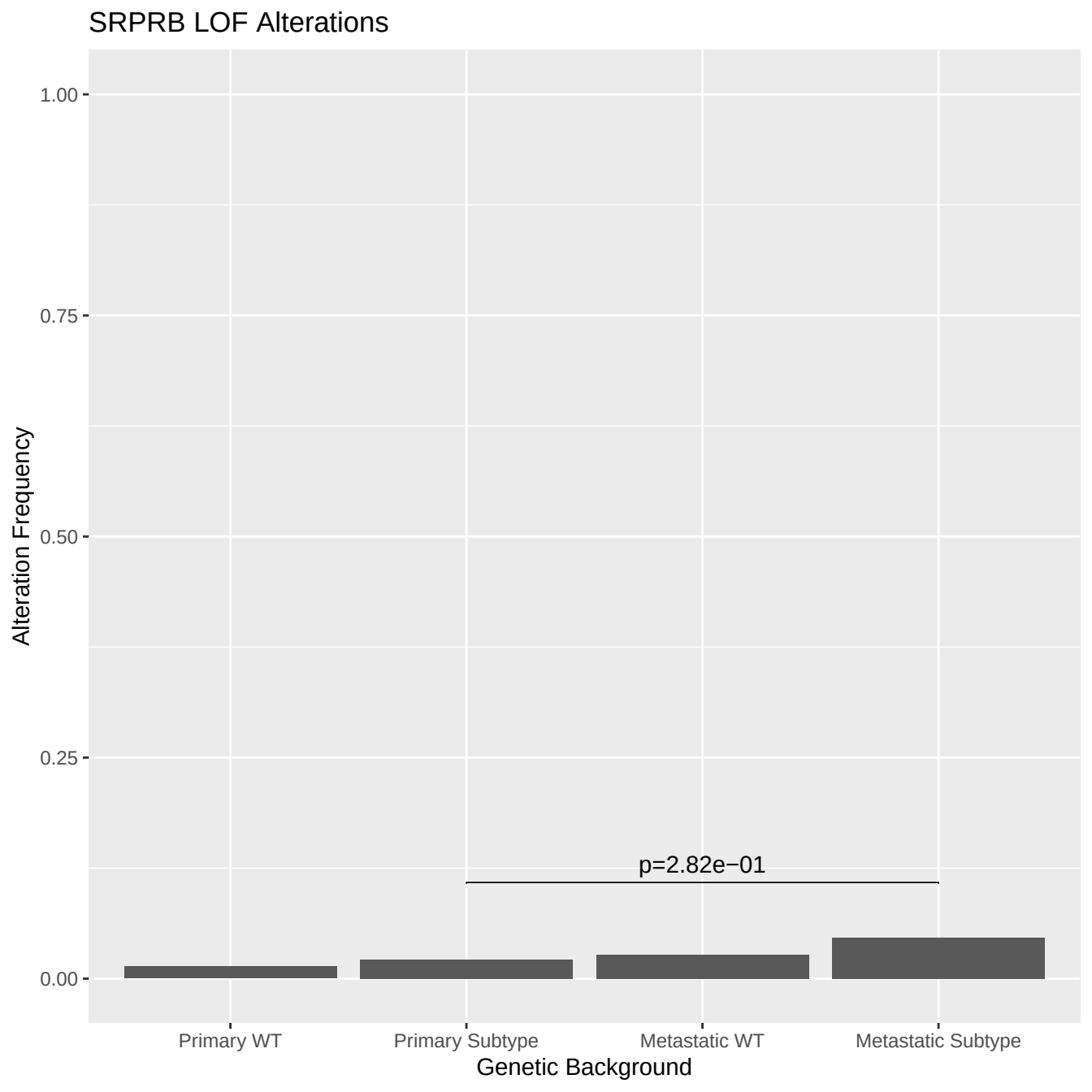

DEDD LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

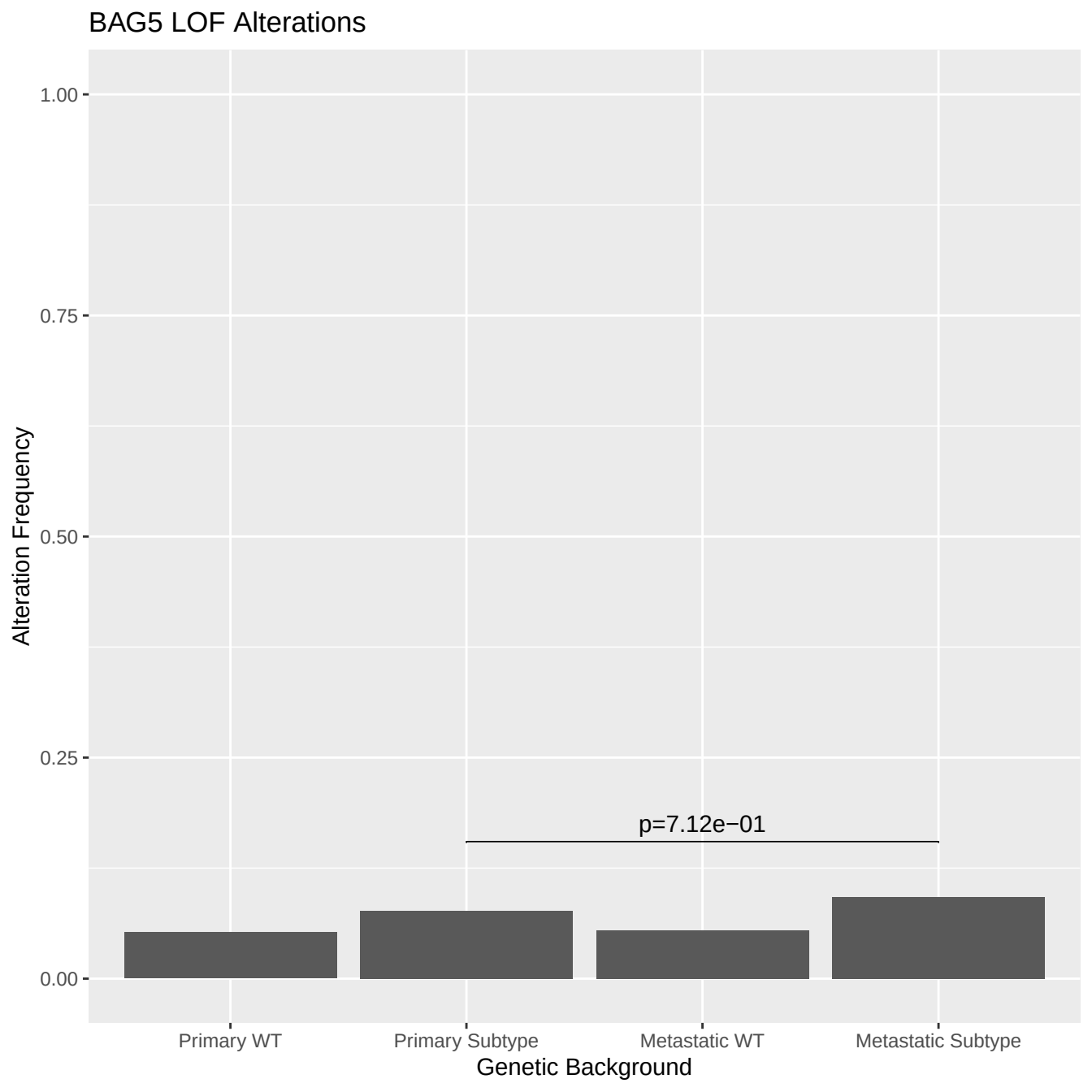

RALGAPA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

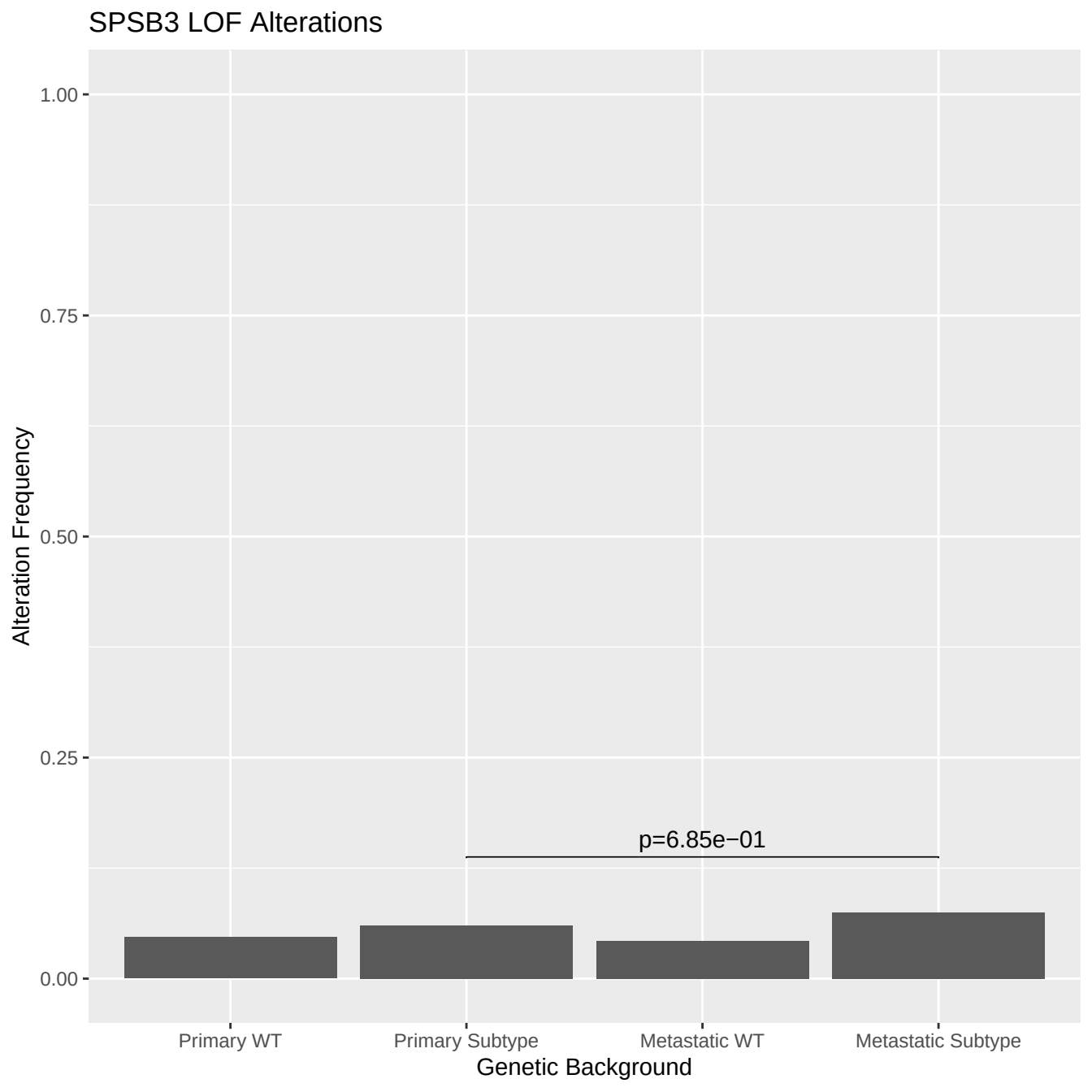

NDRG1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

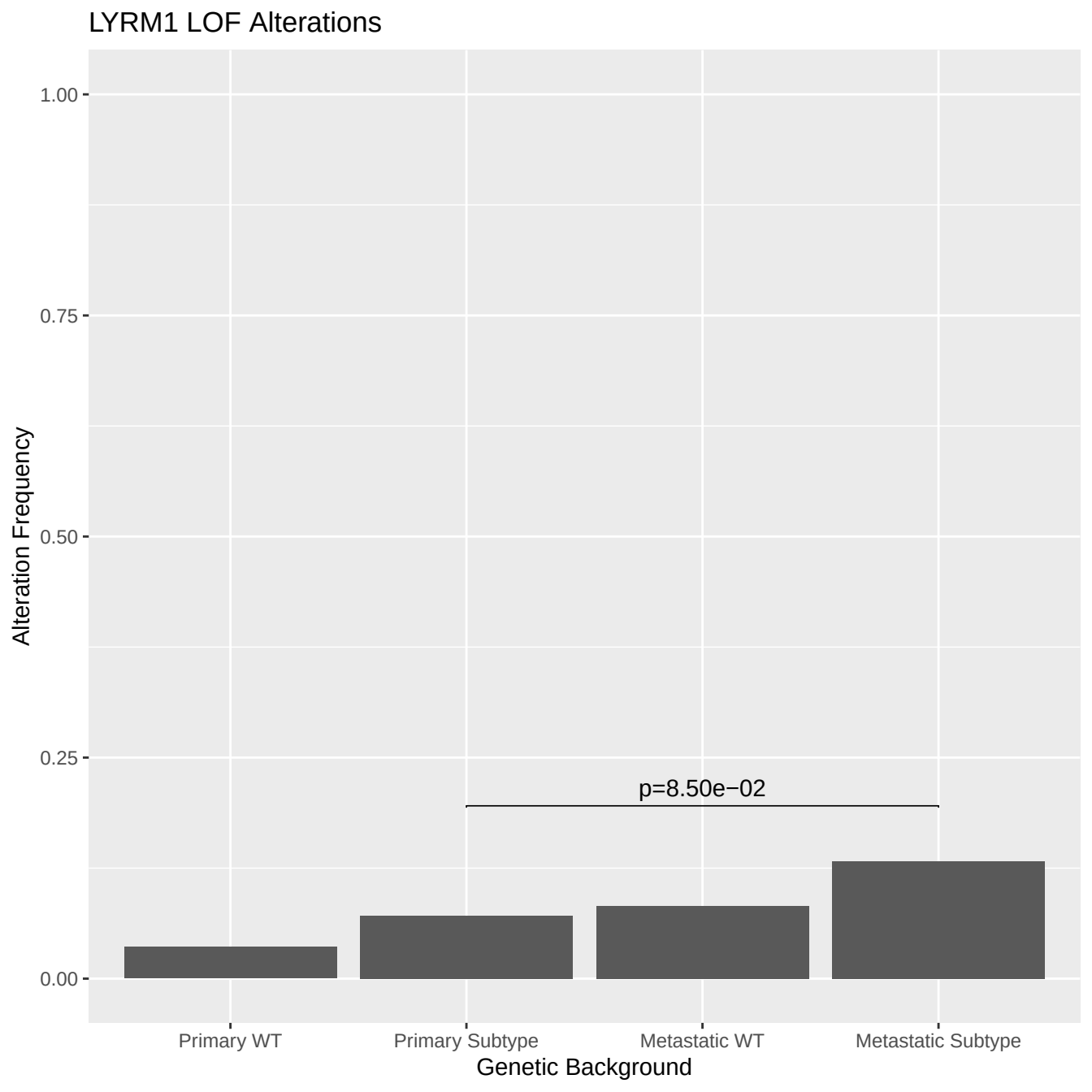

ZP3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

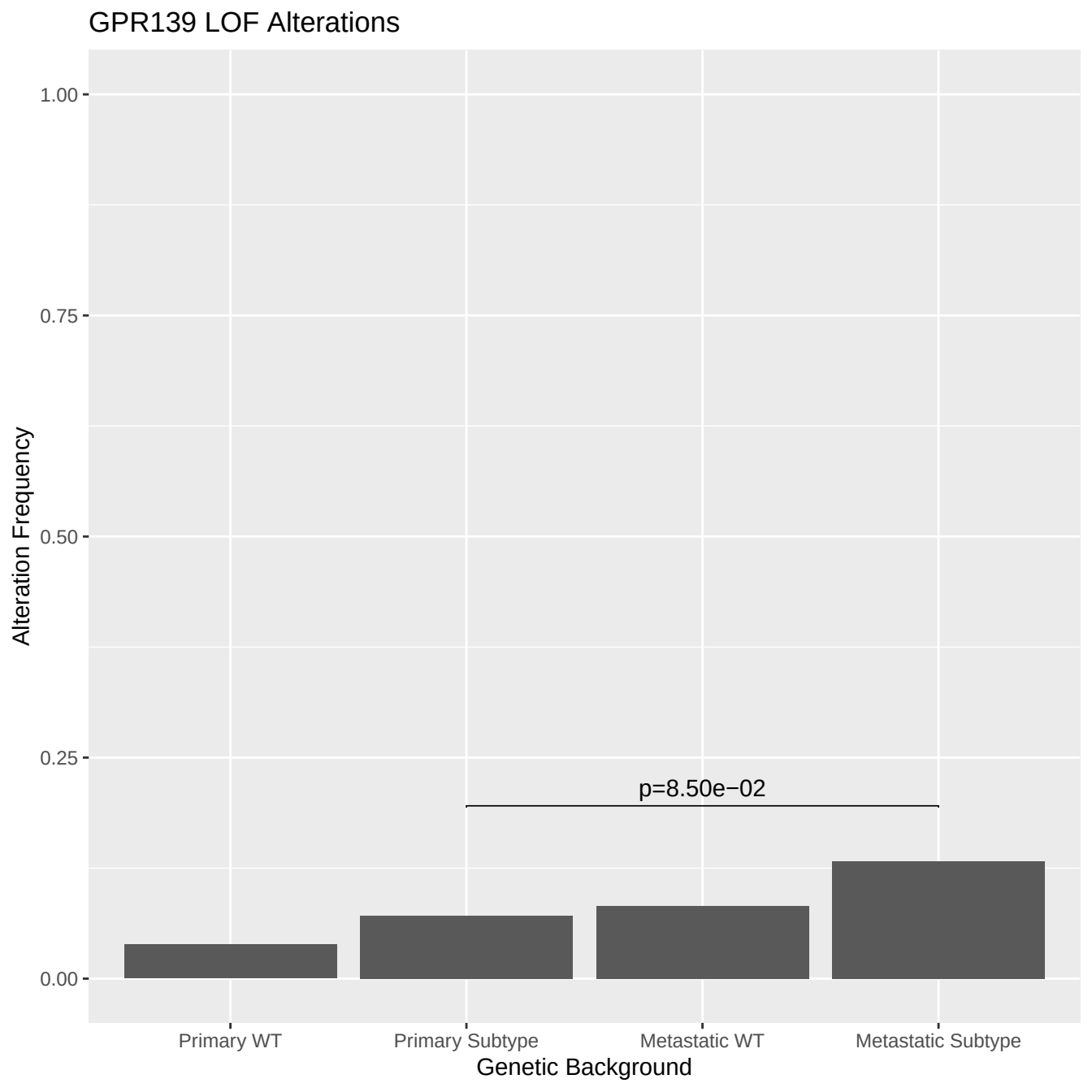

NUF2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.00e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

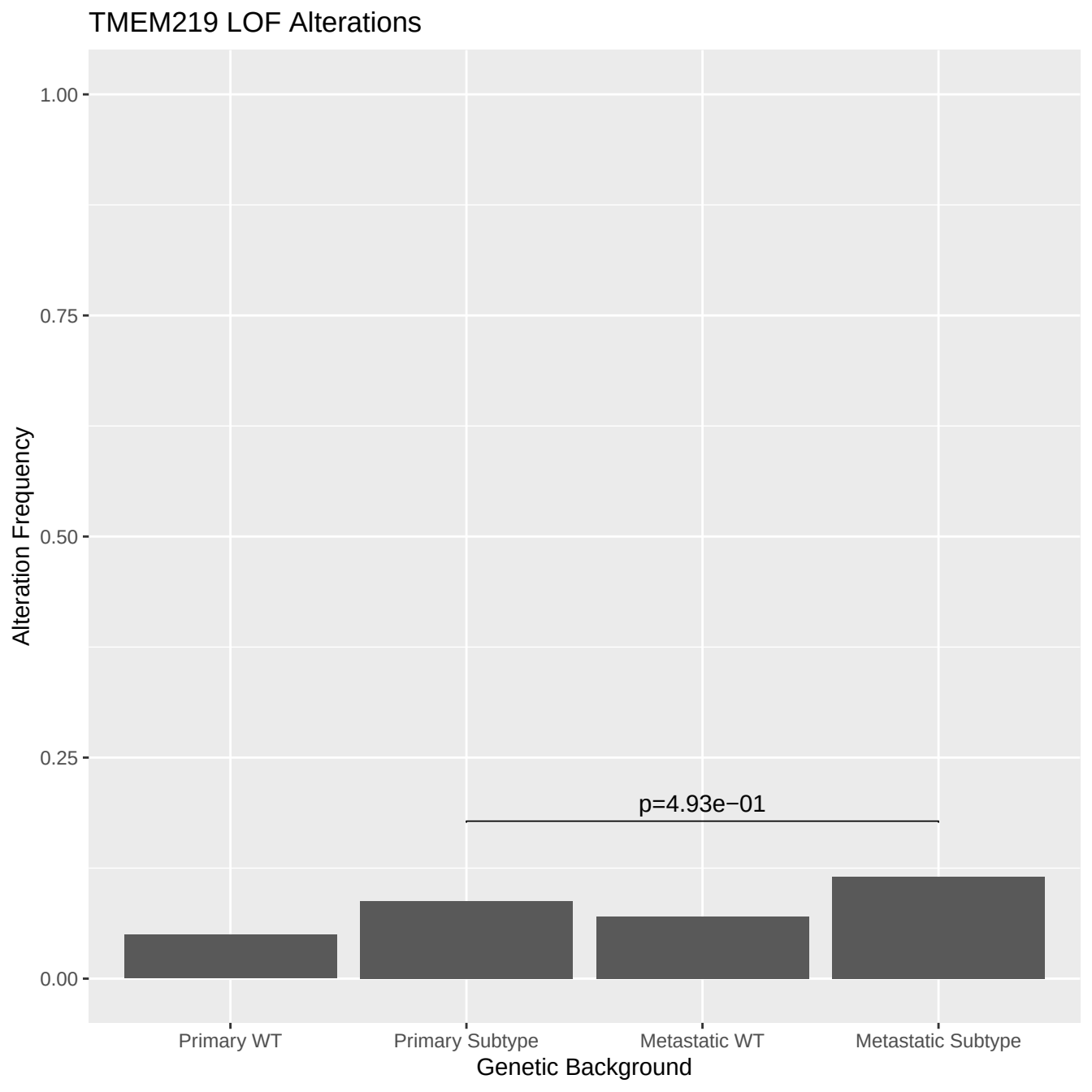

SRPRB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.82e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

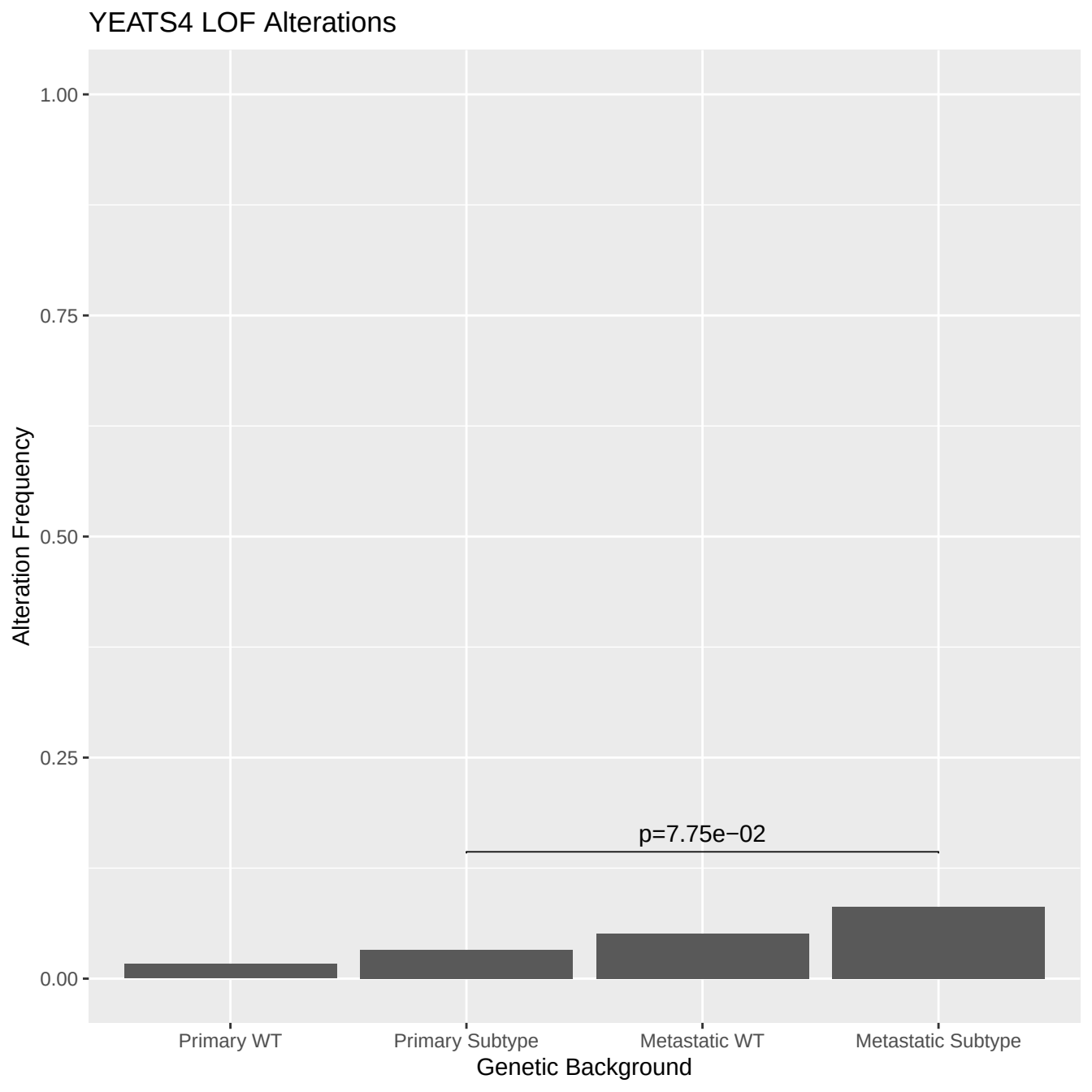

BAG5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.12e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

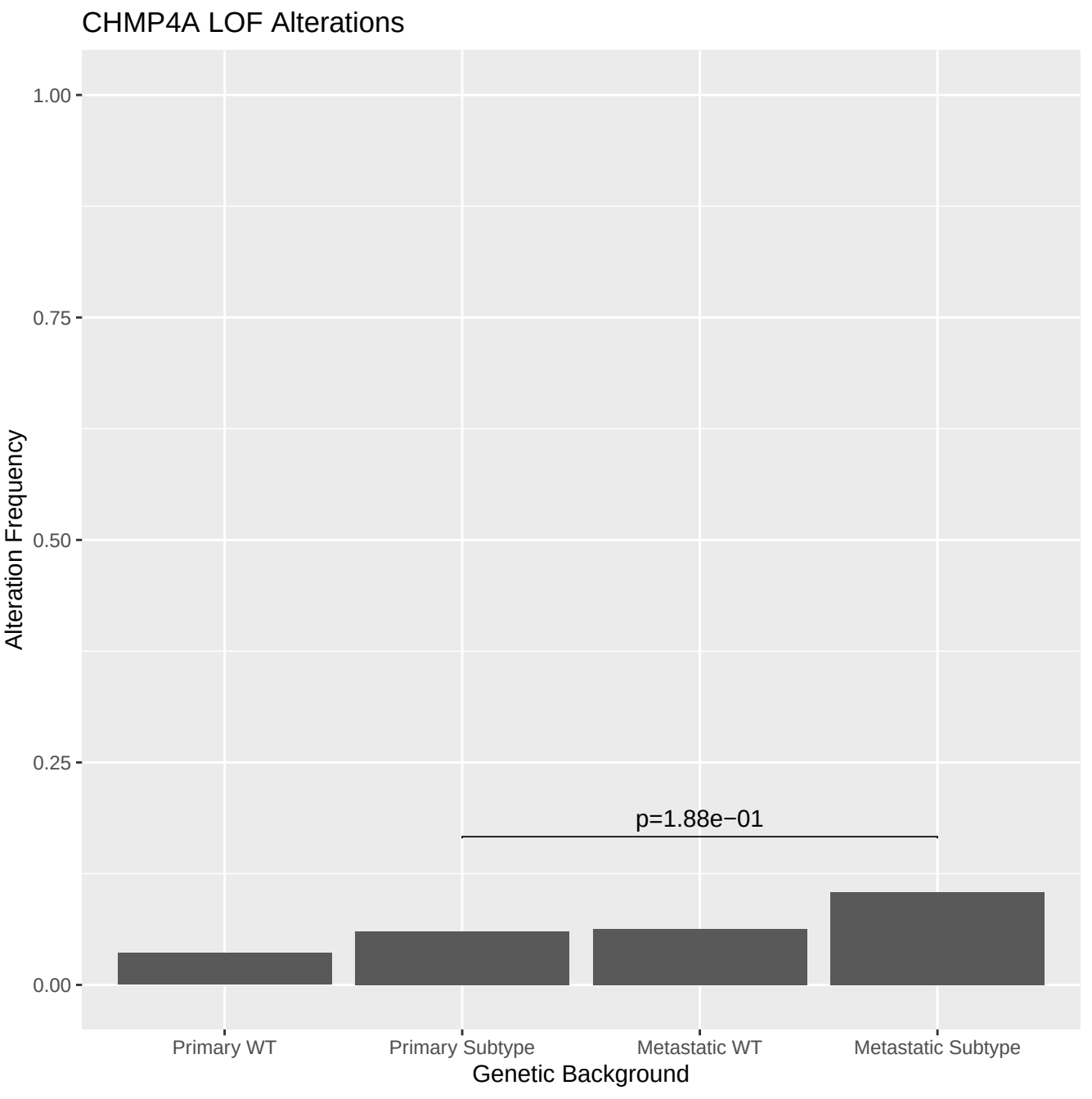

SPSB3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

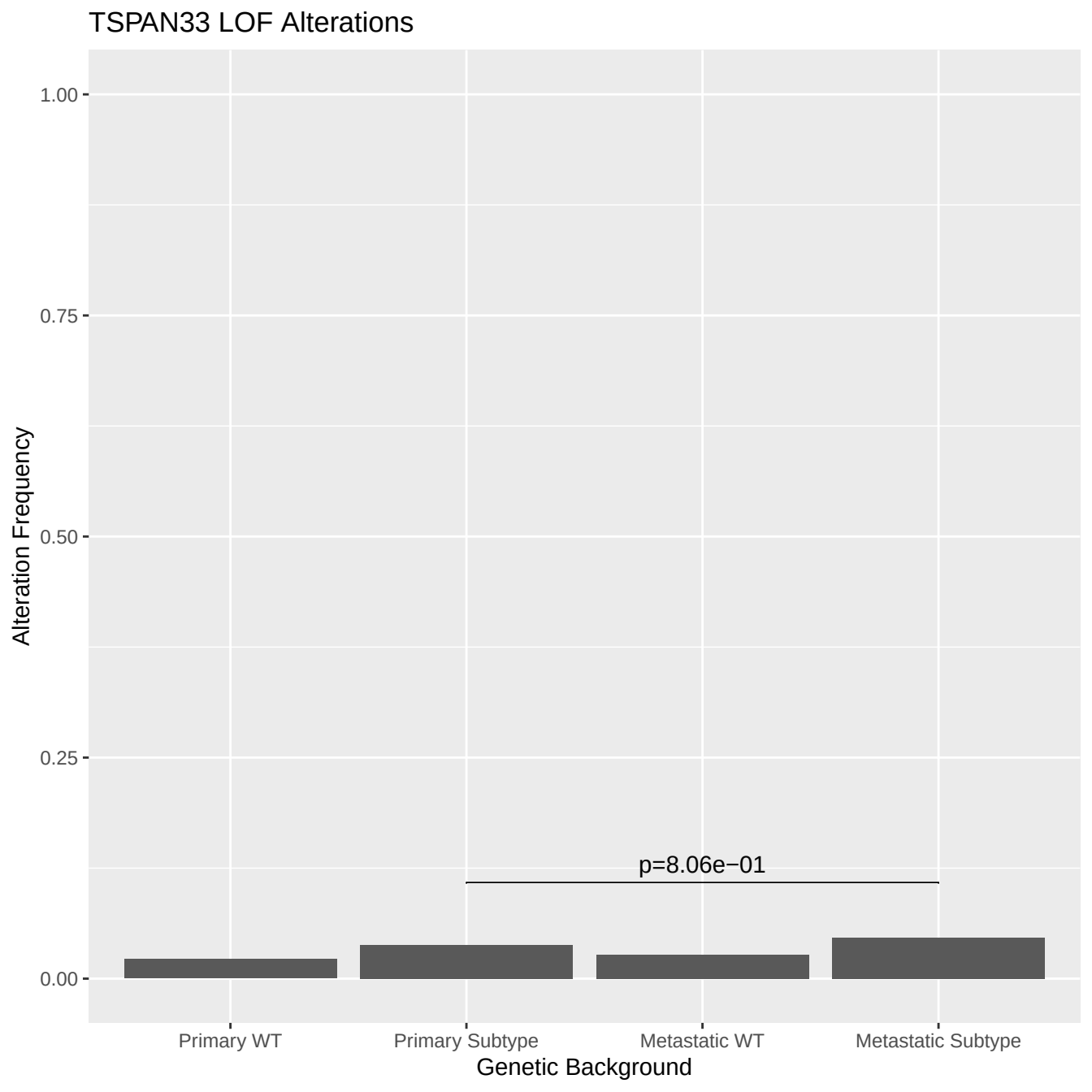

LYRM1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.50e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

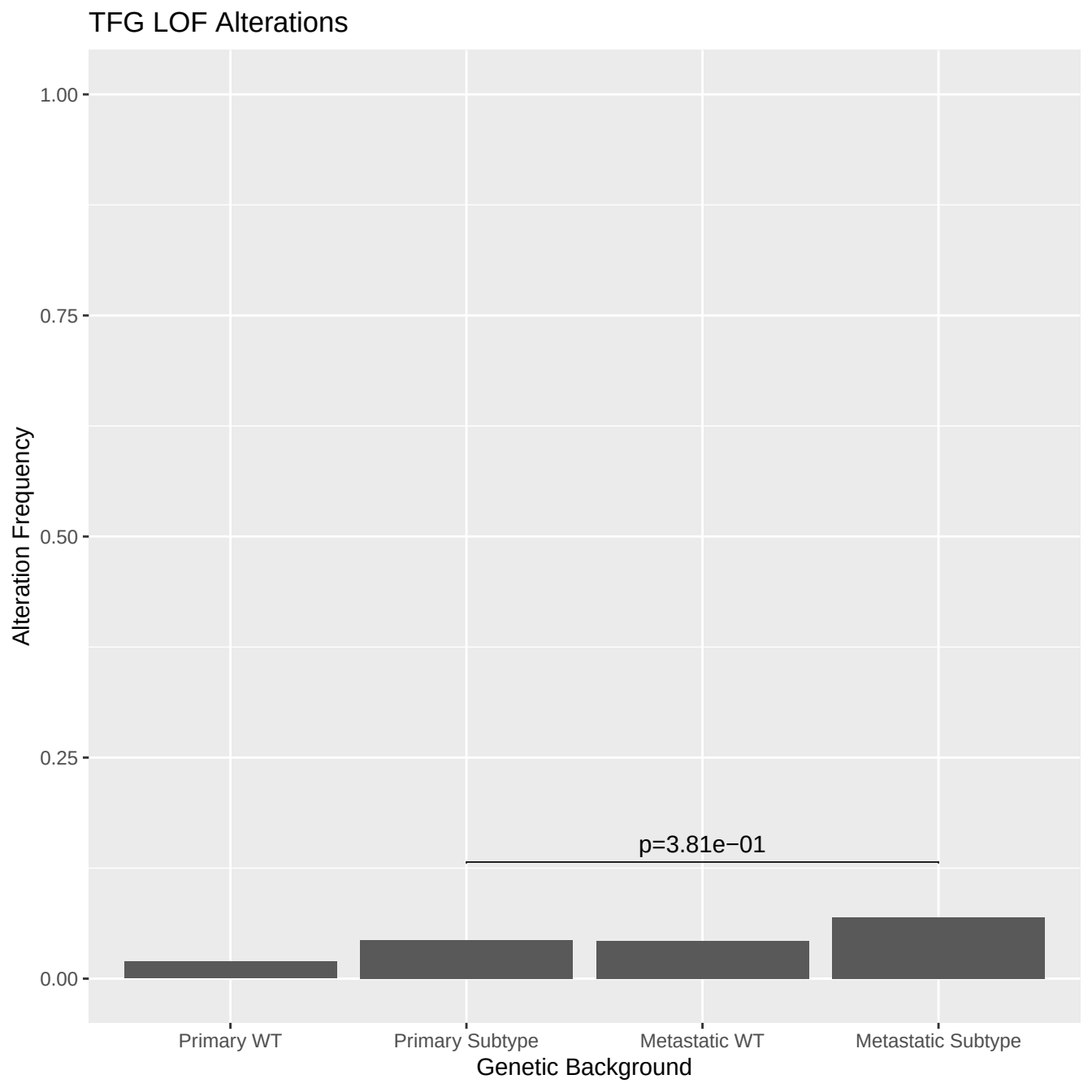

GPR139 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.50e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

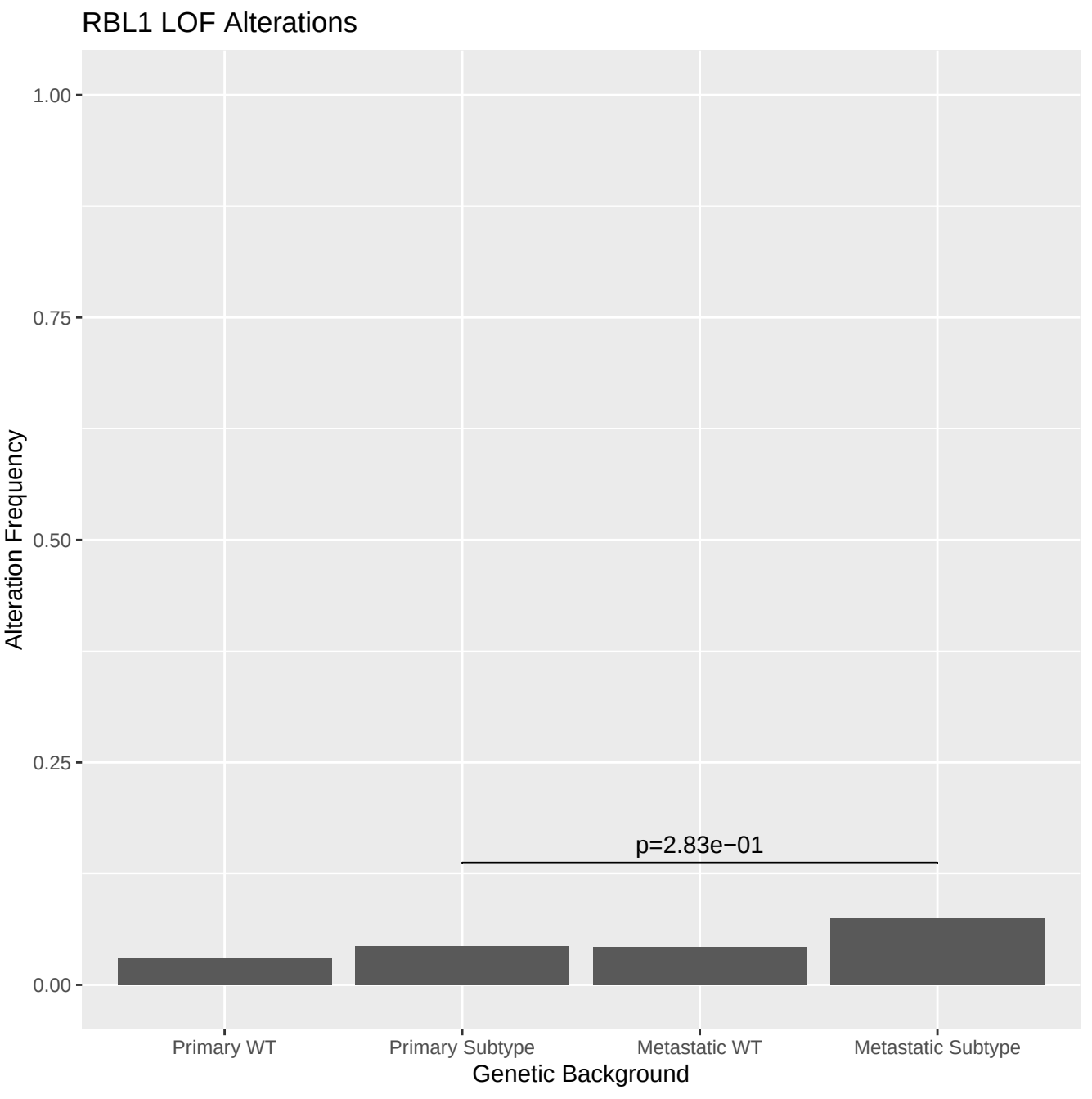

TMEM219 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.93e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

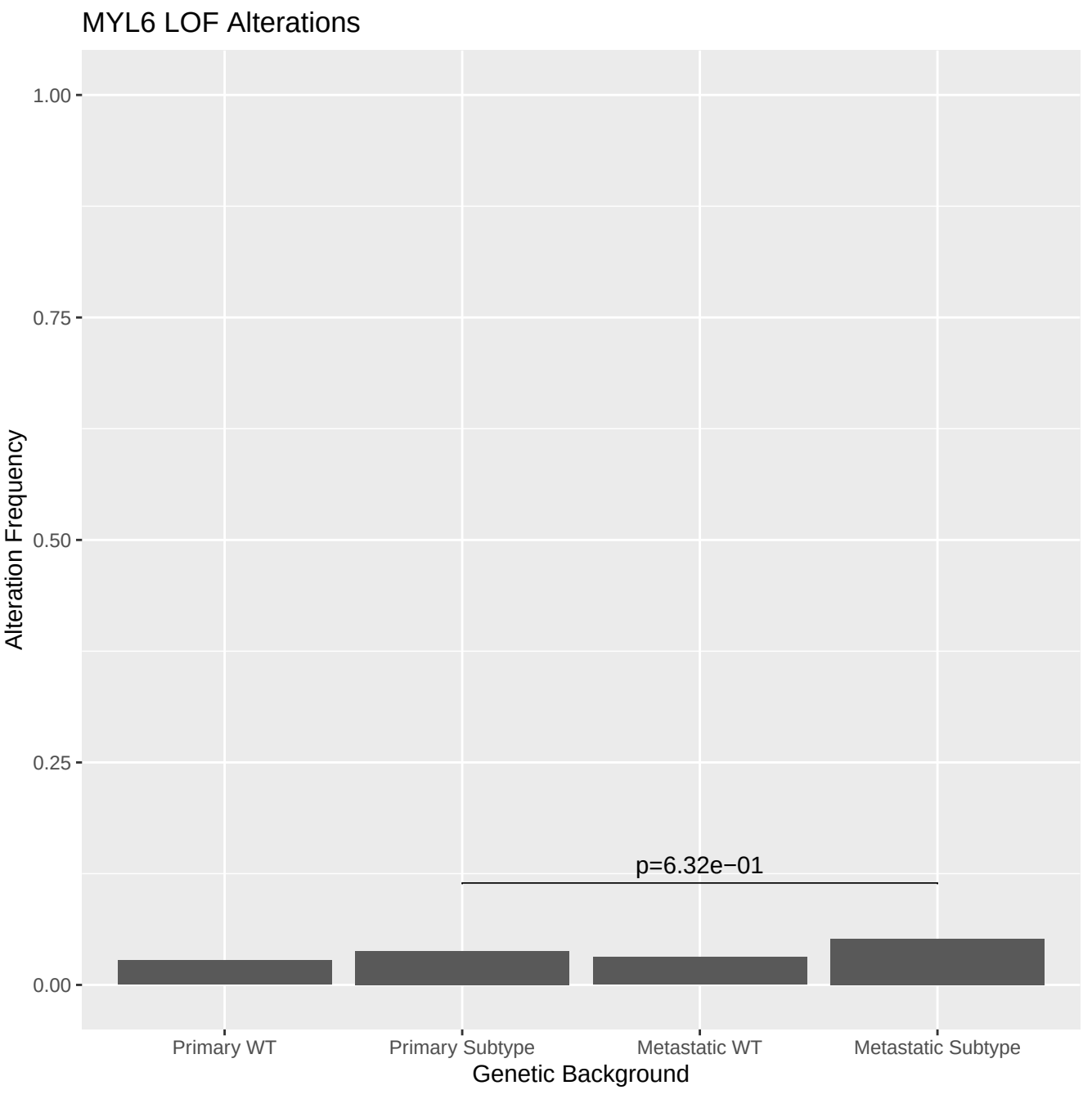

YEATS4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.75e−02
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

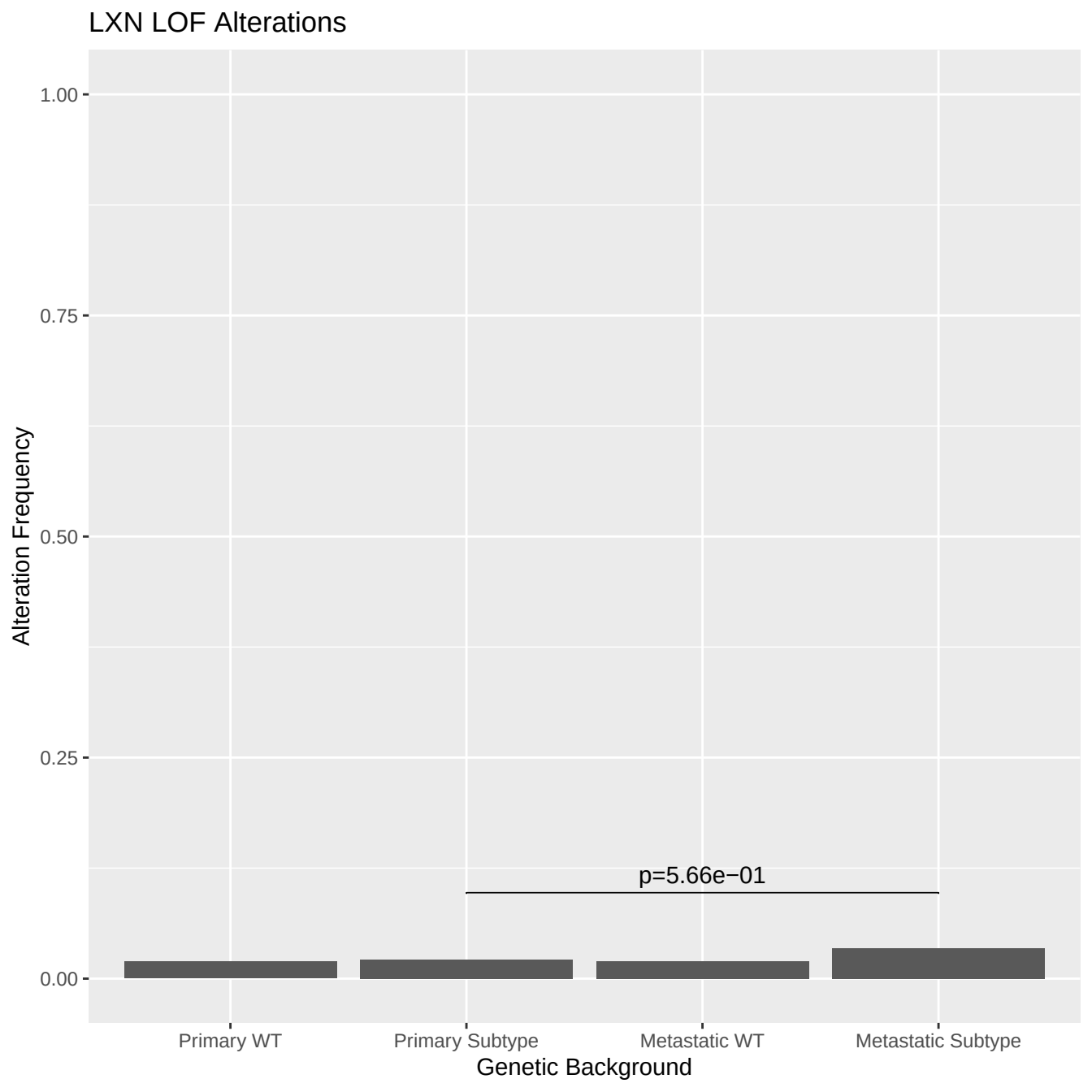

CHMP4A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

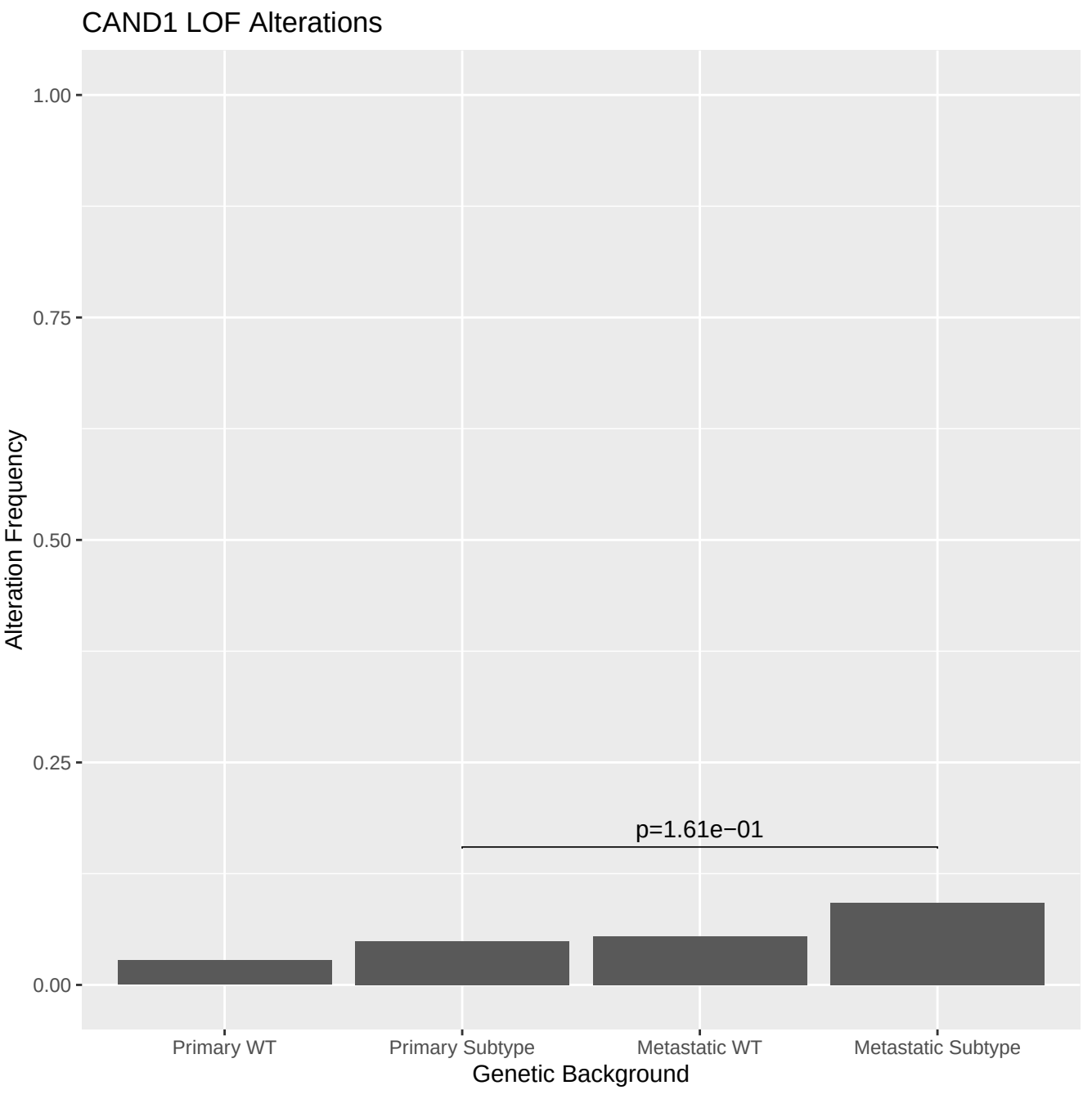

TSPAN33 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

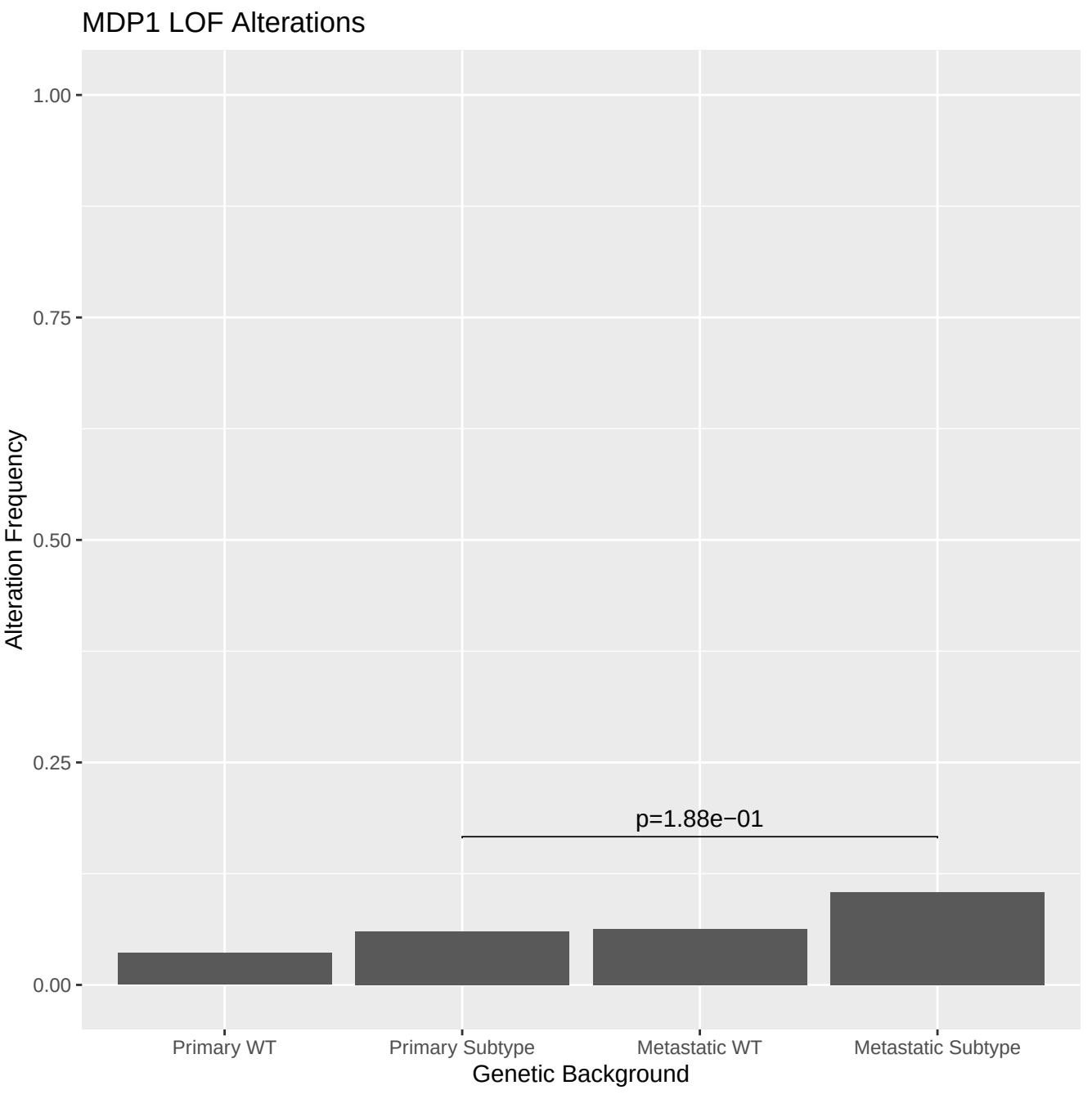

TFG LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

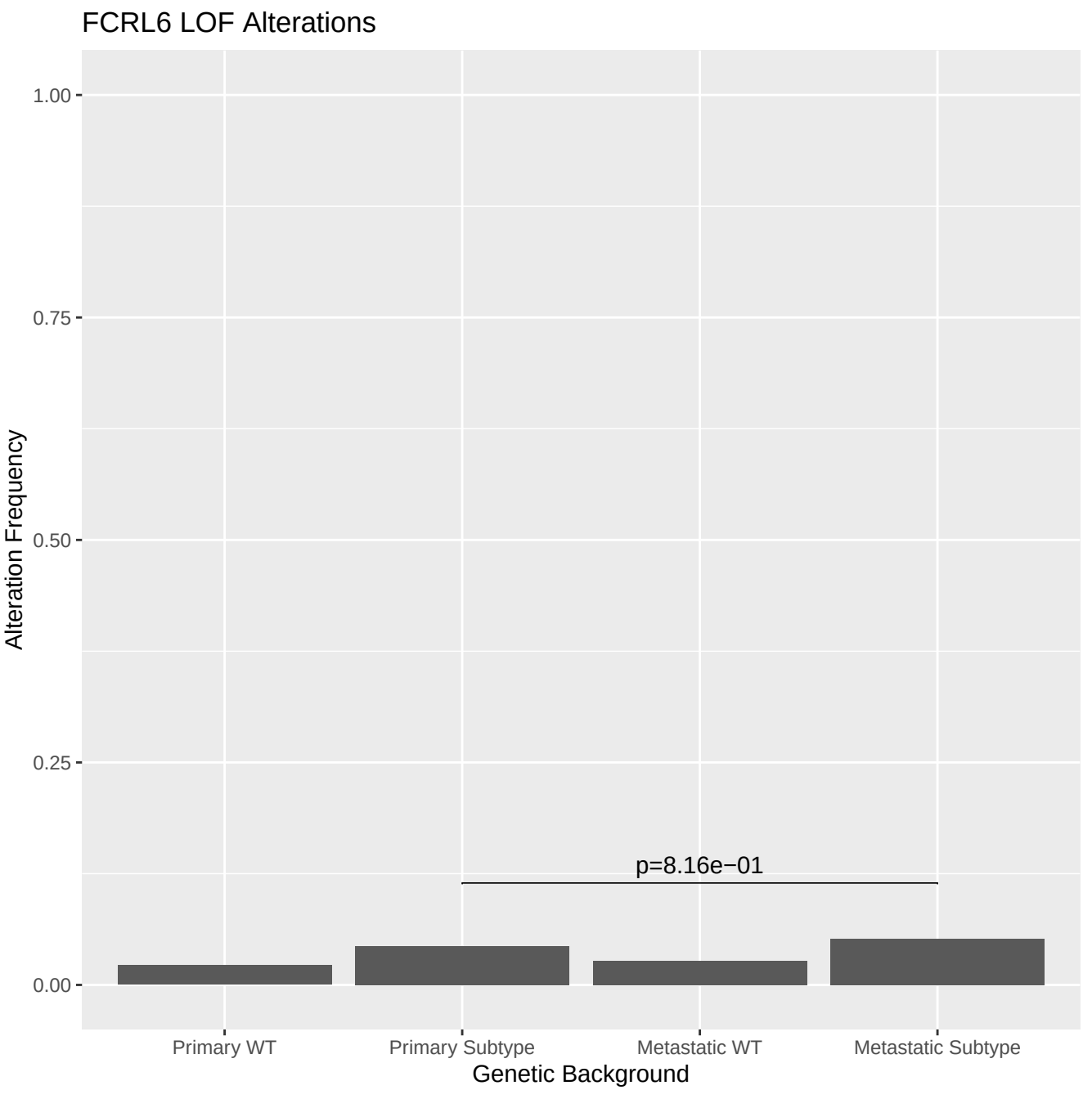

RBL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

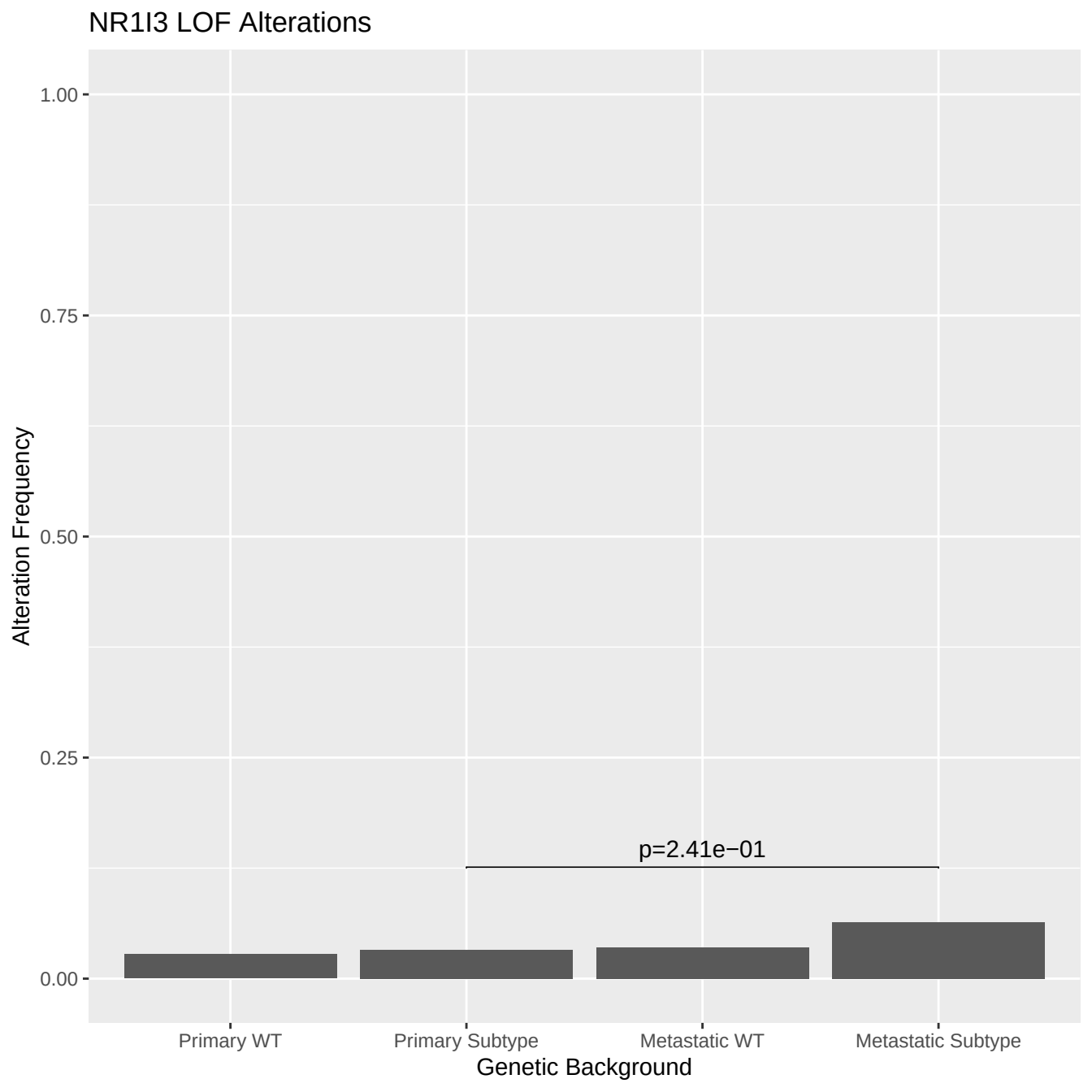

MYL6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

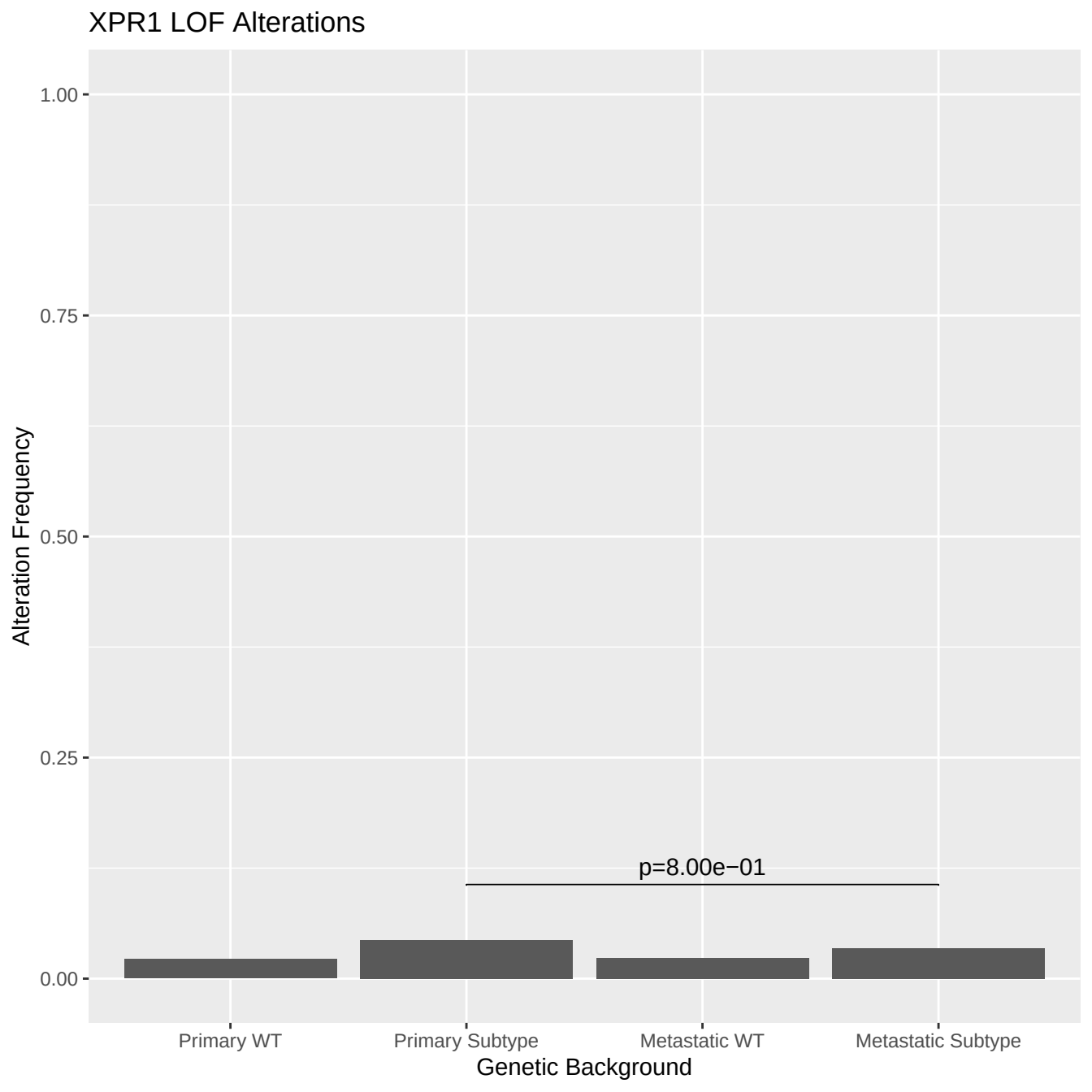

LXN LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

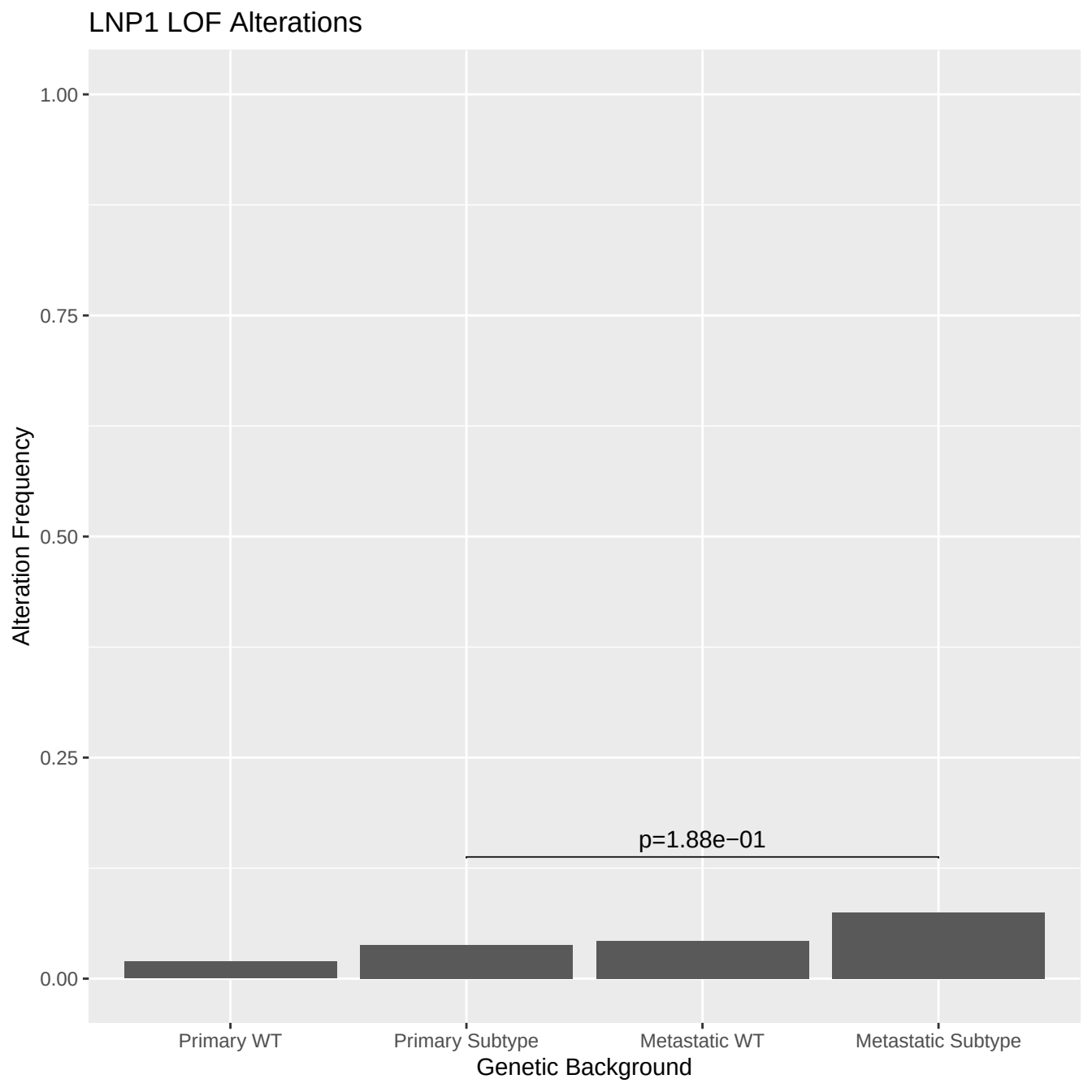

CAND1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.61e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

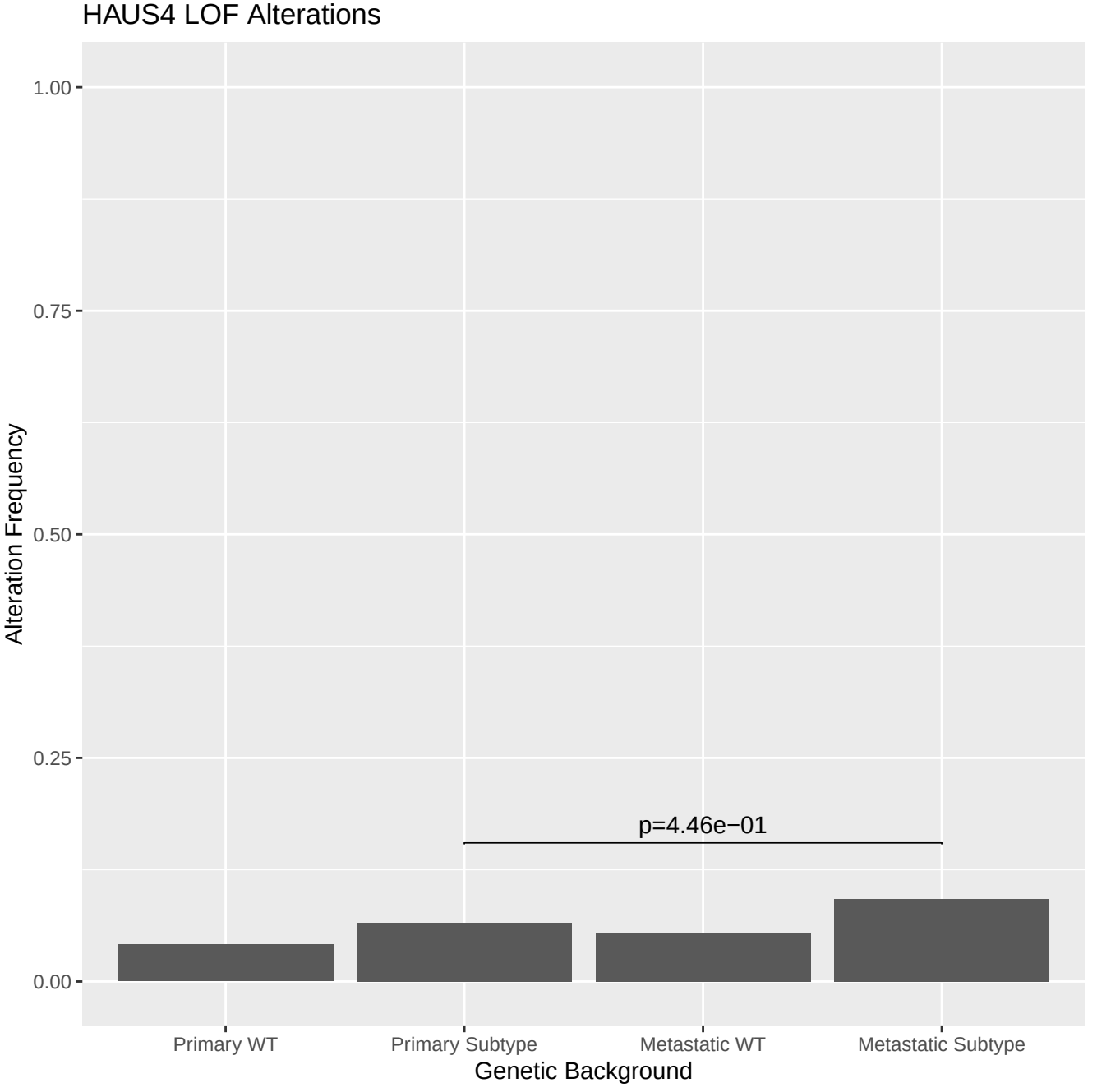

MDP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

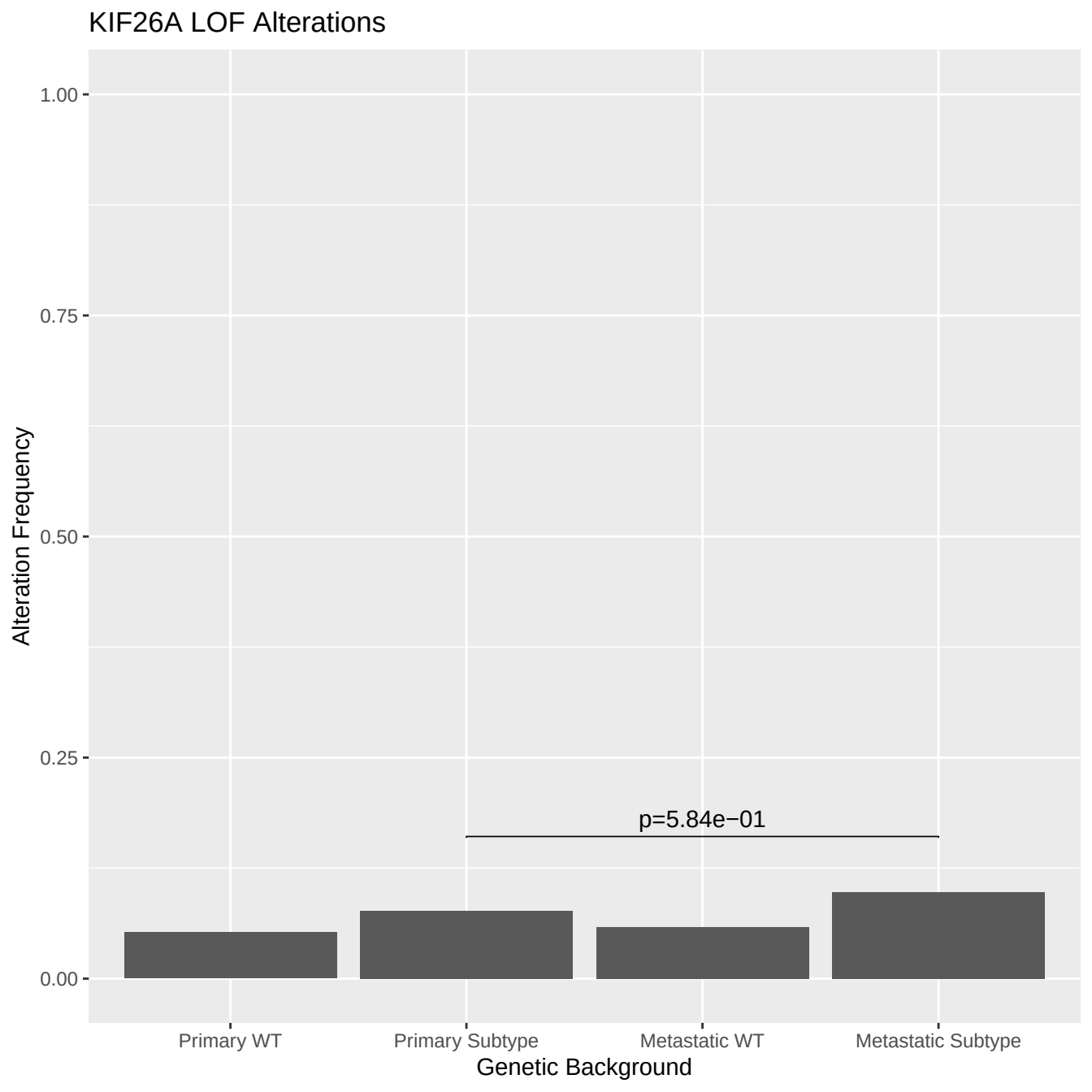

FCRL6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.16e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

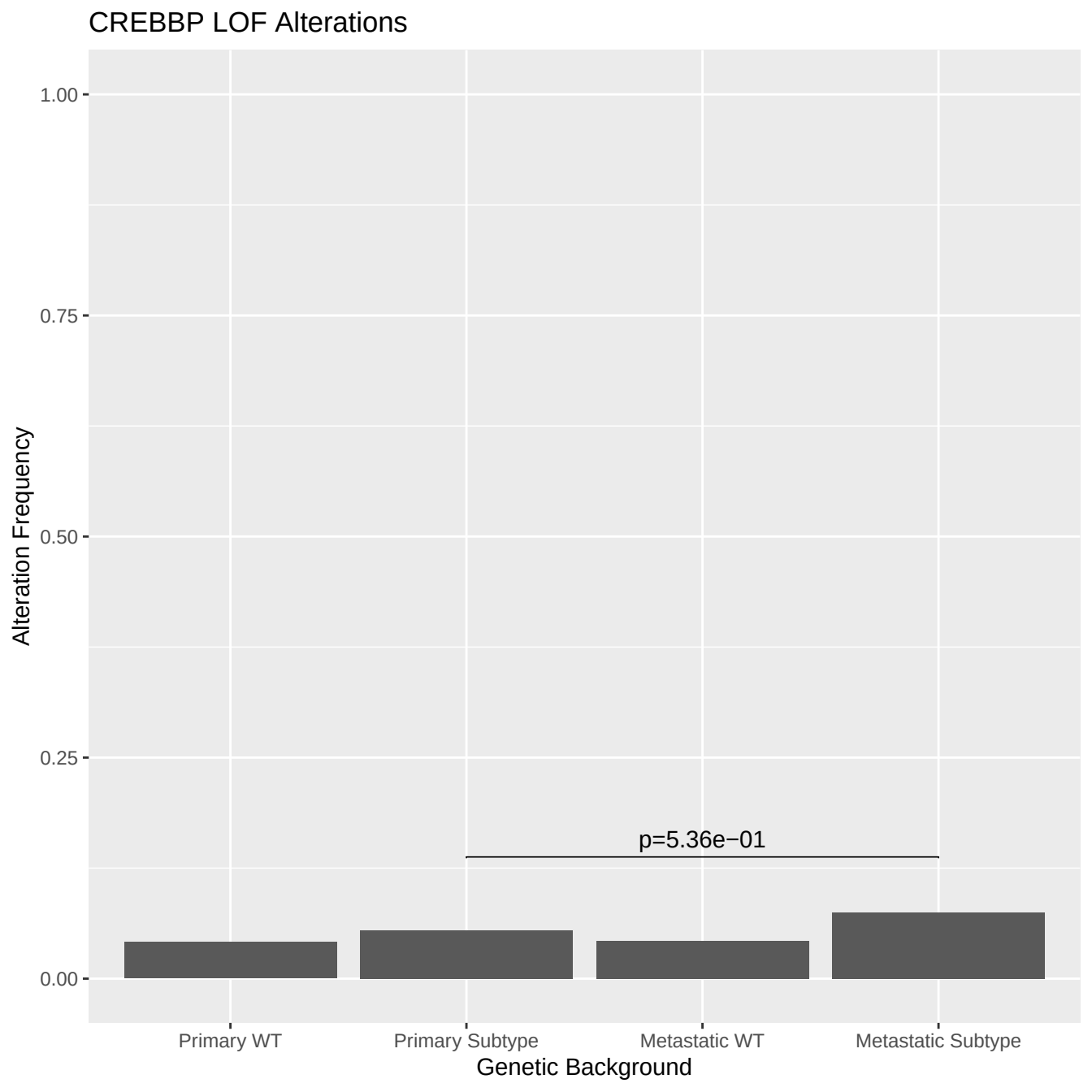

NR1I3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.41e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

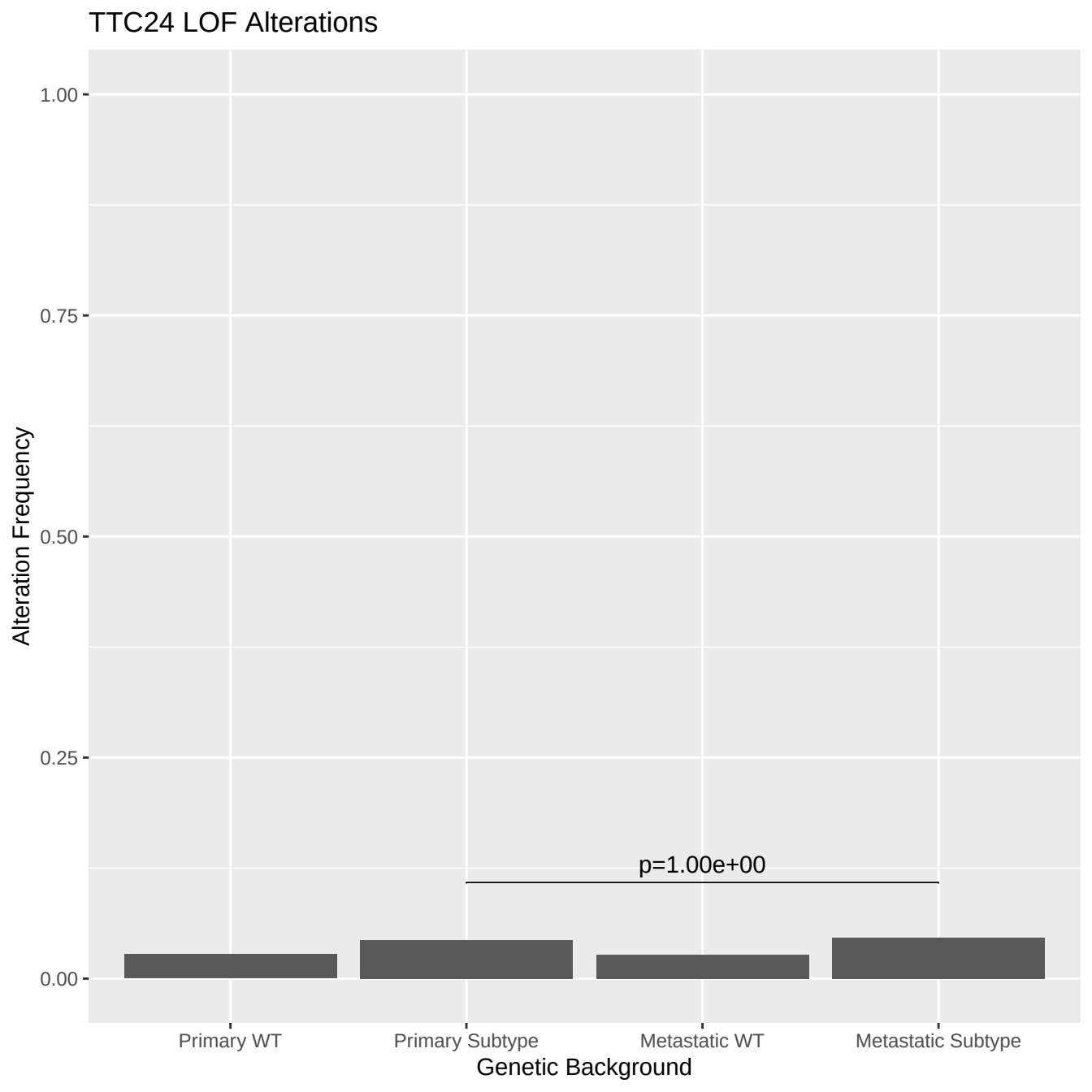

XPR1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.00e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

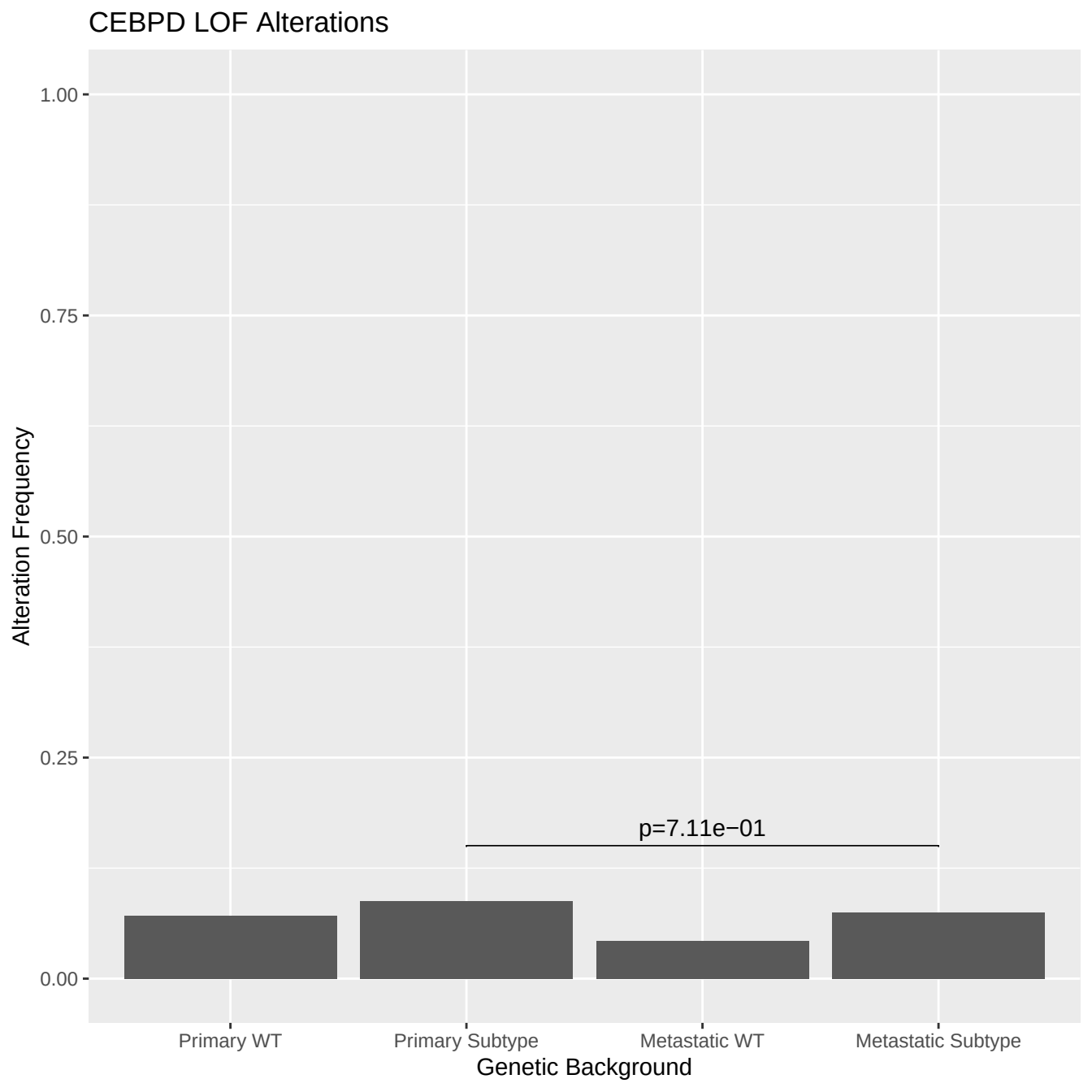

LNP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.88e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

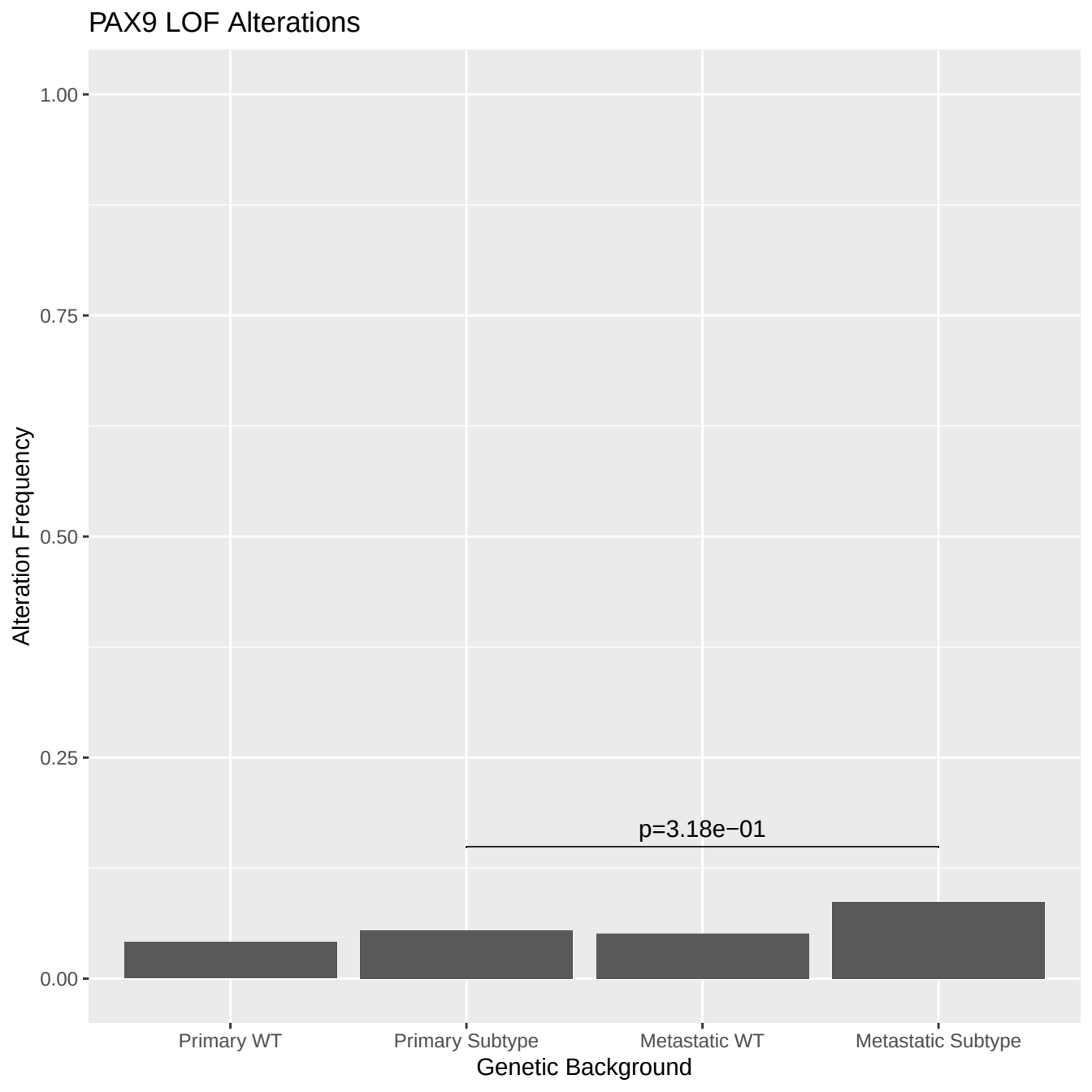

HAUS4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.46e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

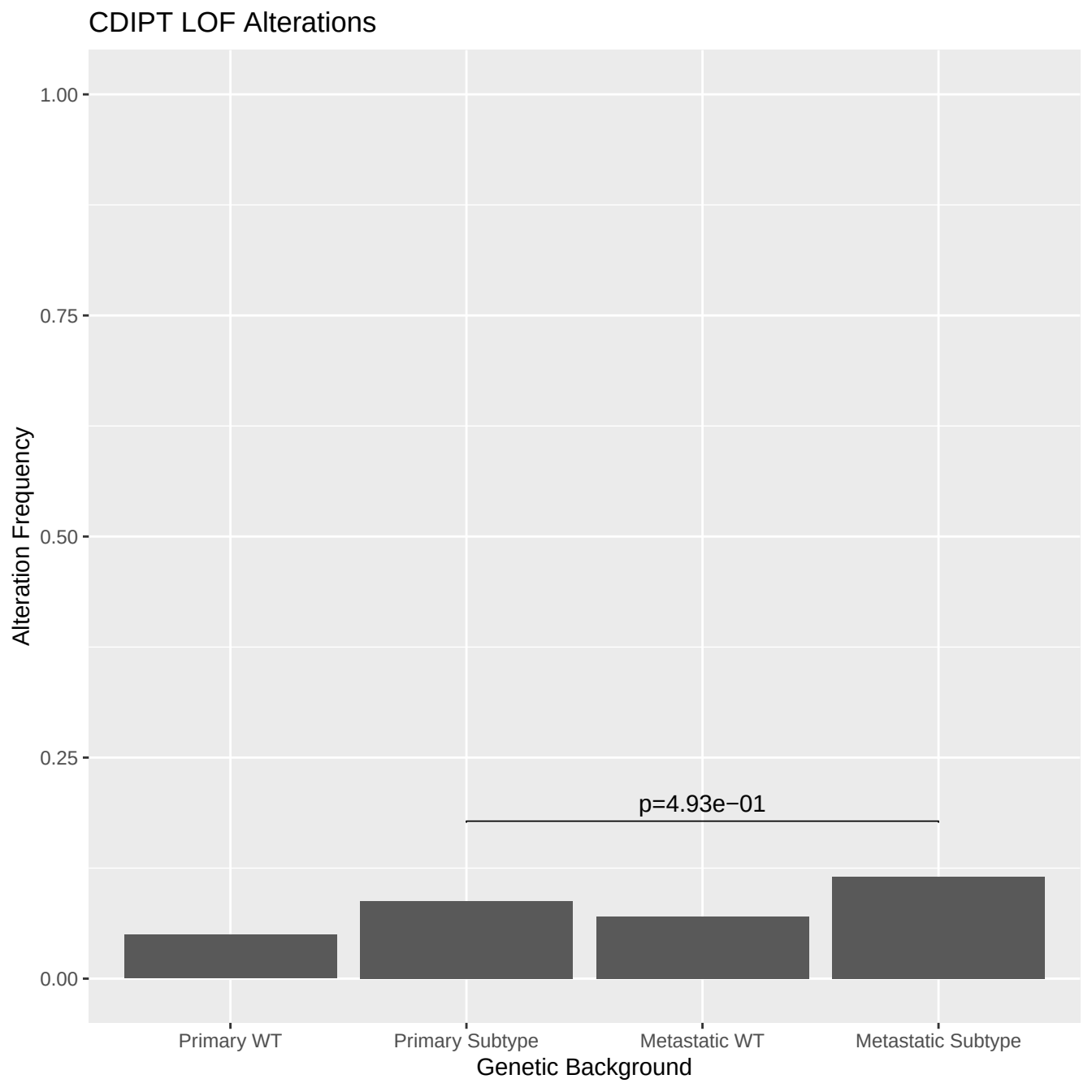

KIF26A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.84e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

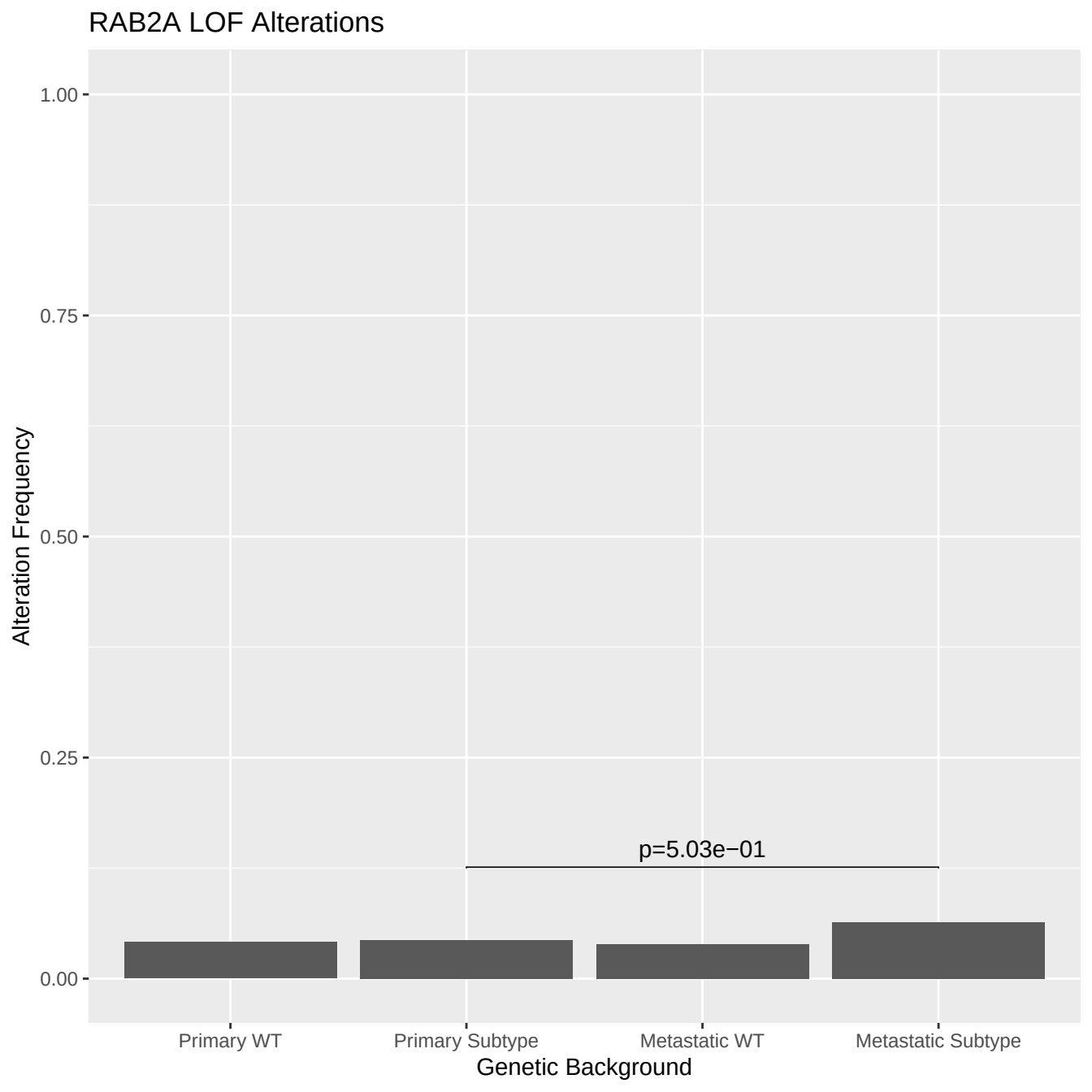

CREBBP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.36e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

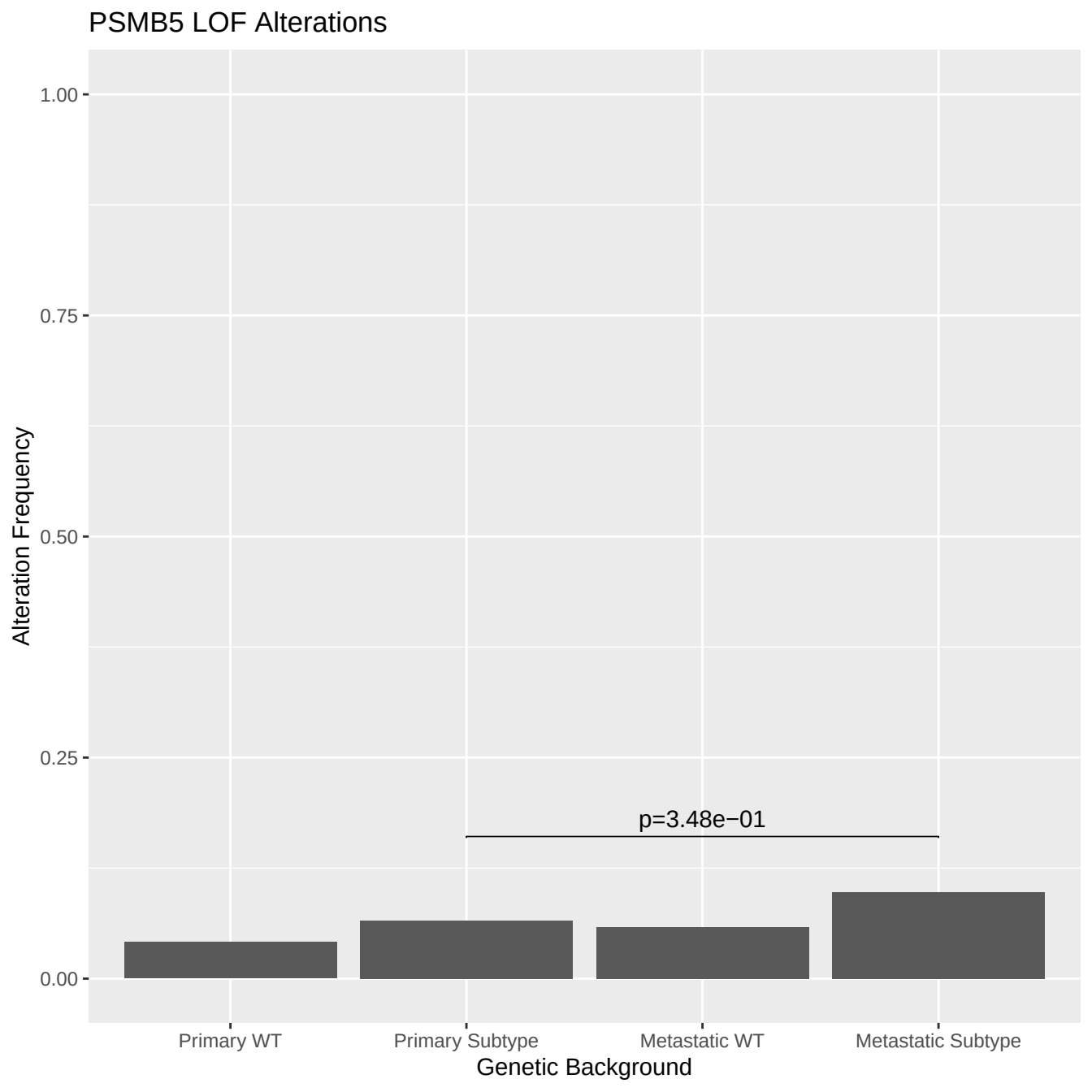

TTC24 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

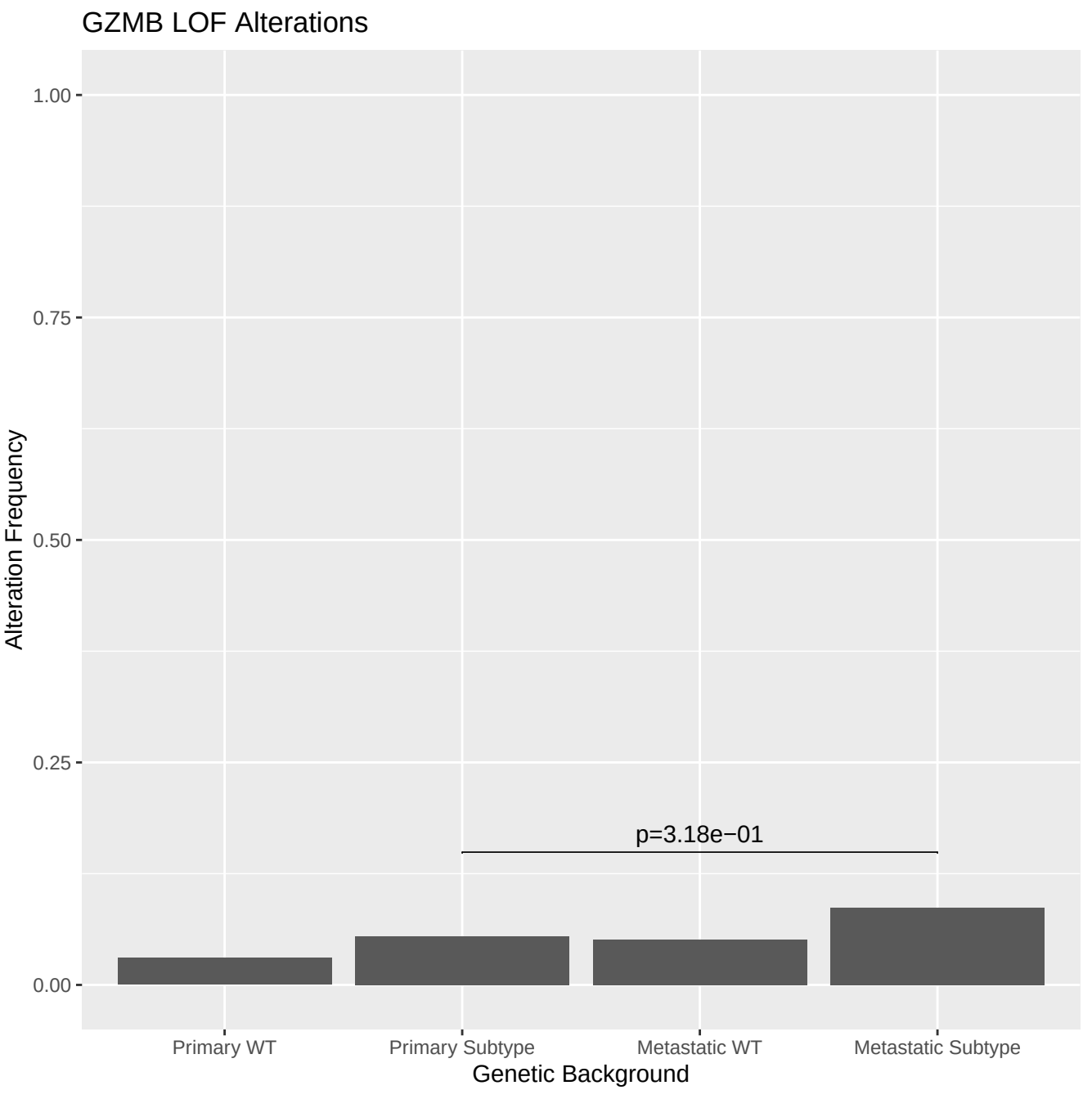

CEBPD LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

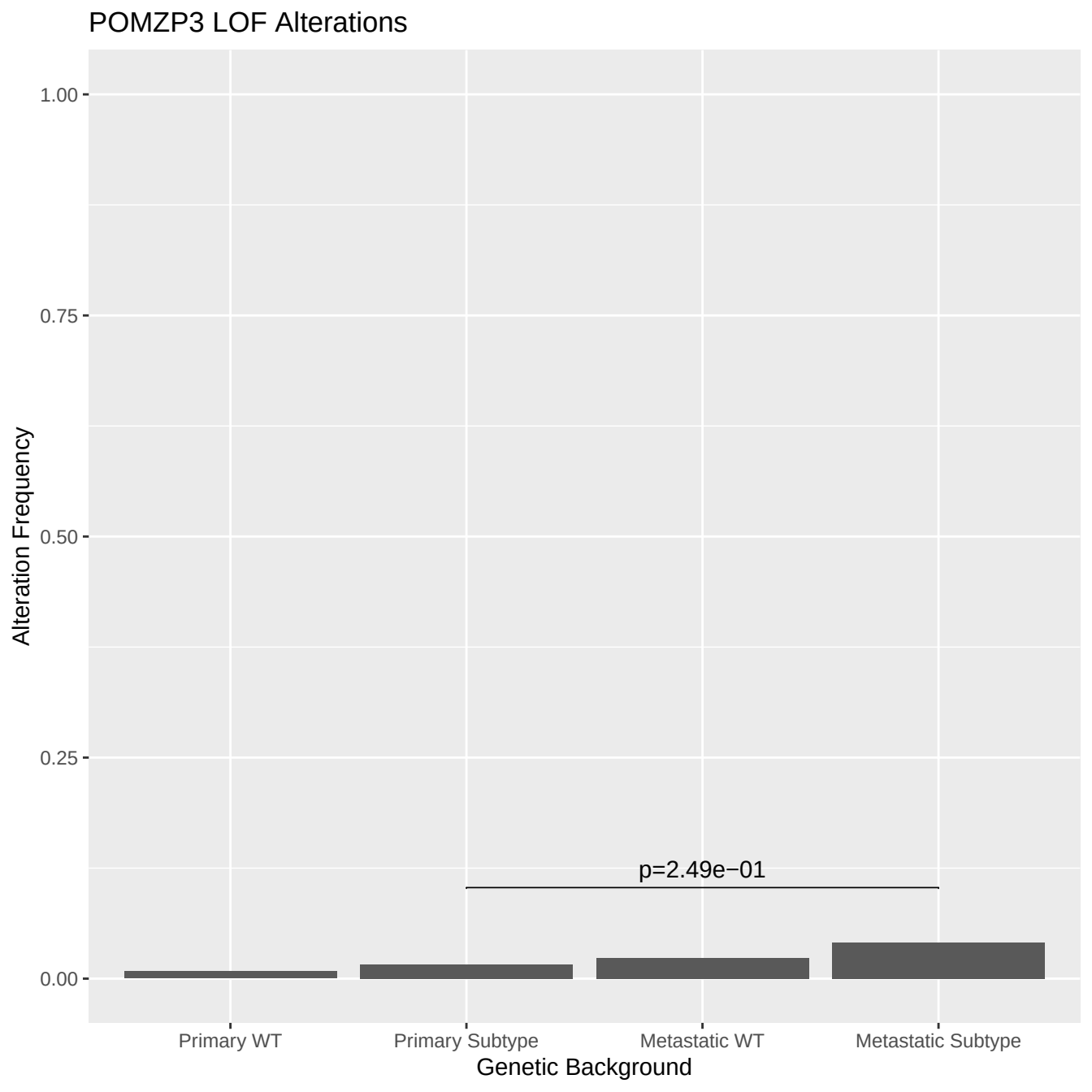

PAX9 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

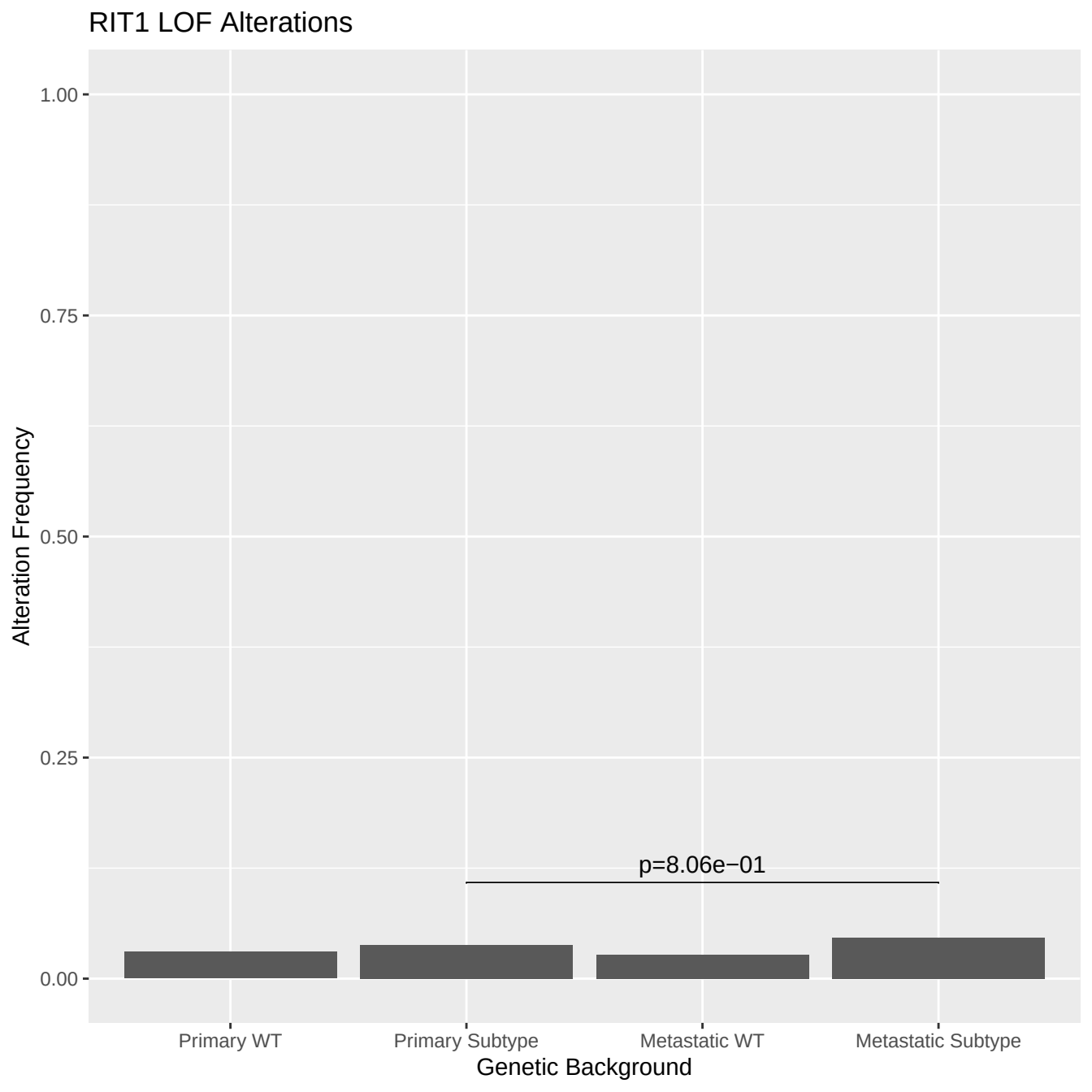

CDIPT LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.93e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

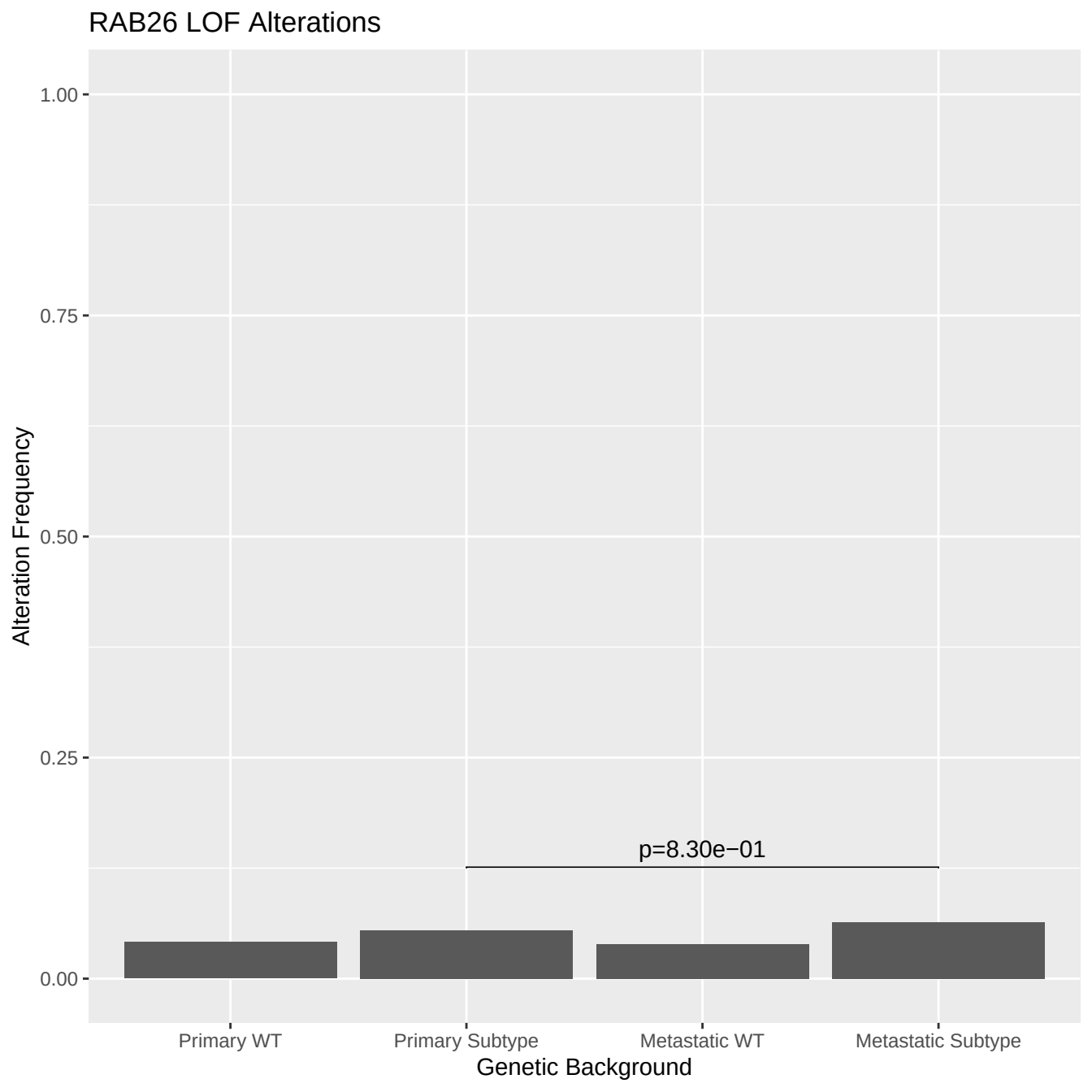

RAB2A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

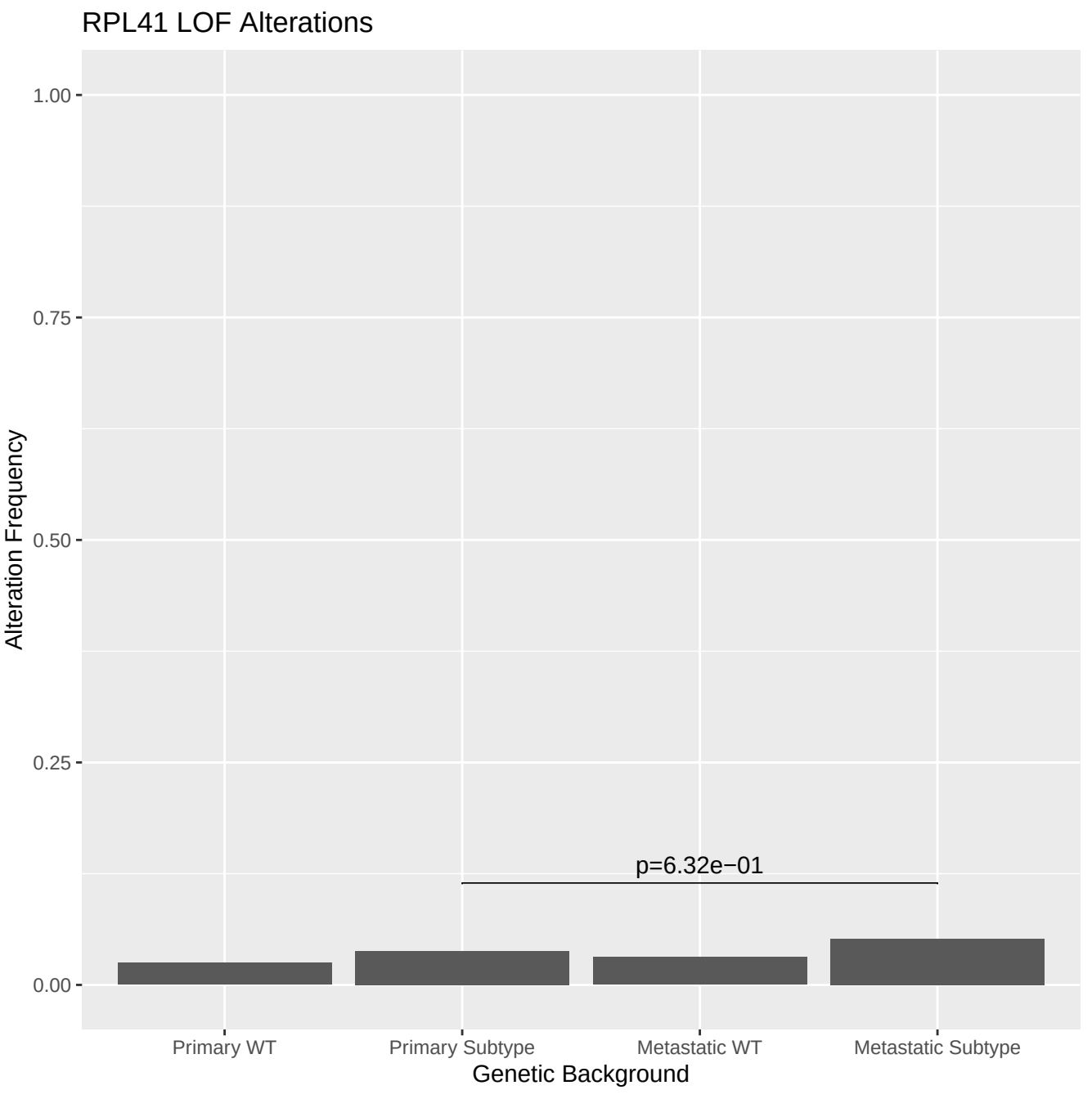

PSMB5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

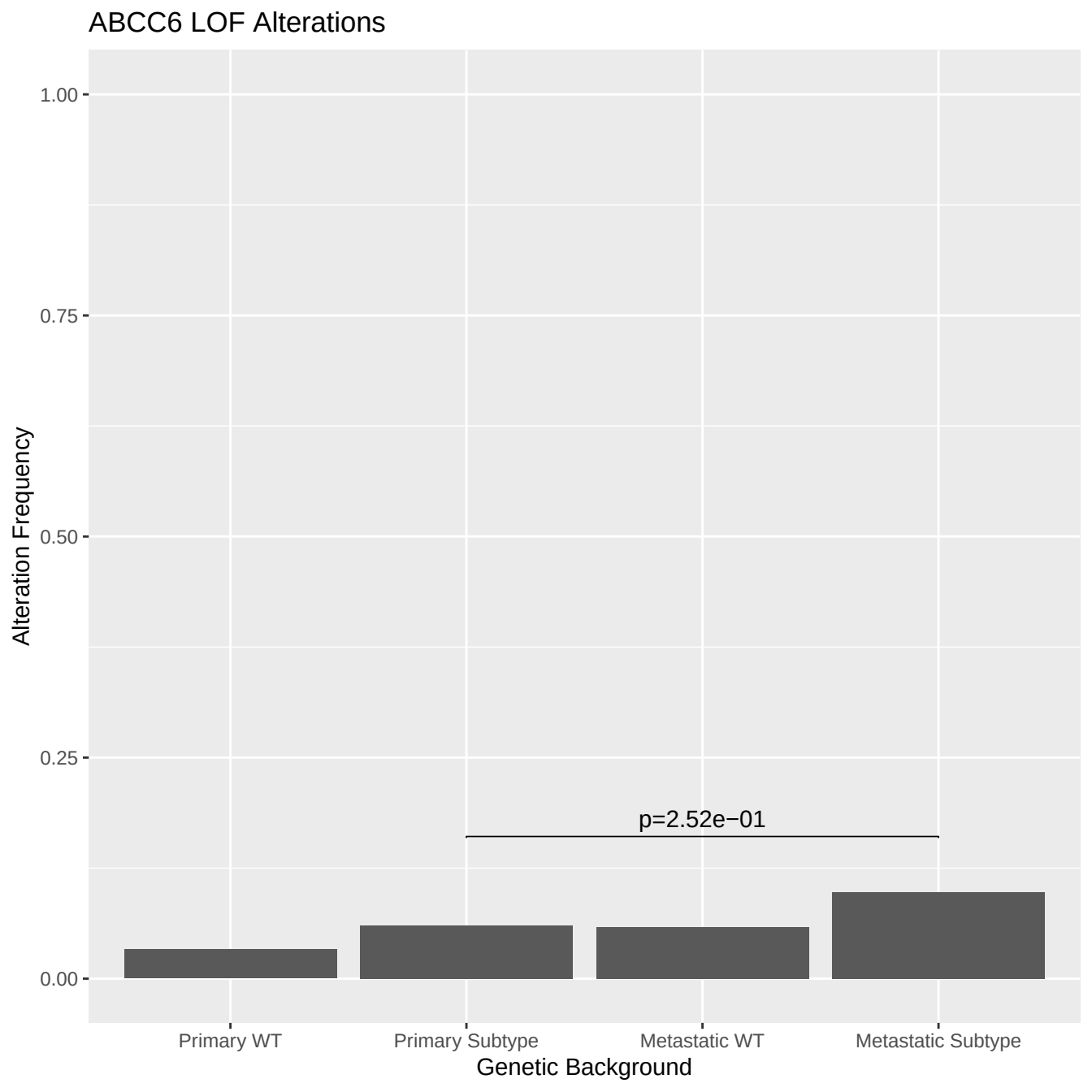

GZMB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

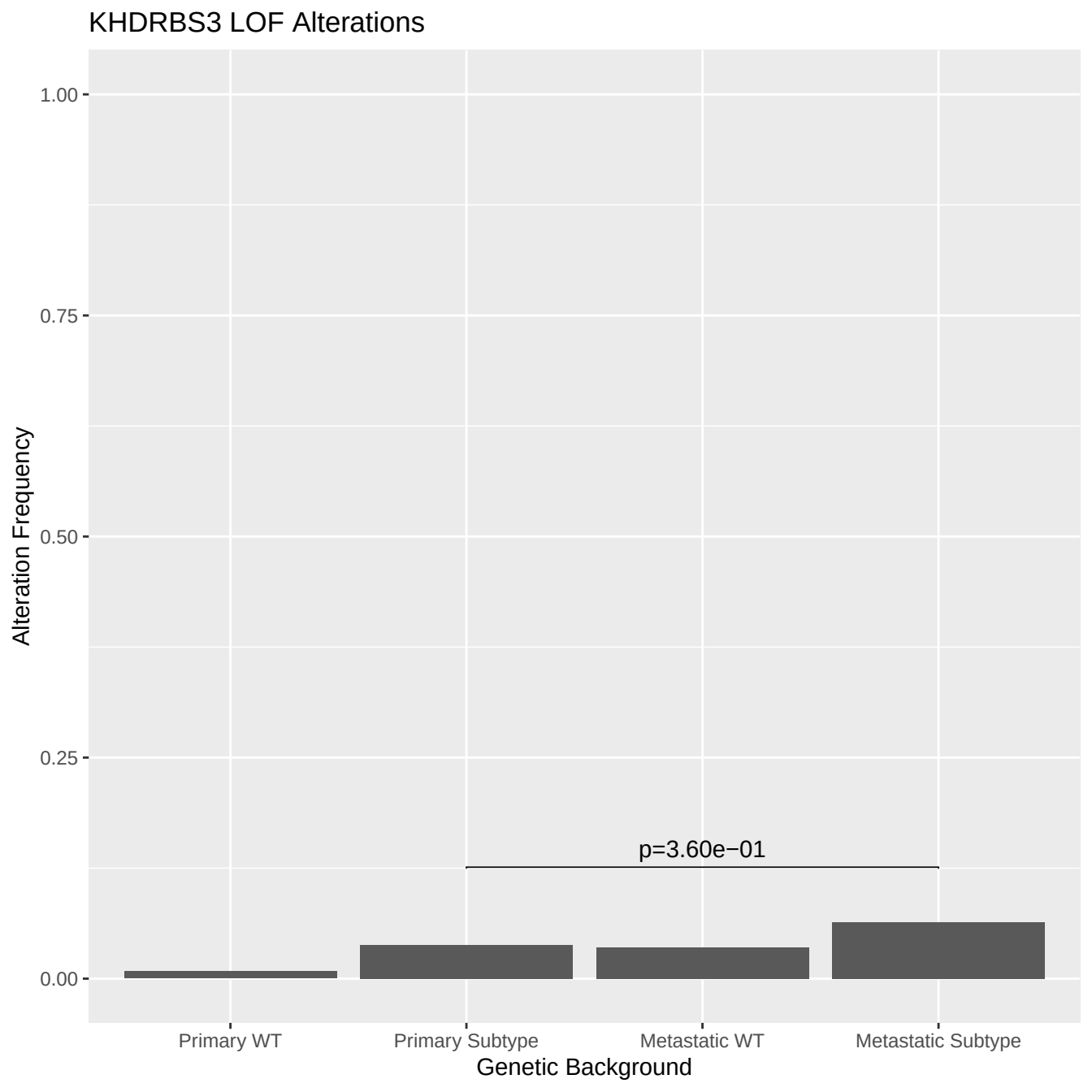

POMZP3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

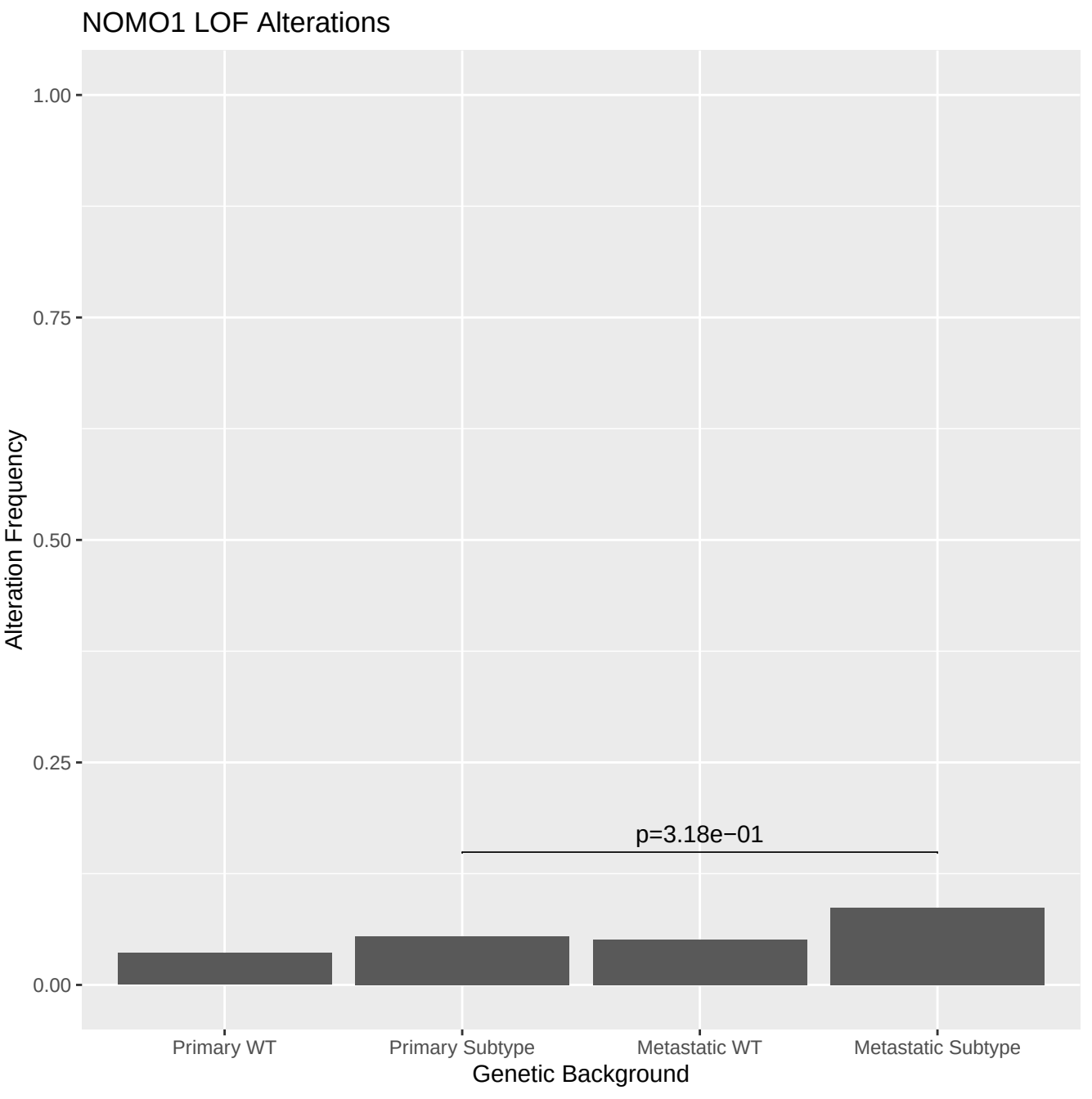

RIT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

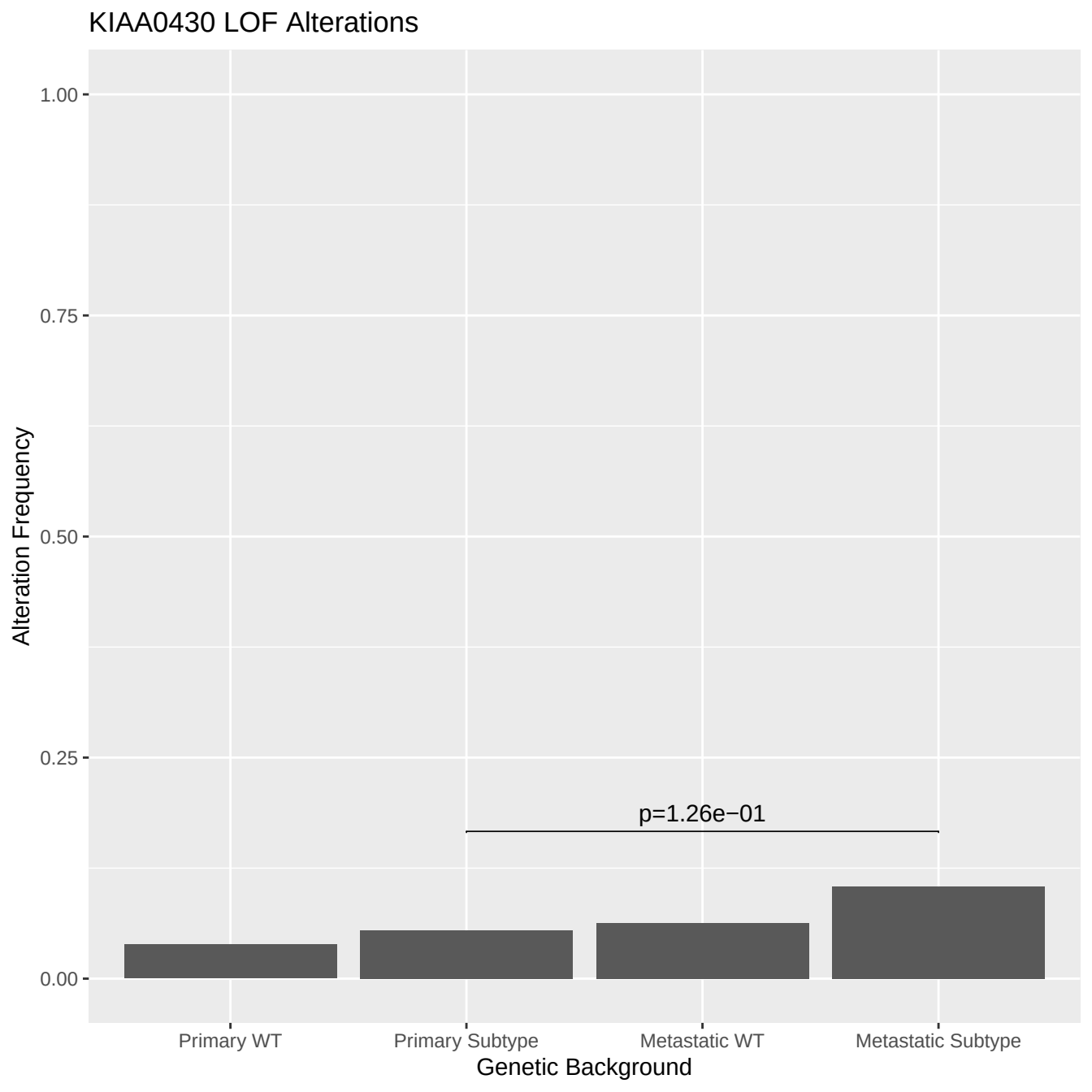

RAB26 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

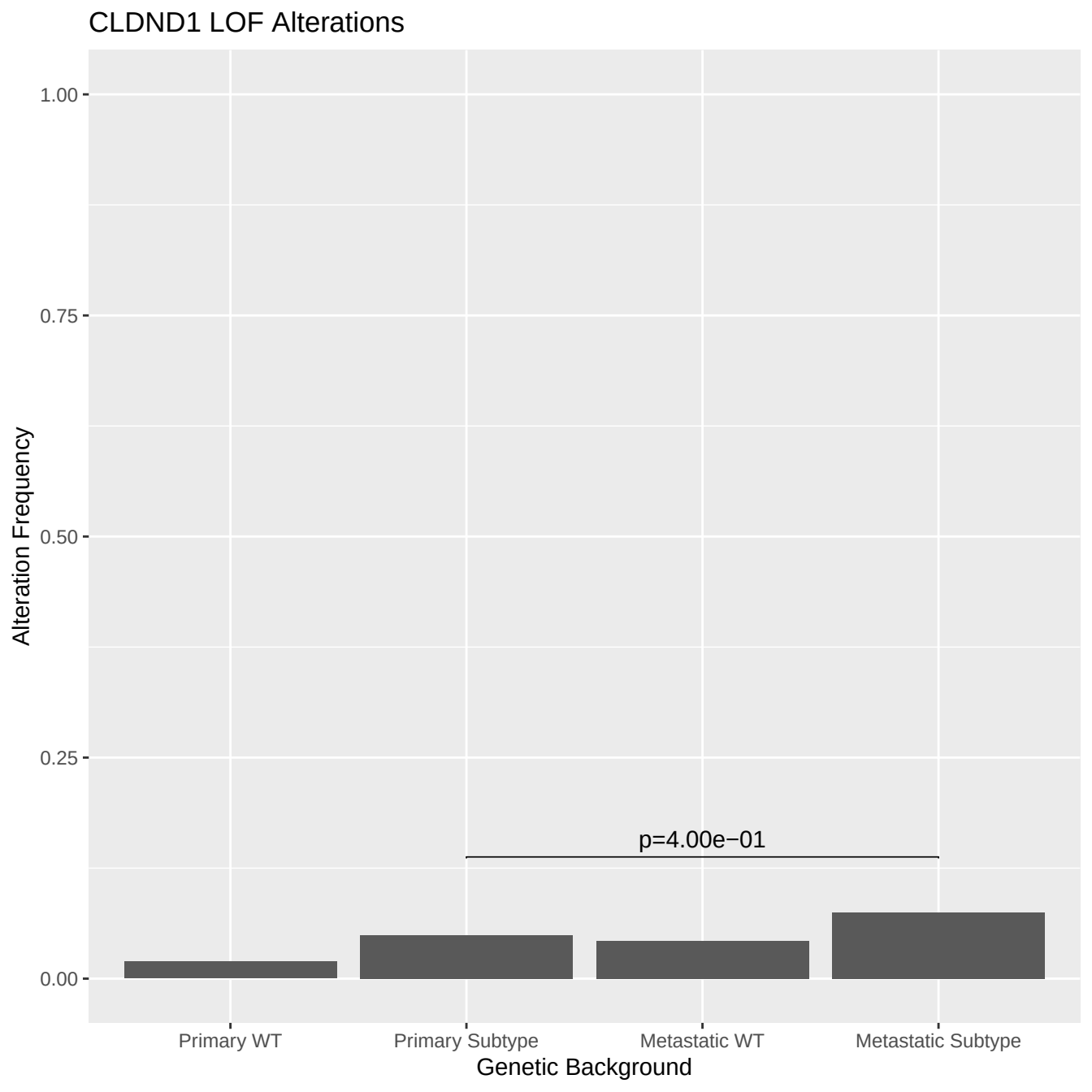

RPL41 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

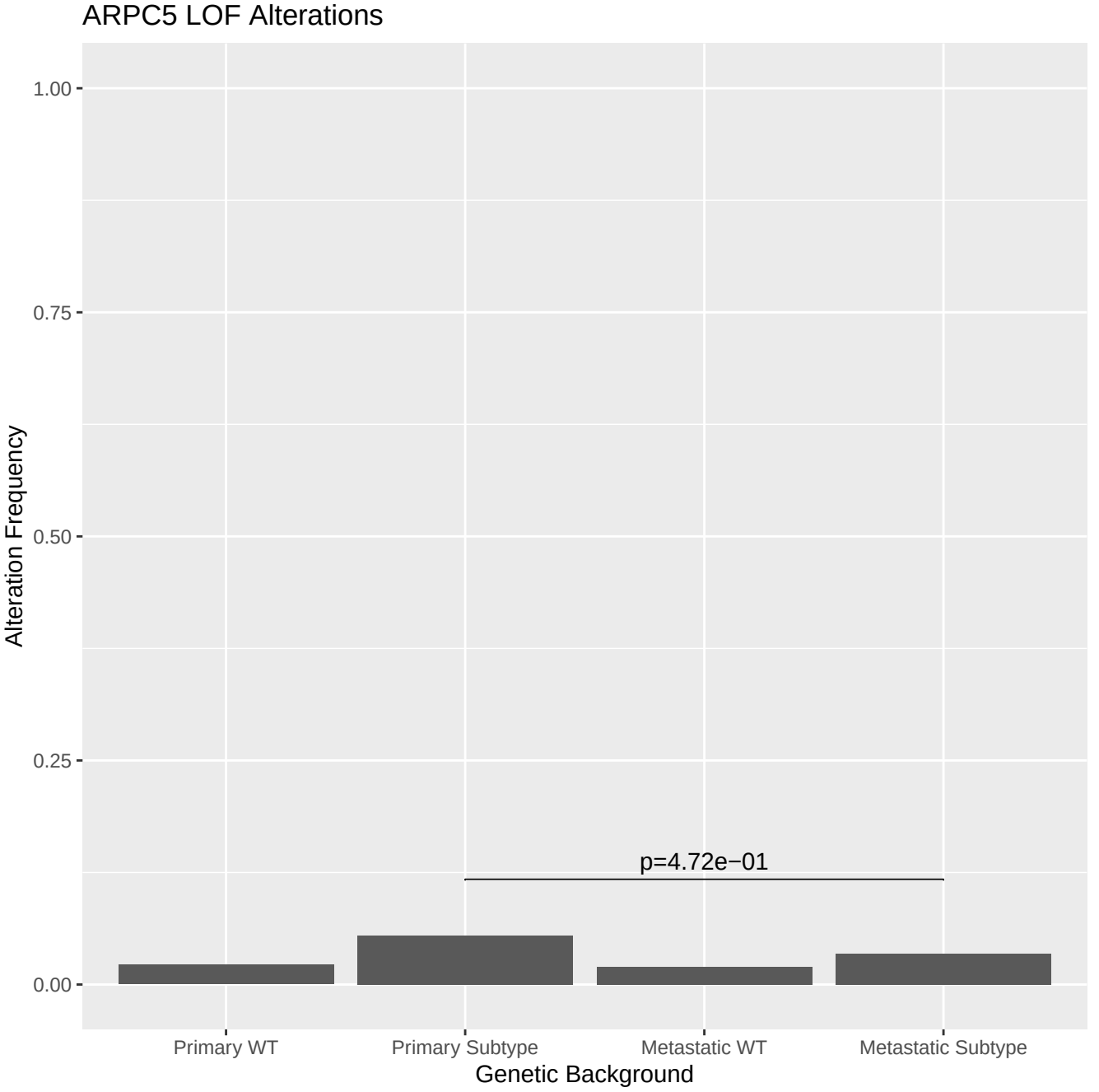

ABCC6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.52e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

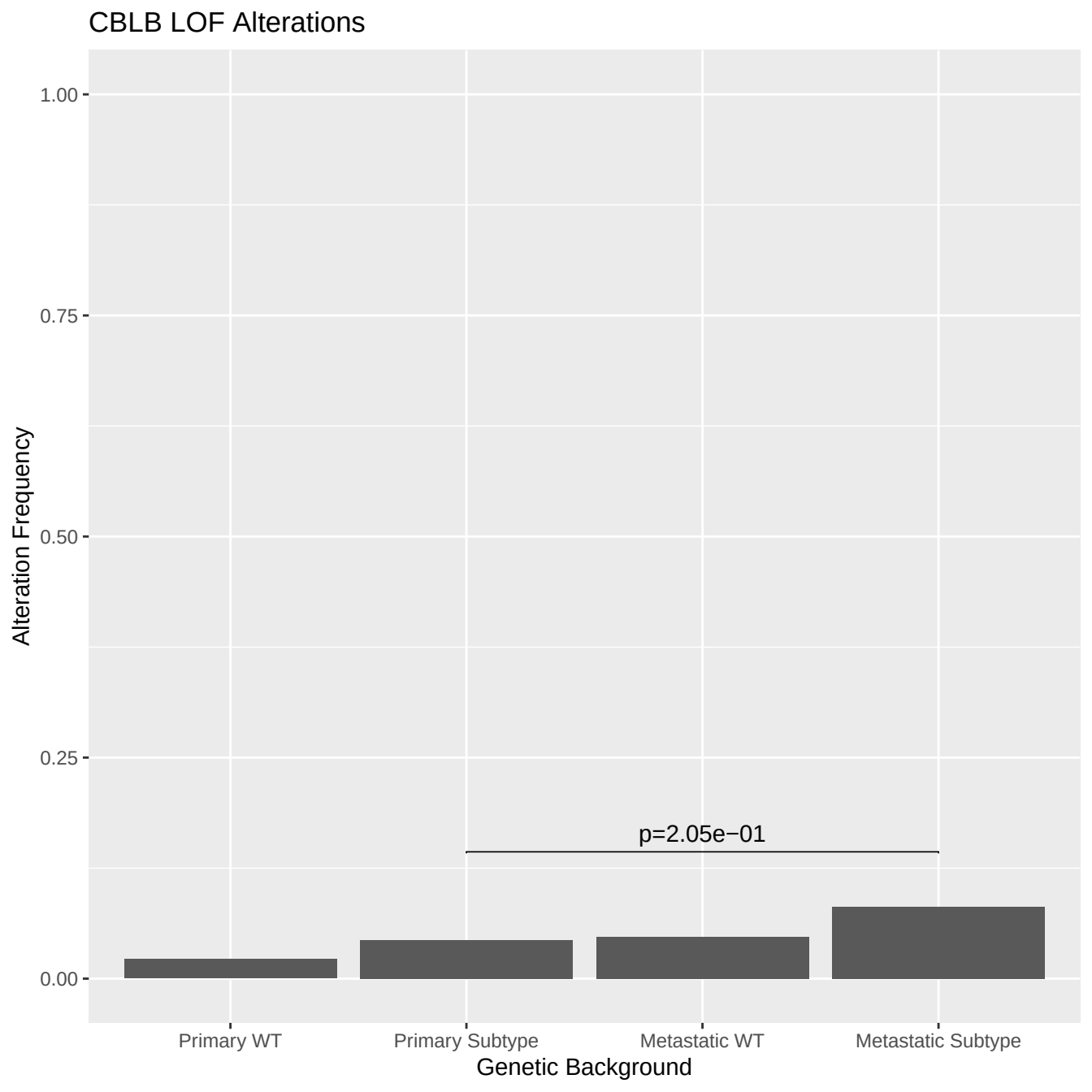

KHDRBS3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.60e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

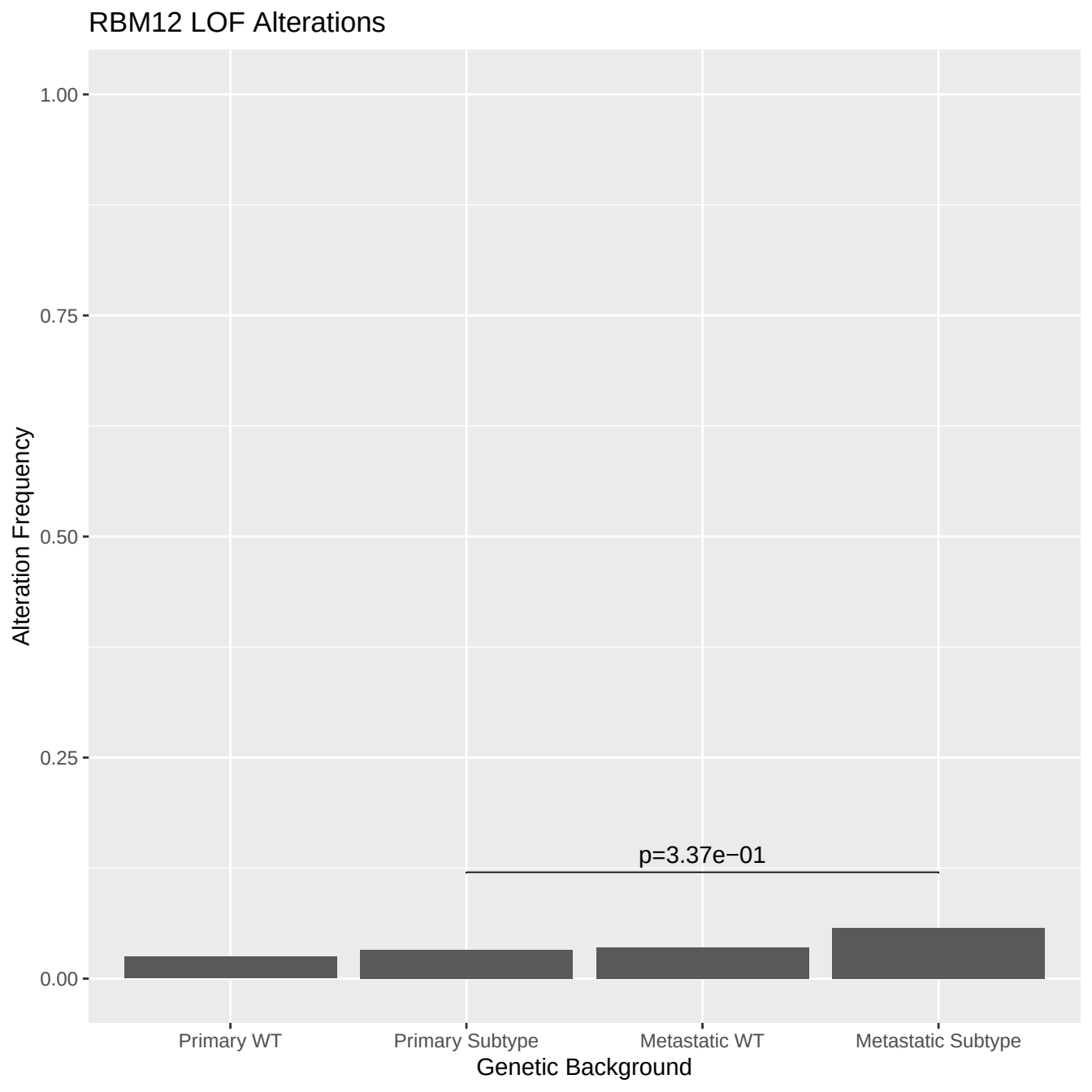

NOMO1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

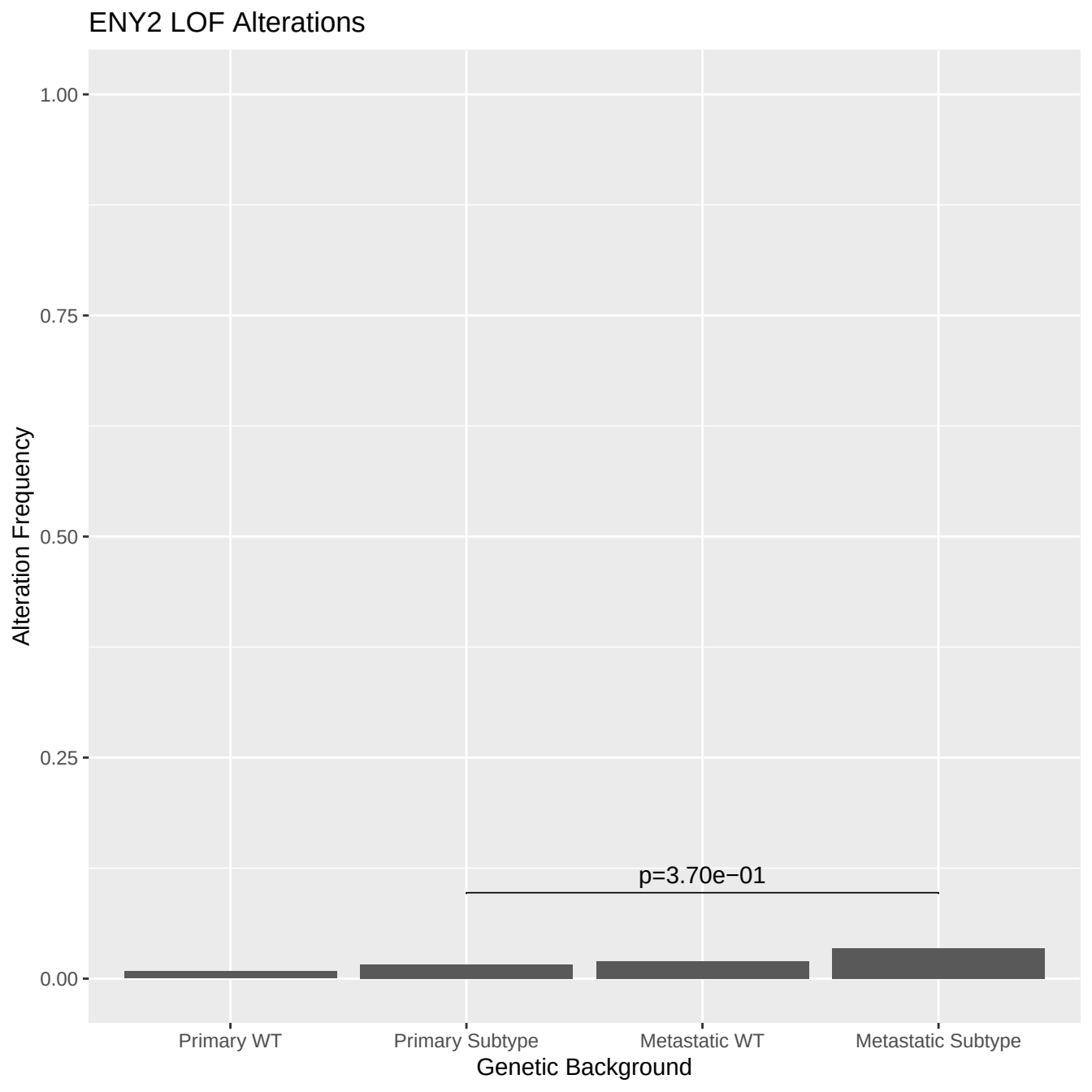

KIAA0430 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.26e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

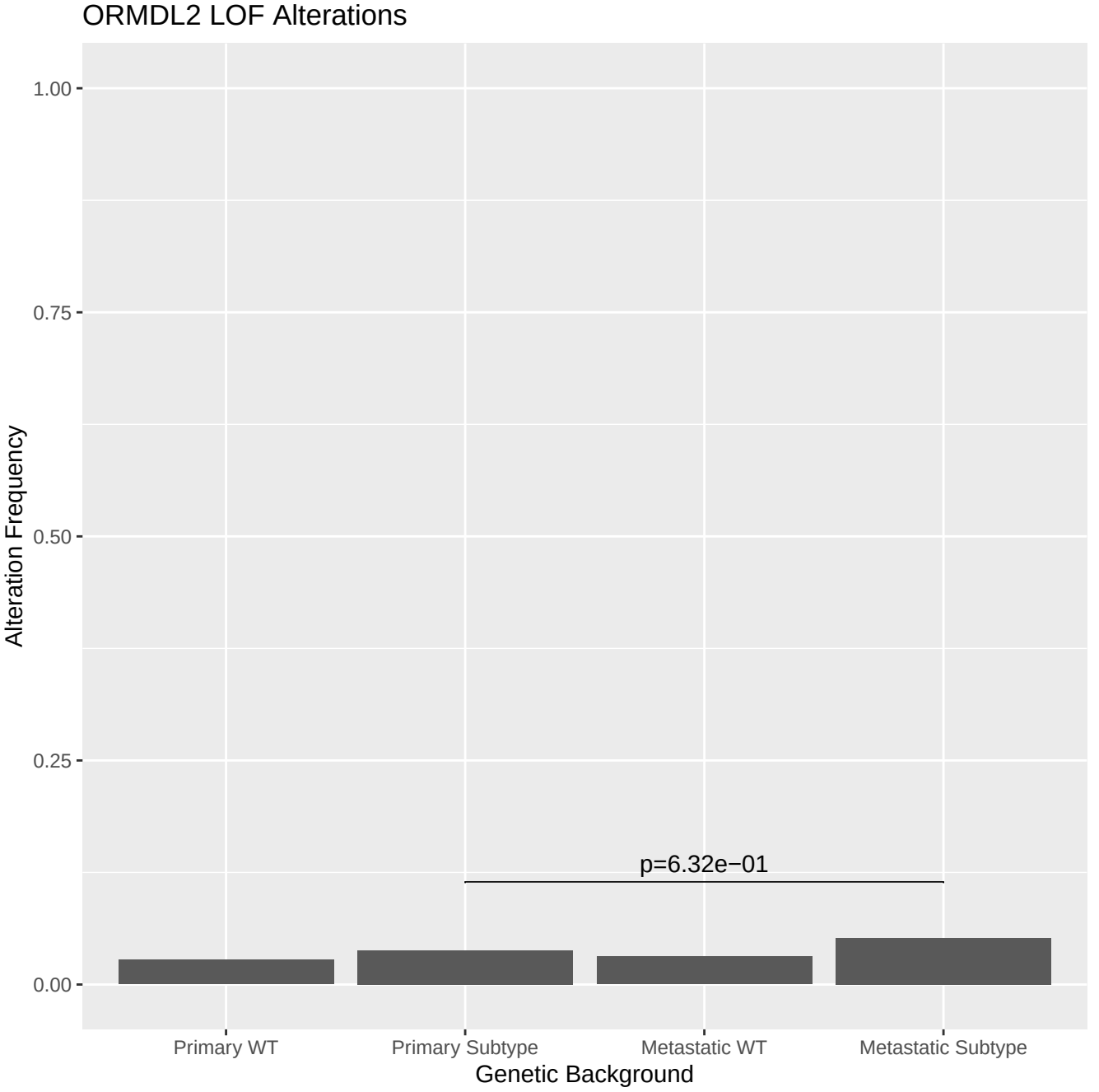

CLDND1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.00e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

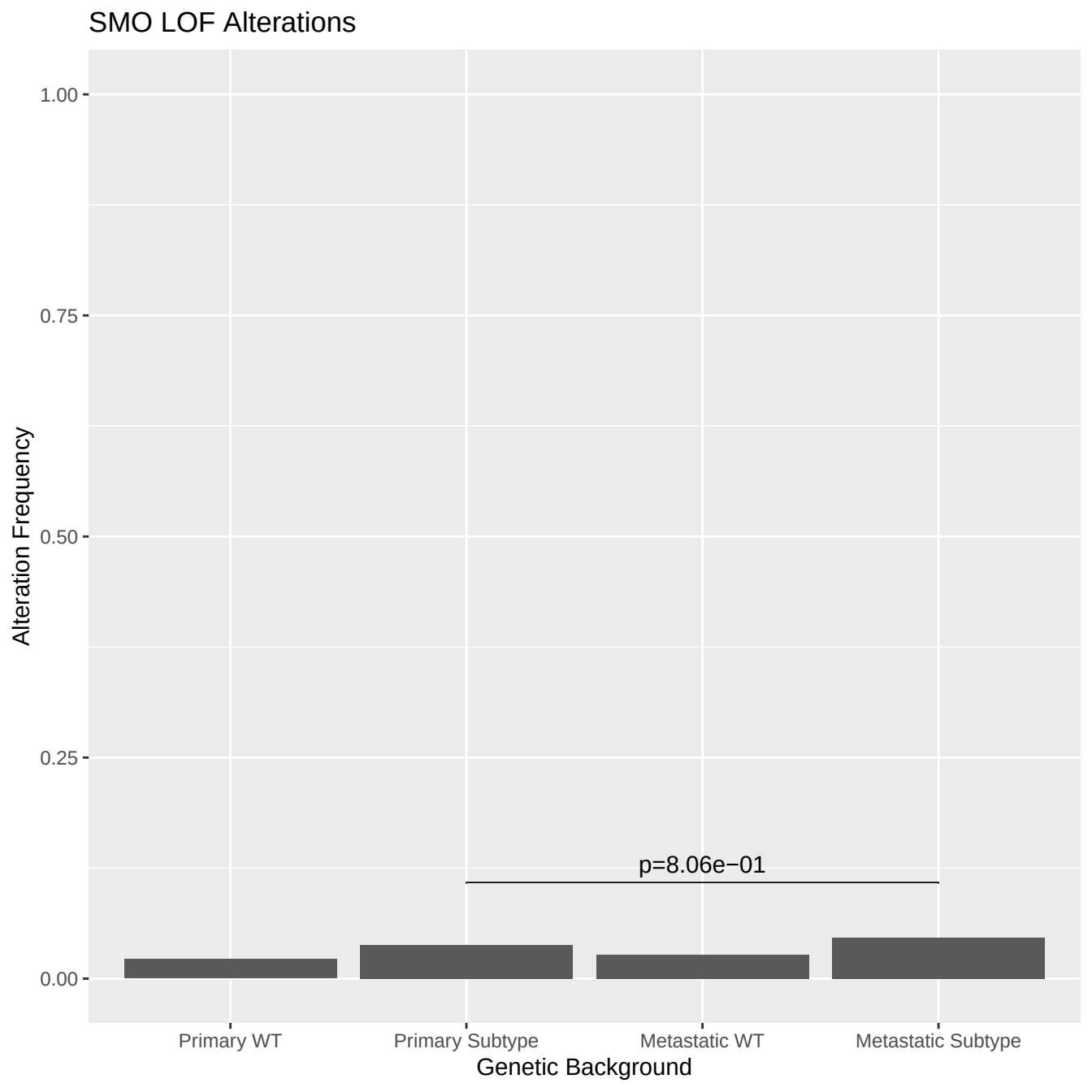

ARPC5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.72e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

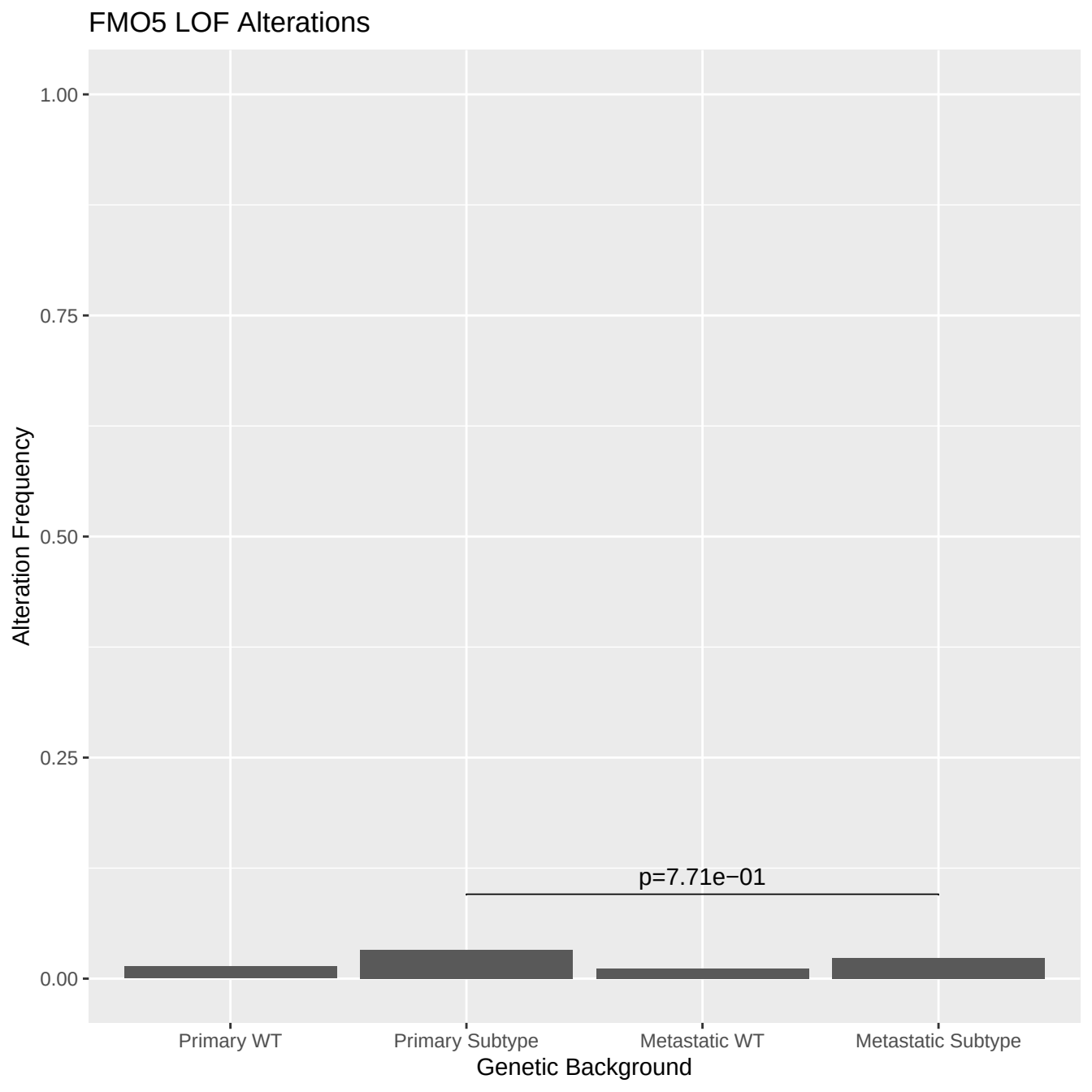

CBLB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.05e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

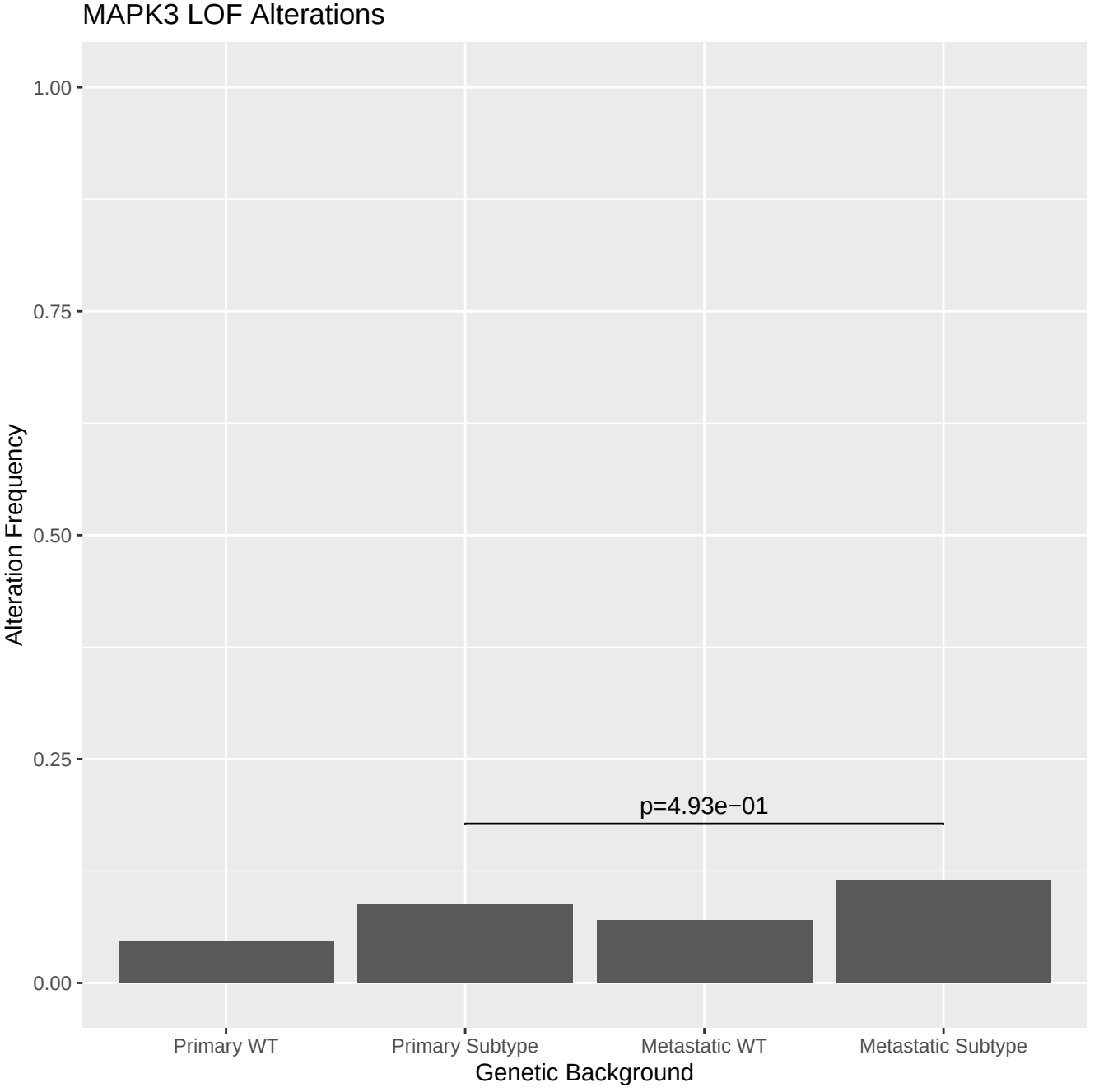

RBM12 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

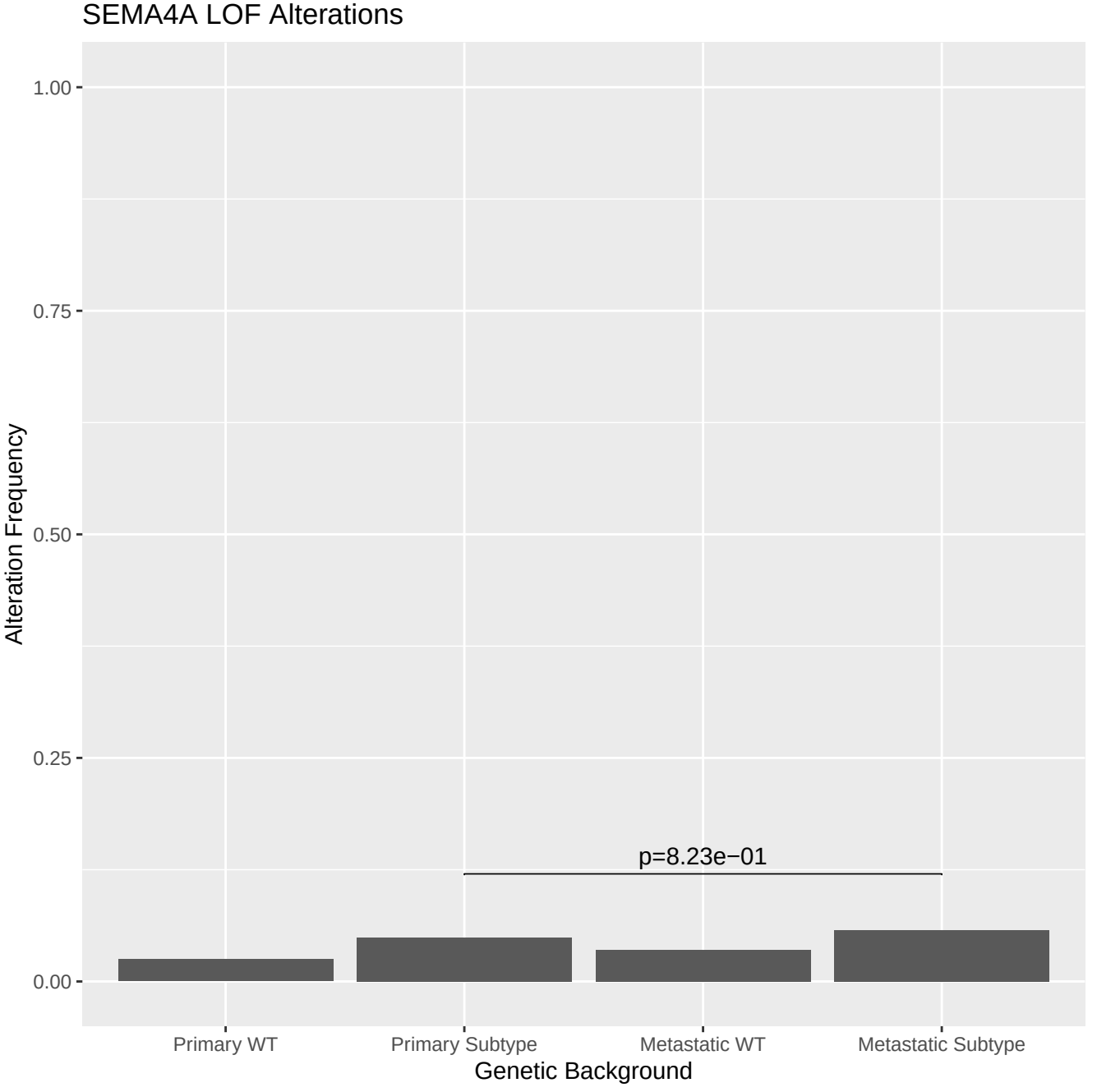

ENY2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.70e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

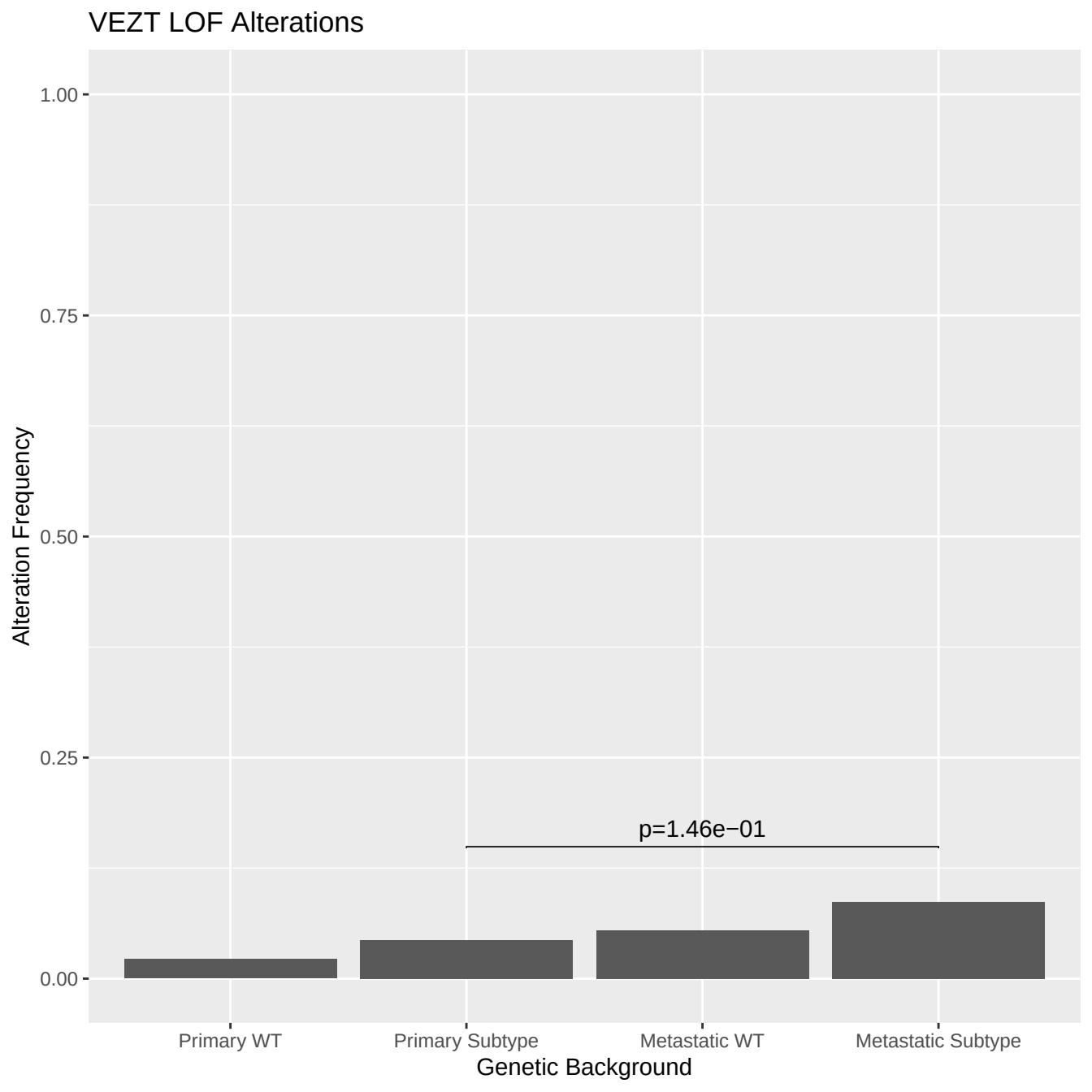

ORMDL2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

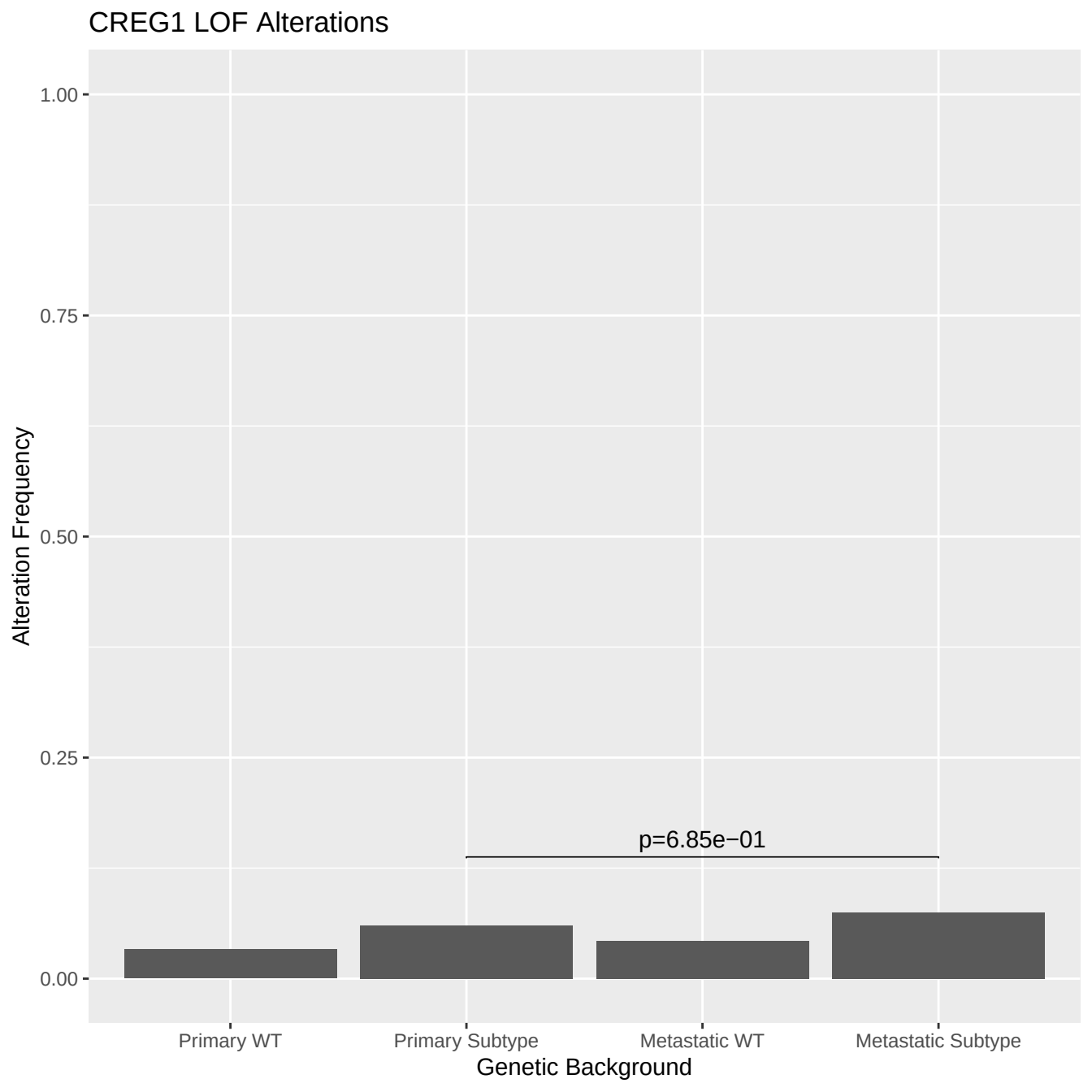

SMO LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

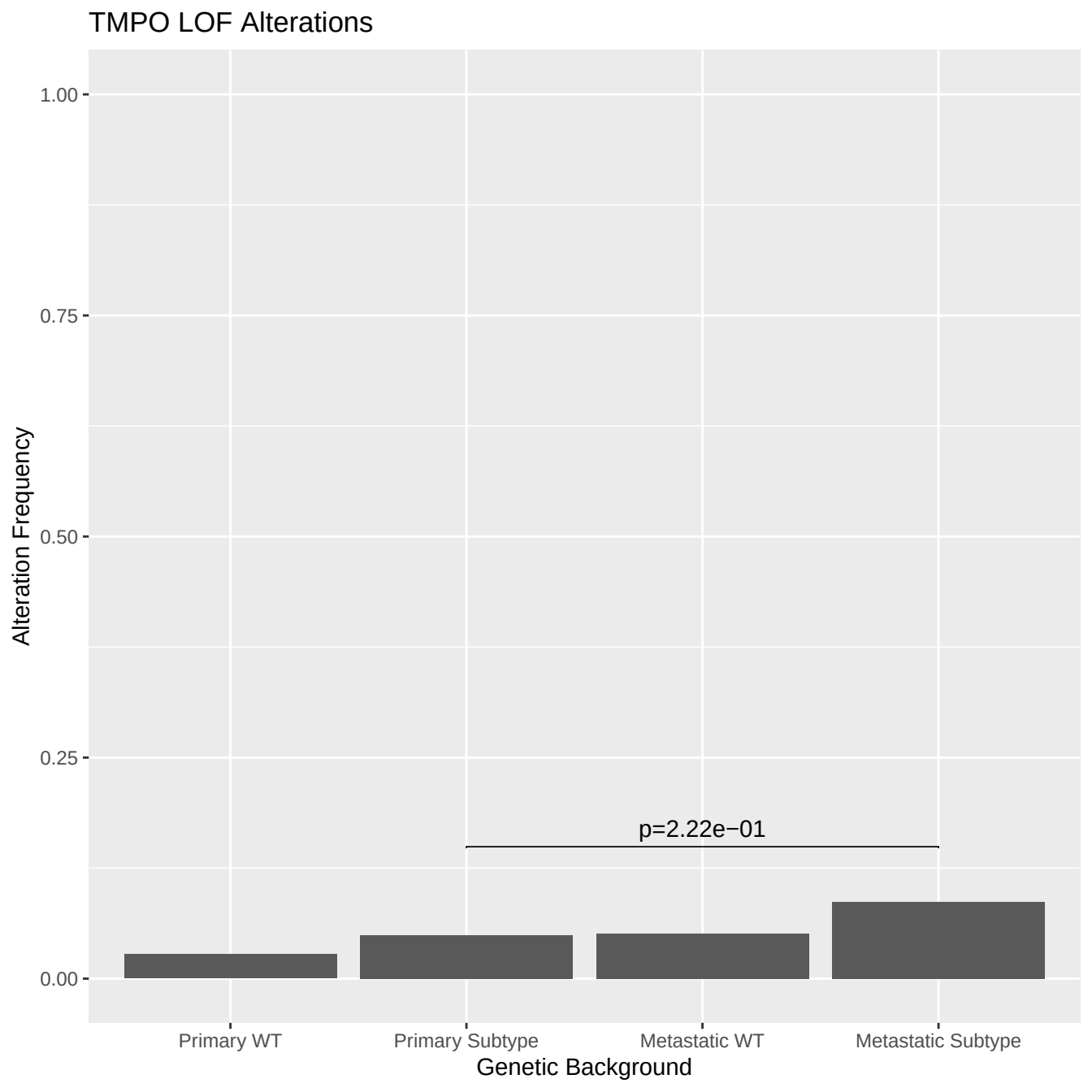

FMO5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

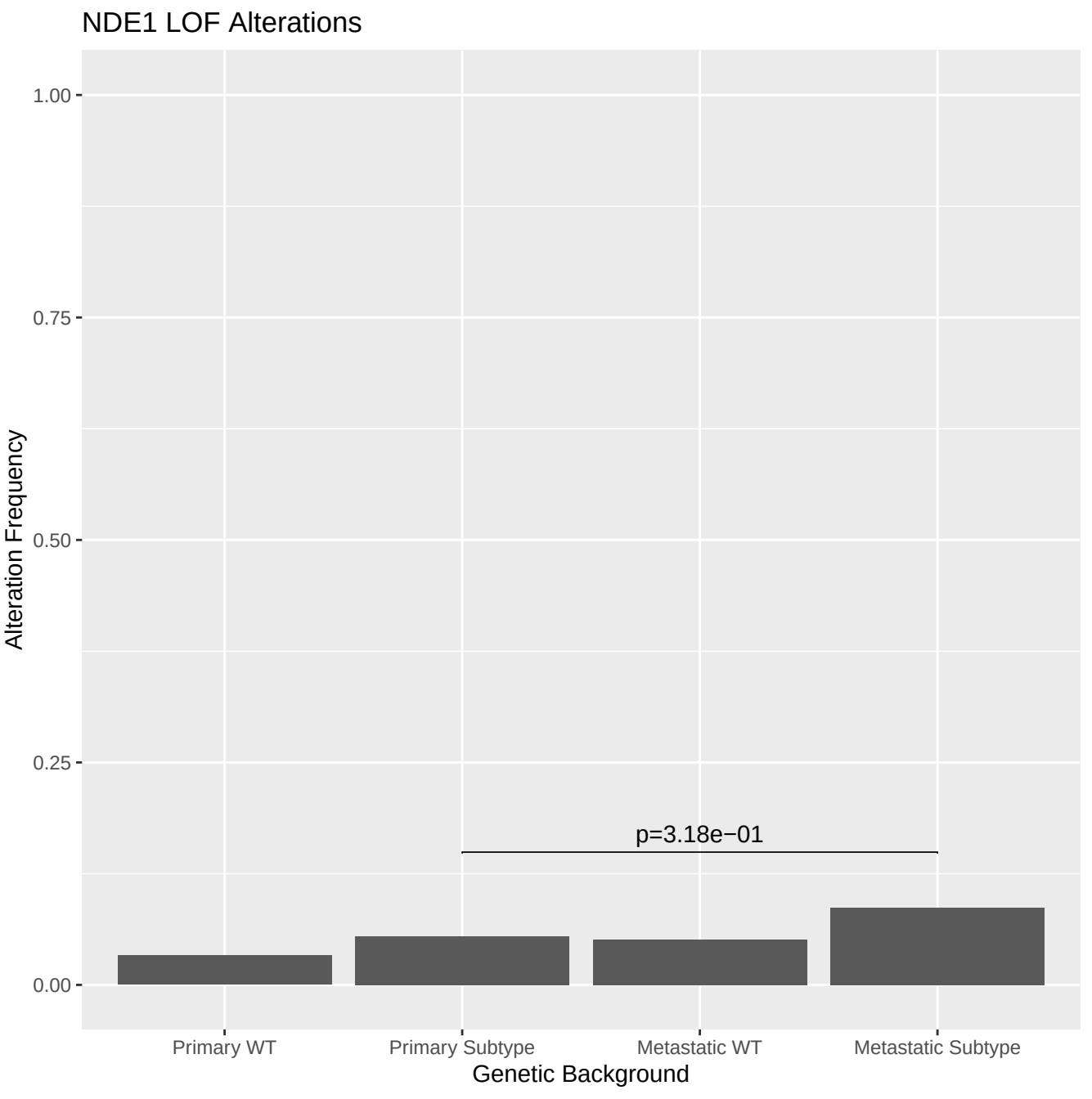

MAPK3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.93e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

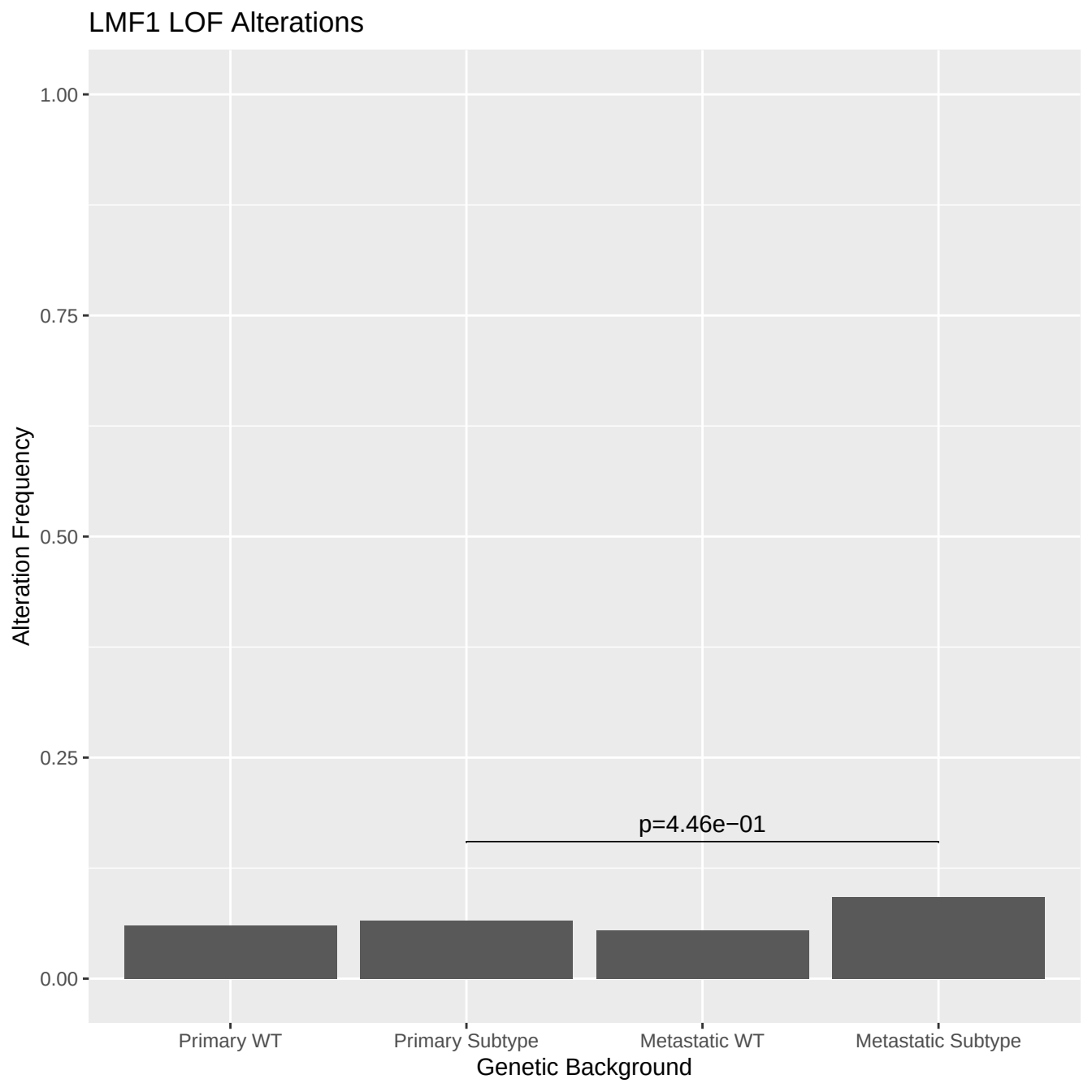

SEMA4A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.23e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

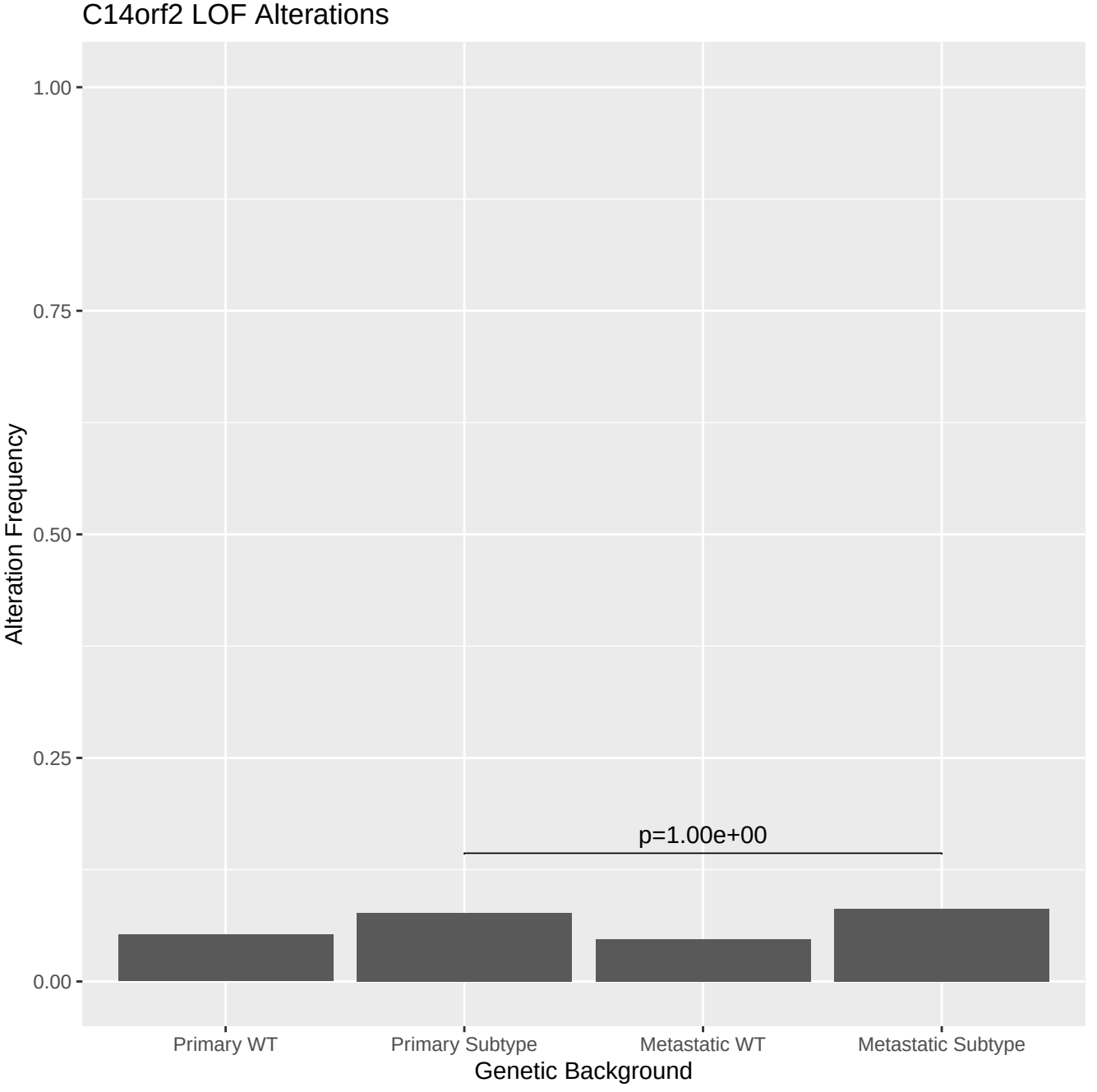

VEZT LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.46e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

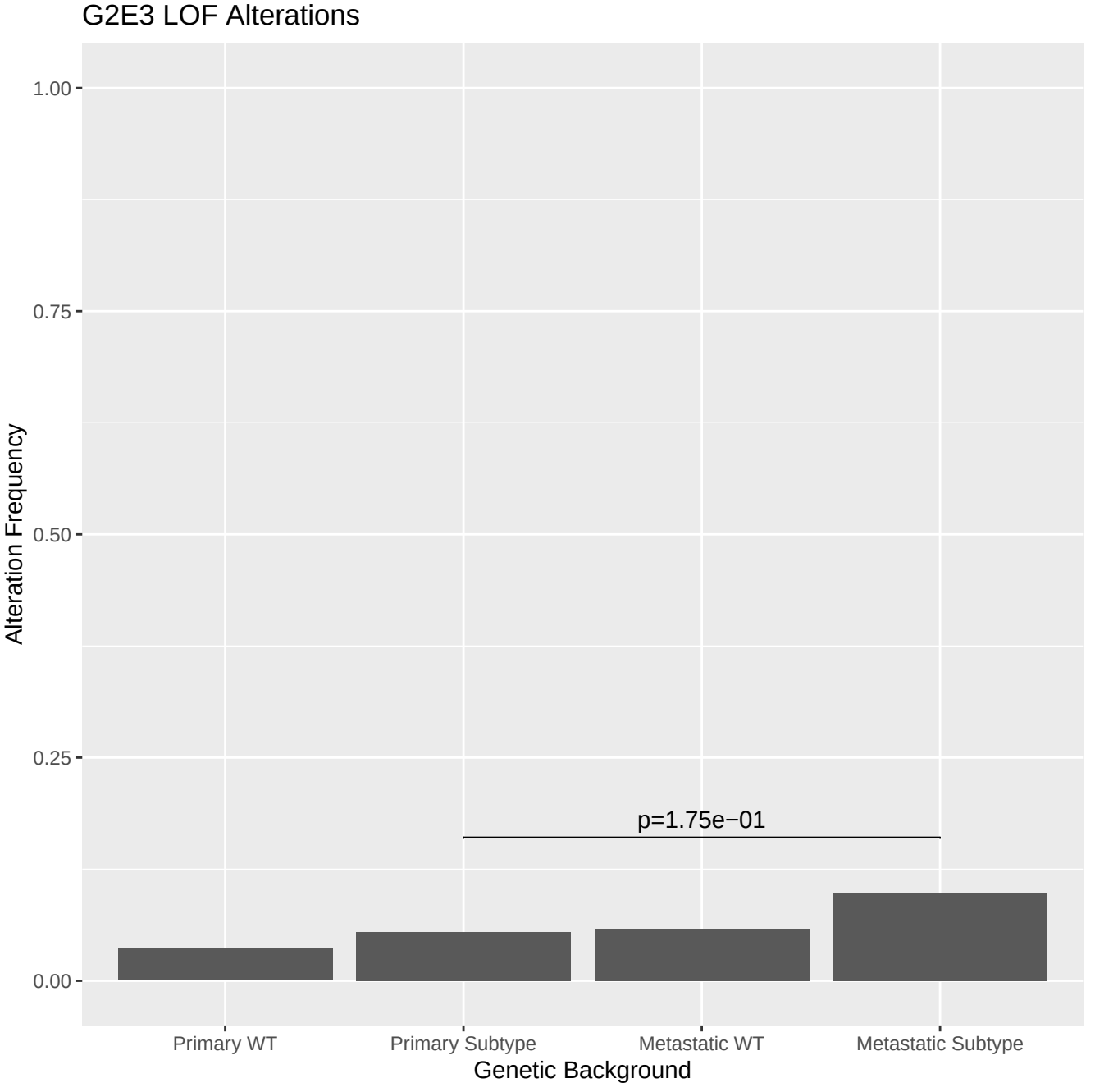

CREG1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

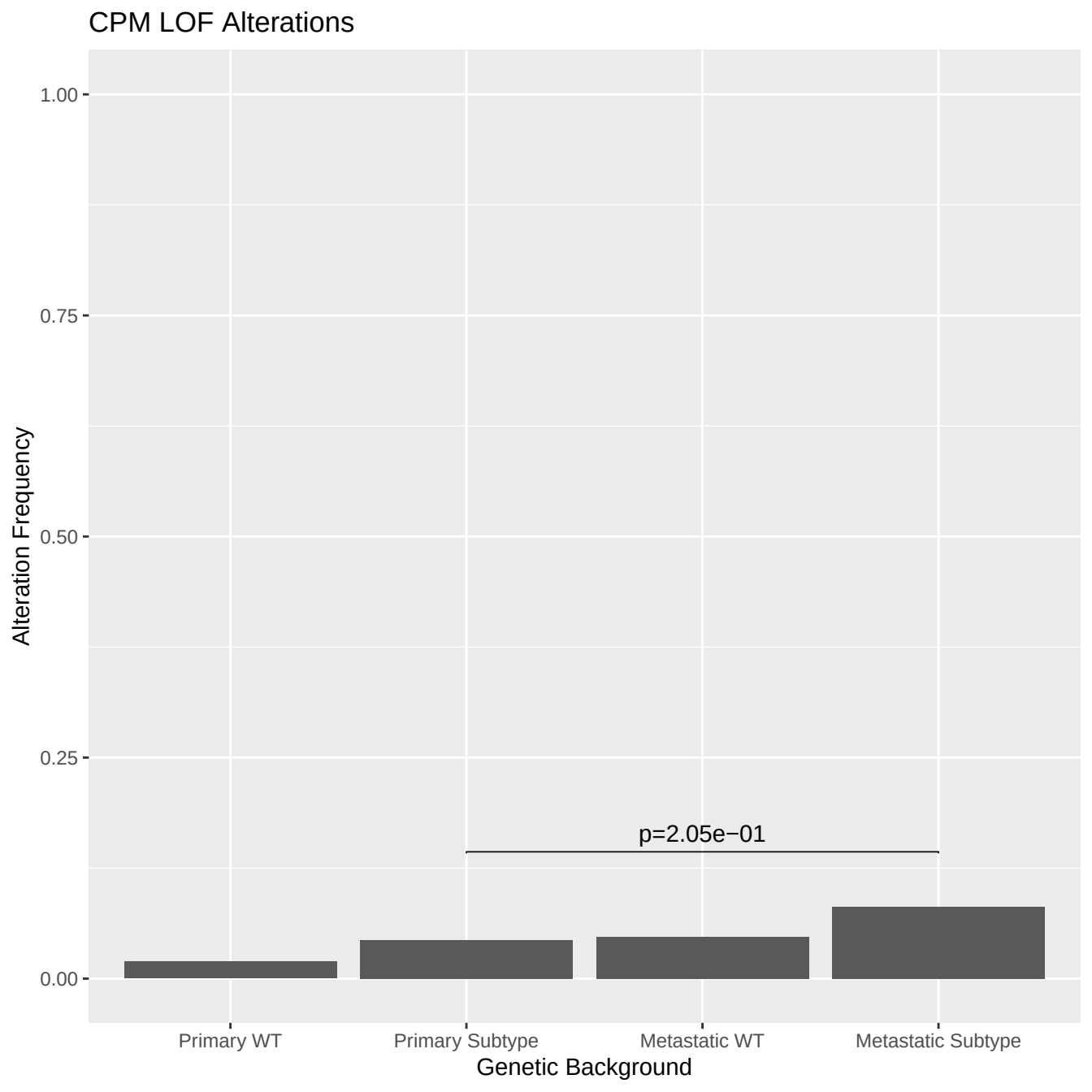

TMPO LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.22e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

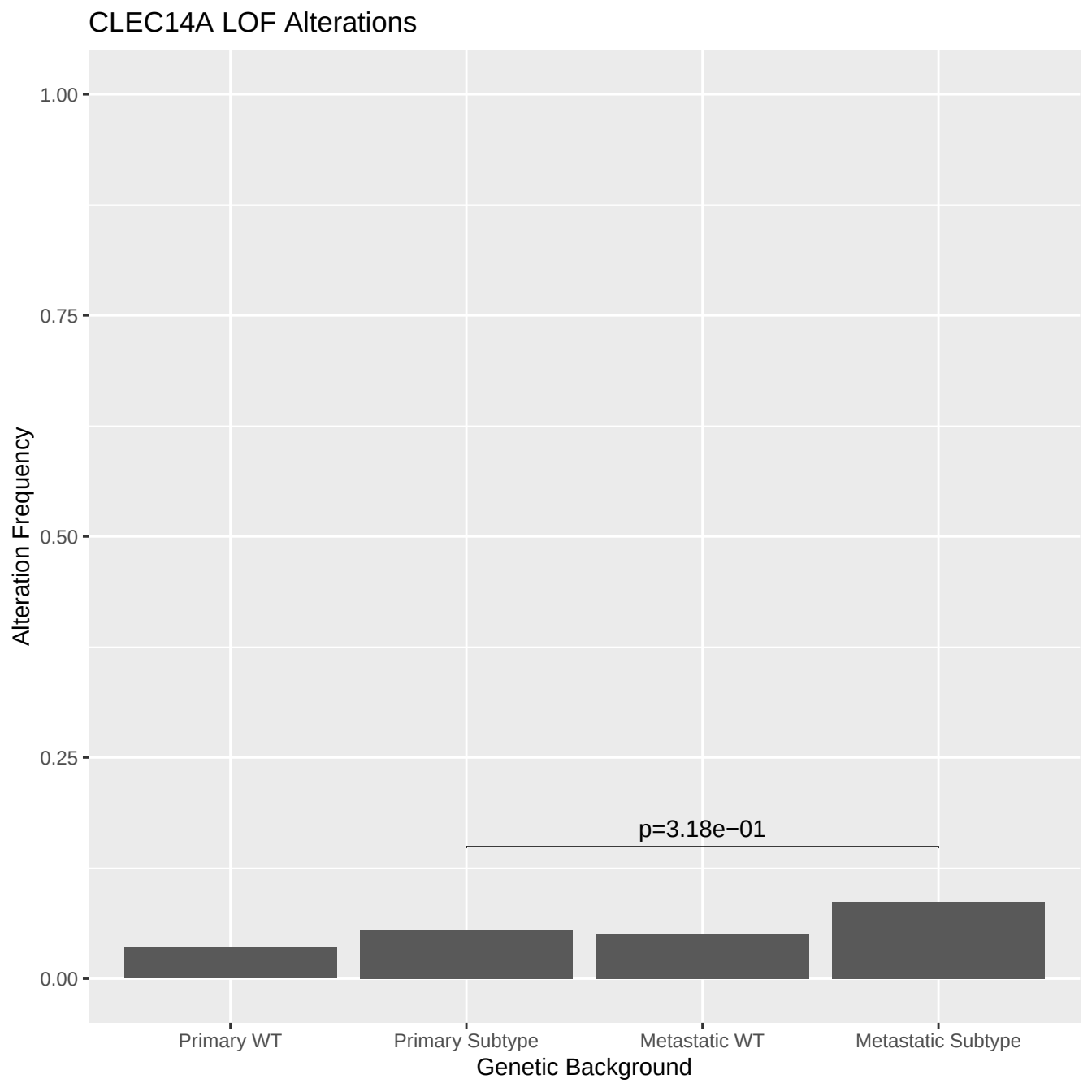

NDE1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

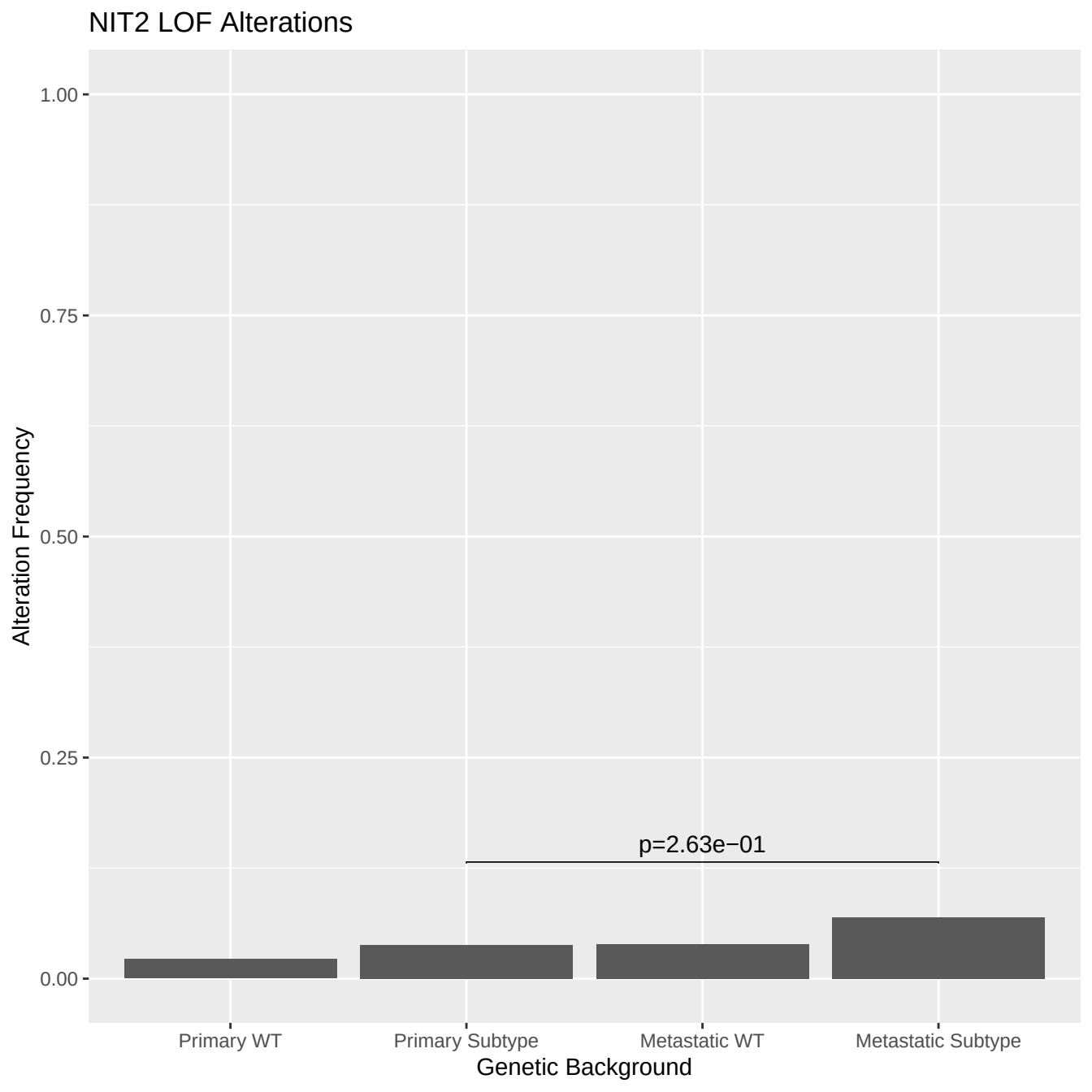

LMF1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.46e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

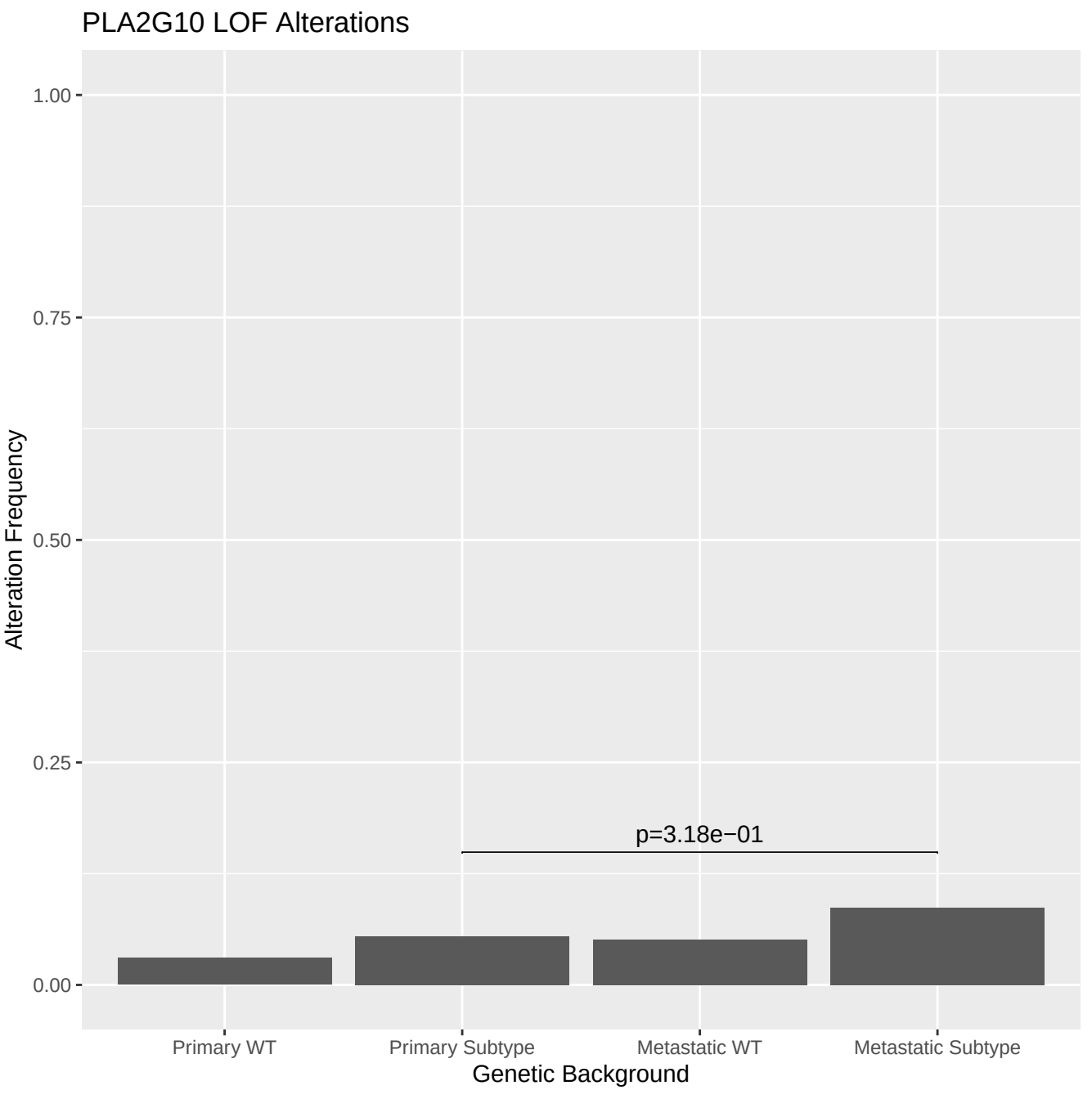

C14orf2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

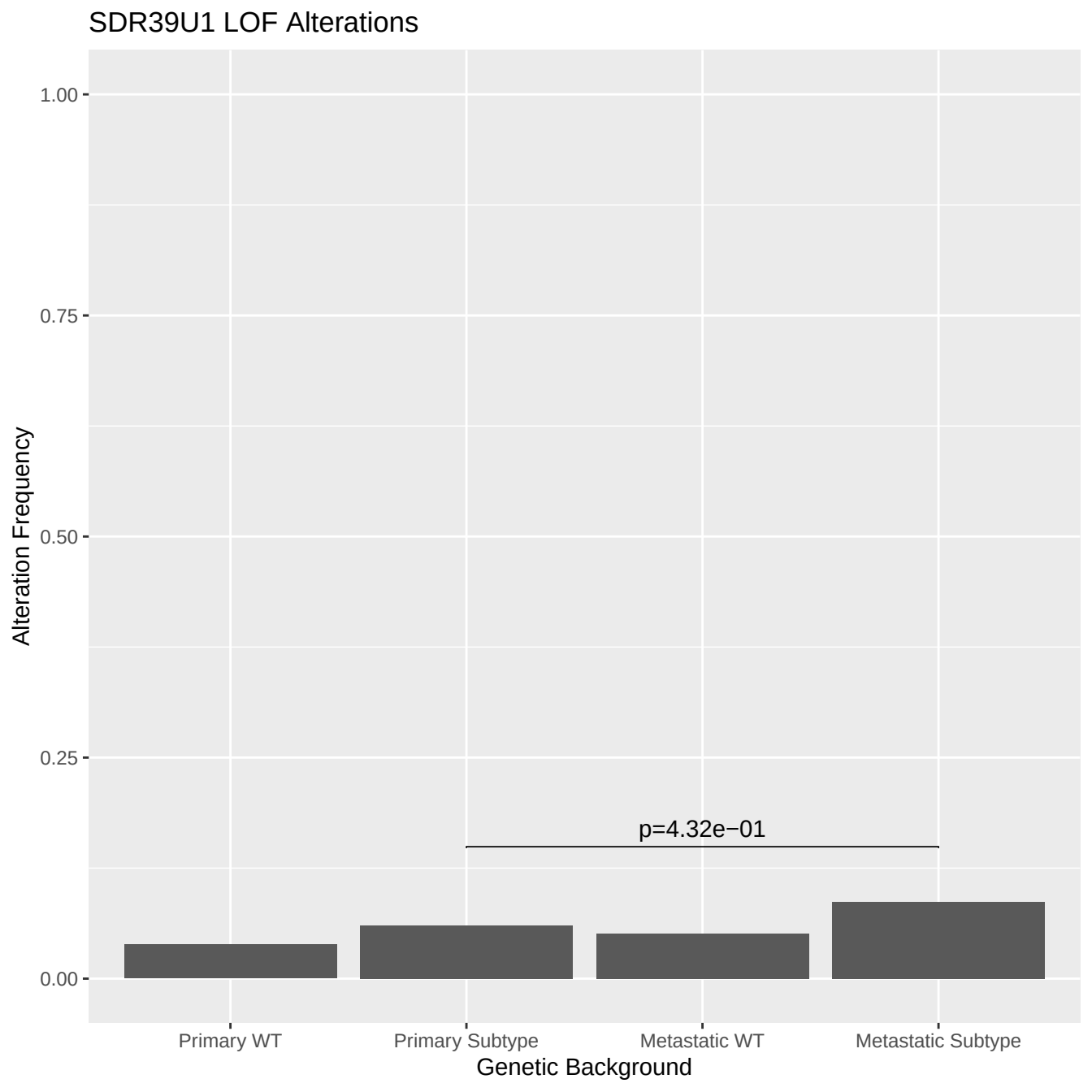

G2E3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.75e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

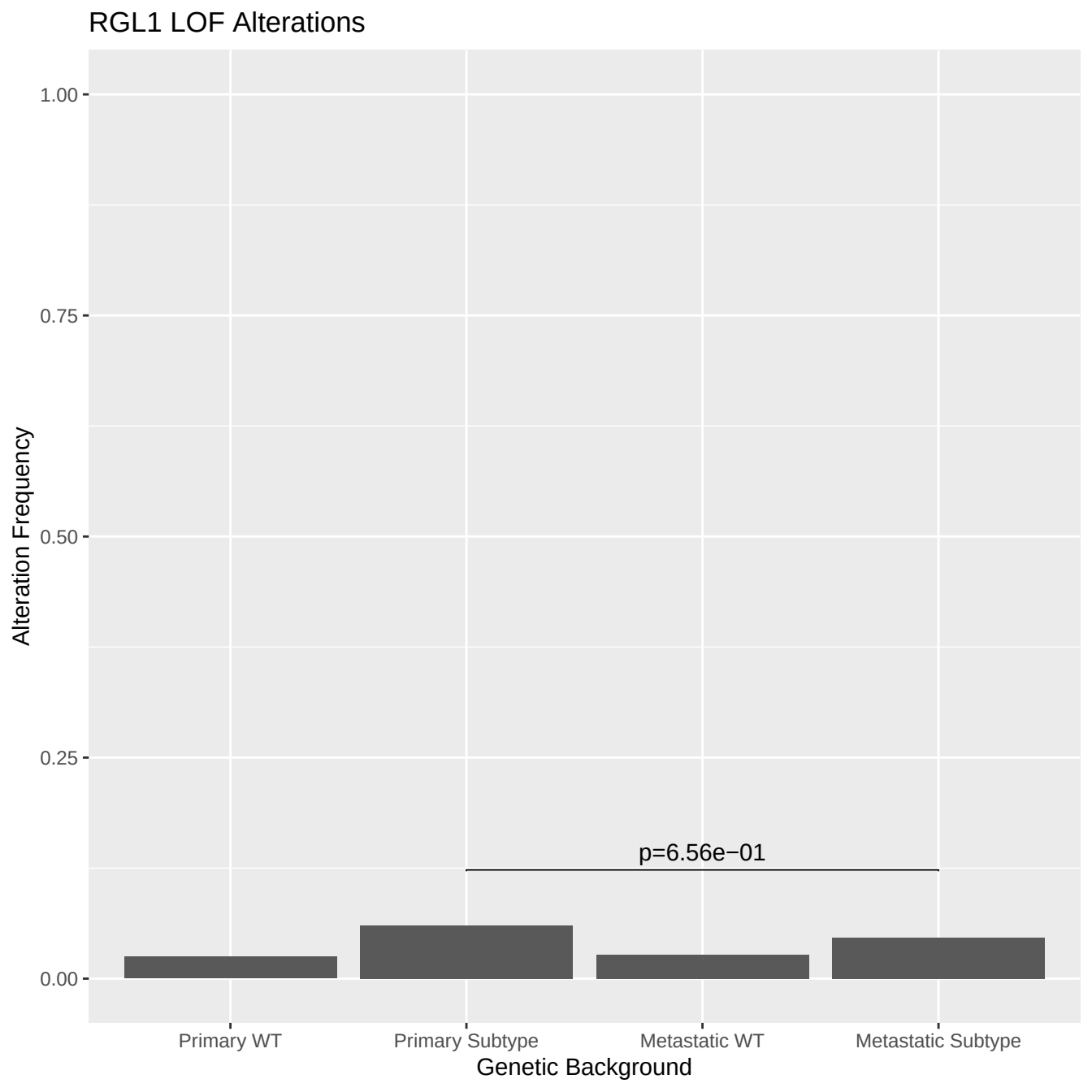

CPM LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.05e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

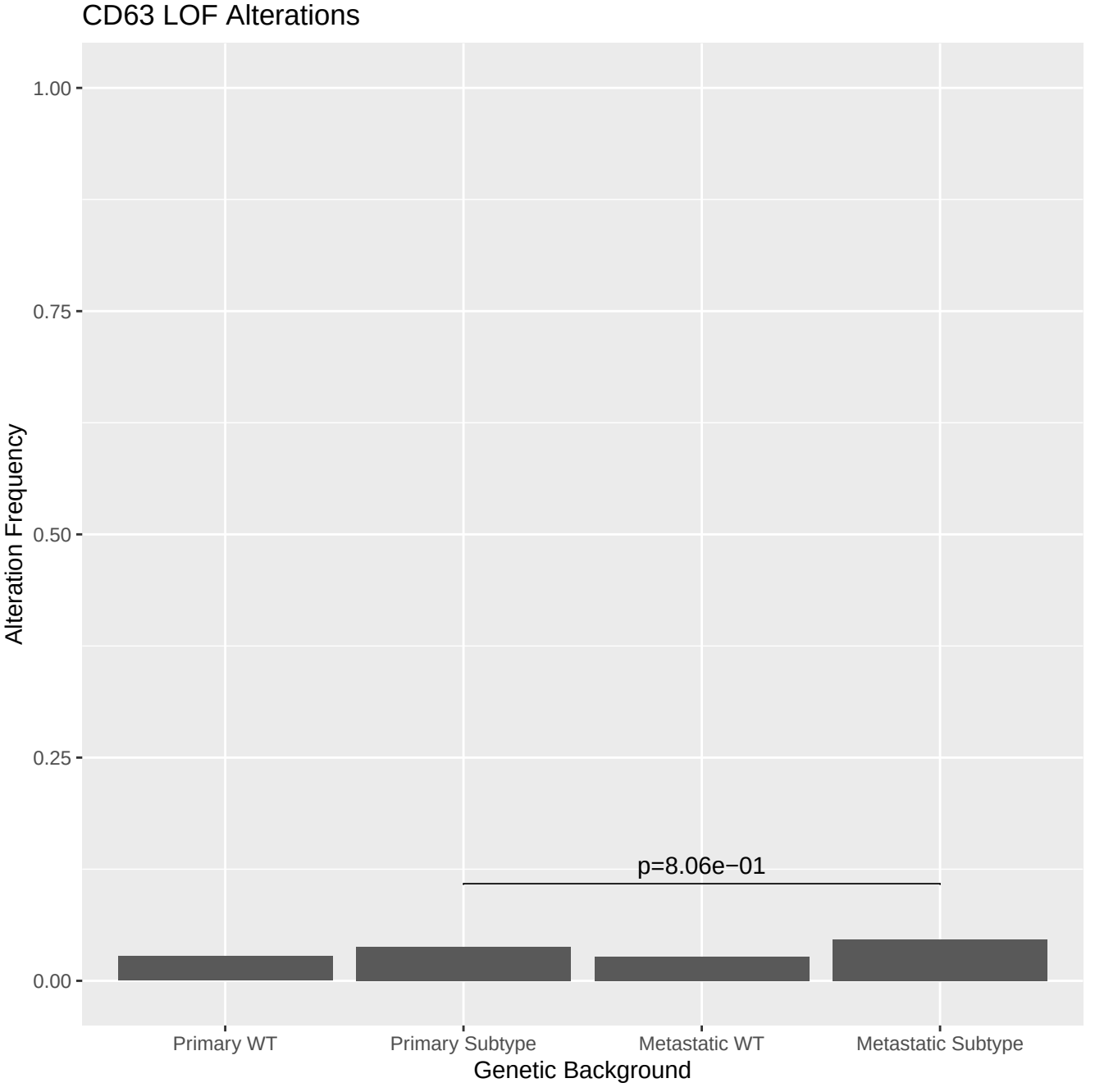

CLEC14A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

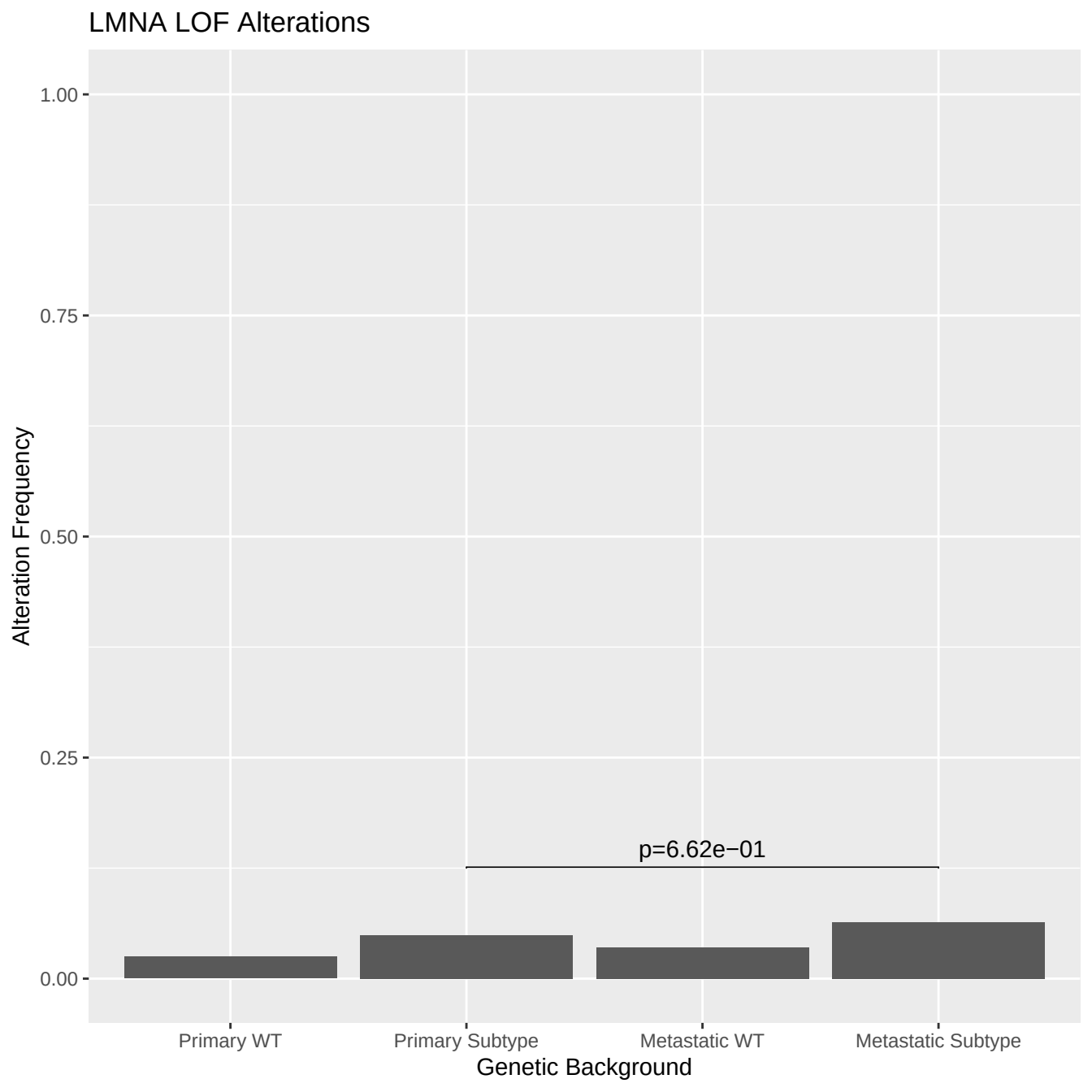

NIT2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.63e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

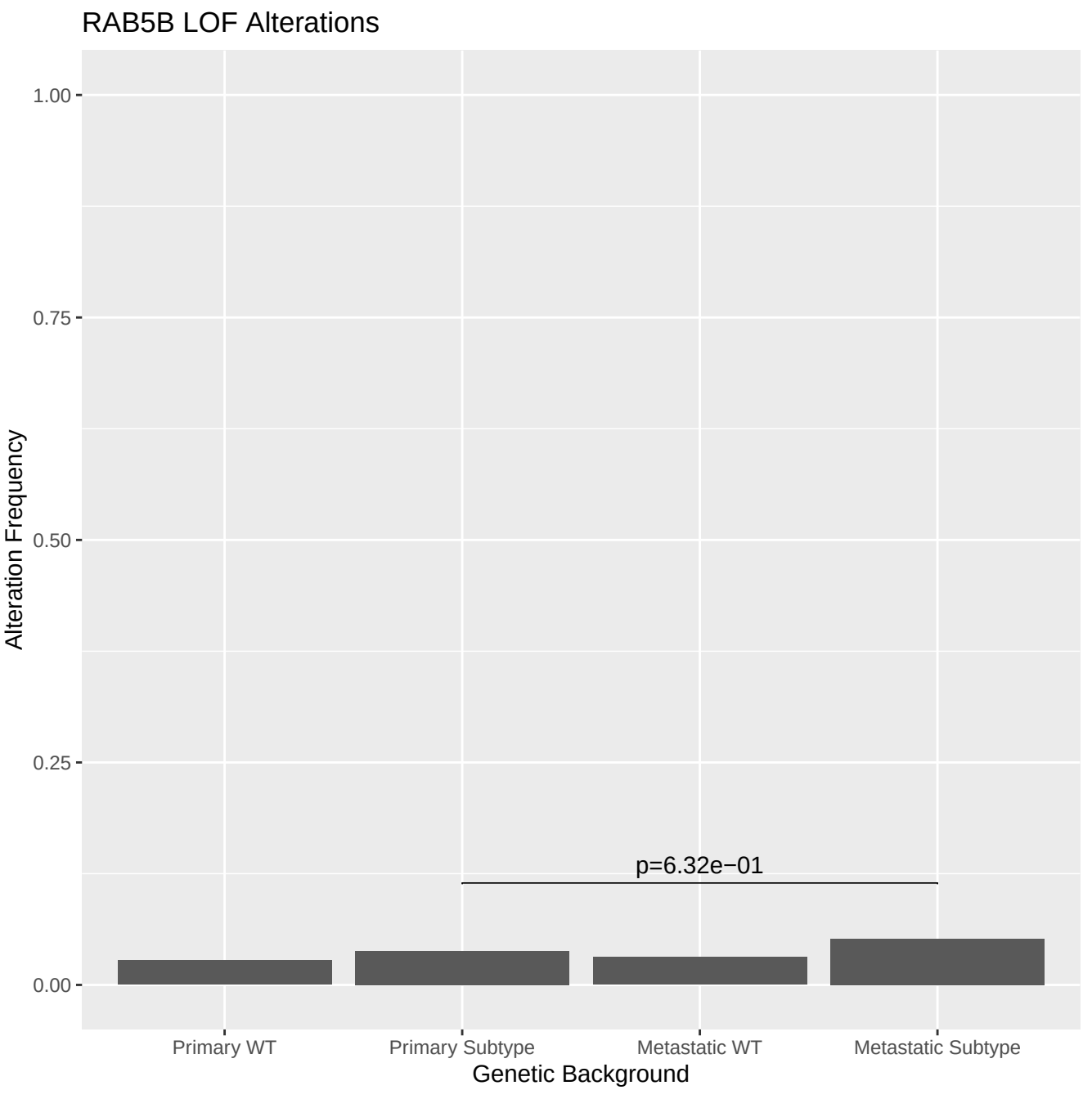

PLA2G10 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

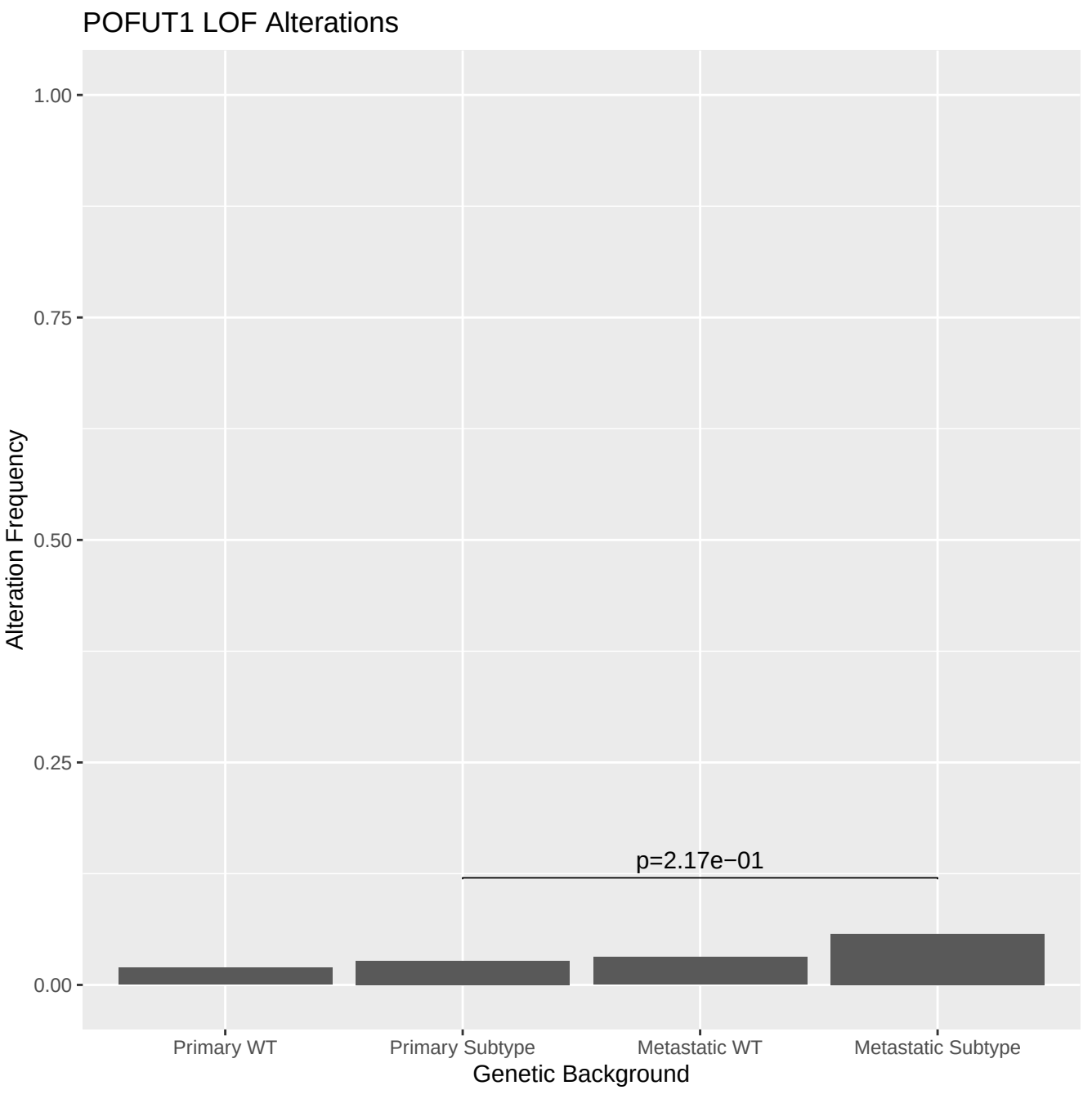

SDR39U1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

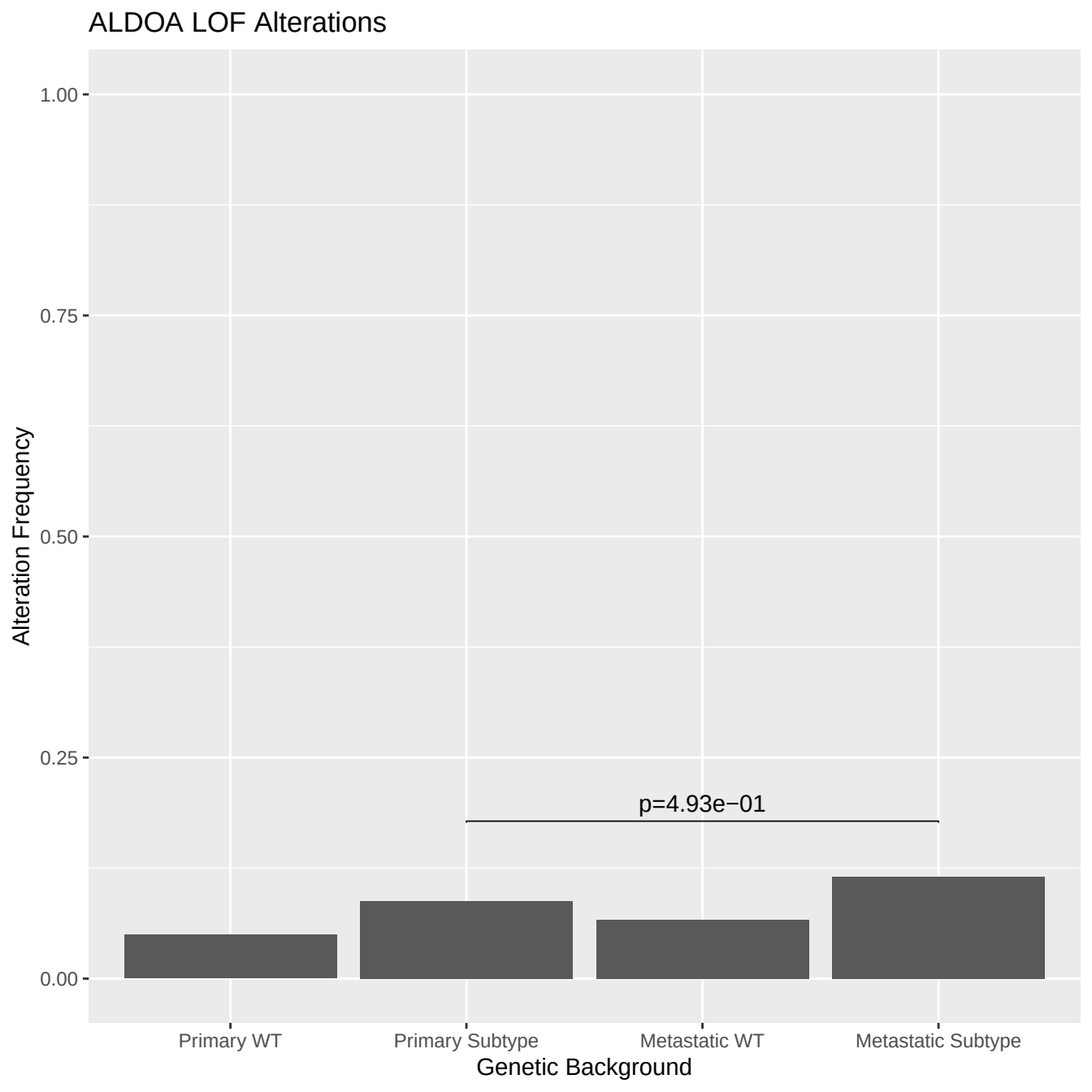

RGL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.56e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

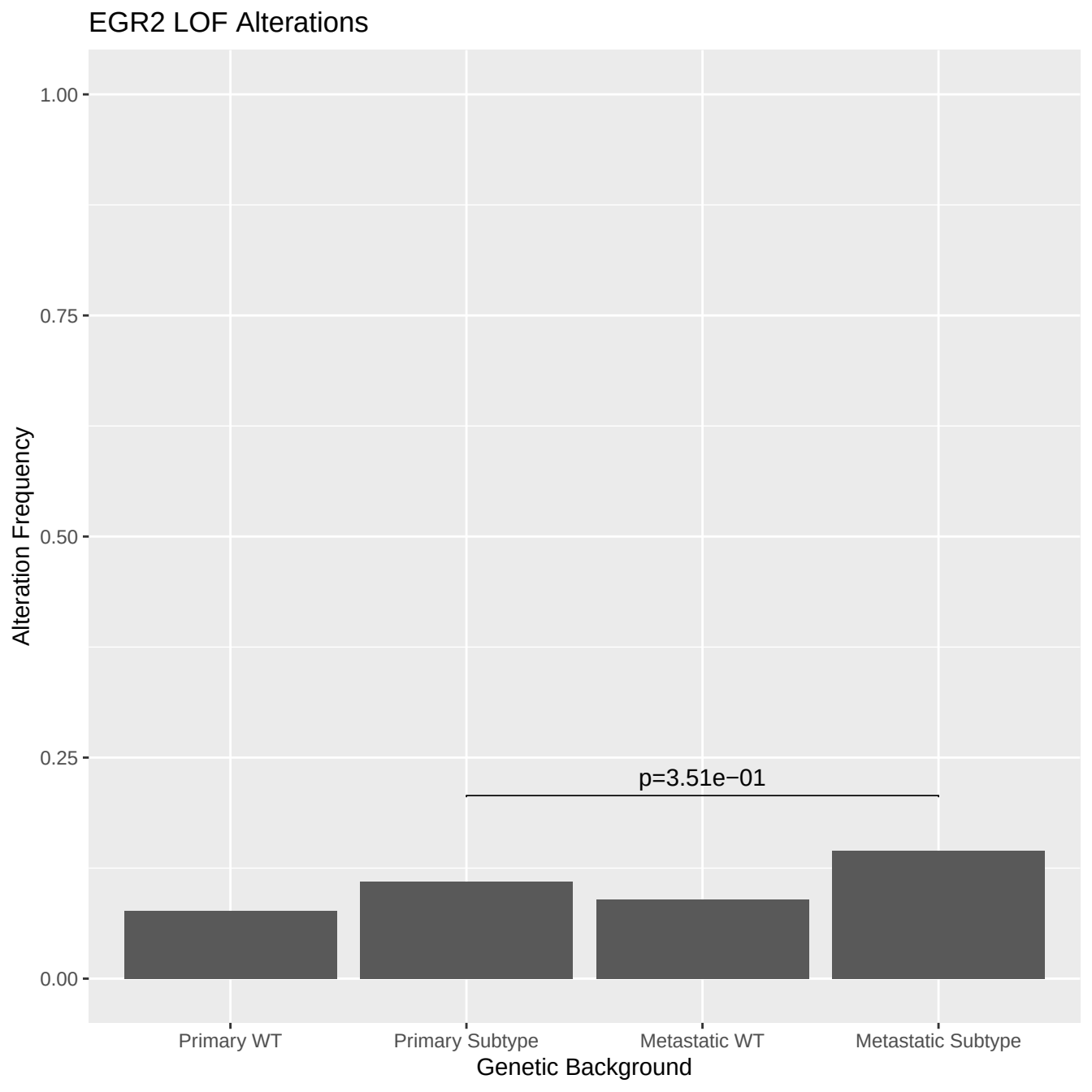

CD63 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

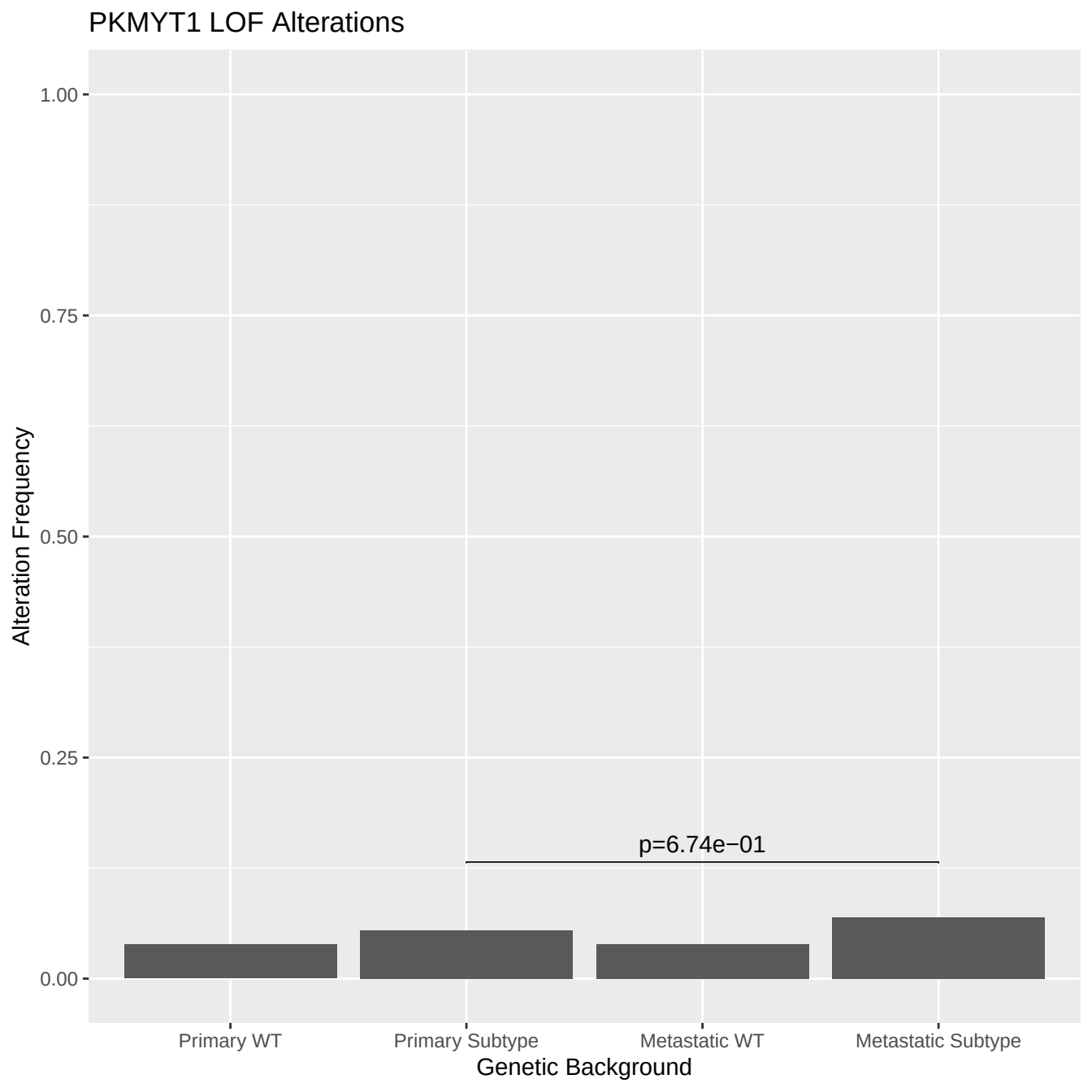

LMNA LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.62e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

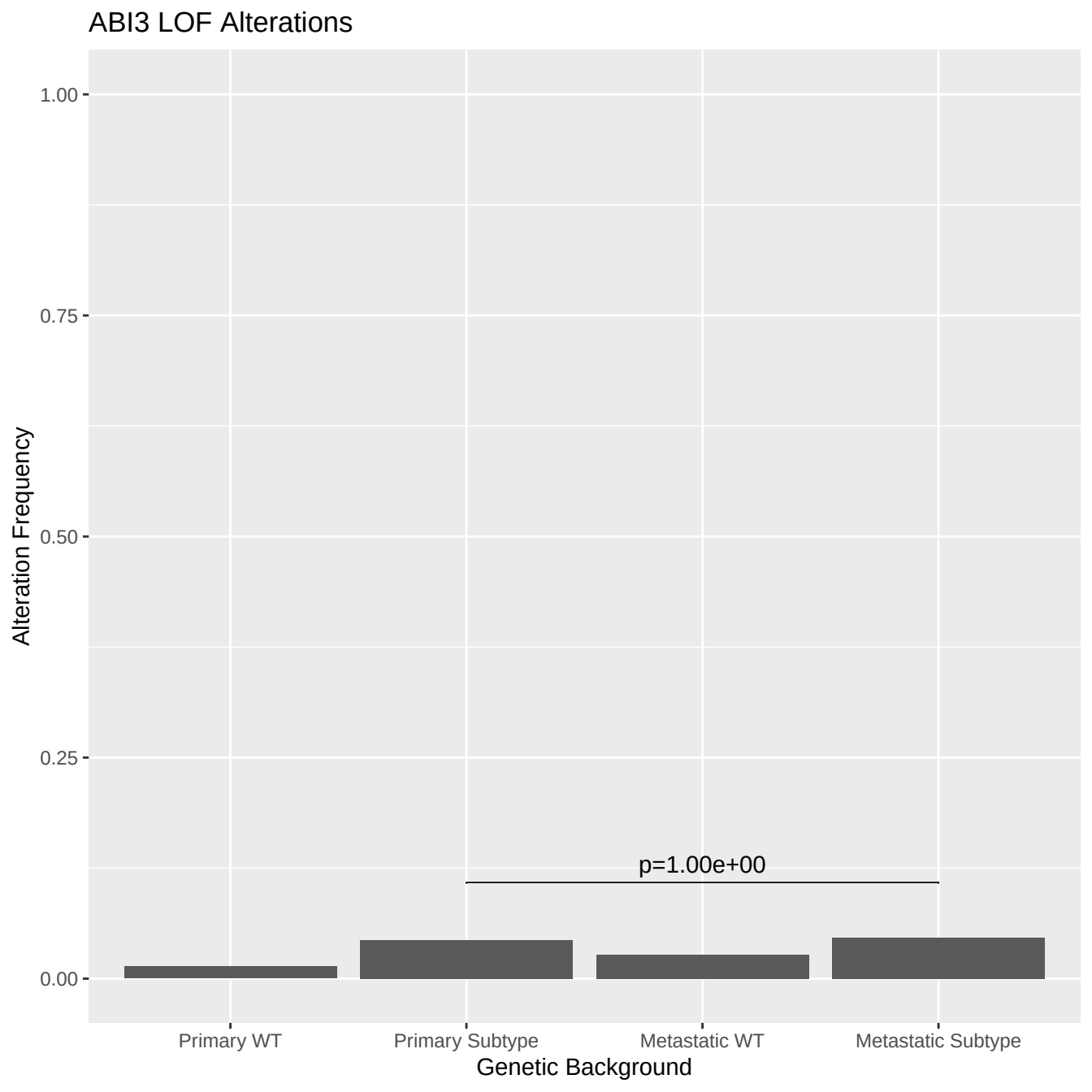

RAB5B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.32e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

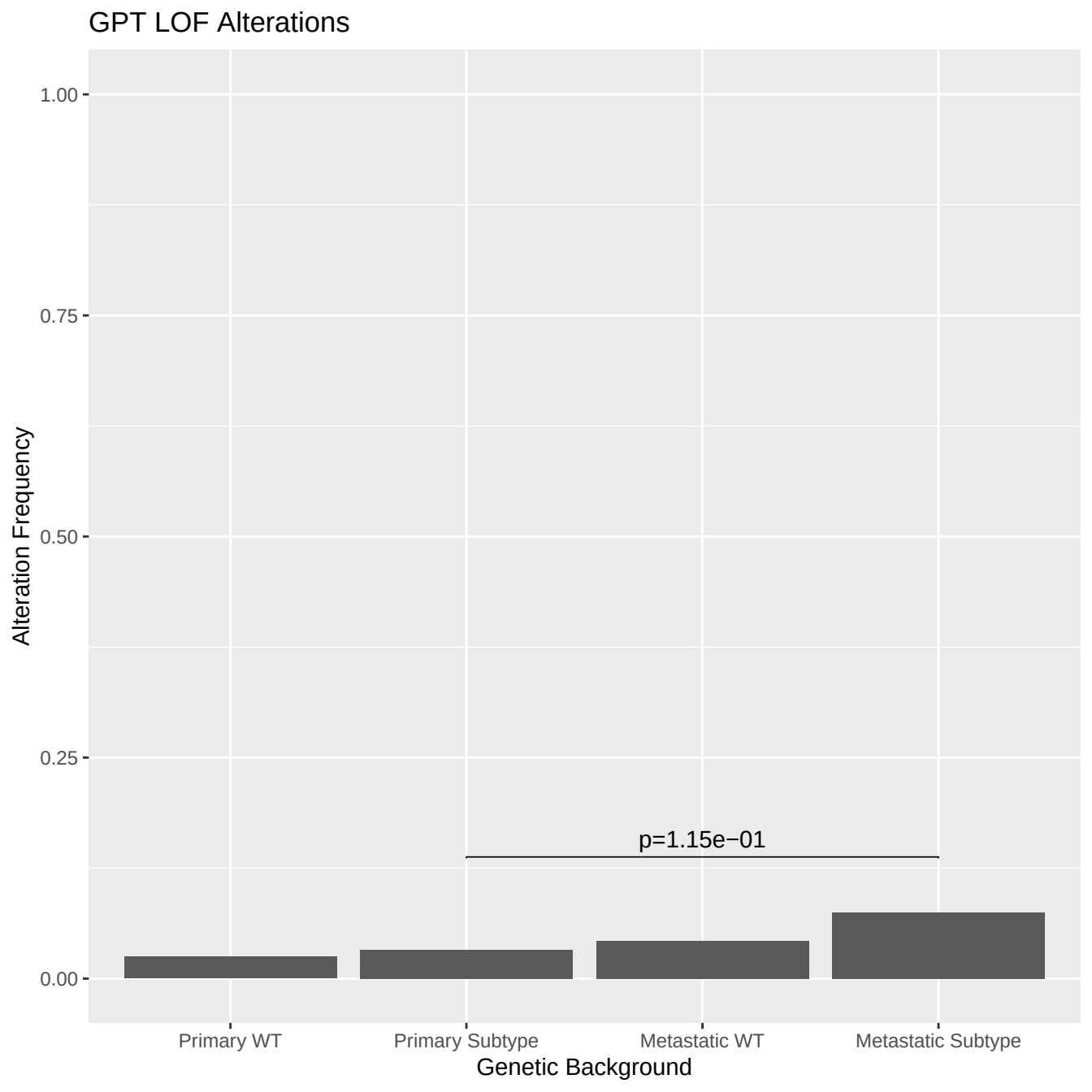

POFUT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

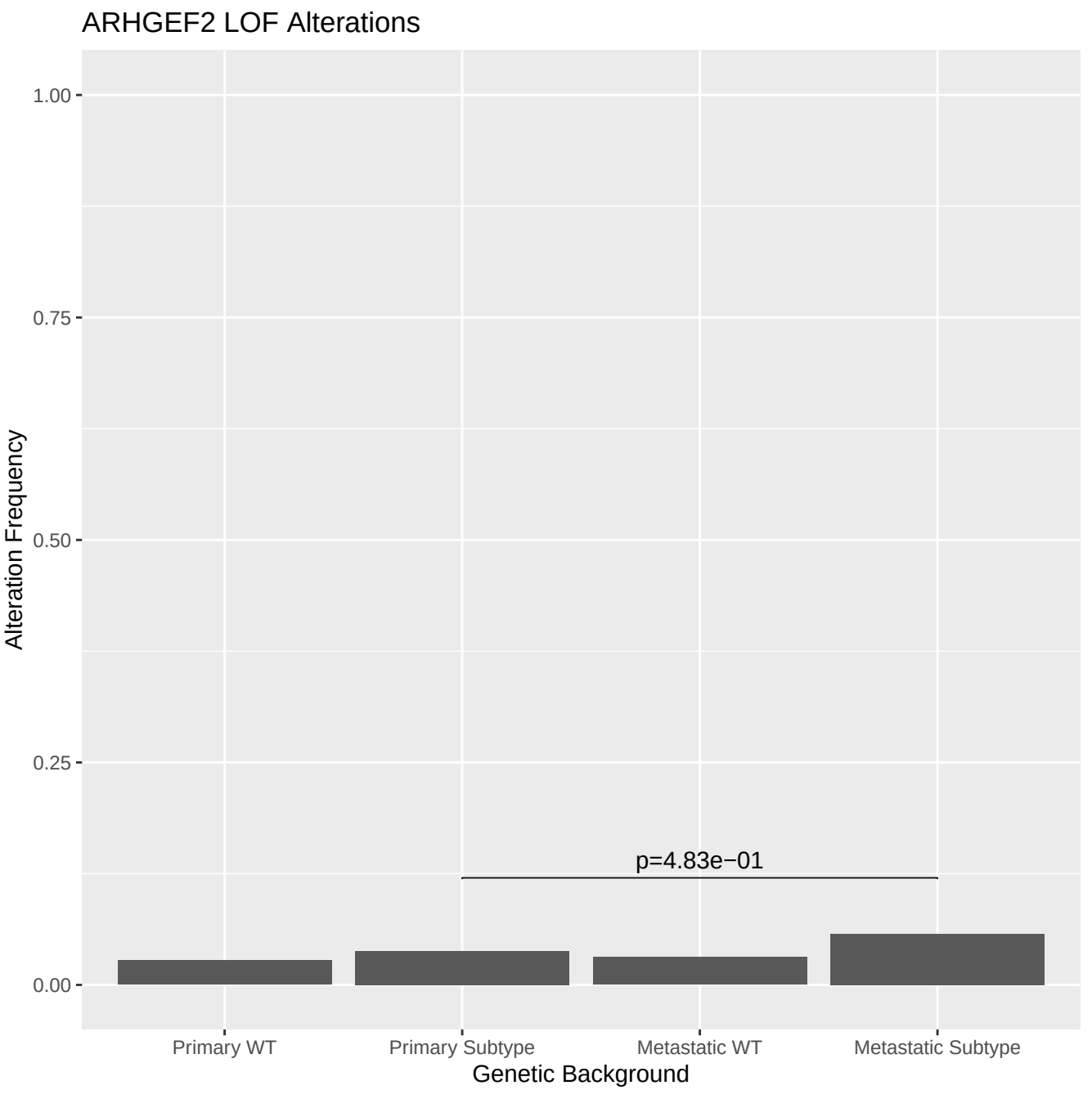

ALDOA LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.93e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

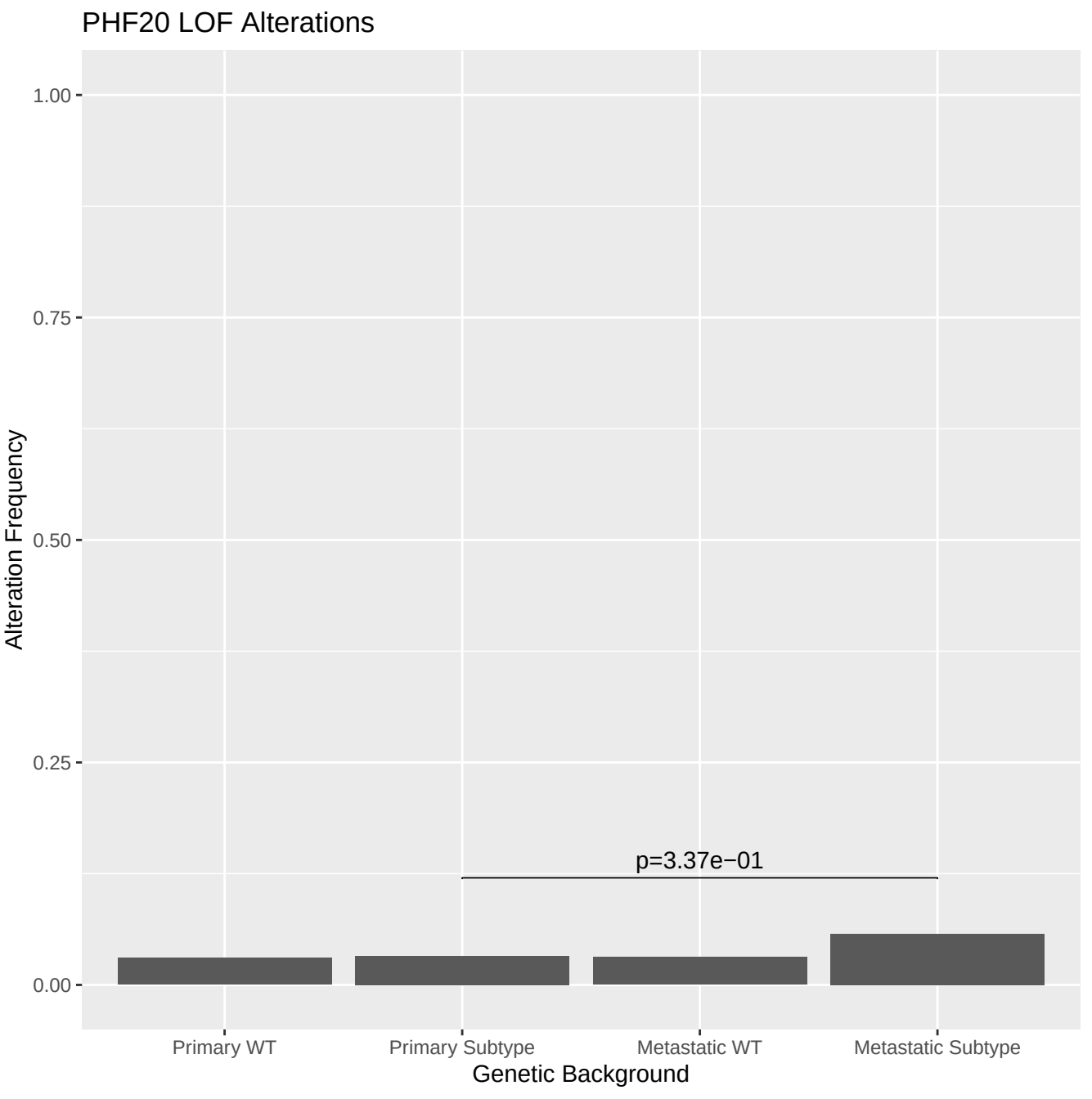

EGR2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

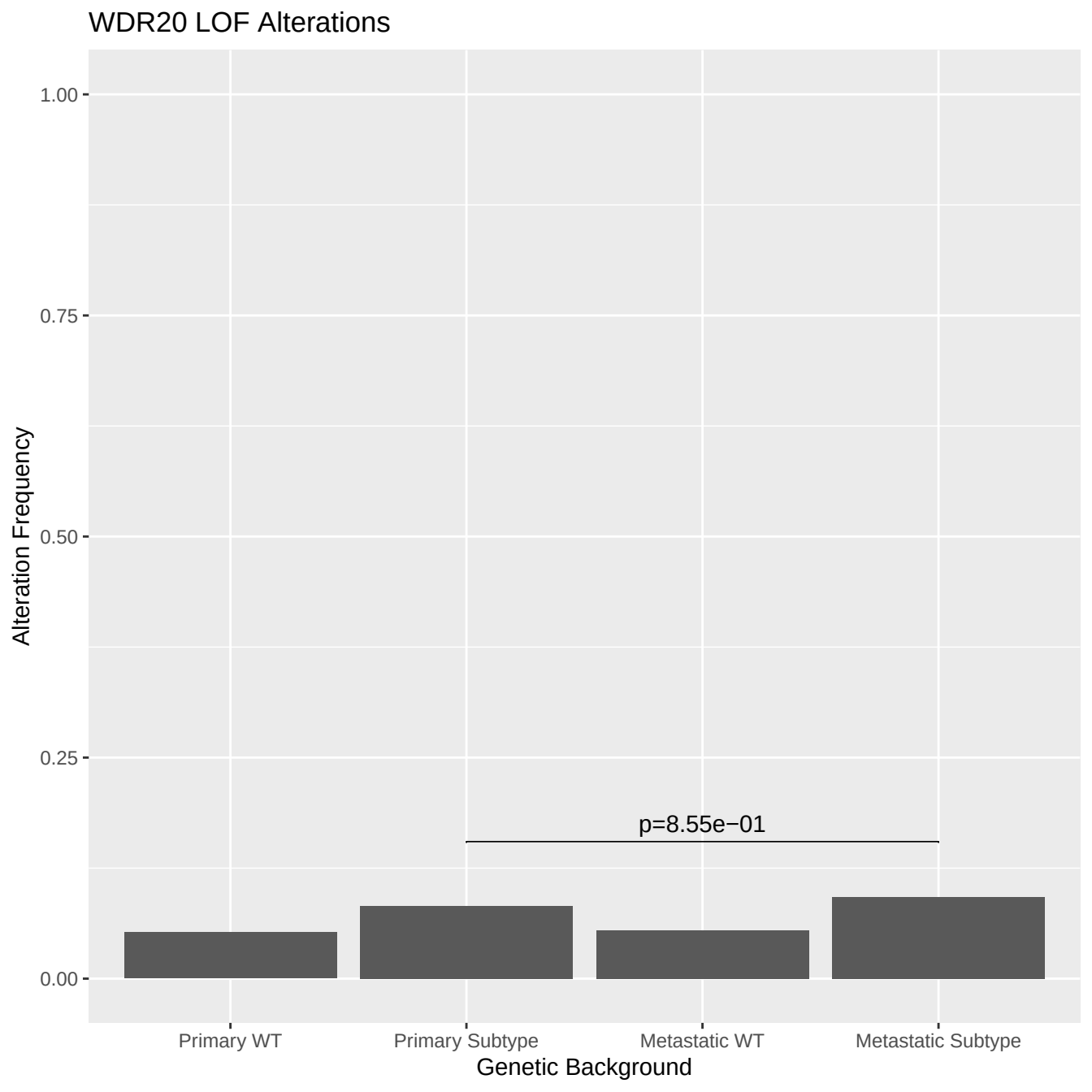

PKMYT1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

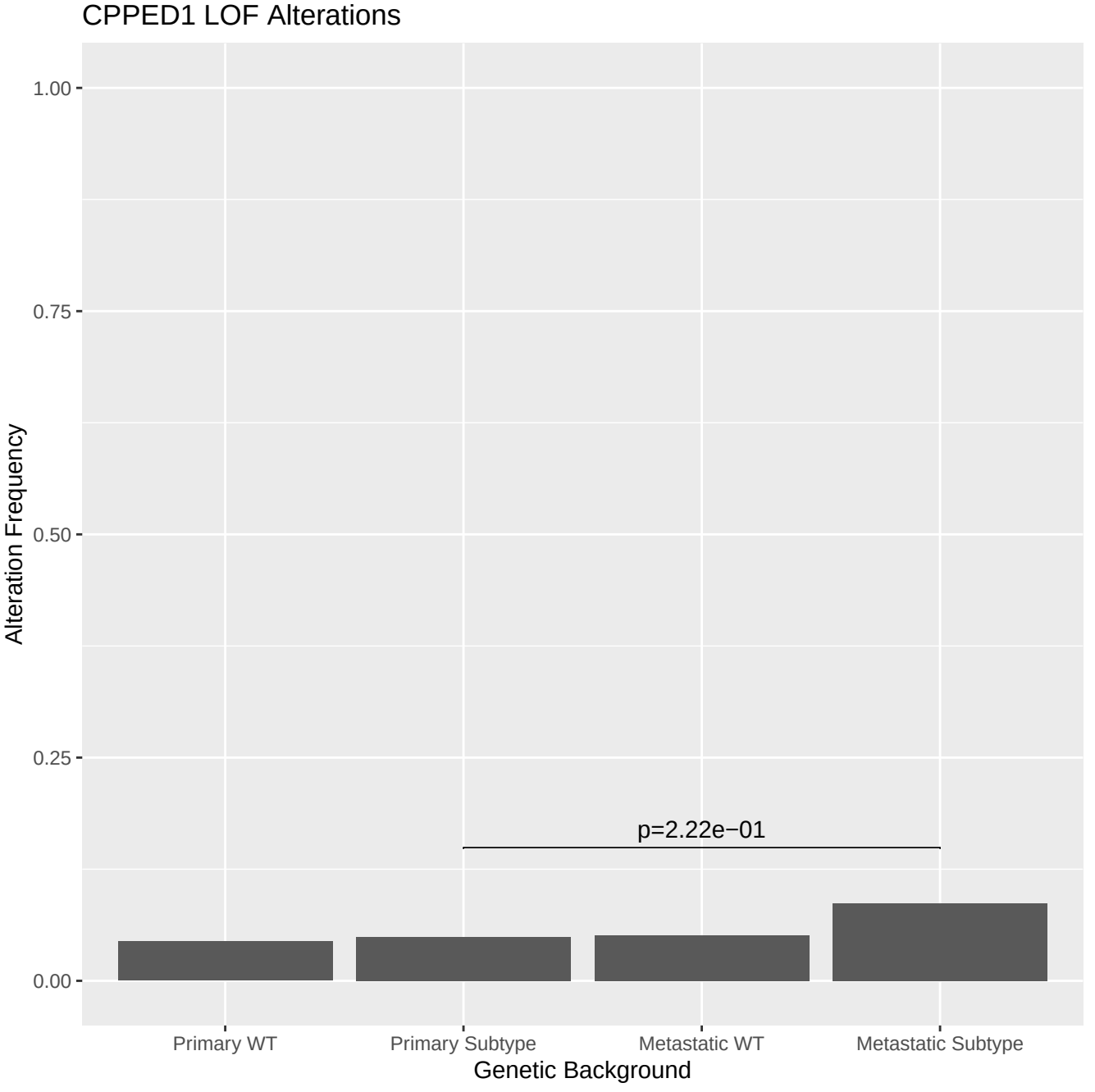

ABI3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

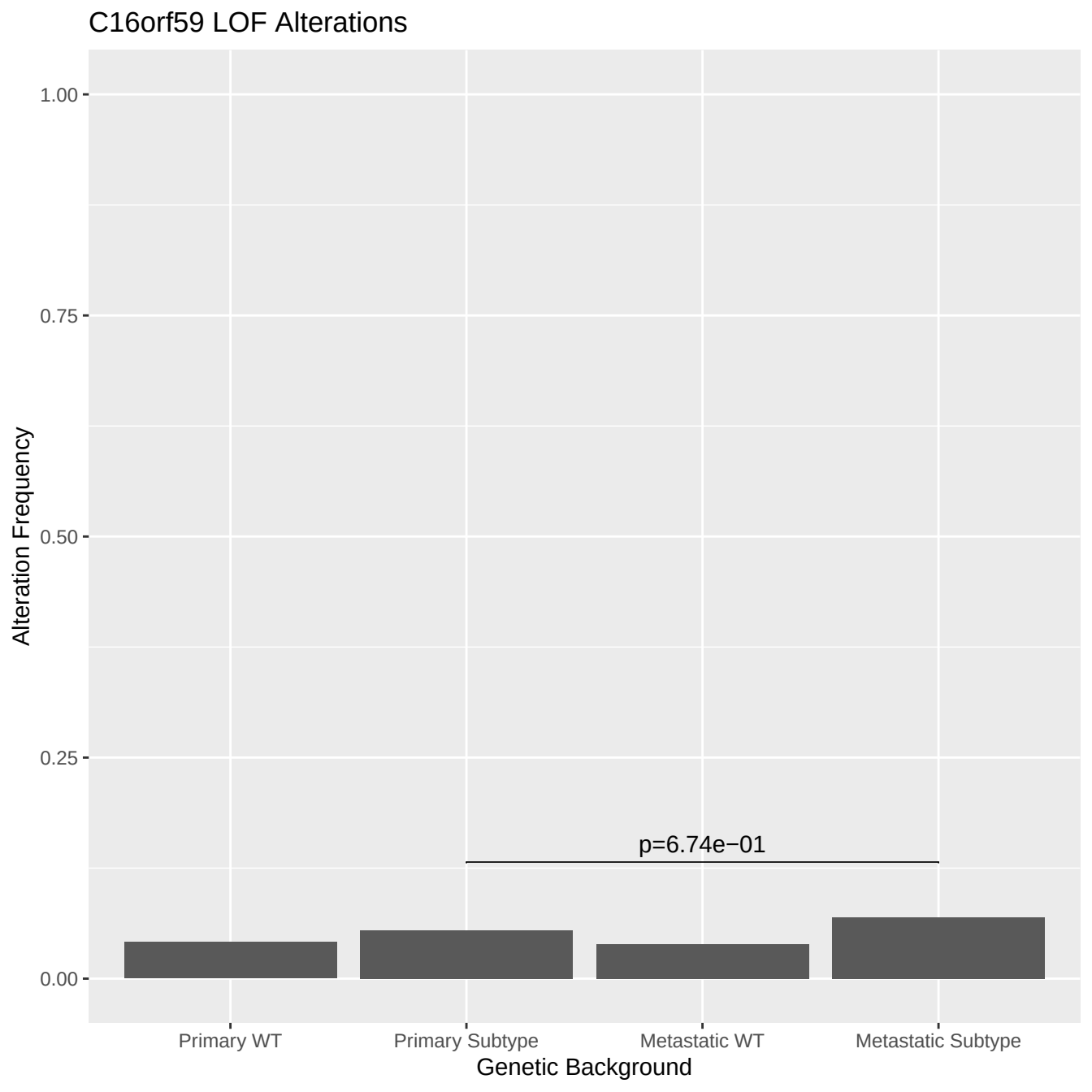

GPT LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.15e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

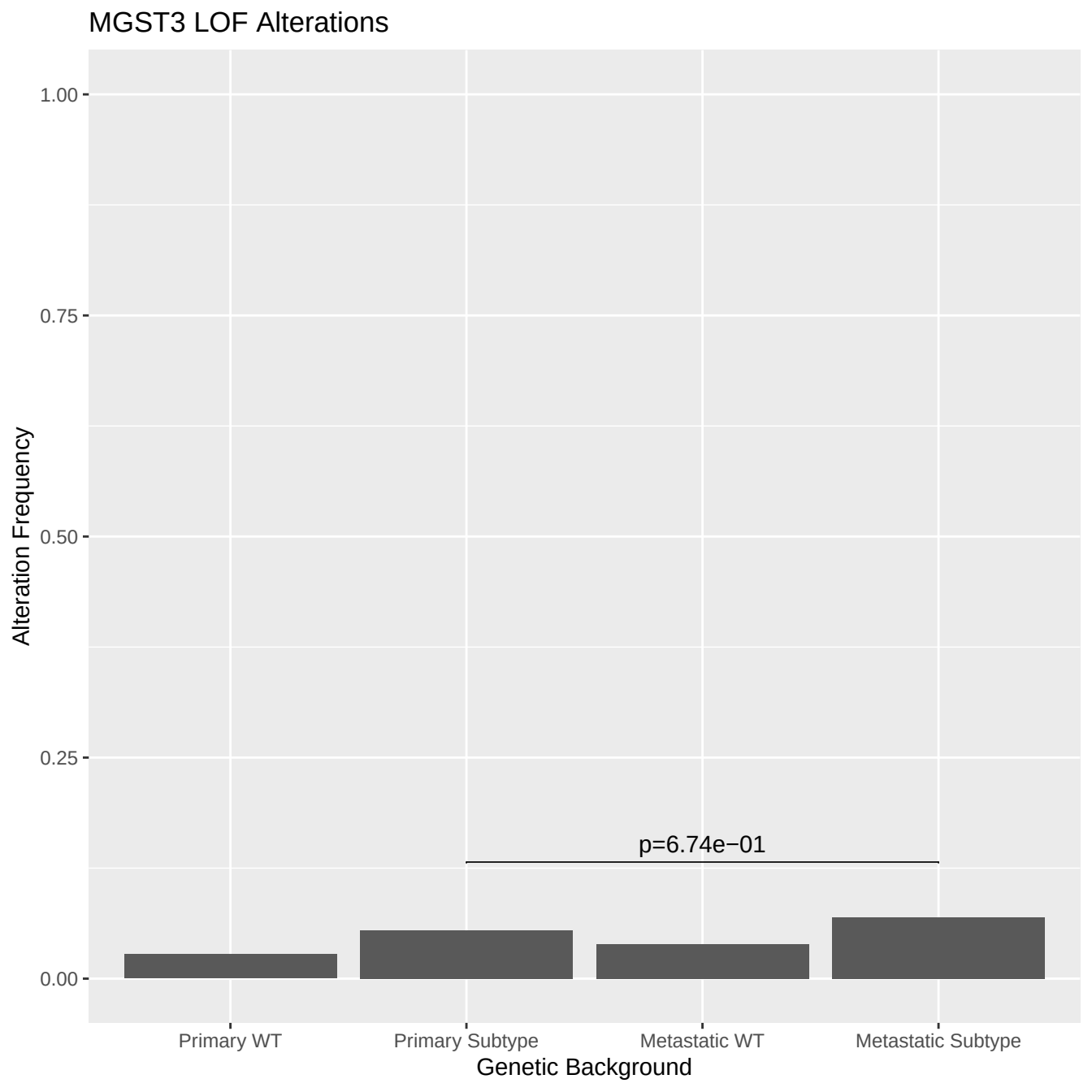

ARHGEF2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

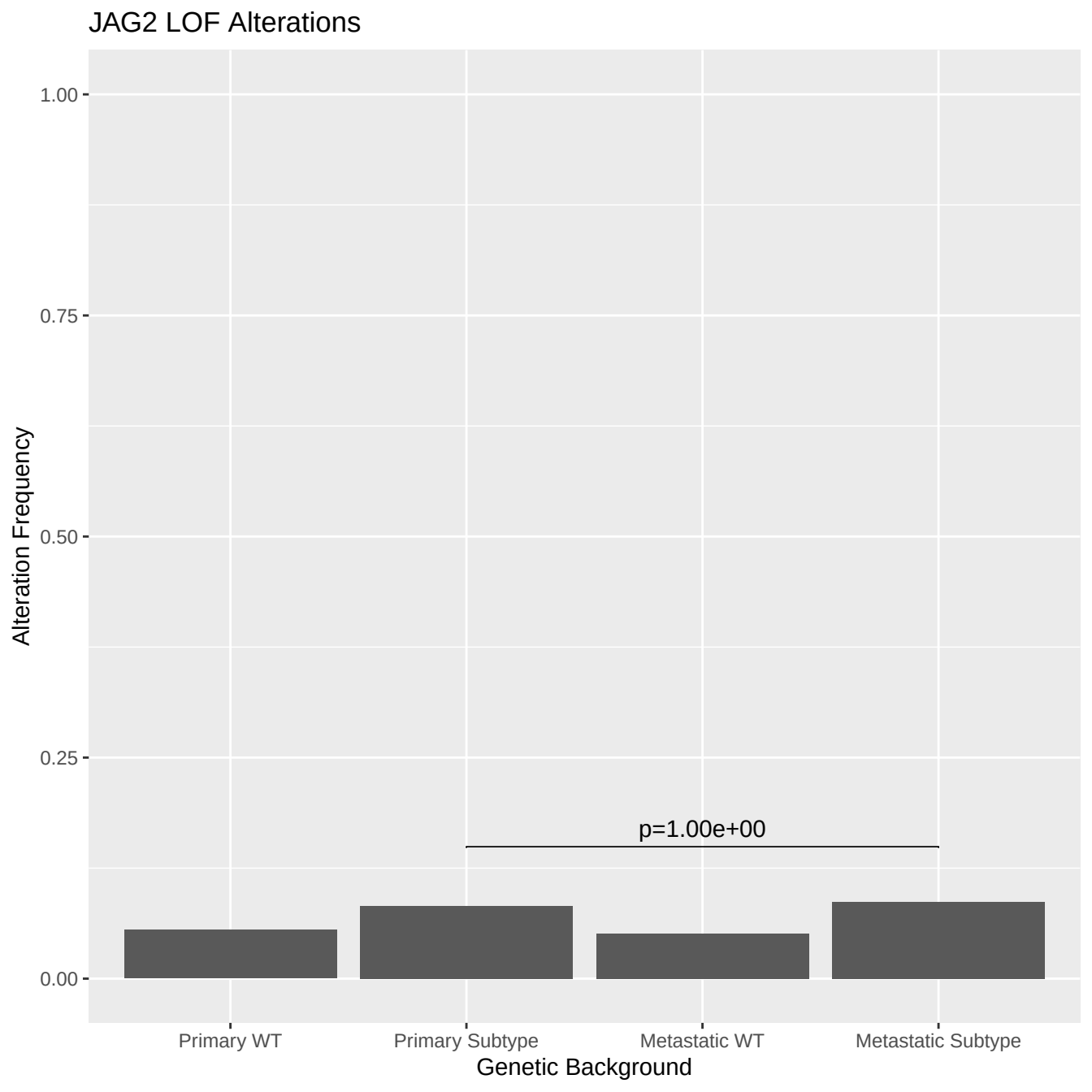

PHF20 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

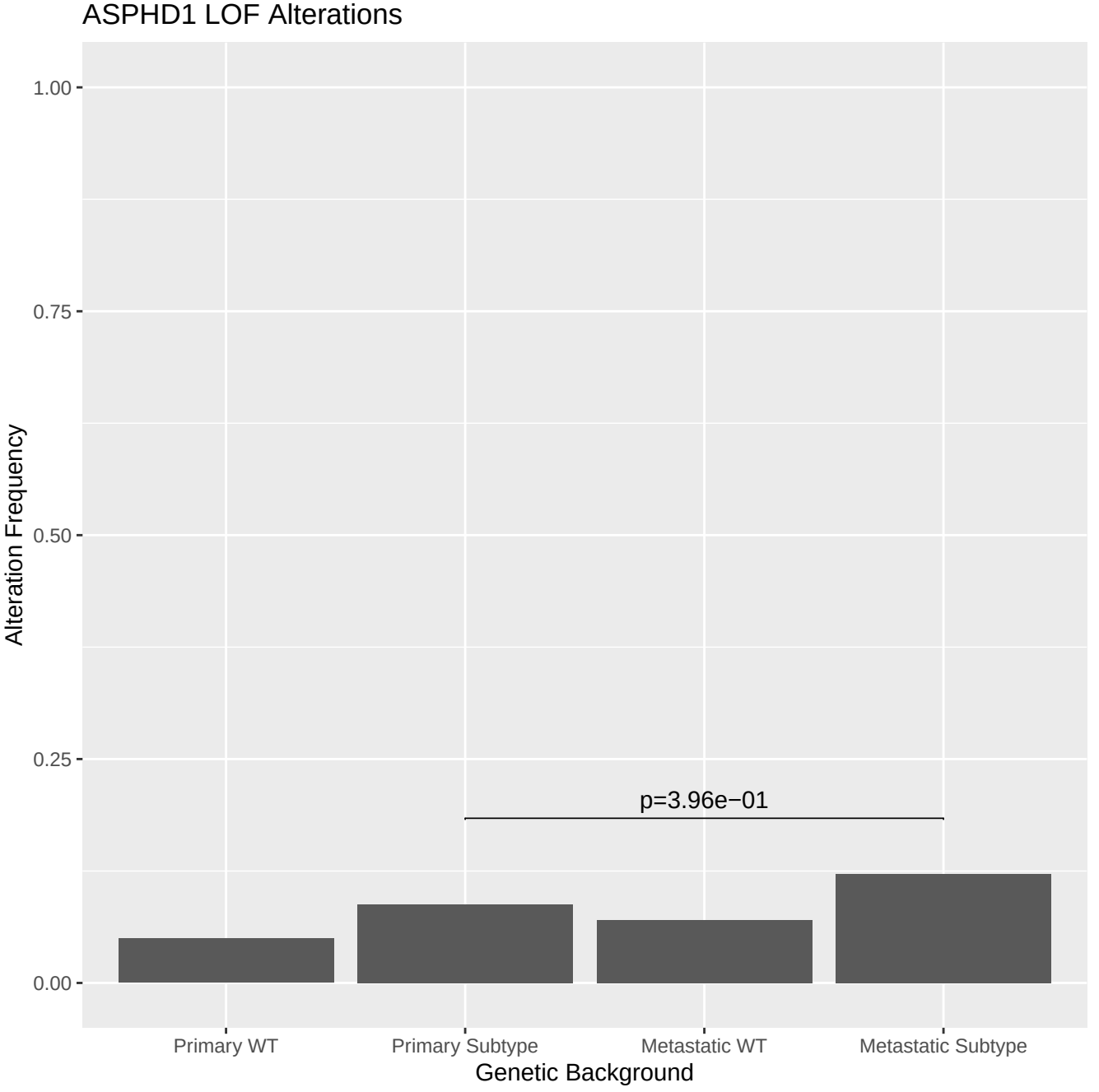

WDR20 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.55e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

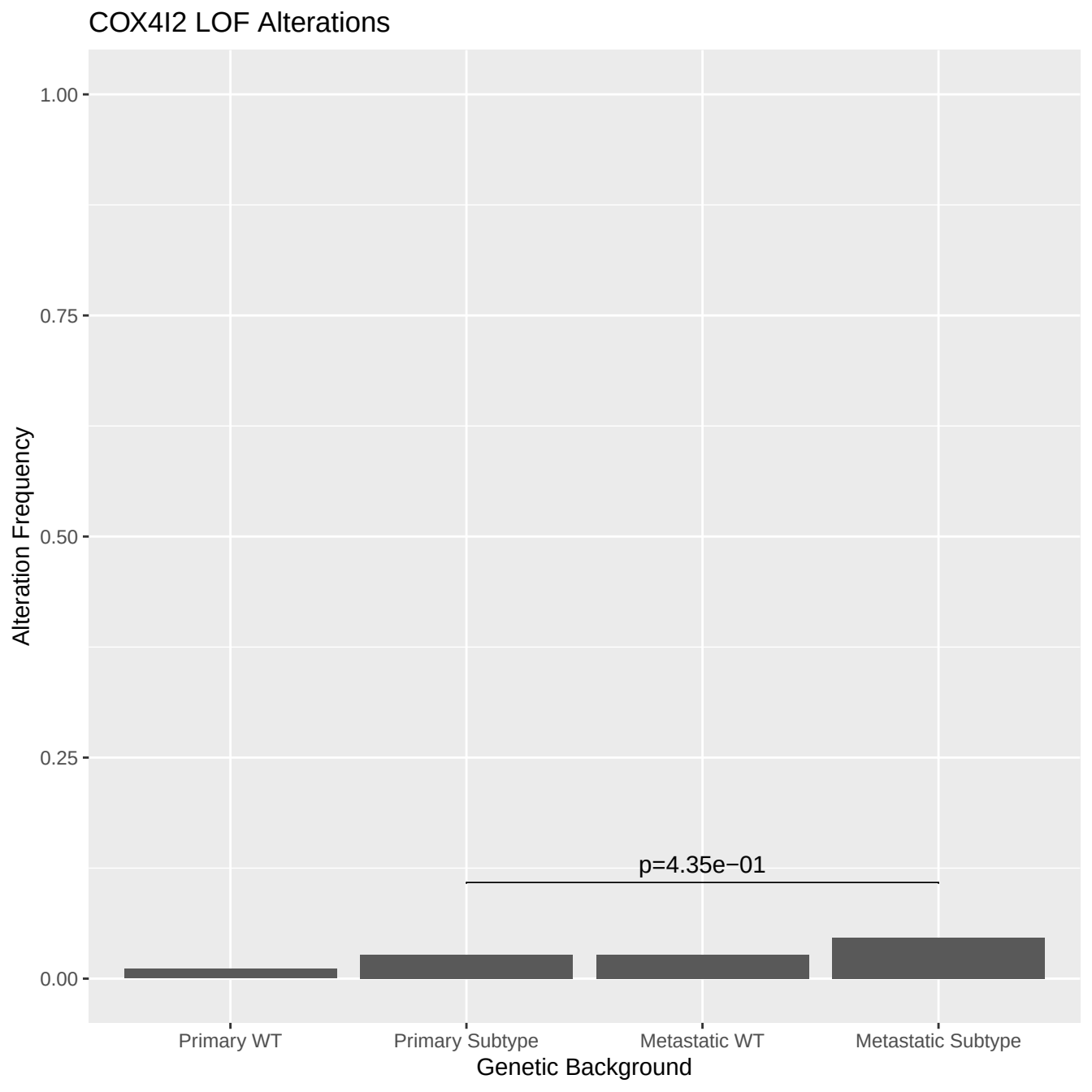

CPPED1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.22e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

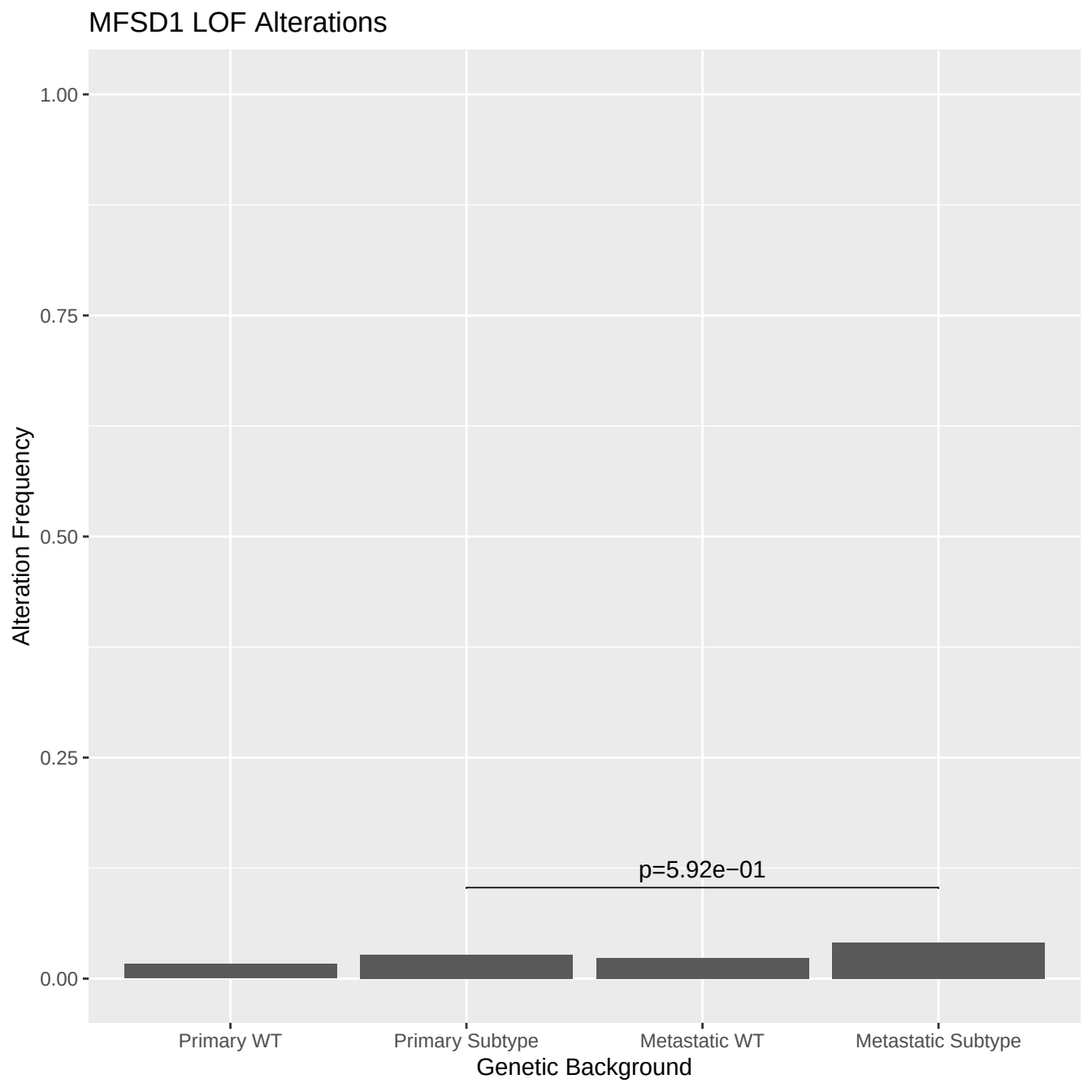

C16orf59 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

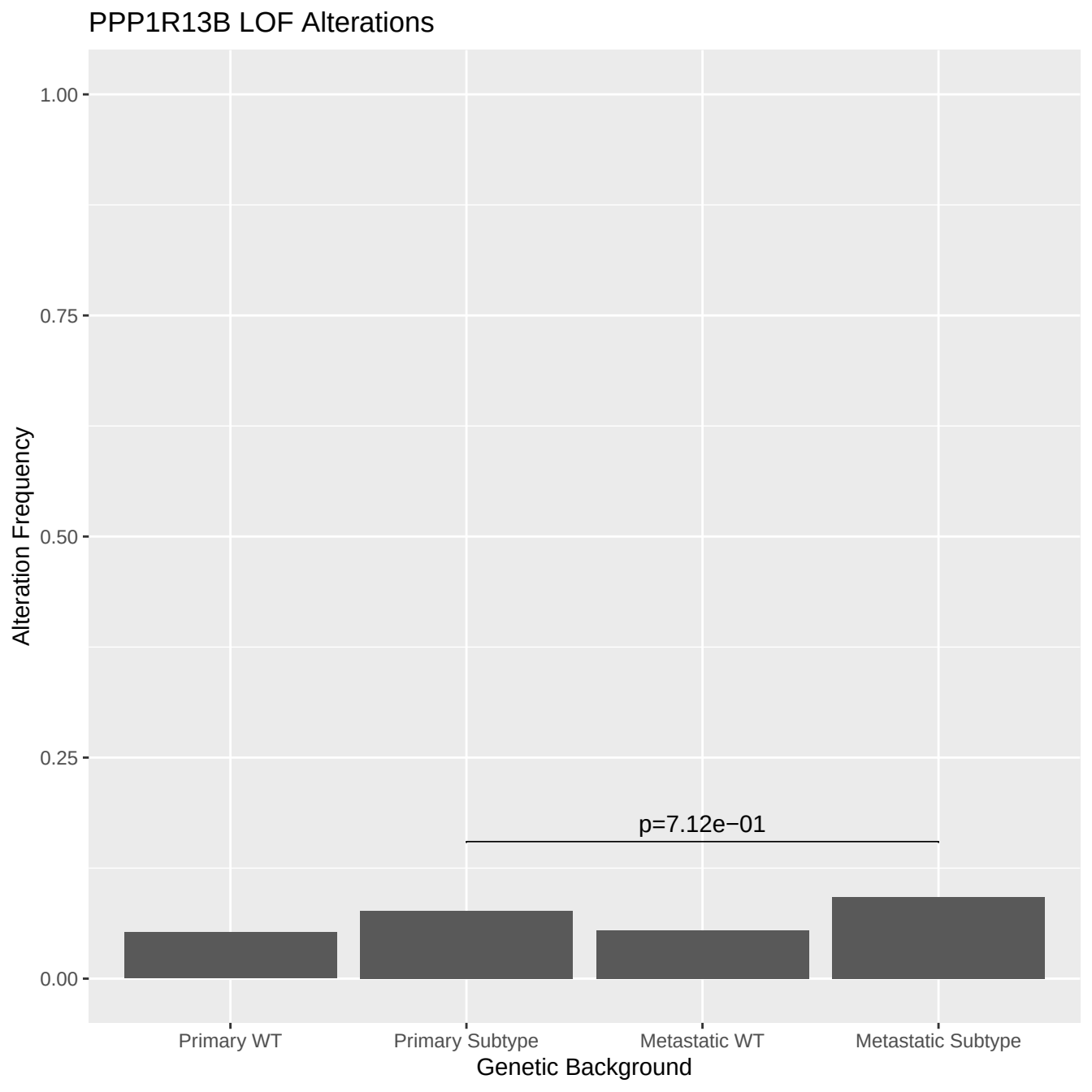

MGST3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

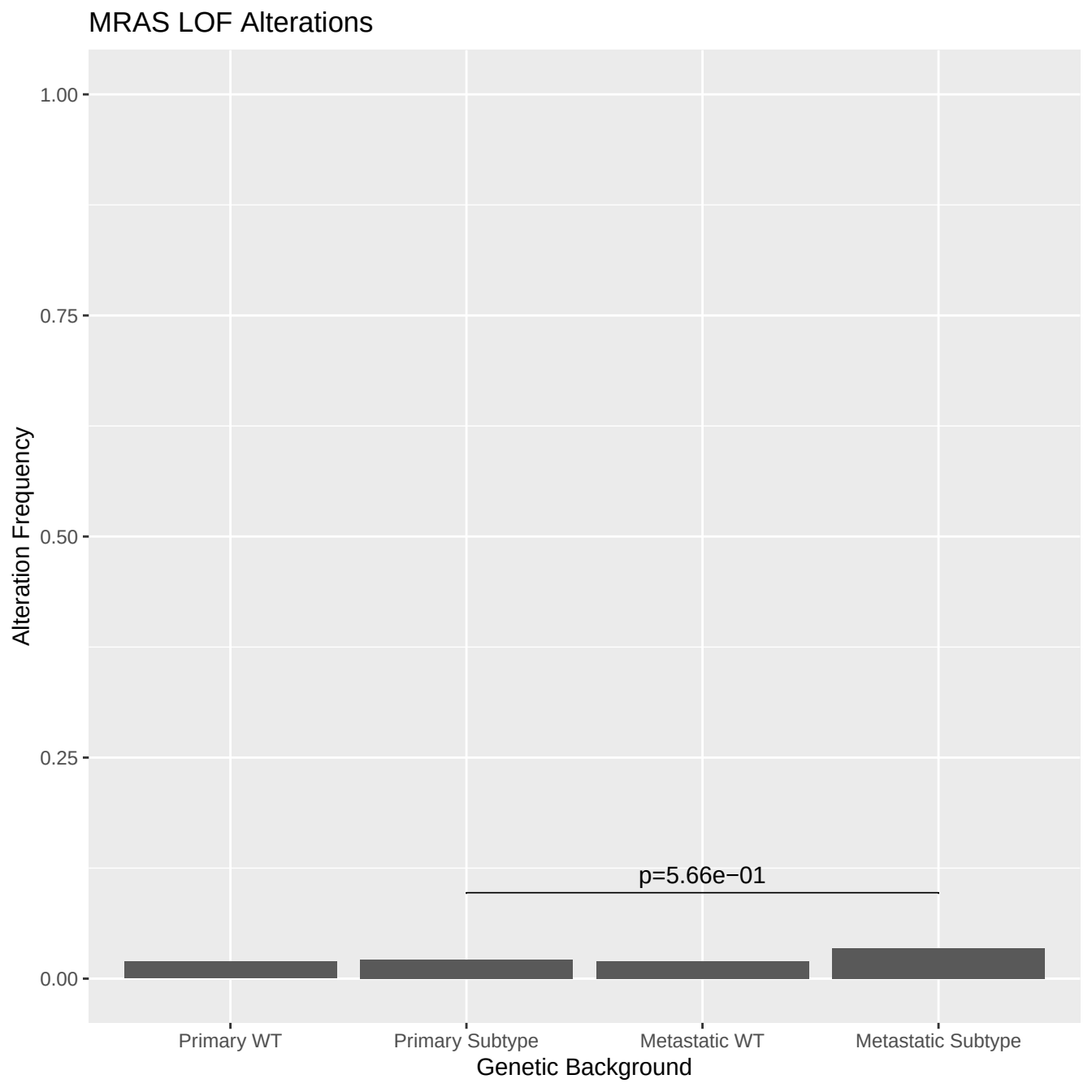

JAG2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

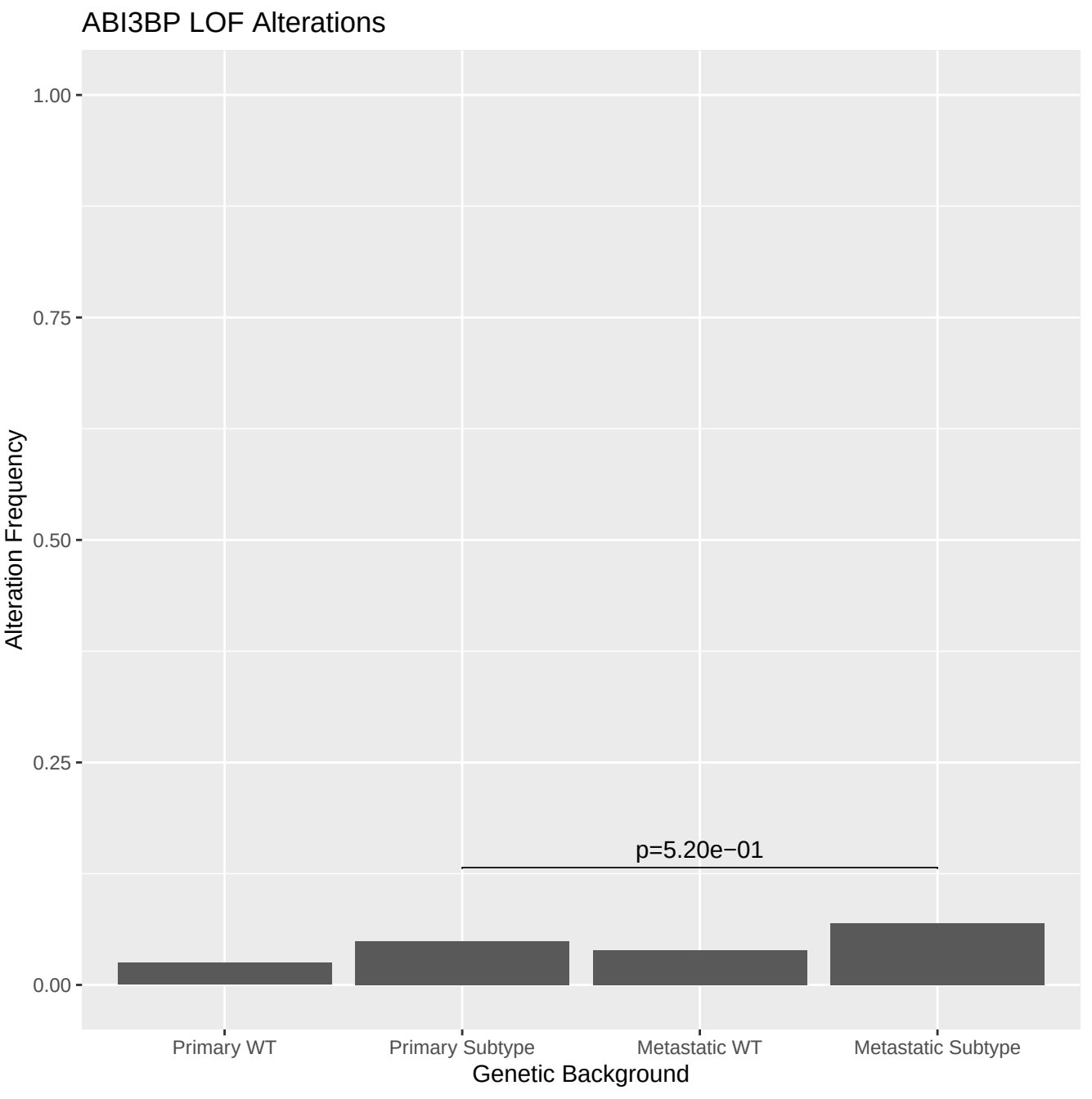

ASPHD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.96e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

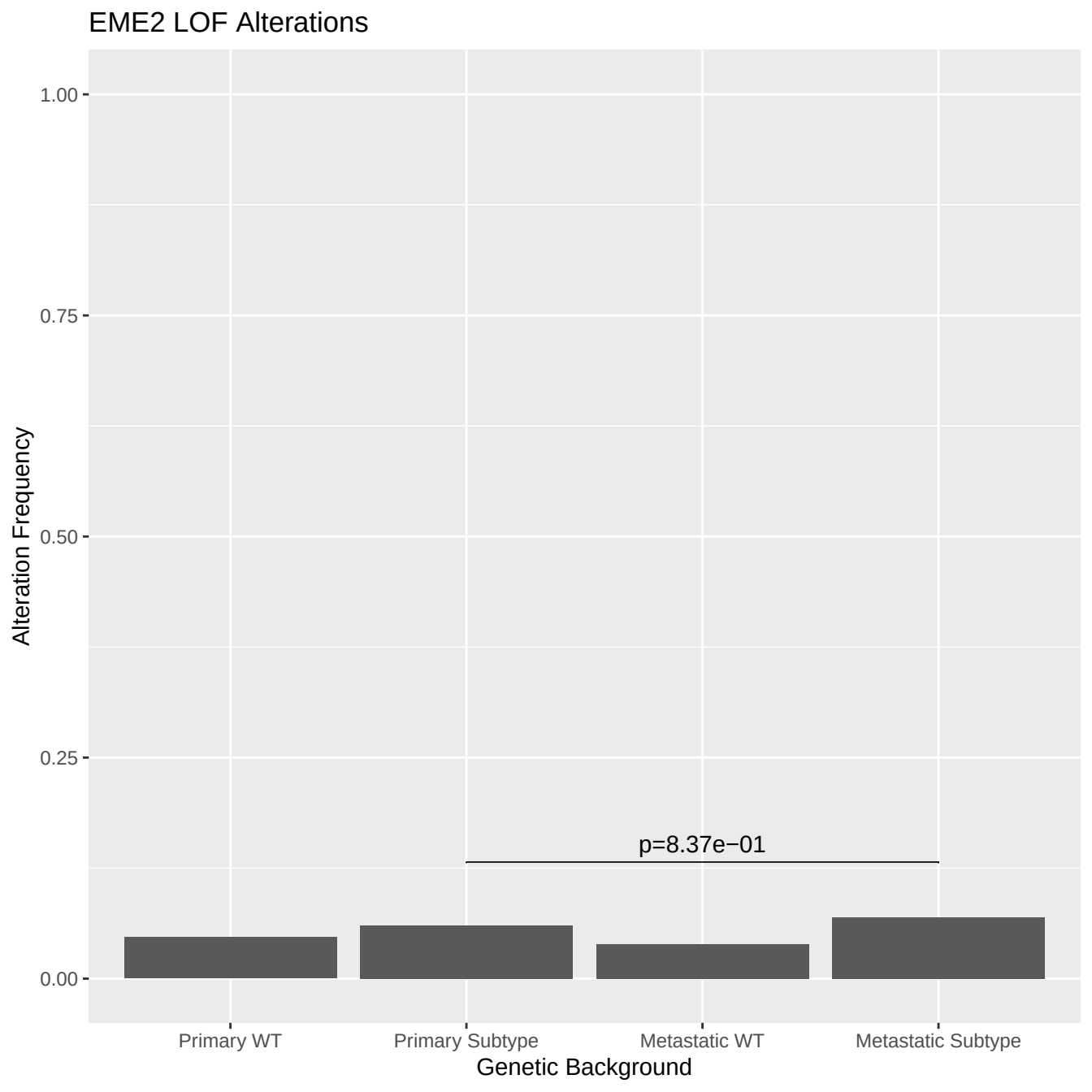

COX4I2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

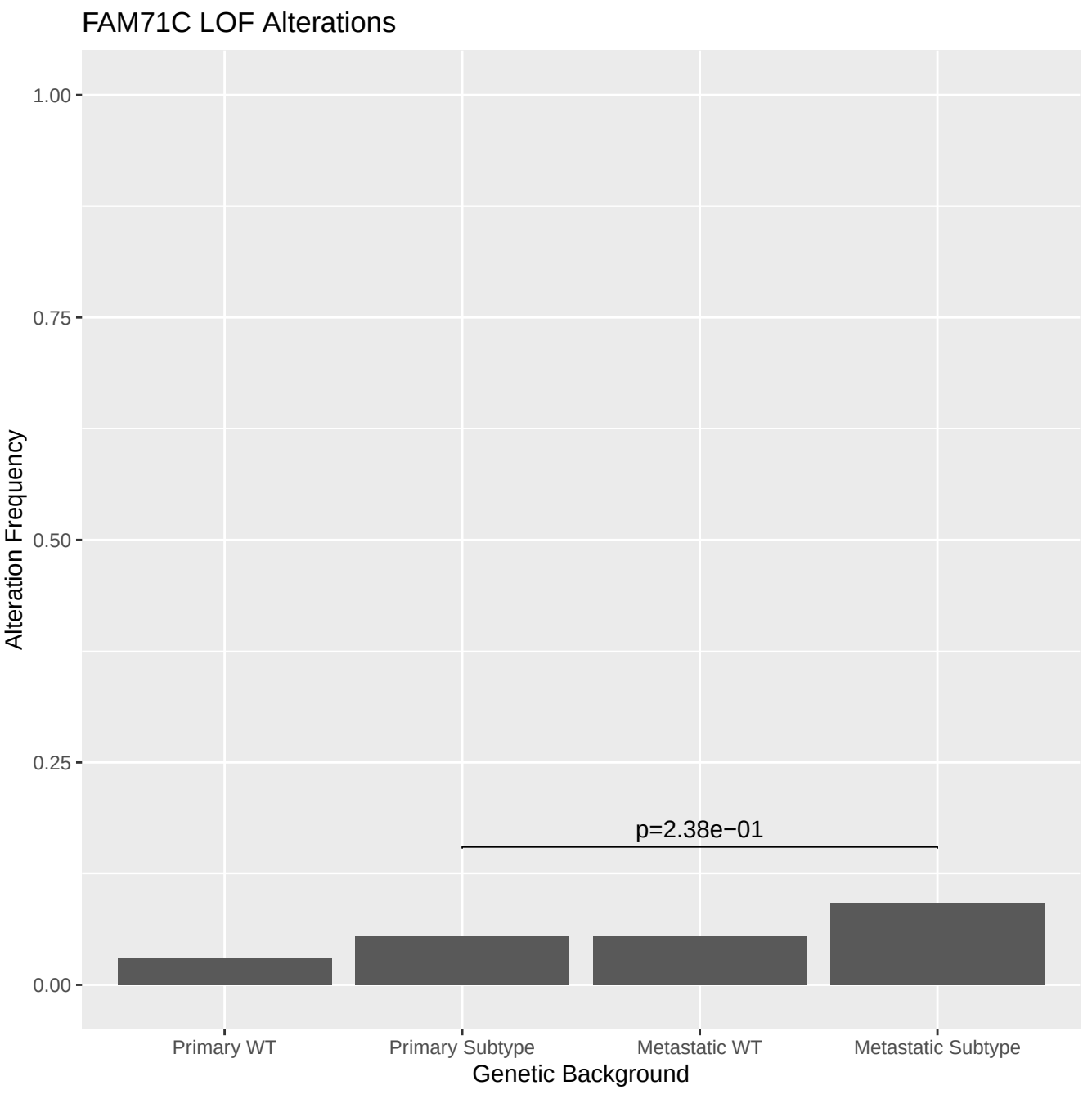

MFSD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.92e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

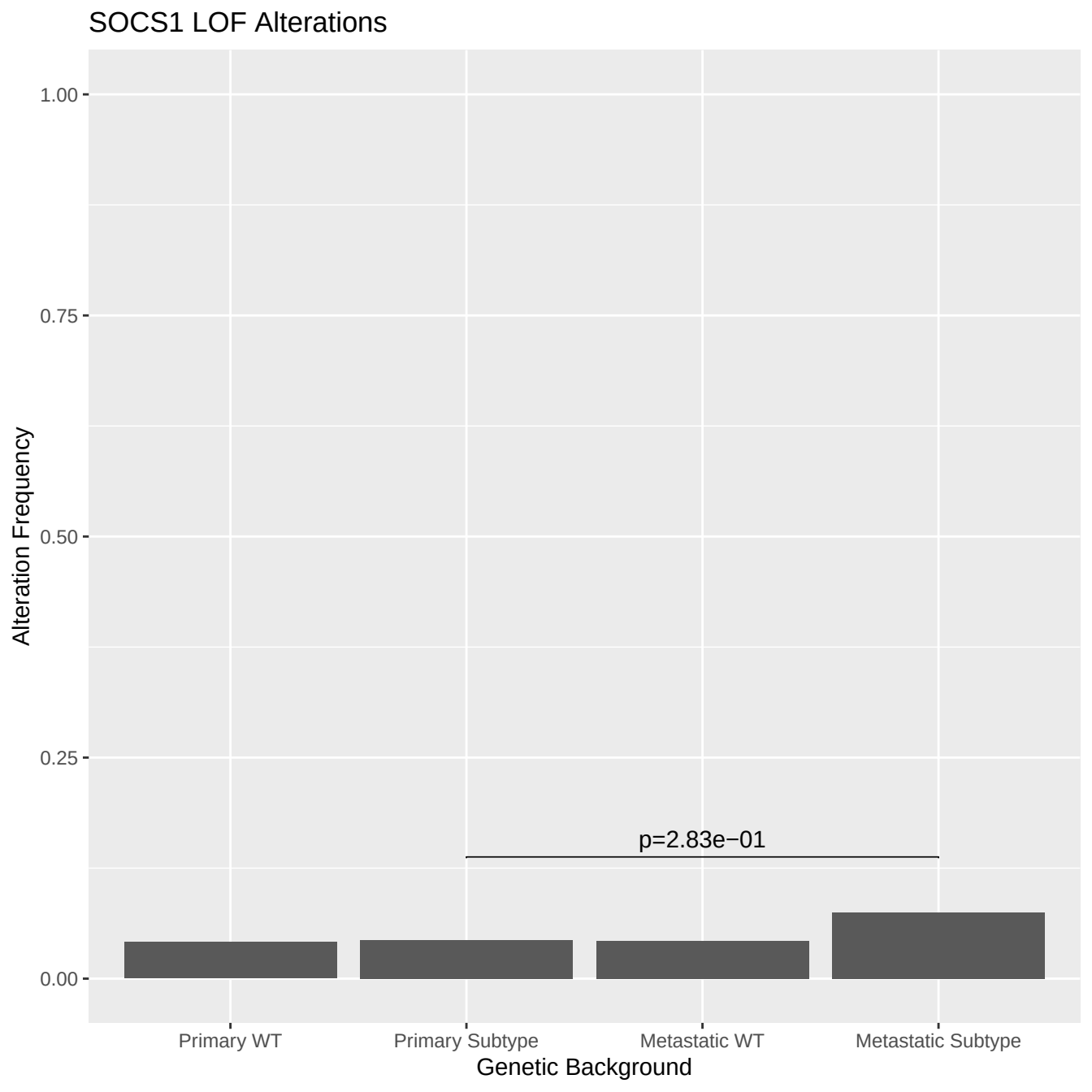

PPP1R13B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.12e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

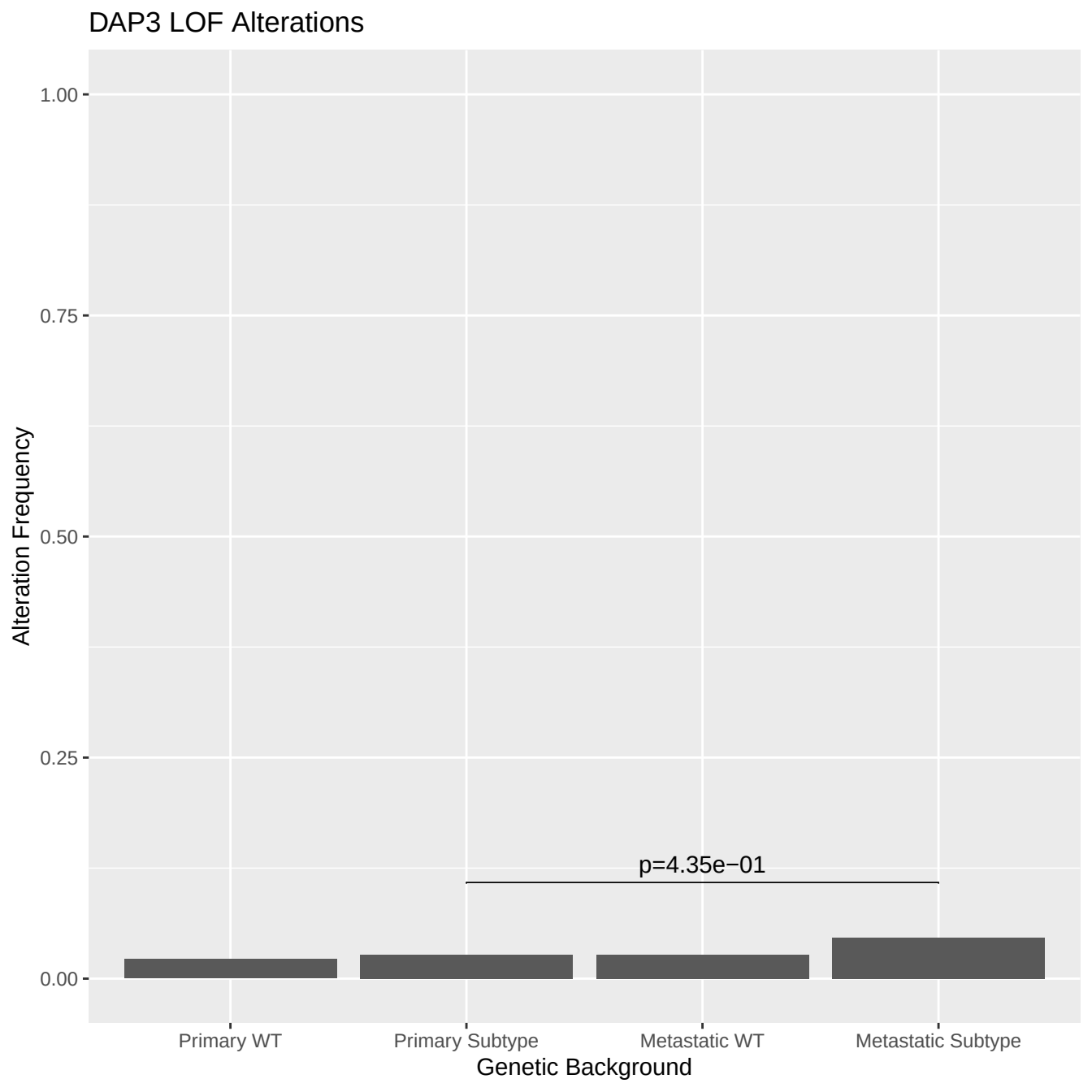

MRAS LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

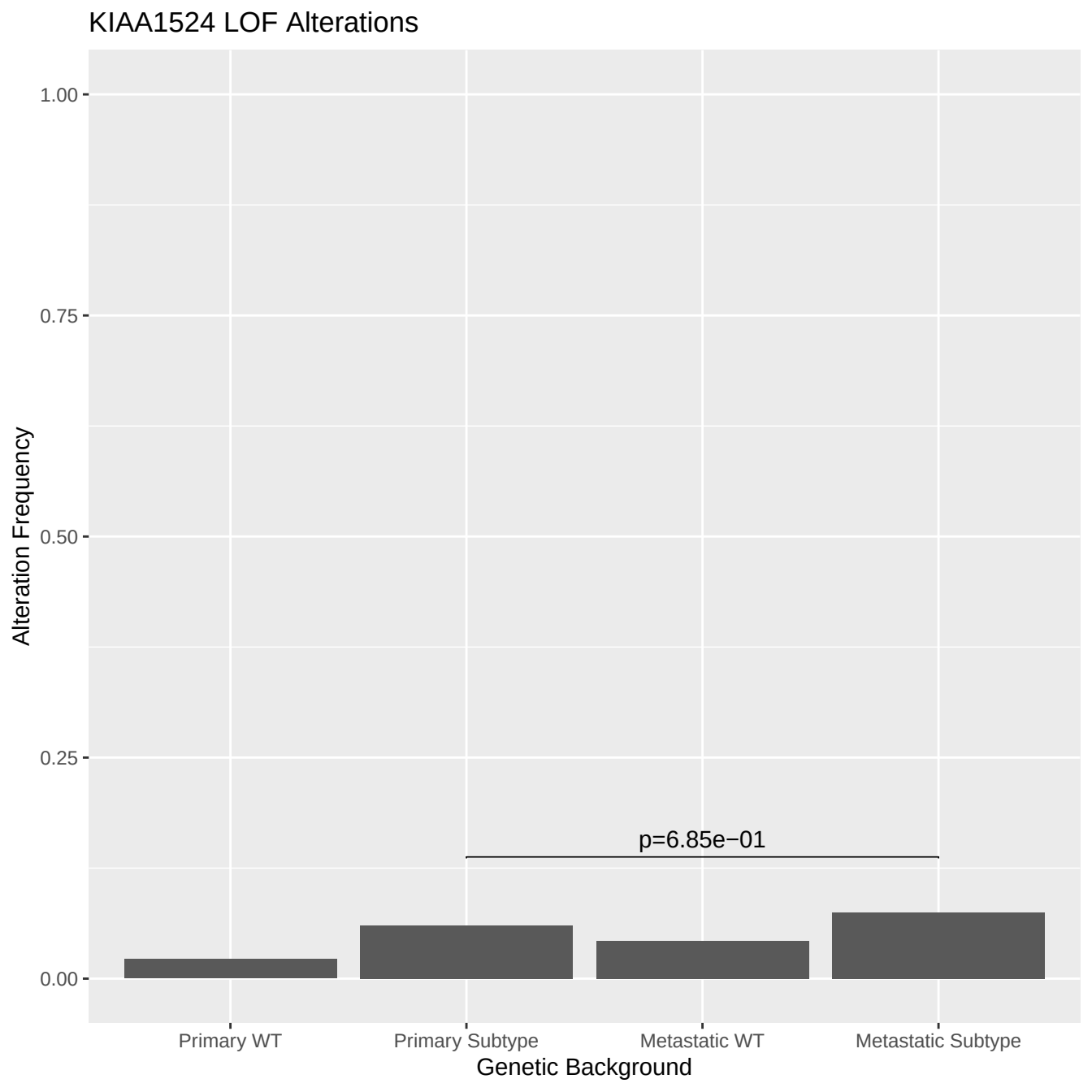

ABI3BP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.20e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

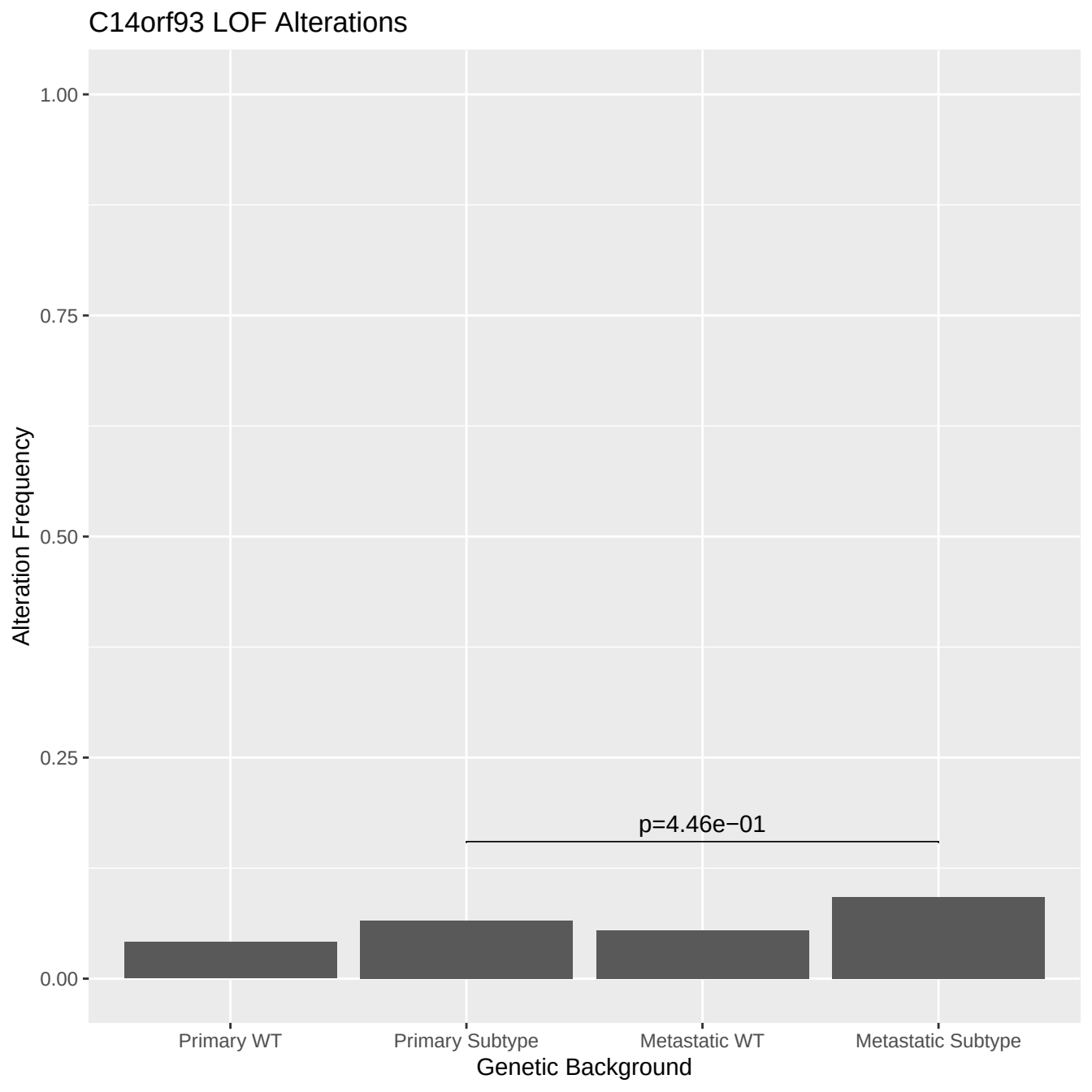

EME2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

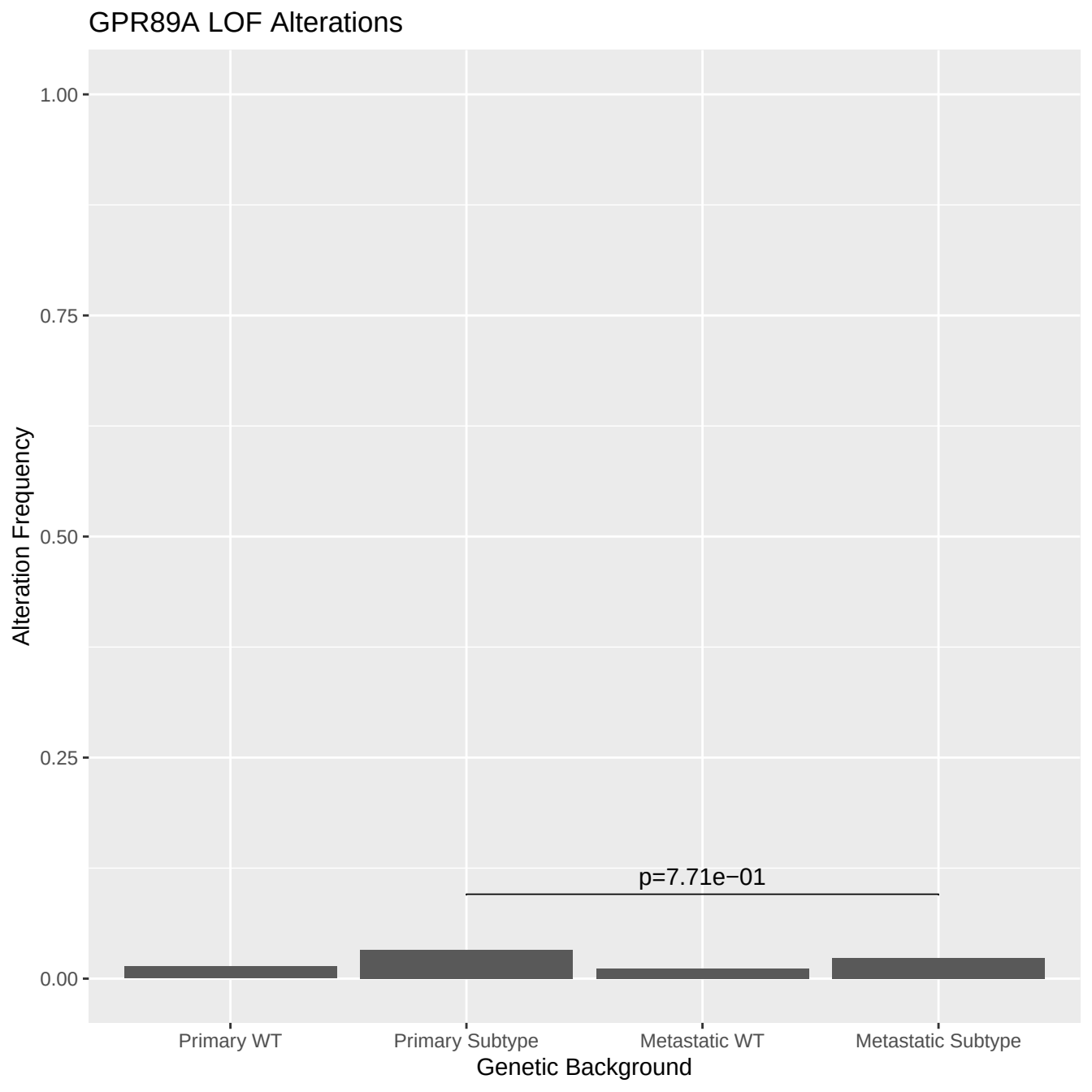

FAM71C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.38e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

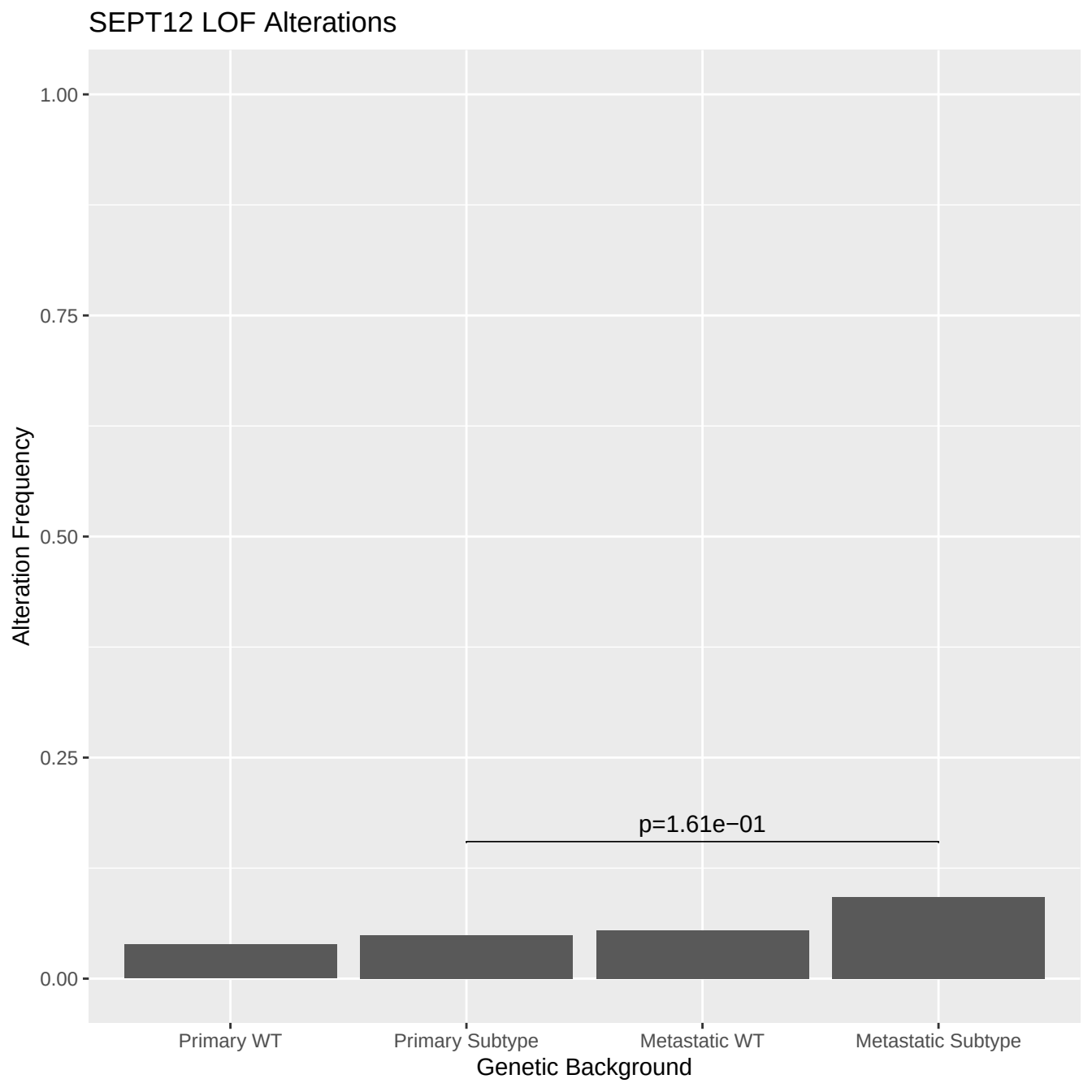

SOCS1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

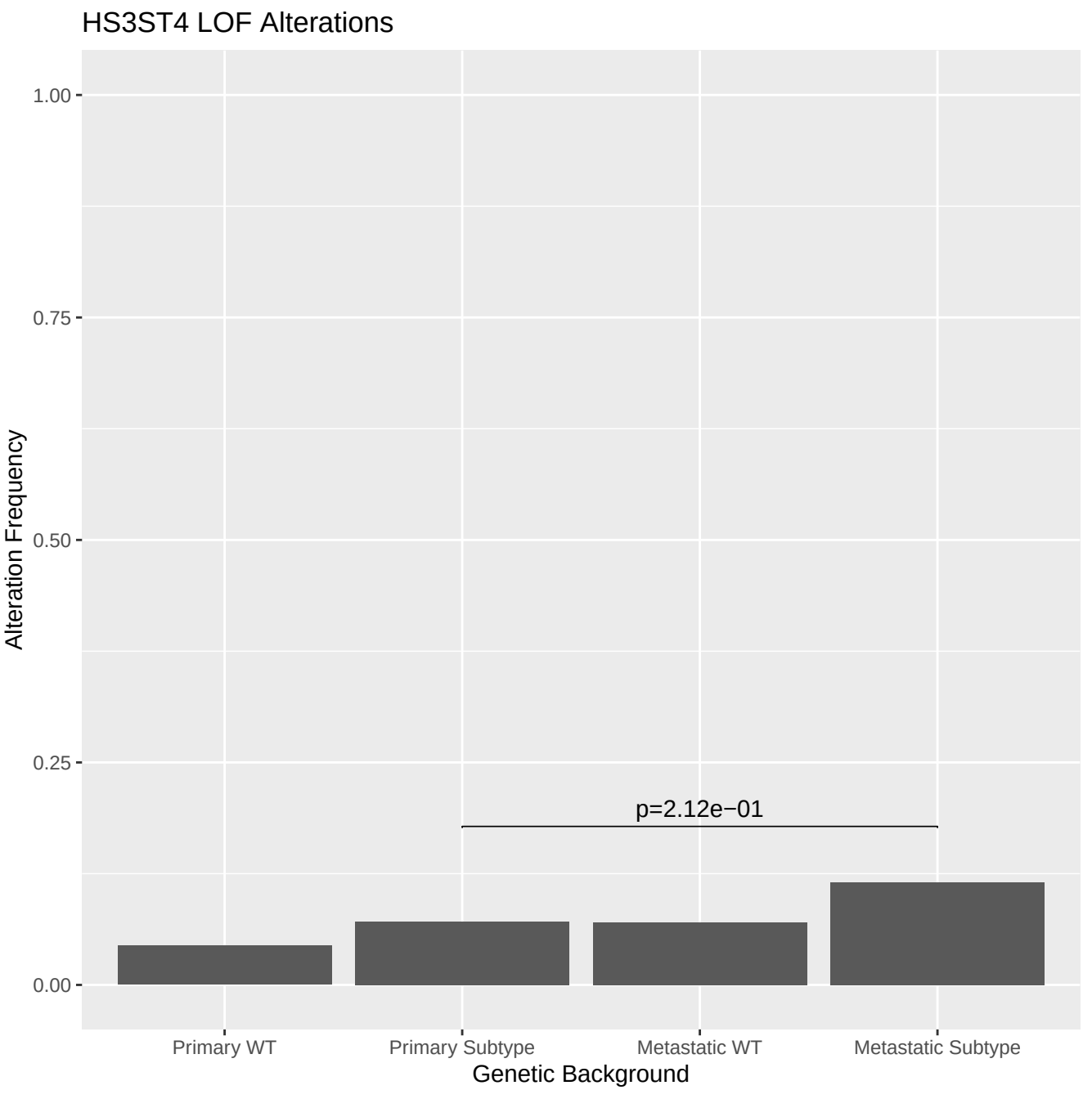

DAP3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

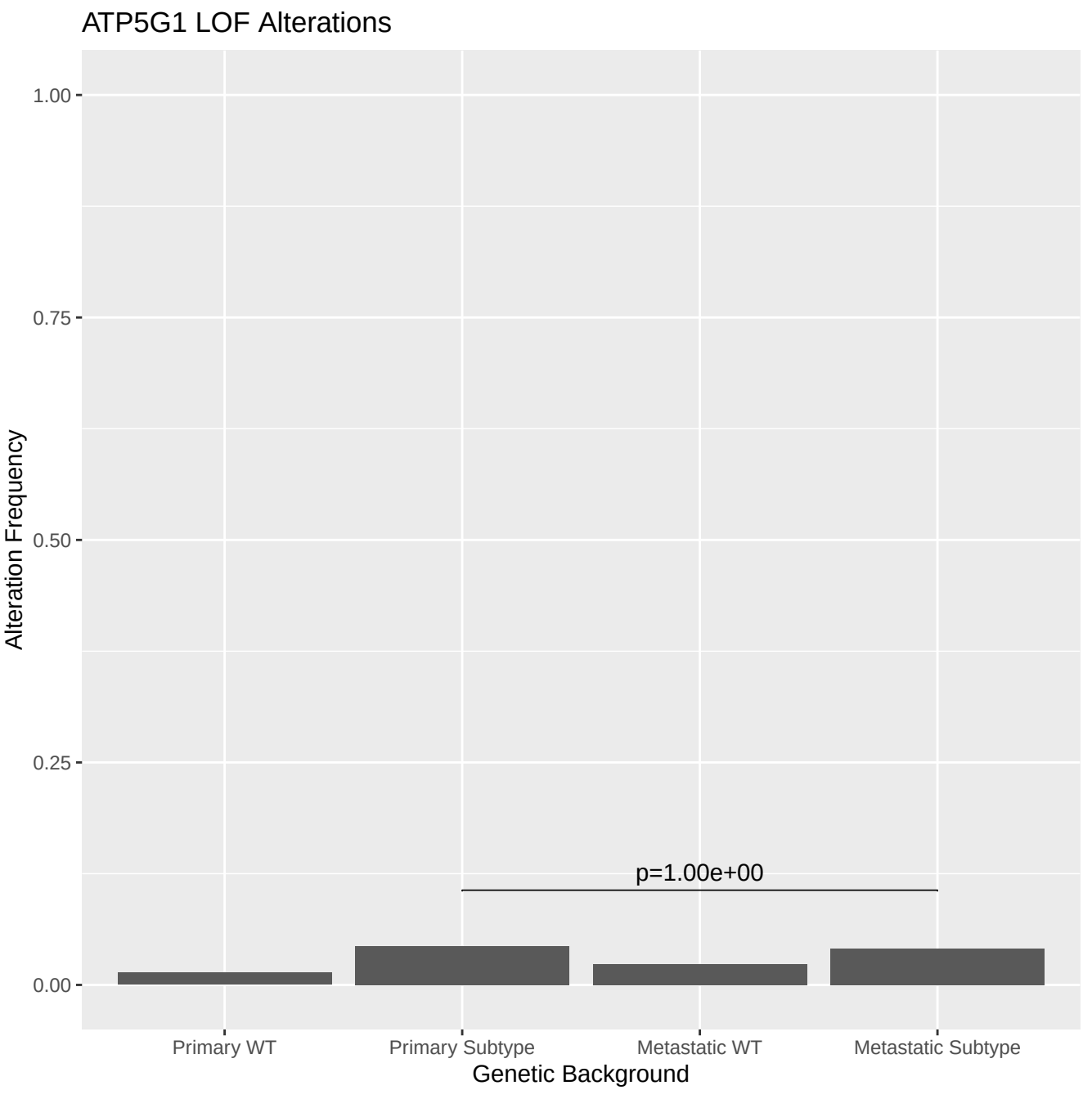

KIAA1524 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

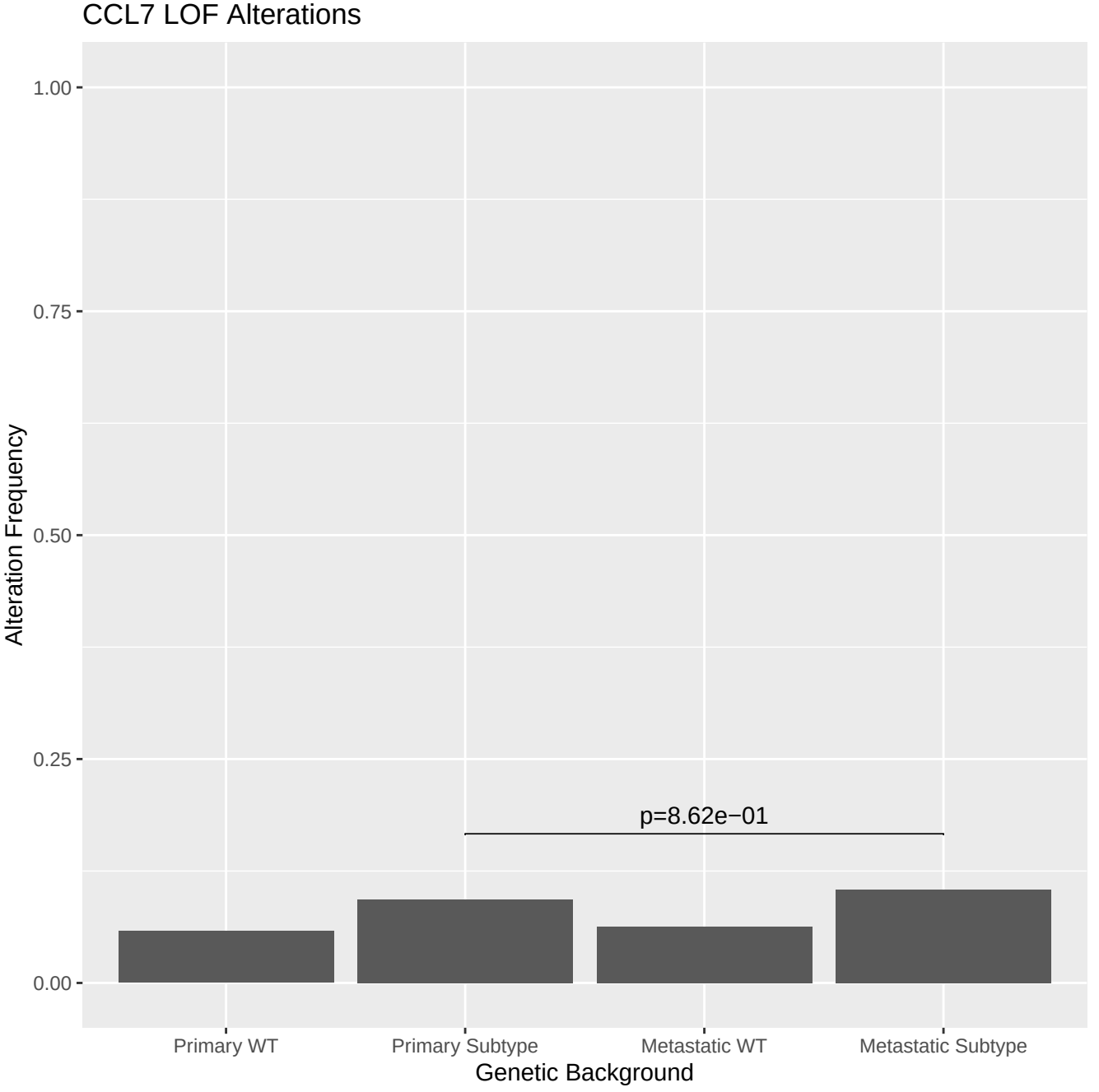

C14orf93 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.46e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

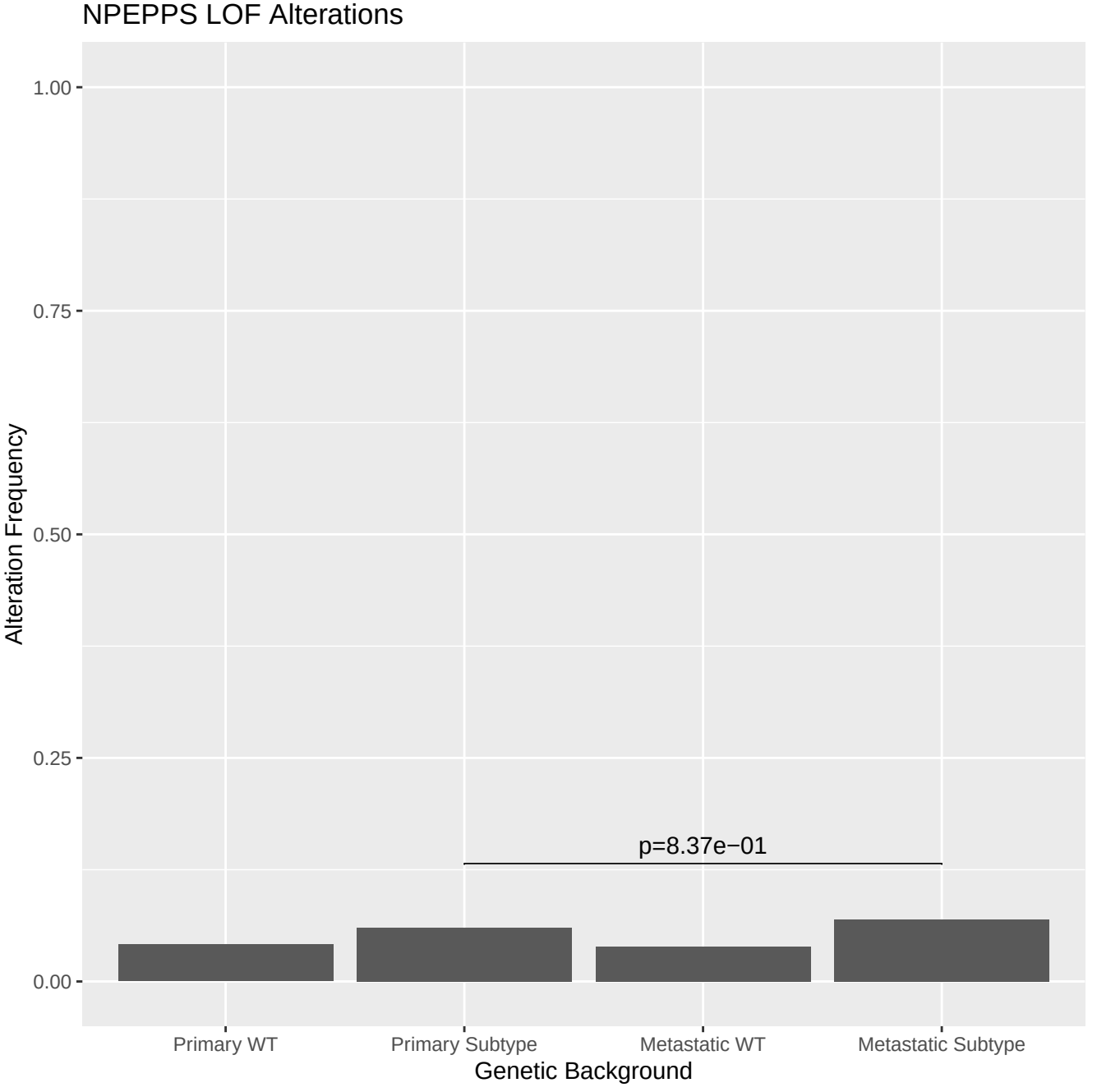

GPR89A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

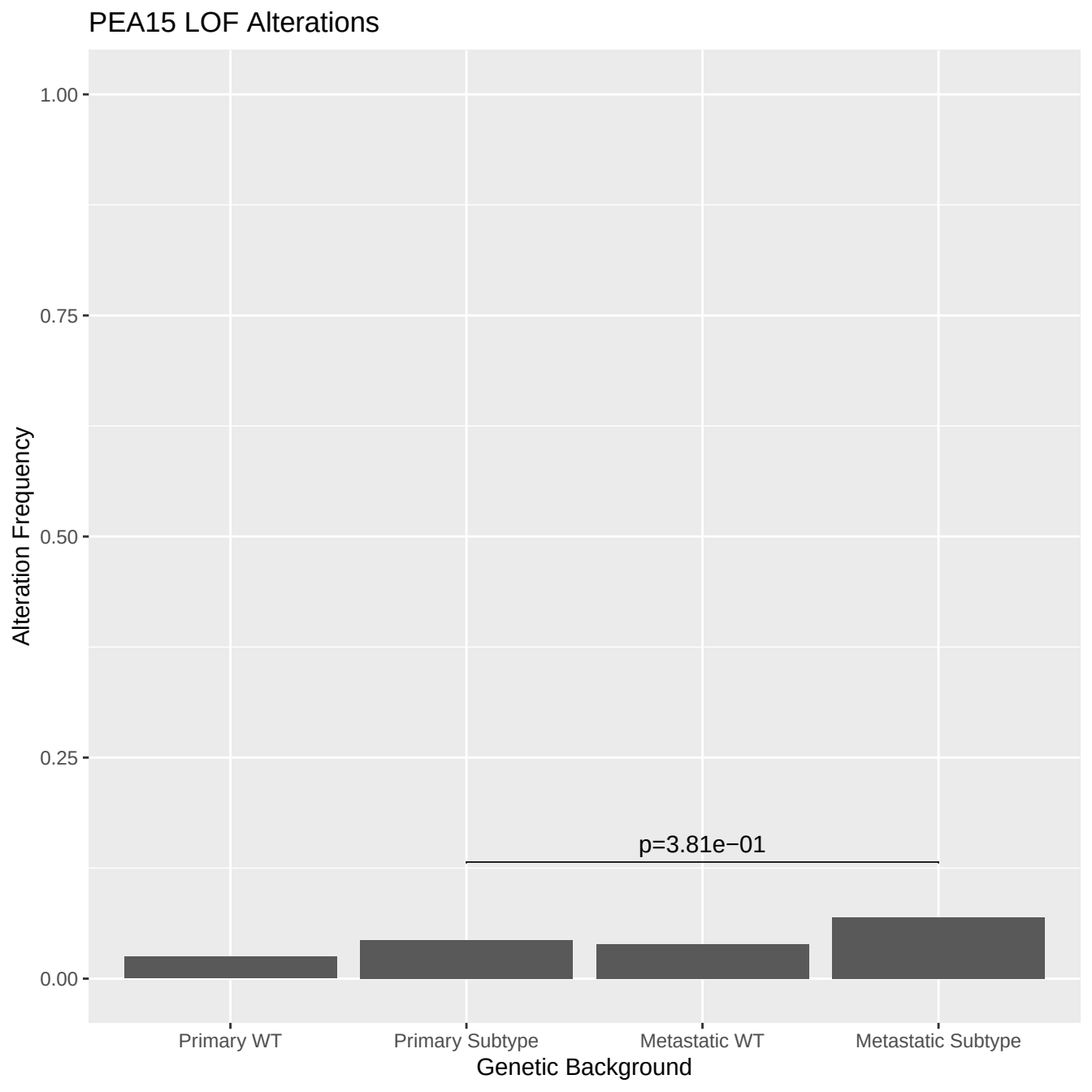

SEPT12 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.61e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

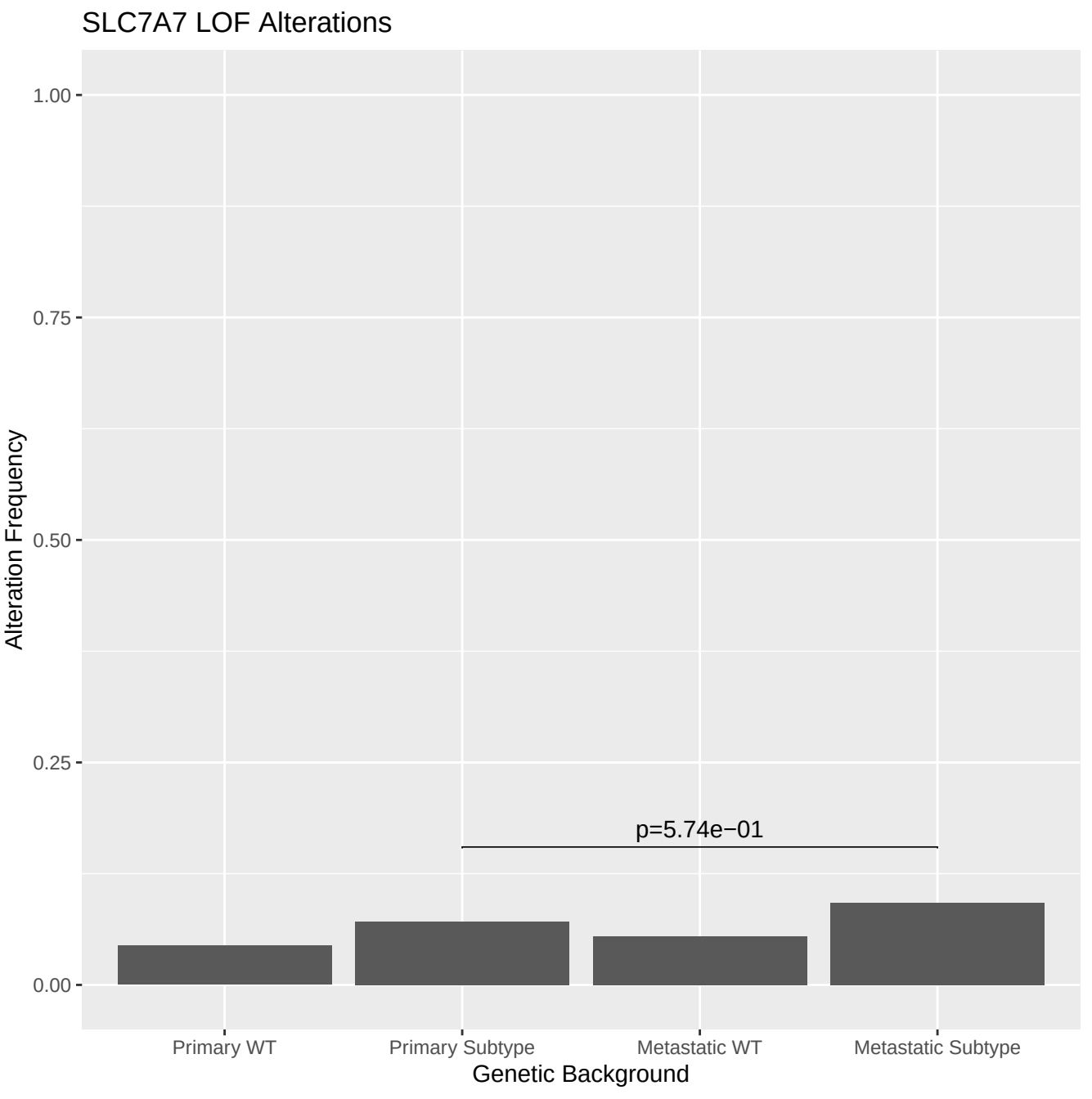

HS3ST4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.12e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

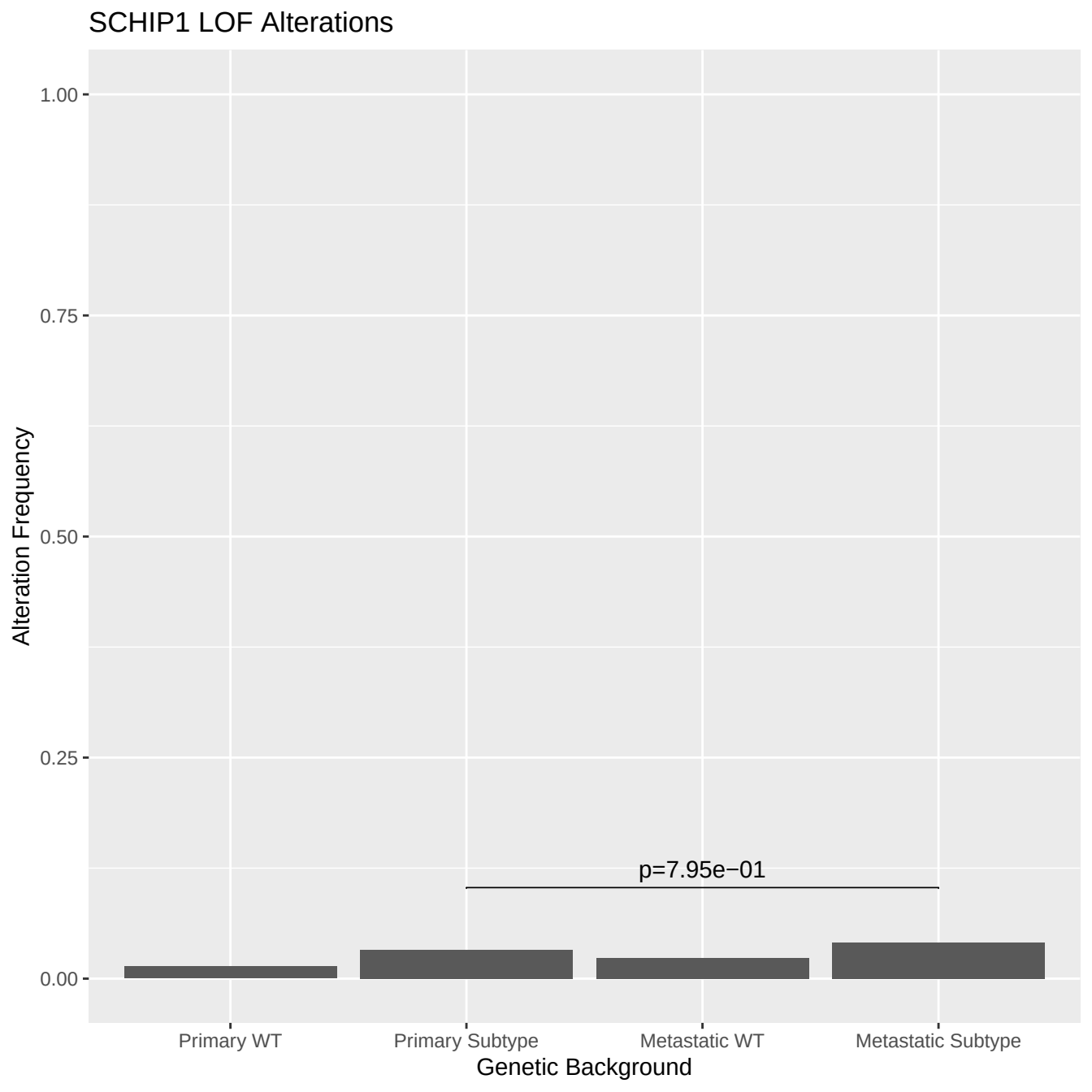

ATP5G1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

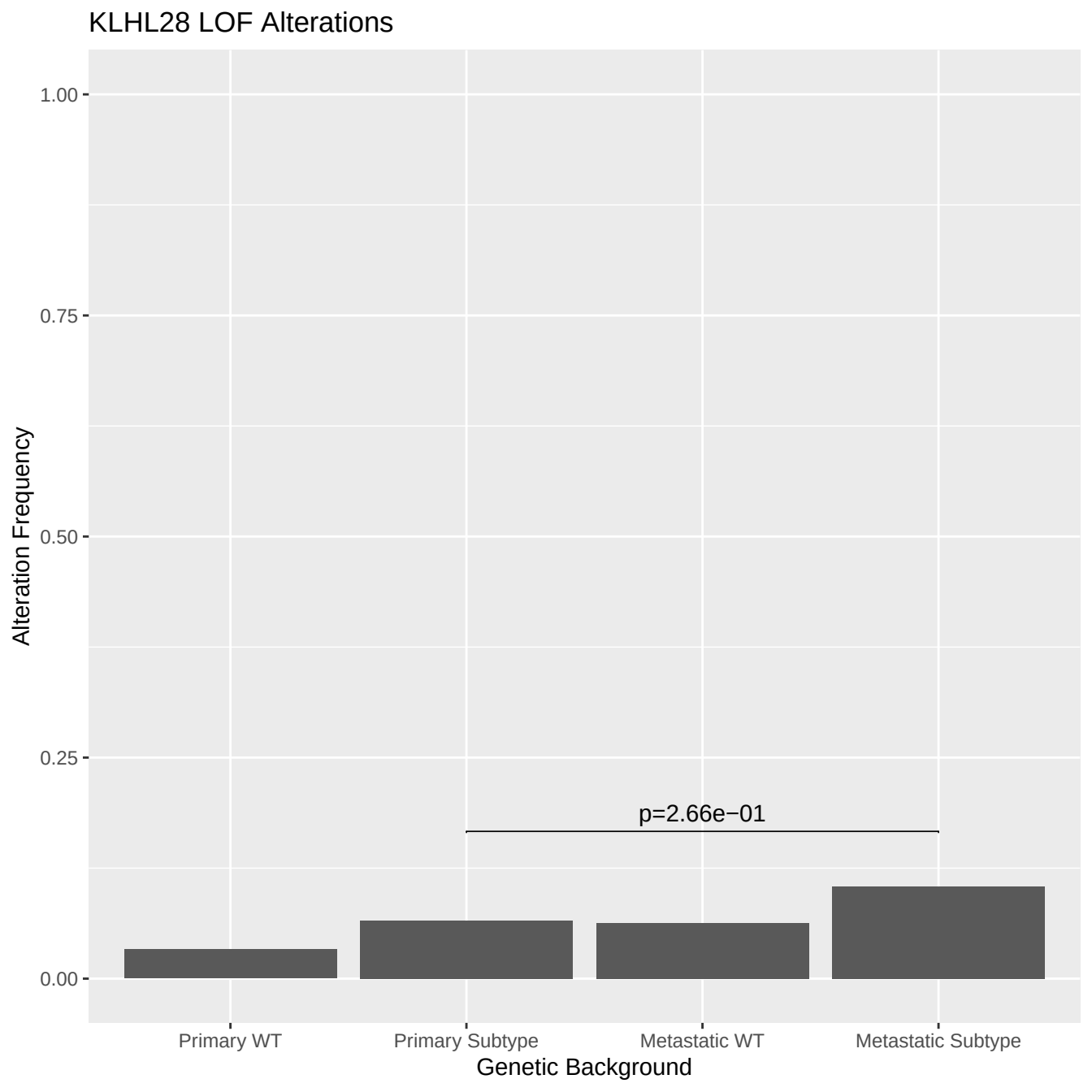

CCL7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.62e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

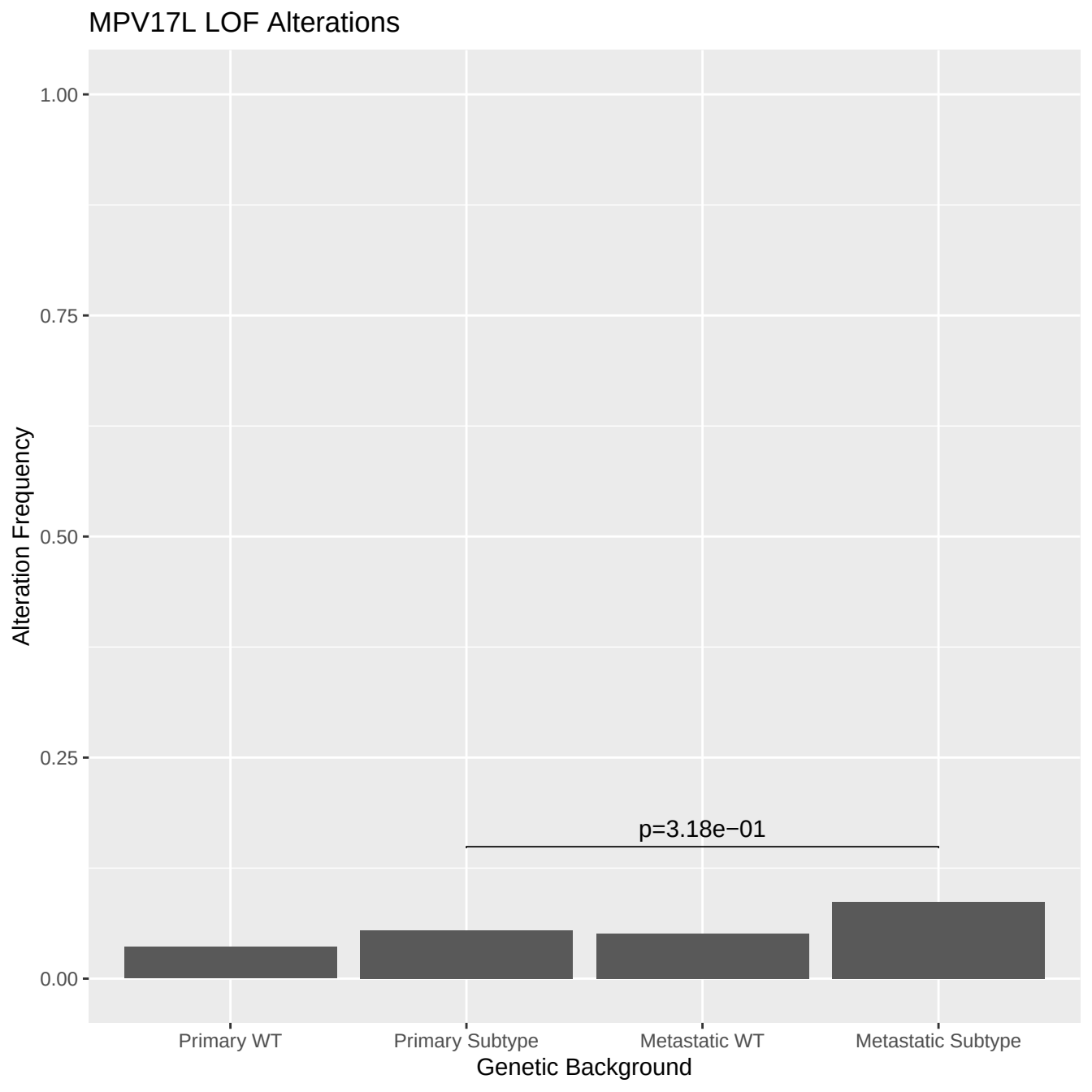

NPEPPS LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

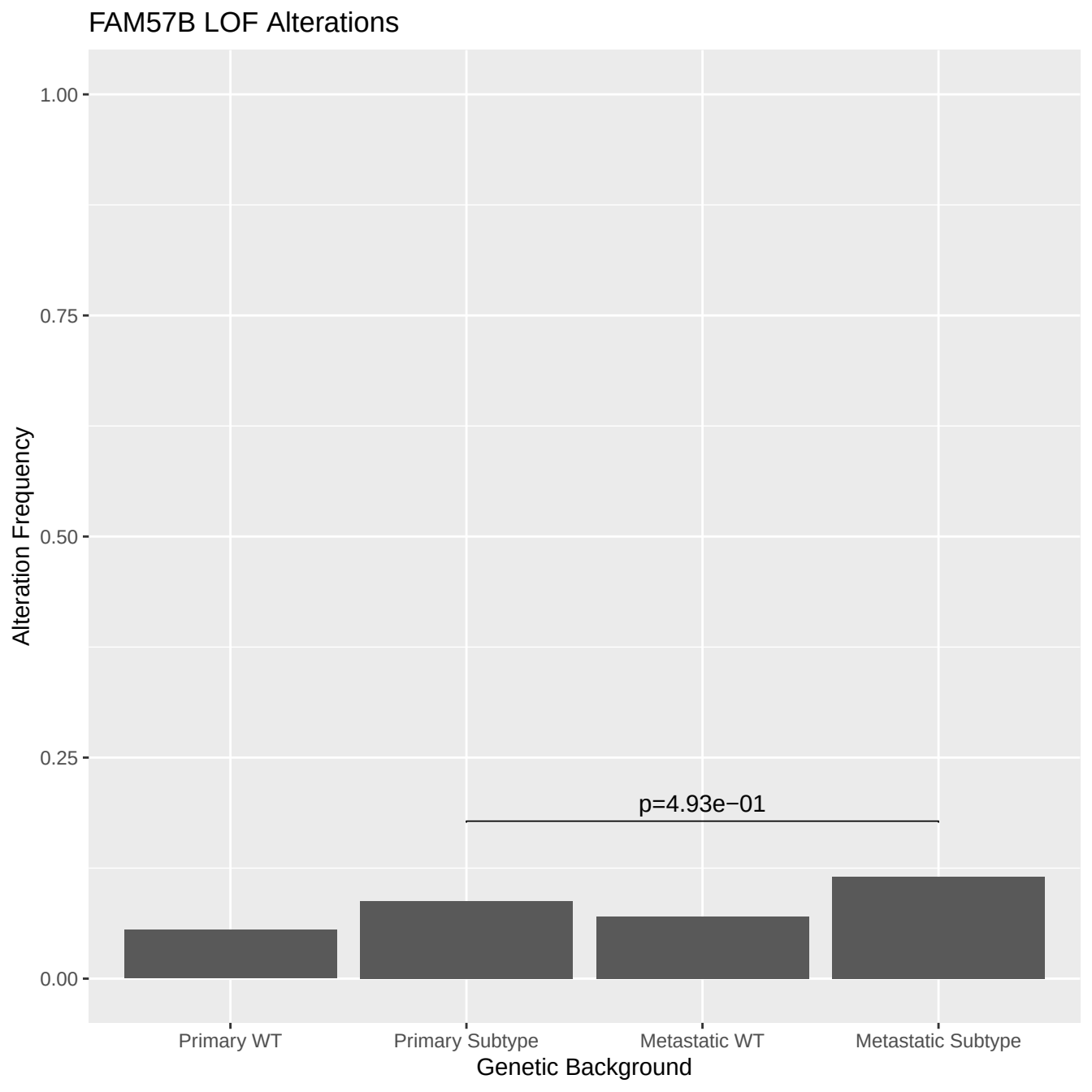

PEA15 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

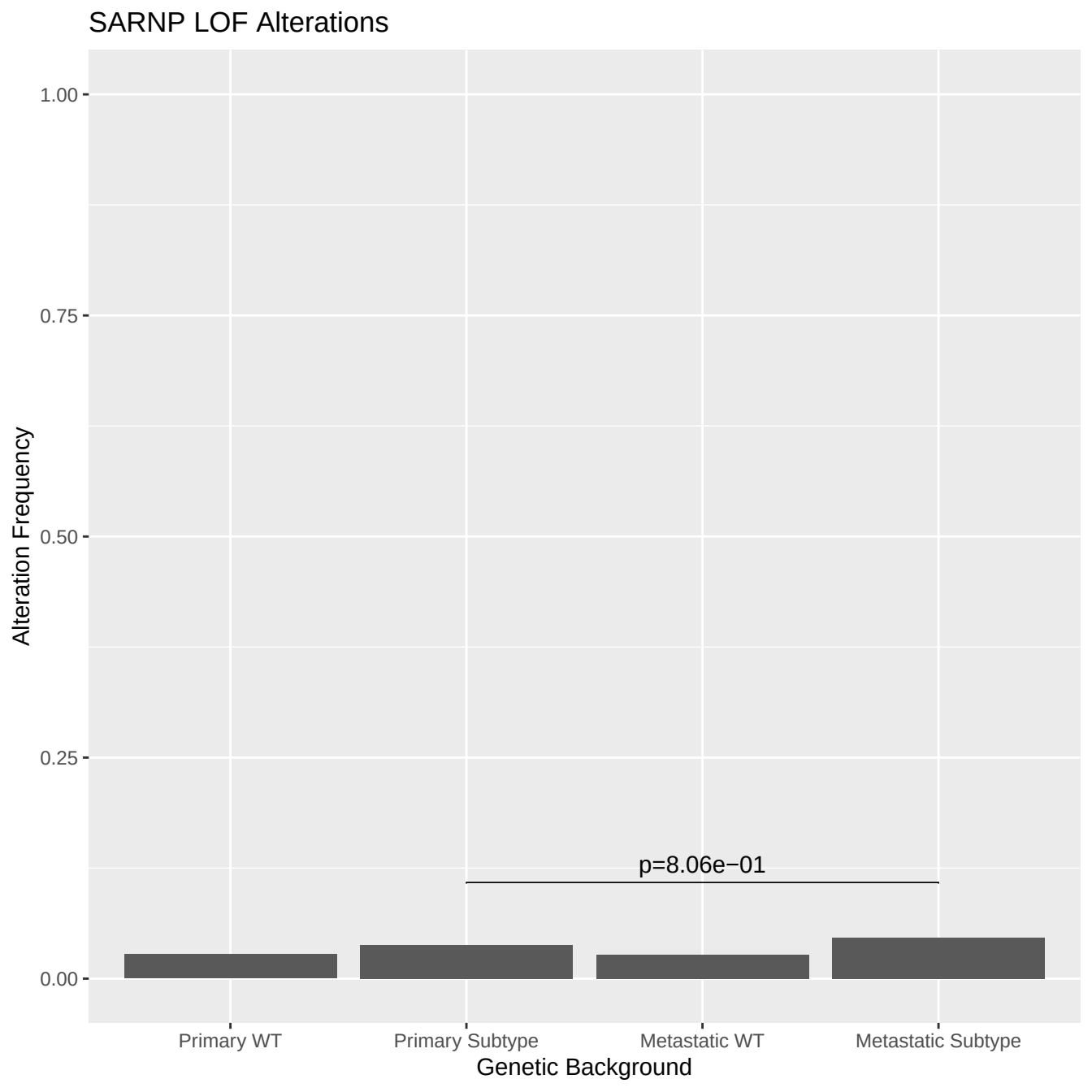

SLC7A7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.74e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

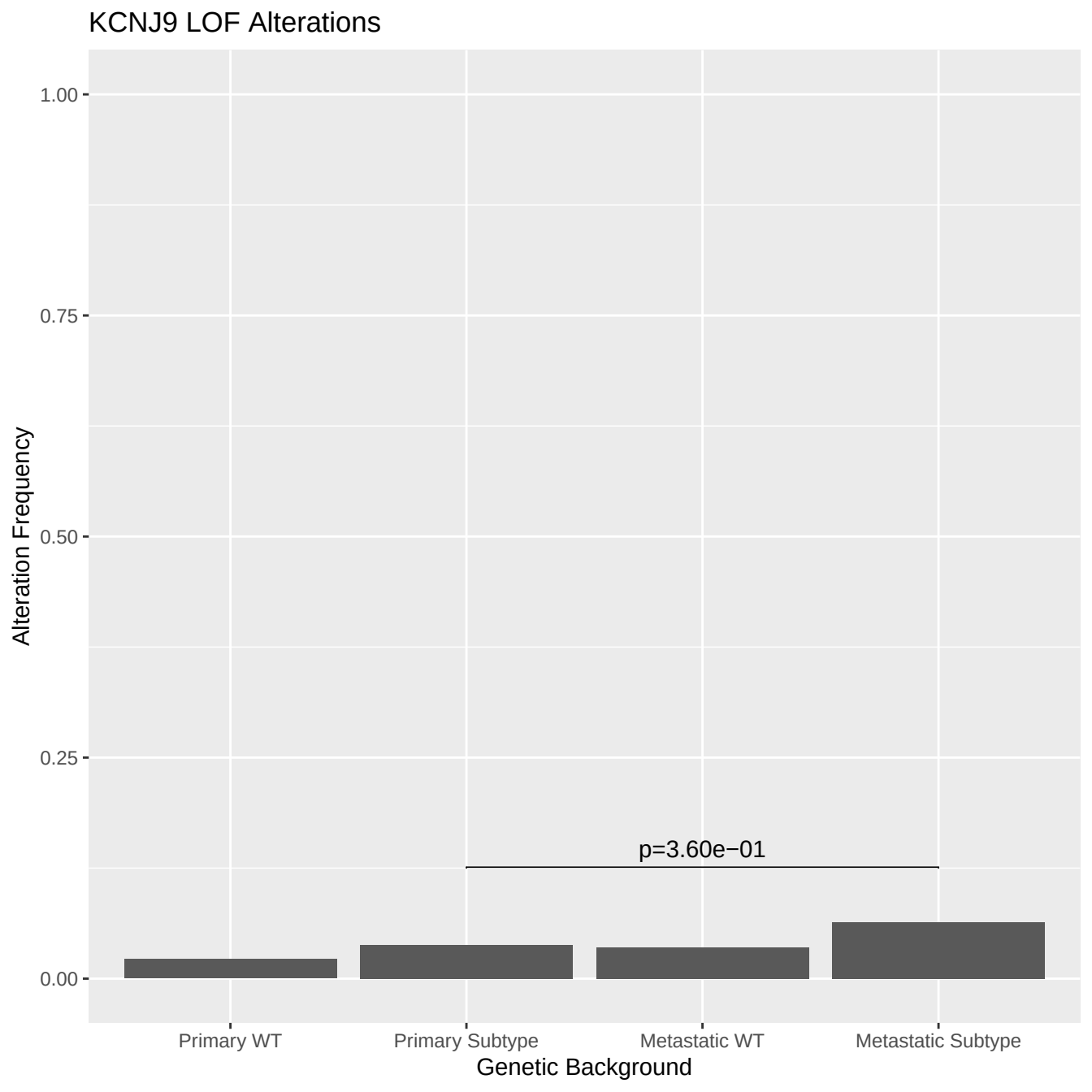

SCHIP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.95e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

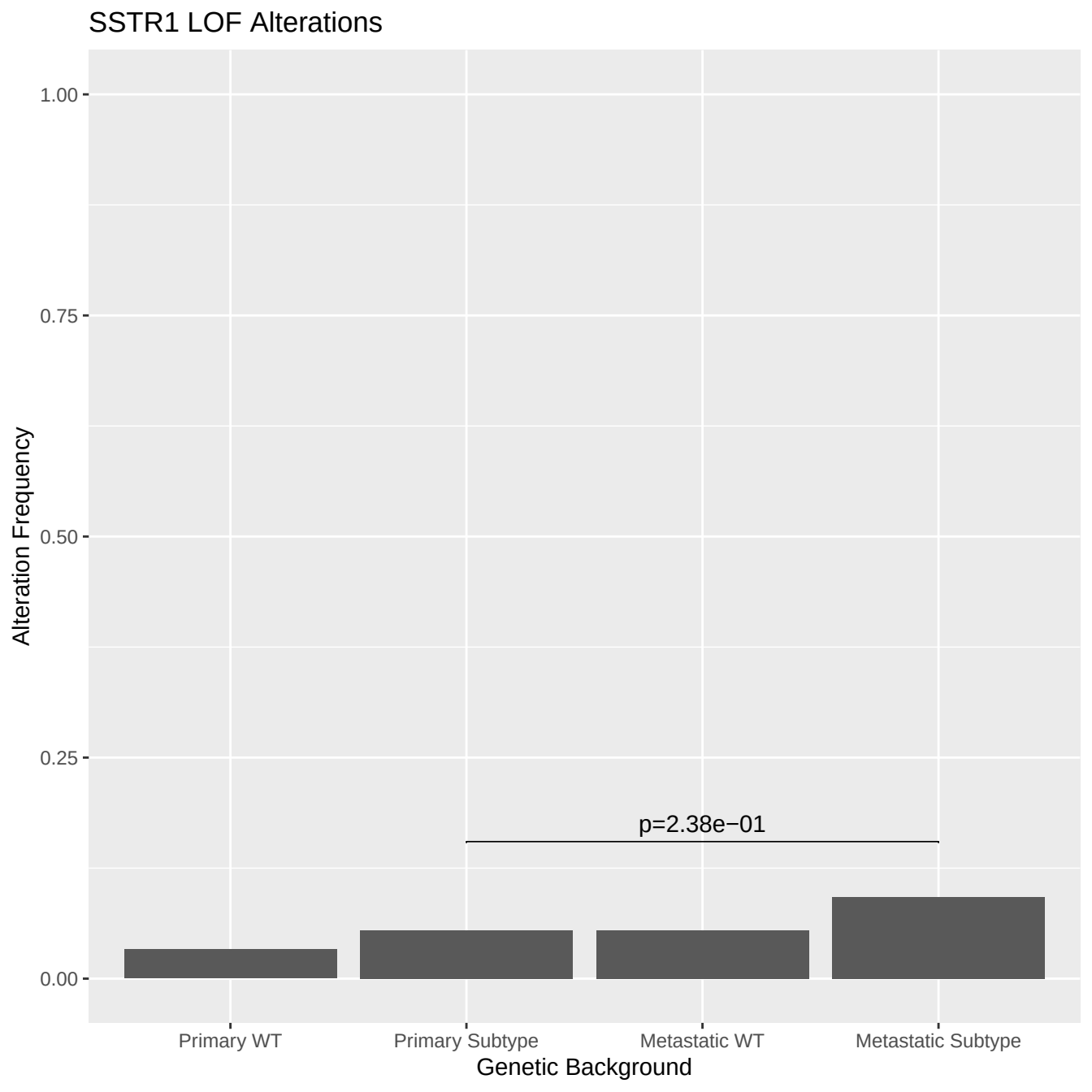

KLHL28 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

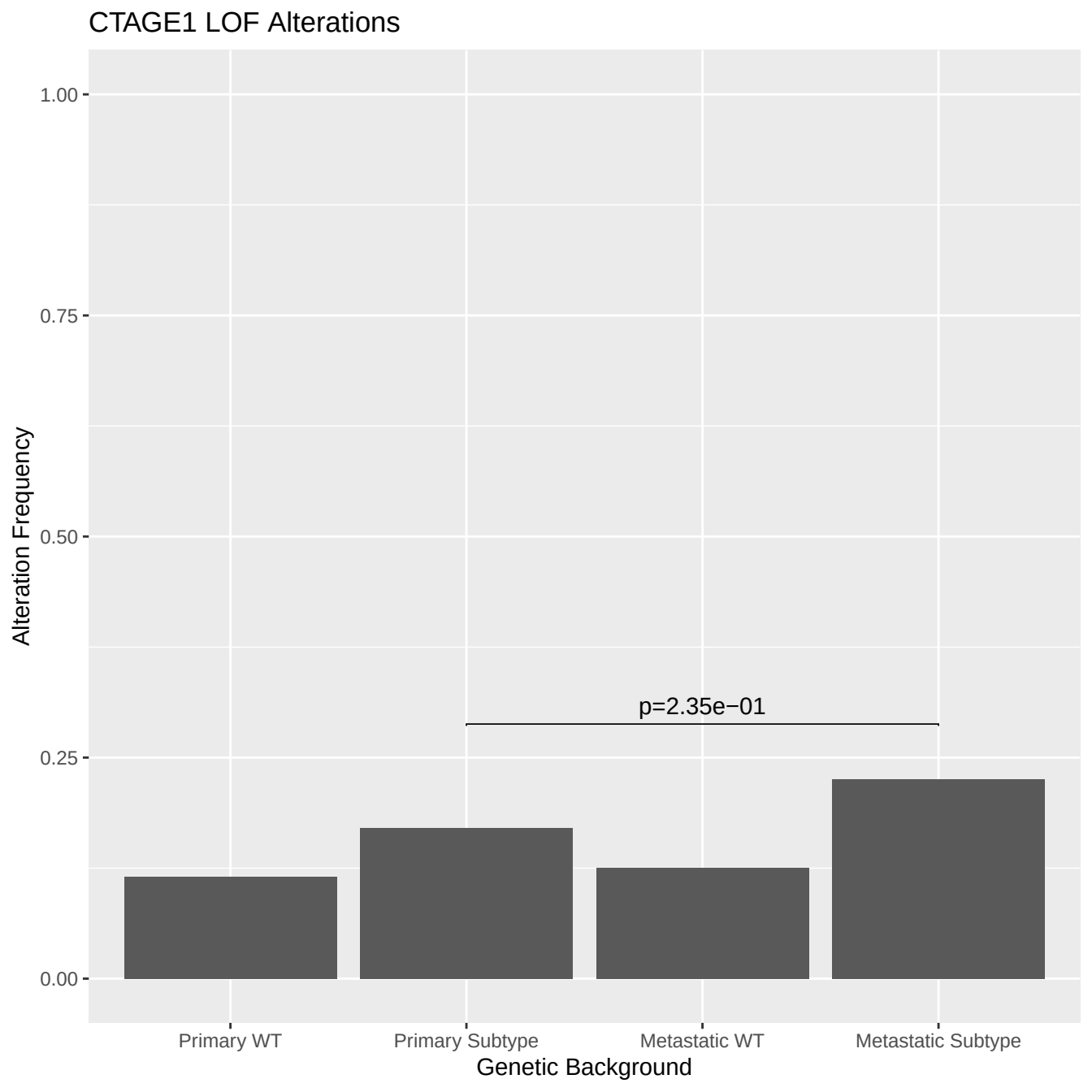

MPV17L LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

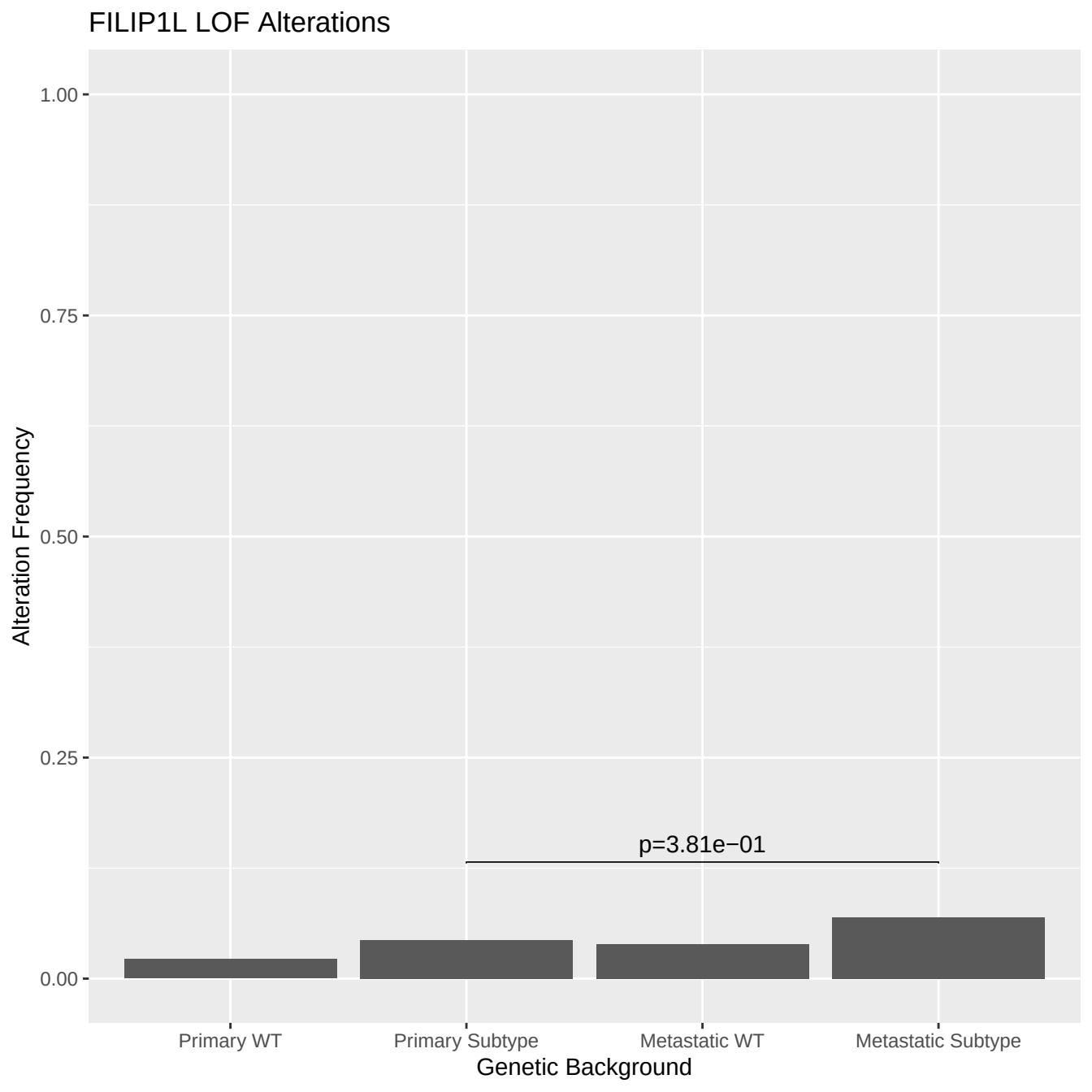

FAM57B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.93e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

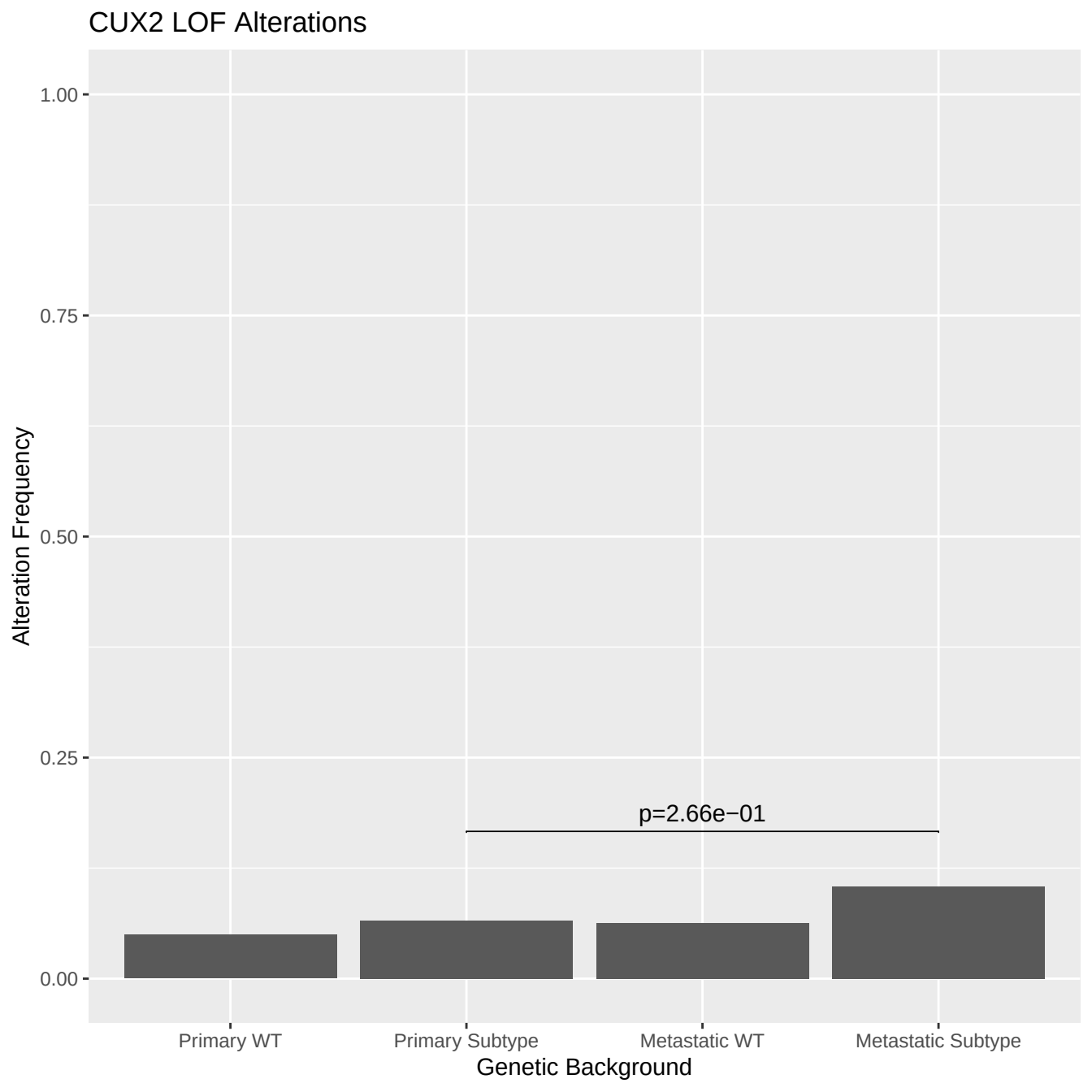

SARNP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.06e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

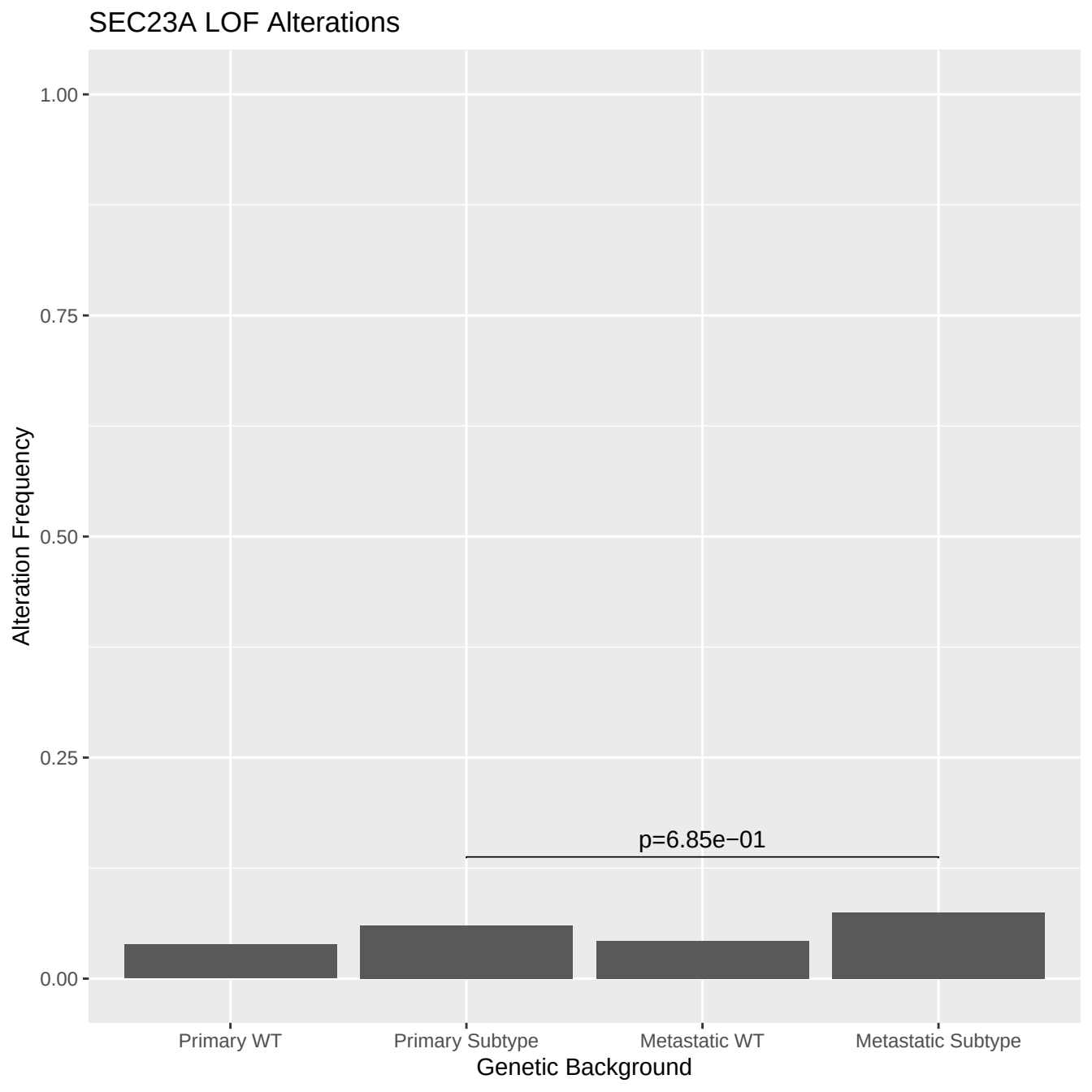

KCNJ9 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.60e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

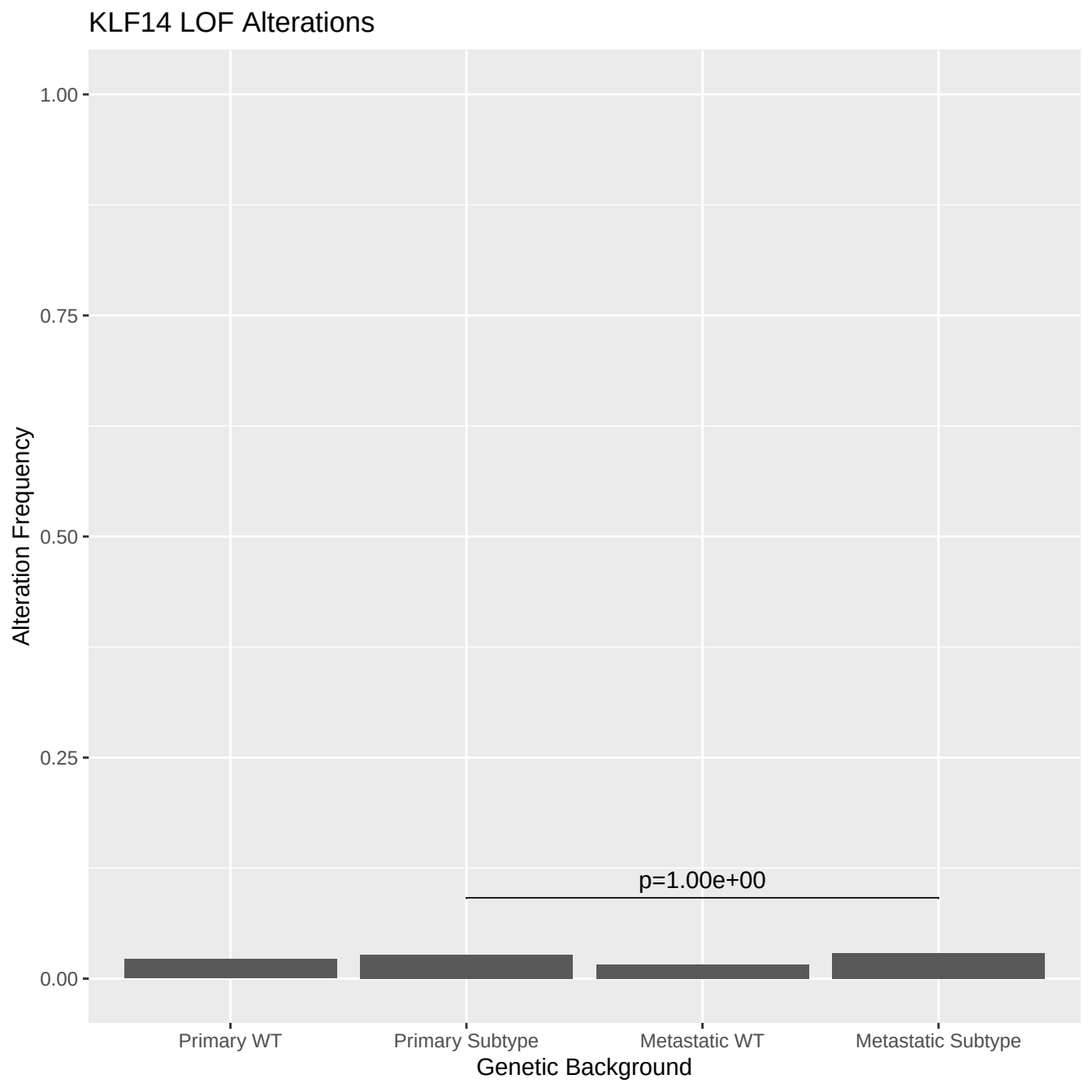

SSTR1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.38e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

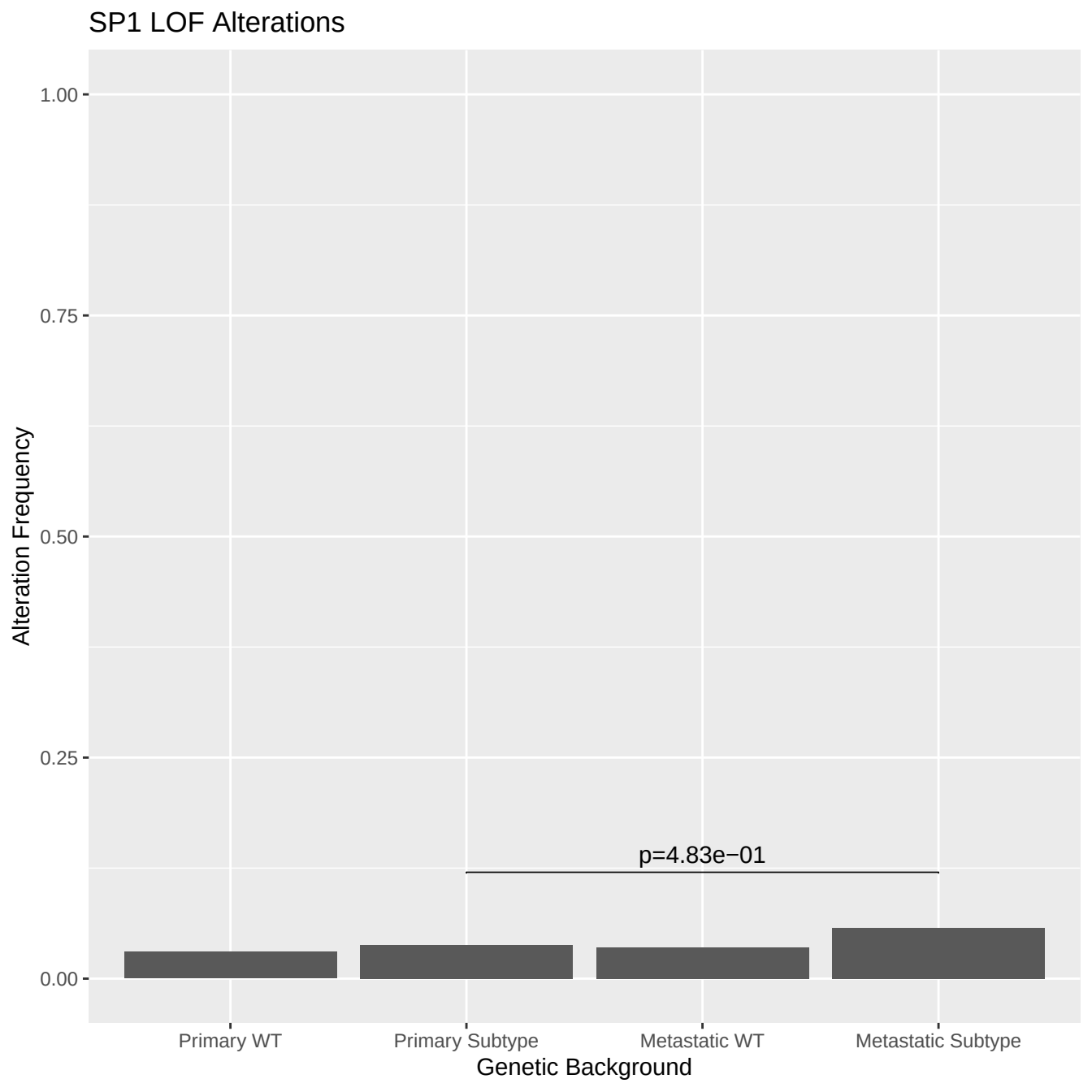

CTAGE1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

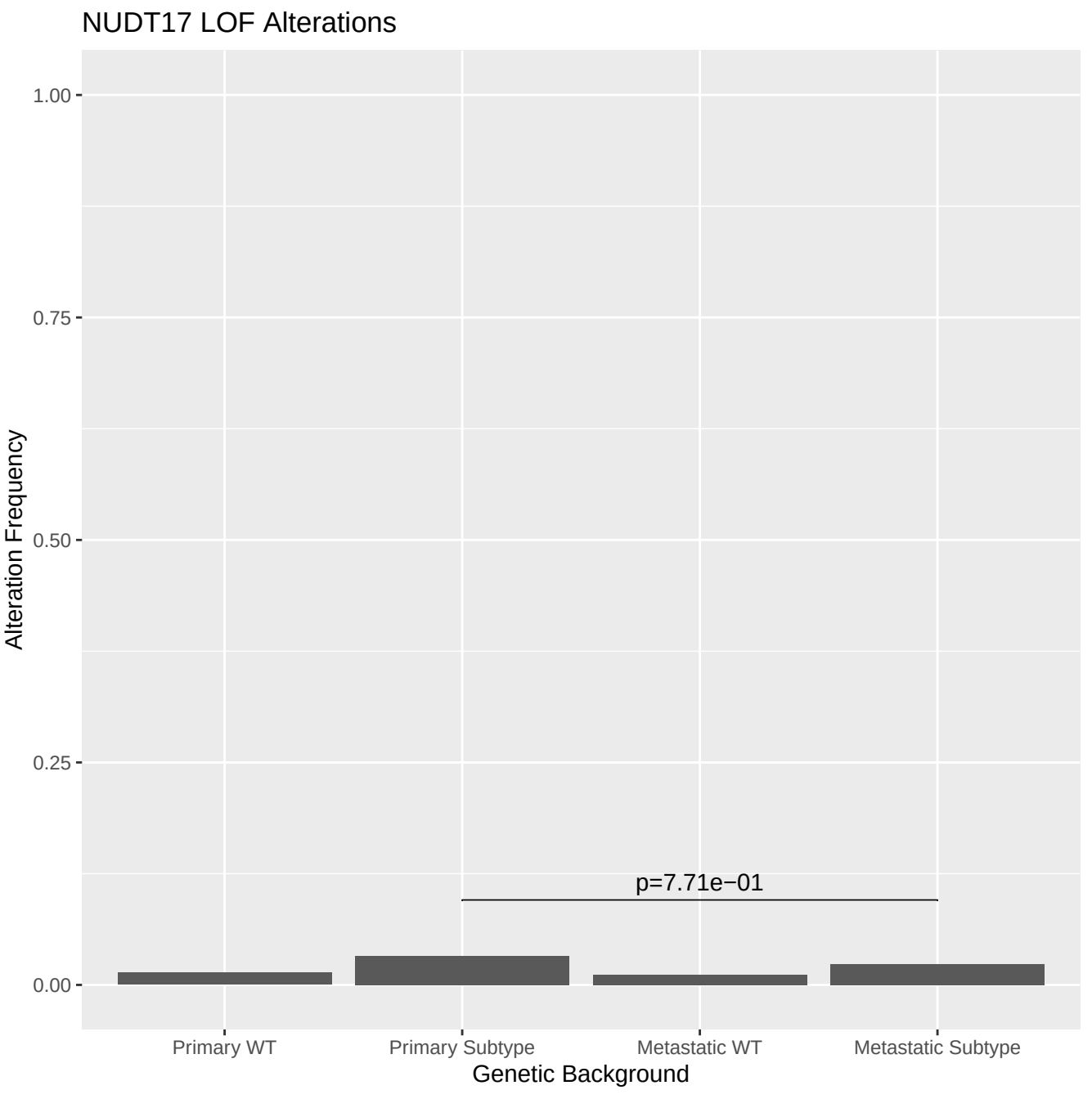

FILIP1L LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

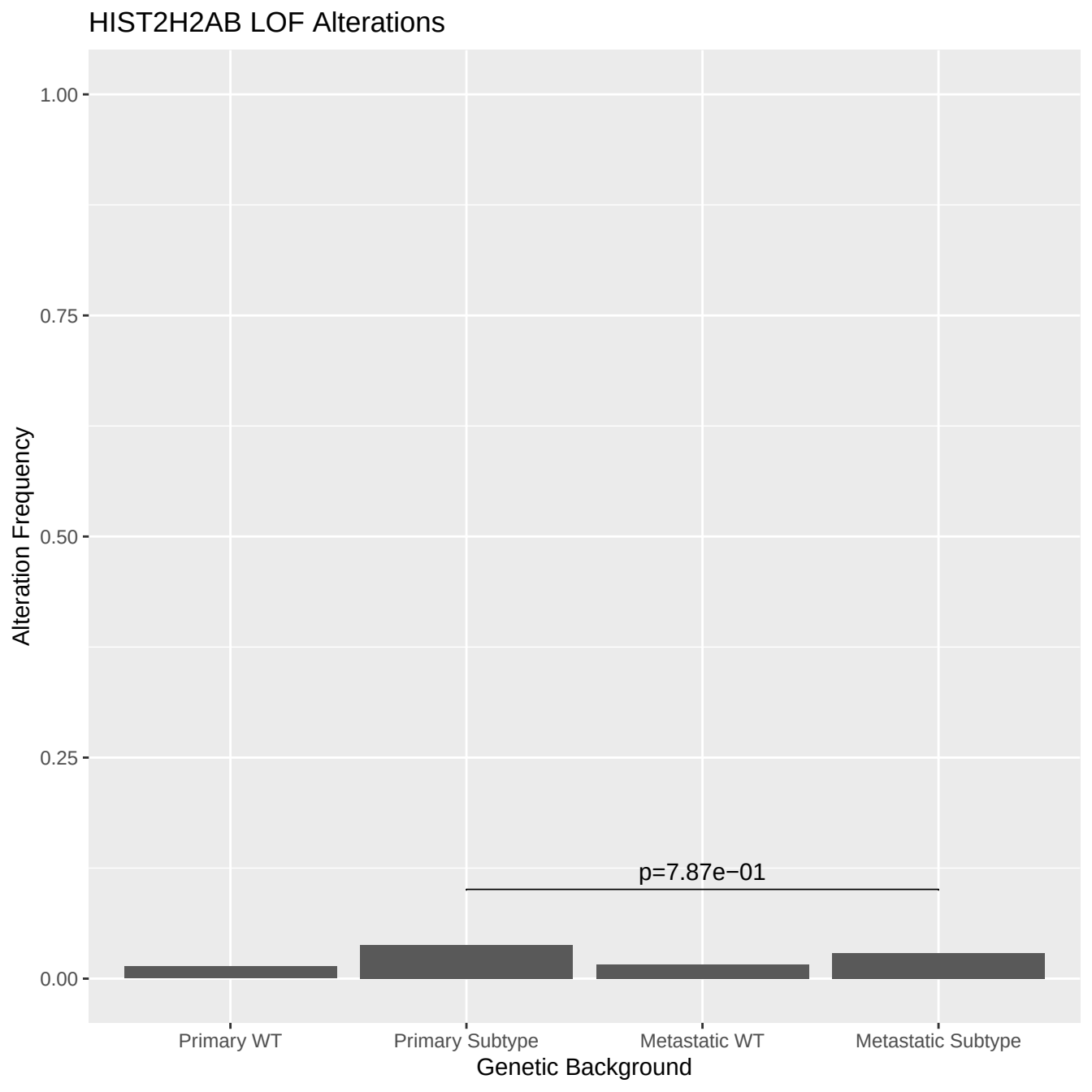

CUX2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

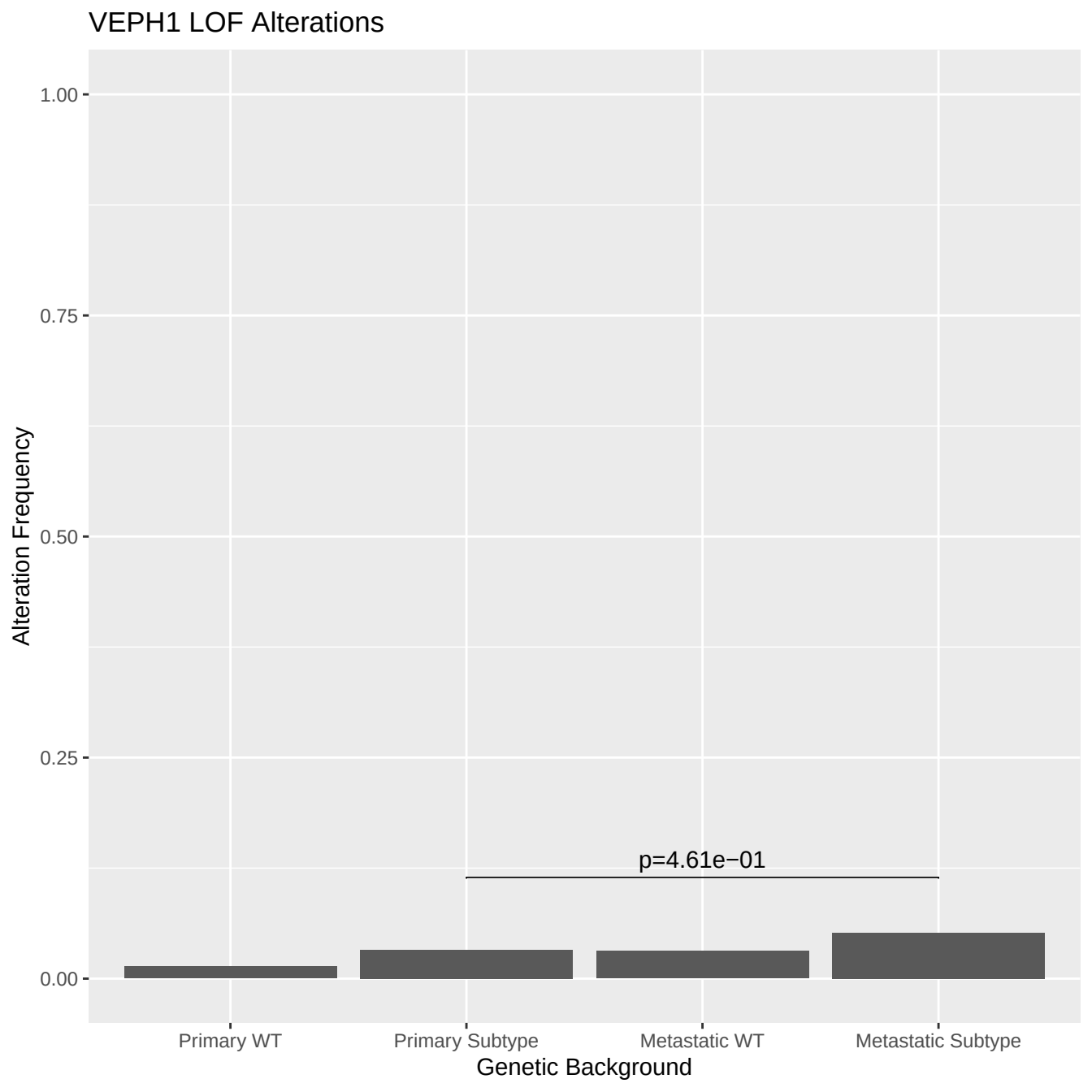

SEC23A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

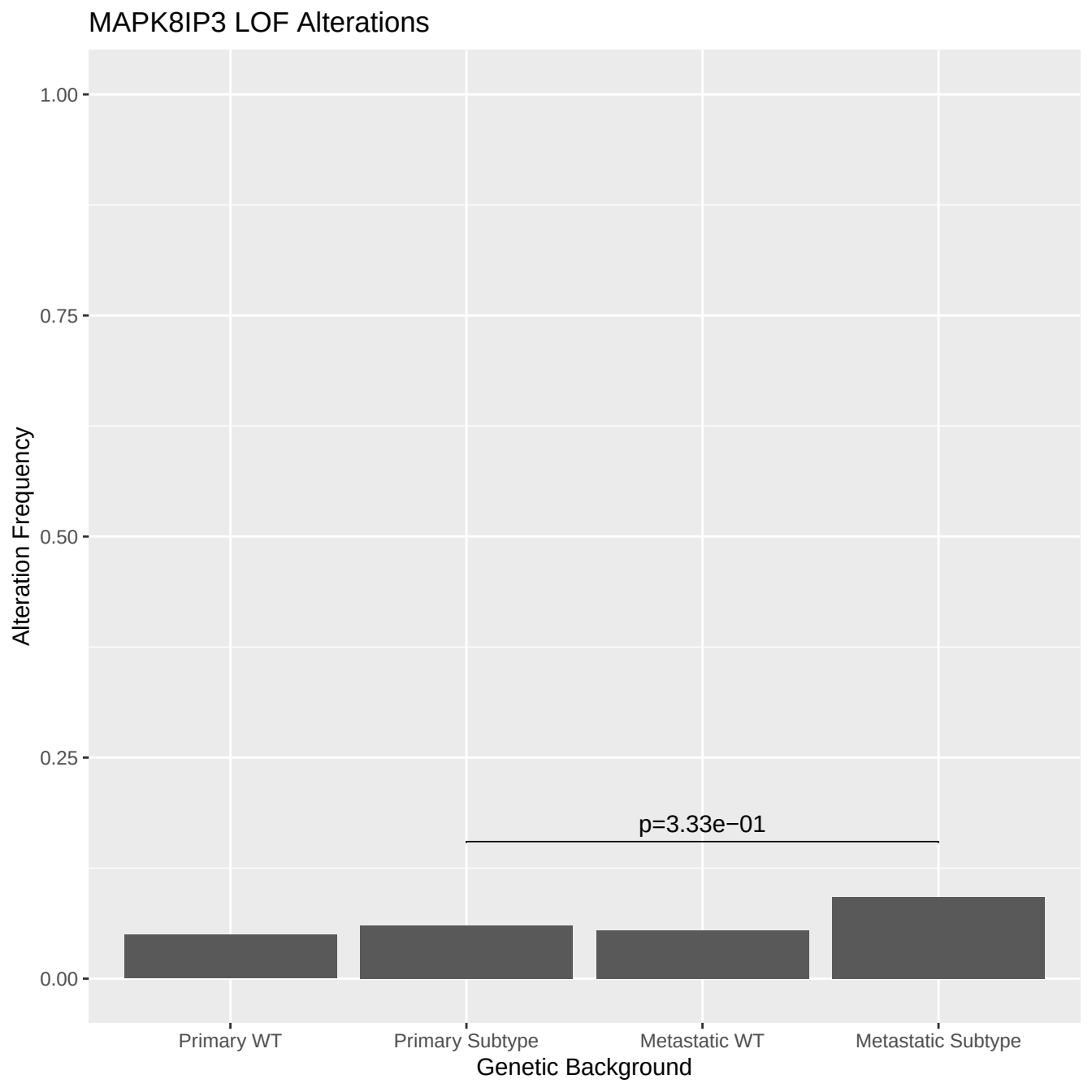

KLF14 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

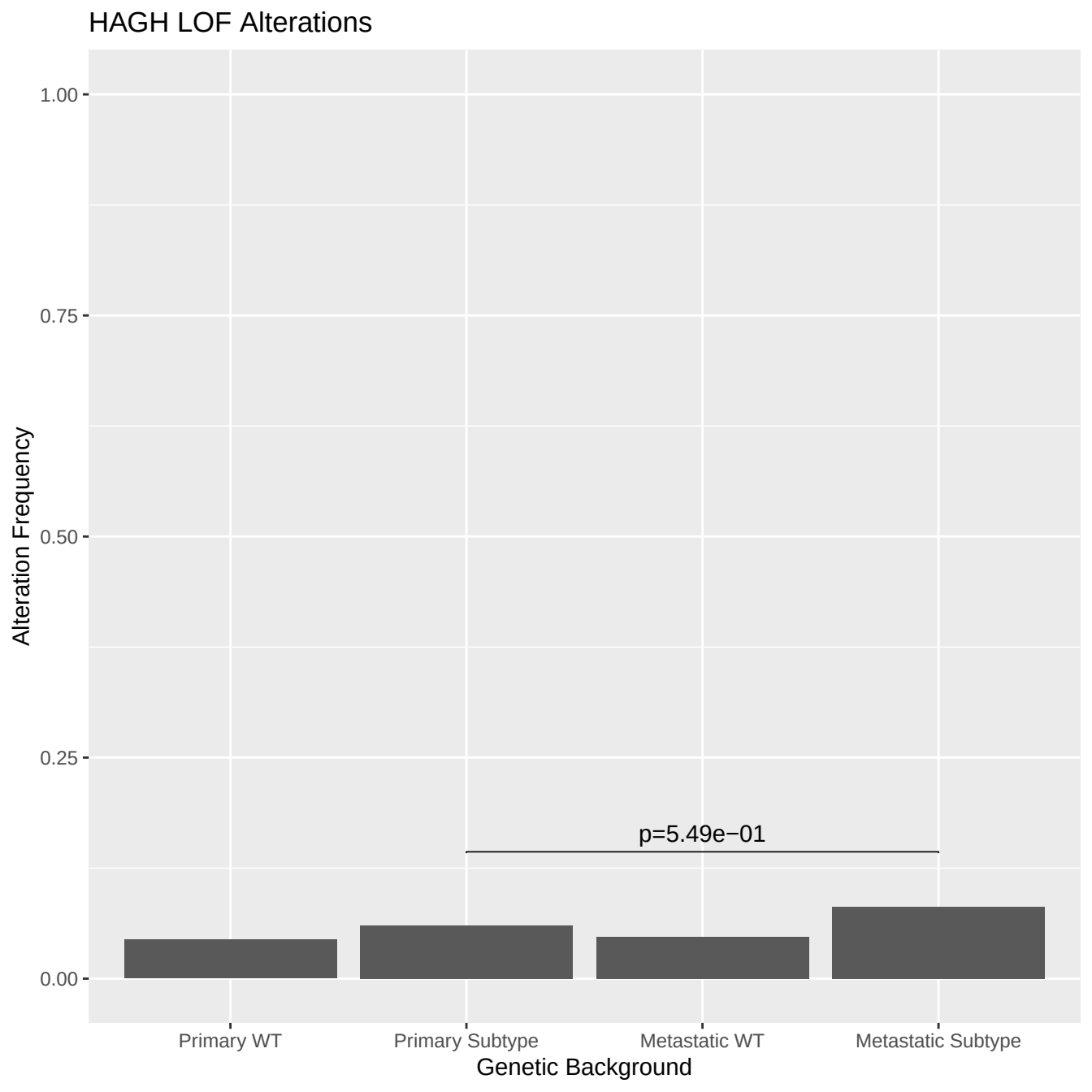

SP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

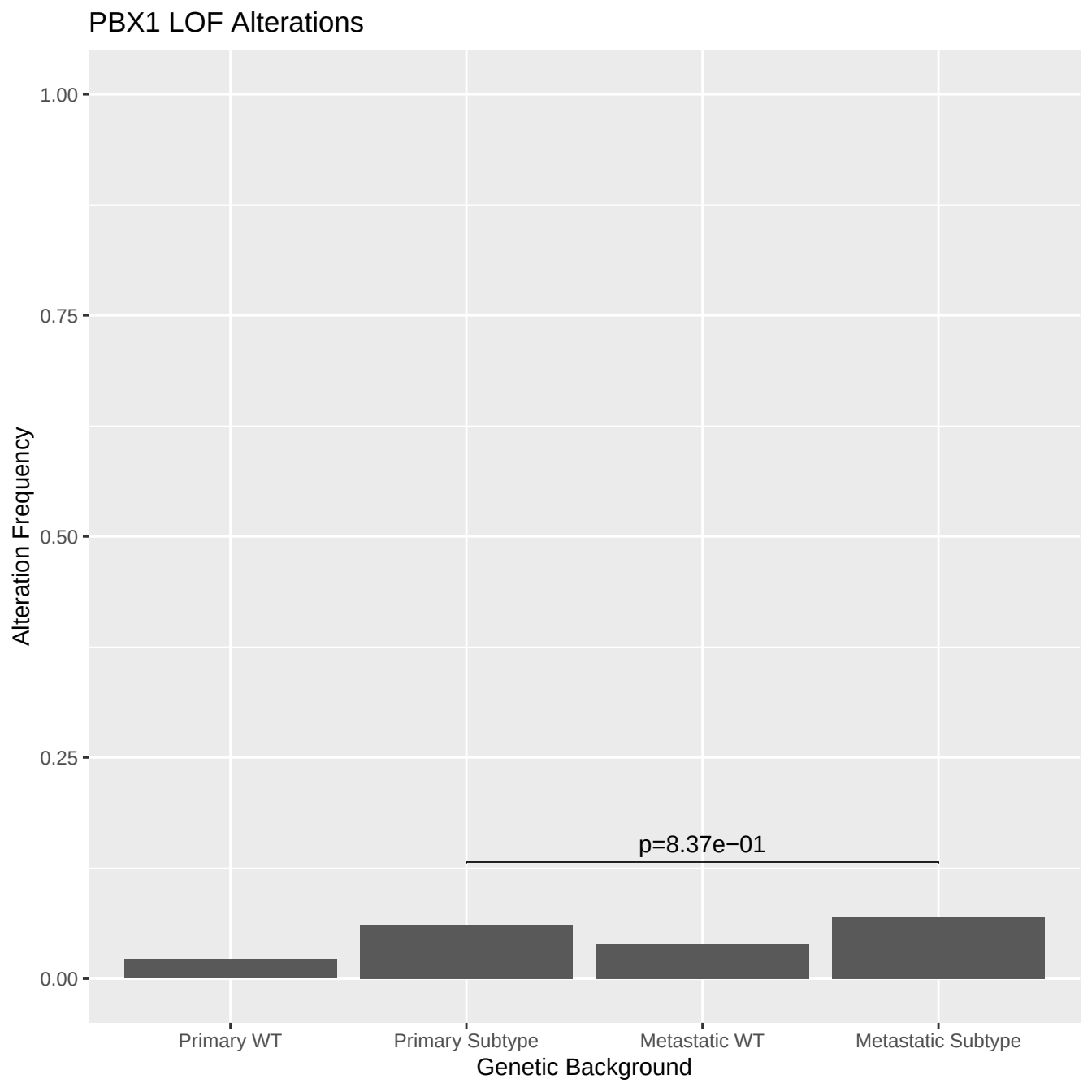

NUDT17 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

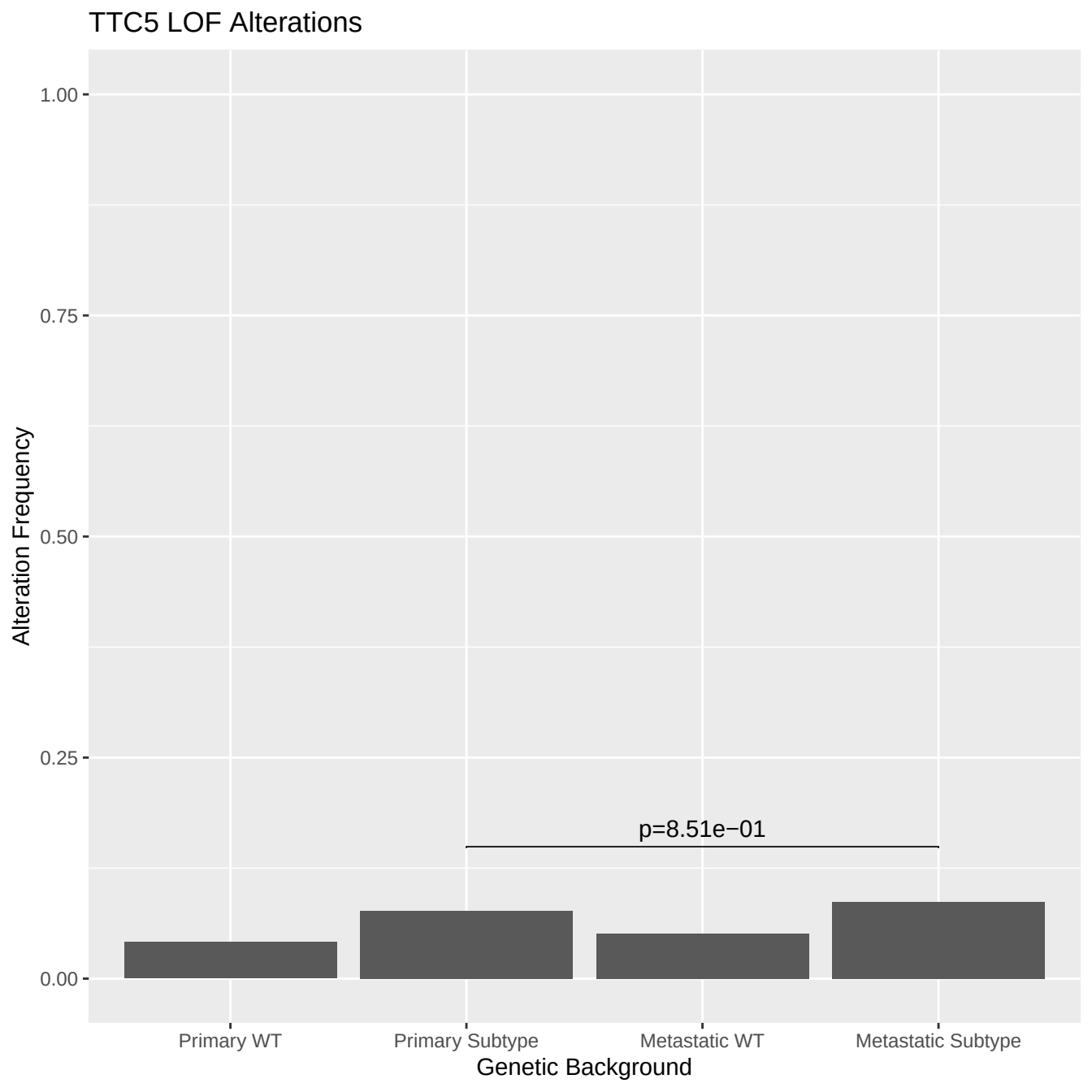

HIST2H2AB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.87e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

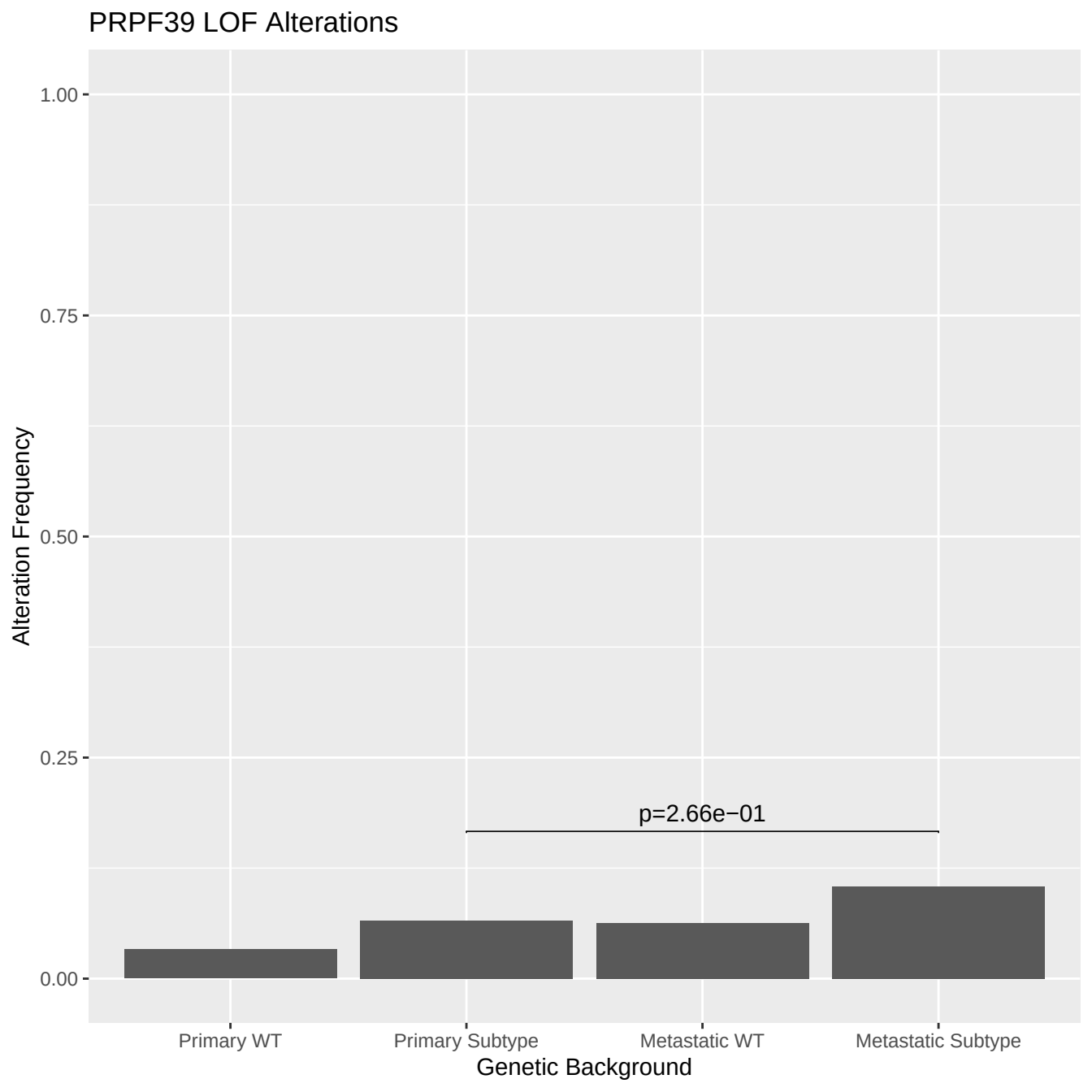

VEPH1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.61e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

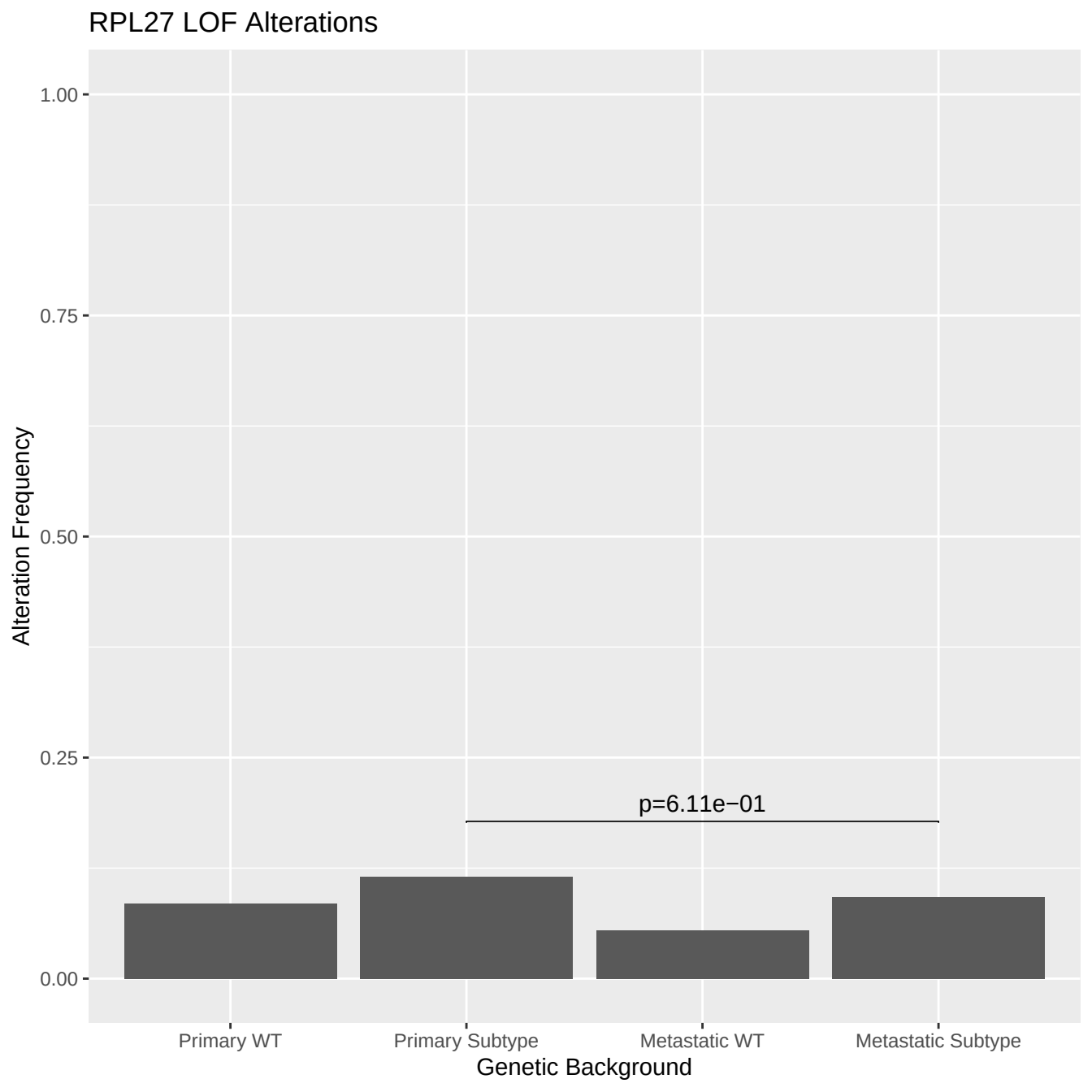

MAPK8IP3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.33e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

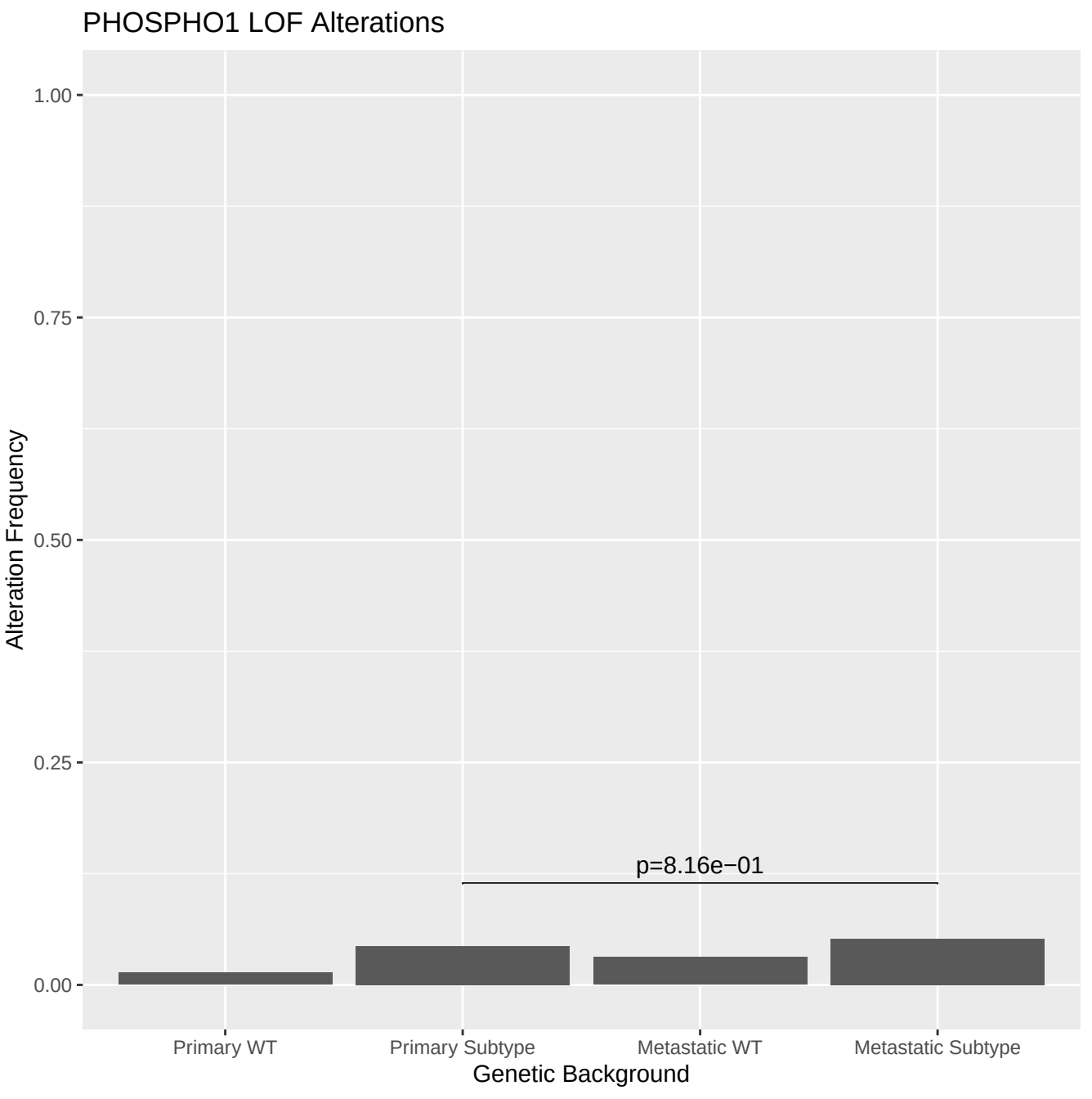

HAGH LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

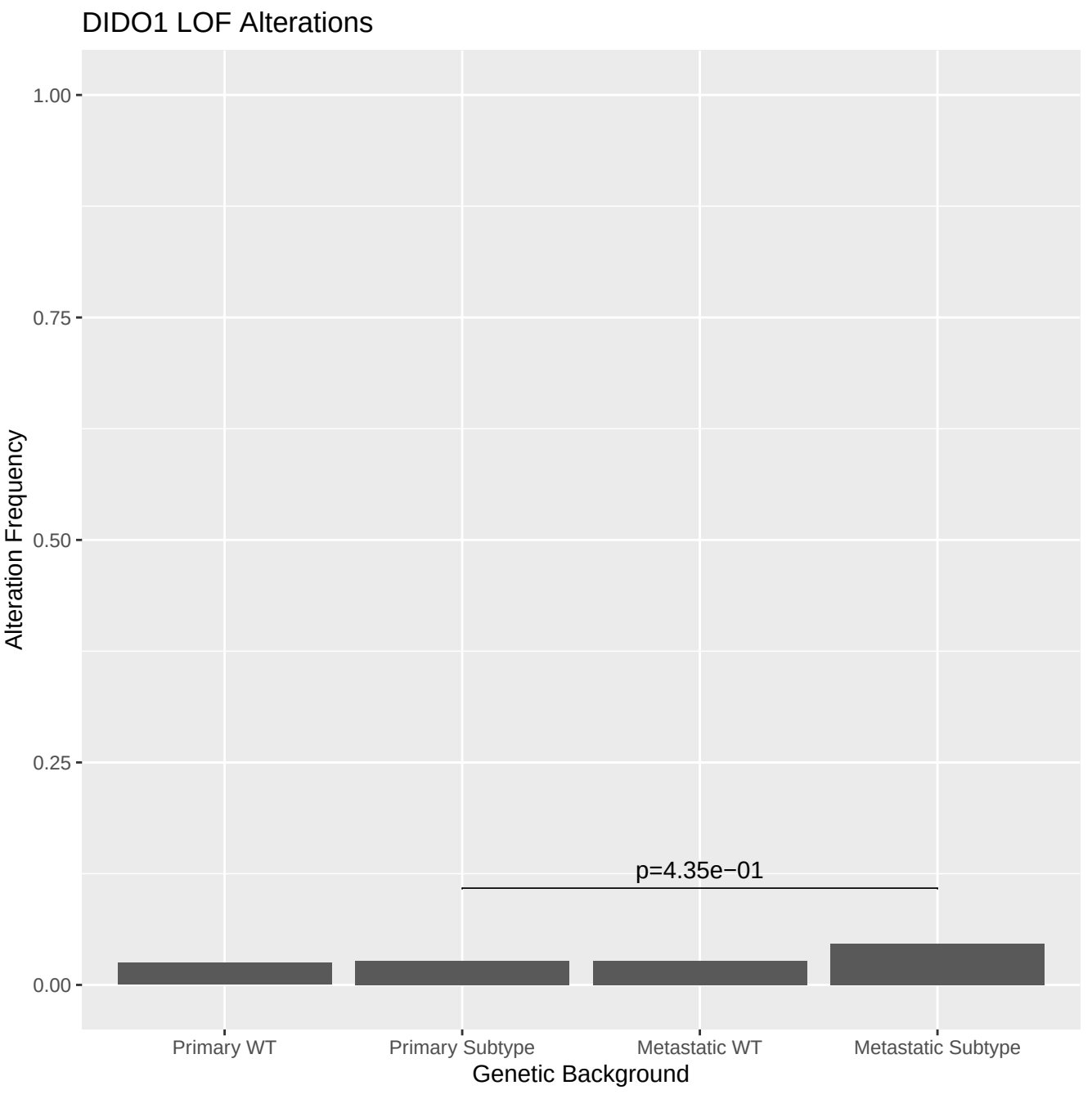

PBX1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

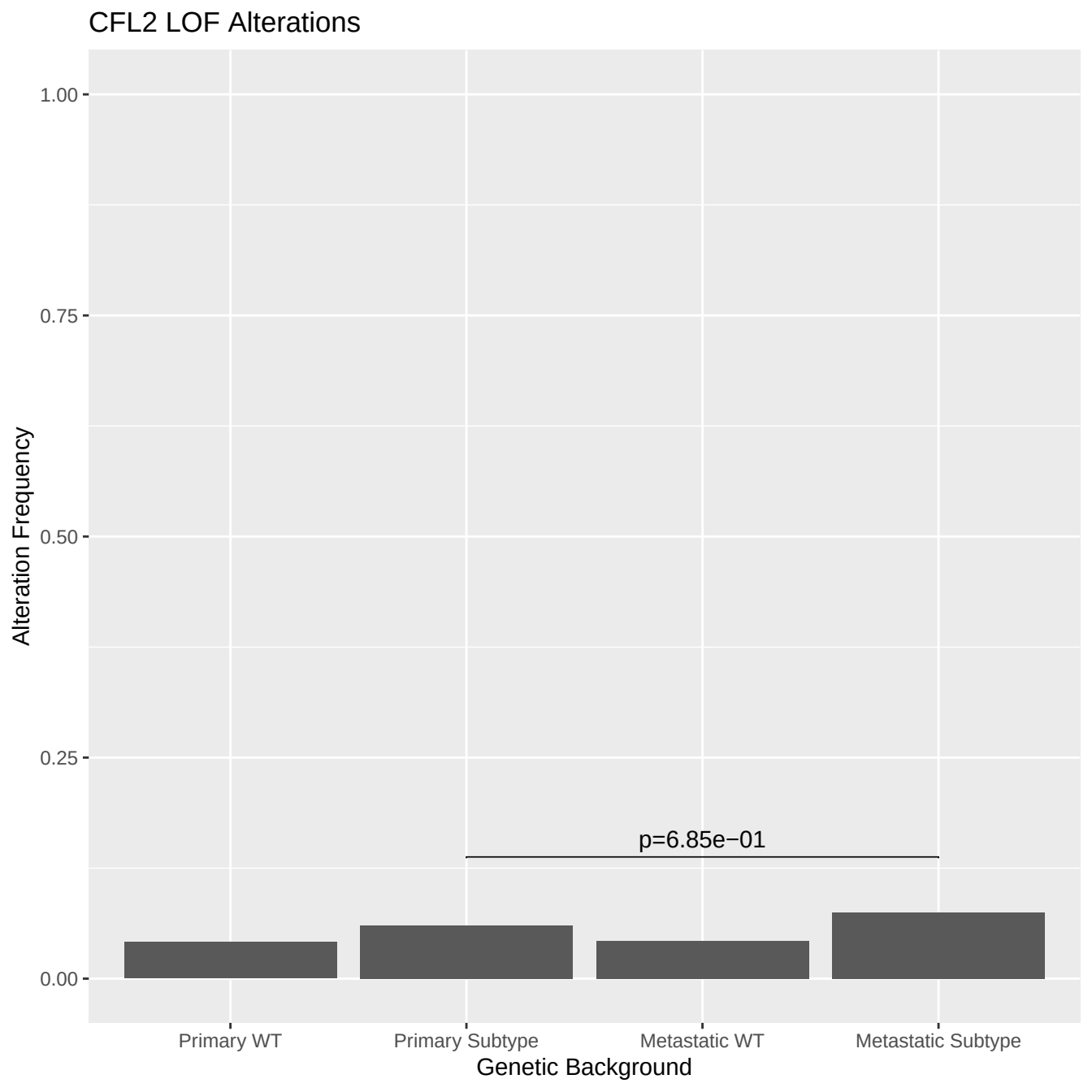

TTC5 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

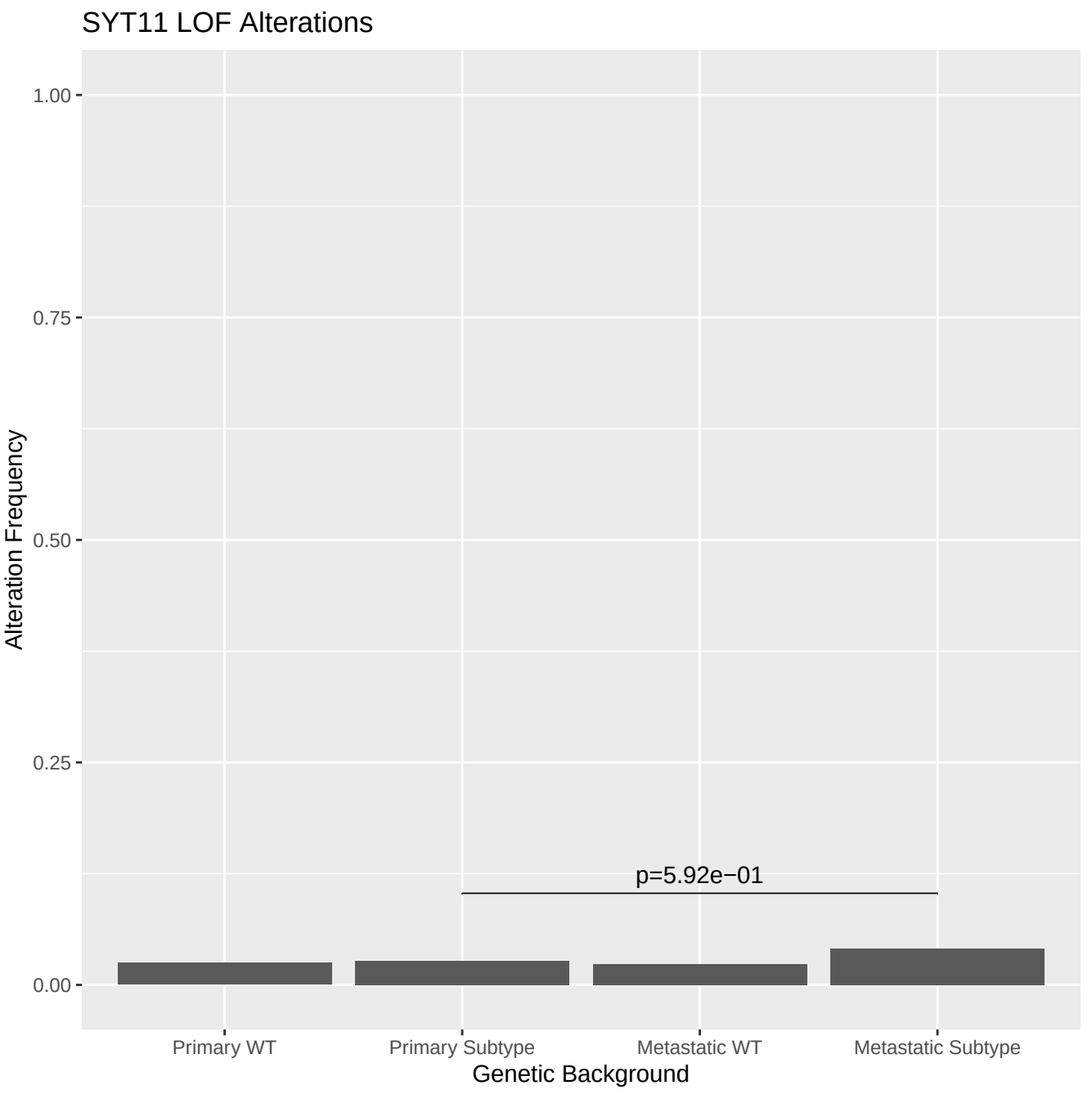

PRPF39 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

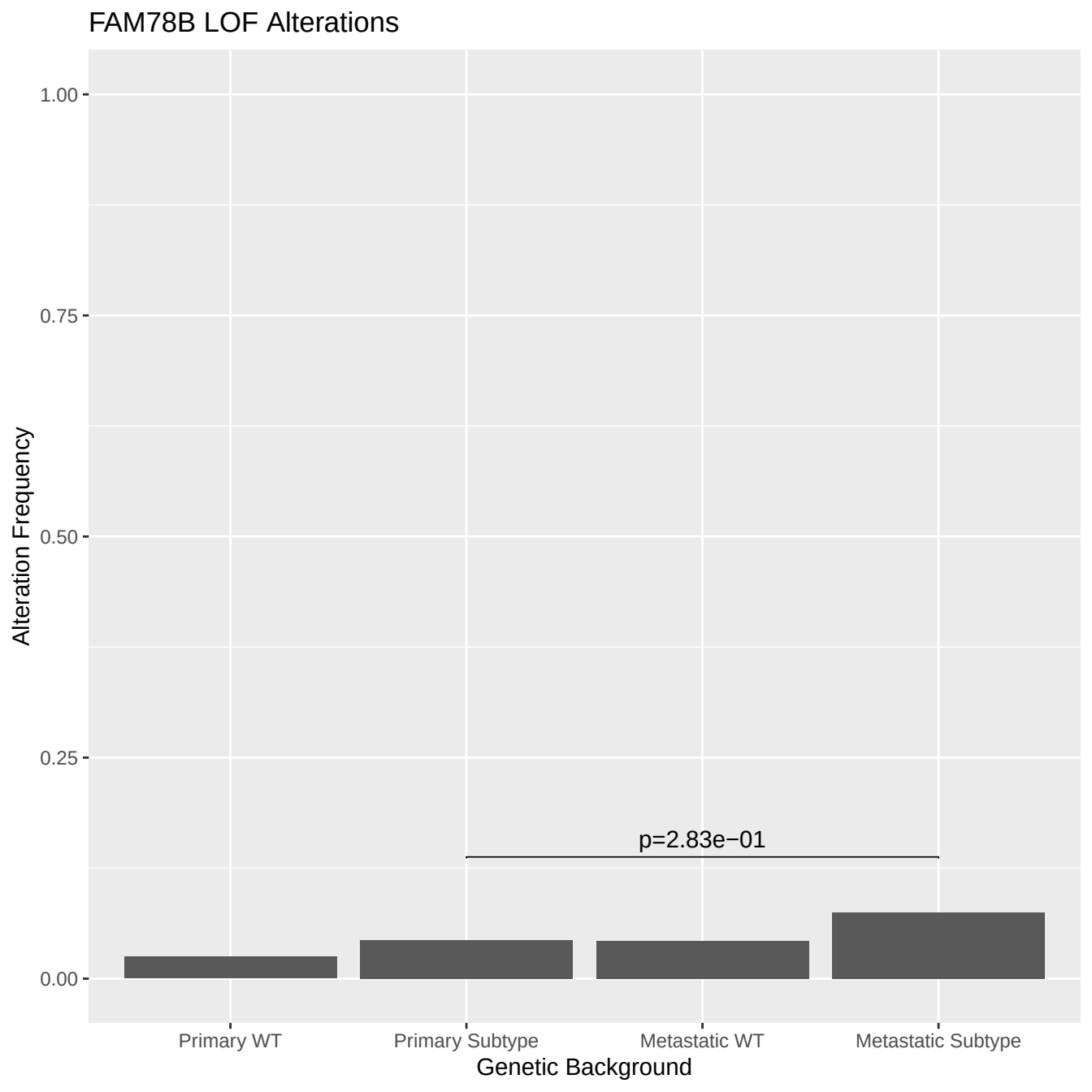

RPL27 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

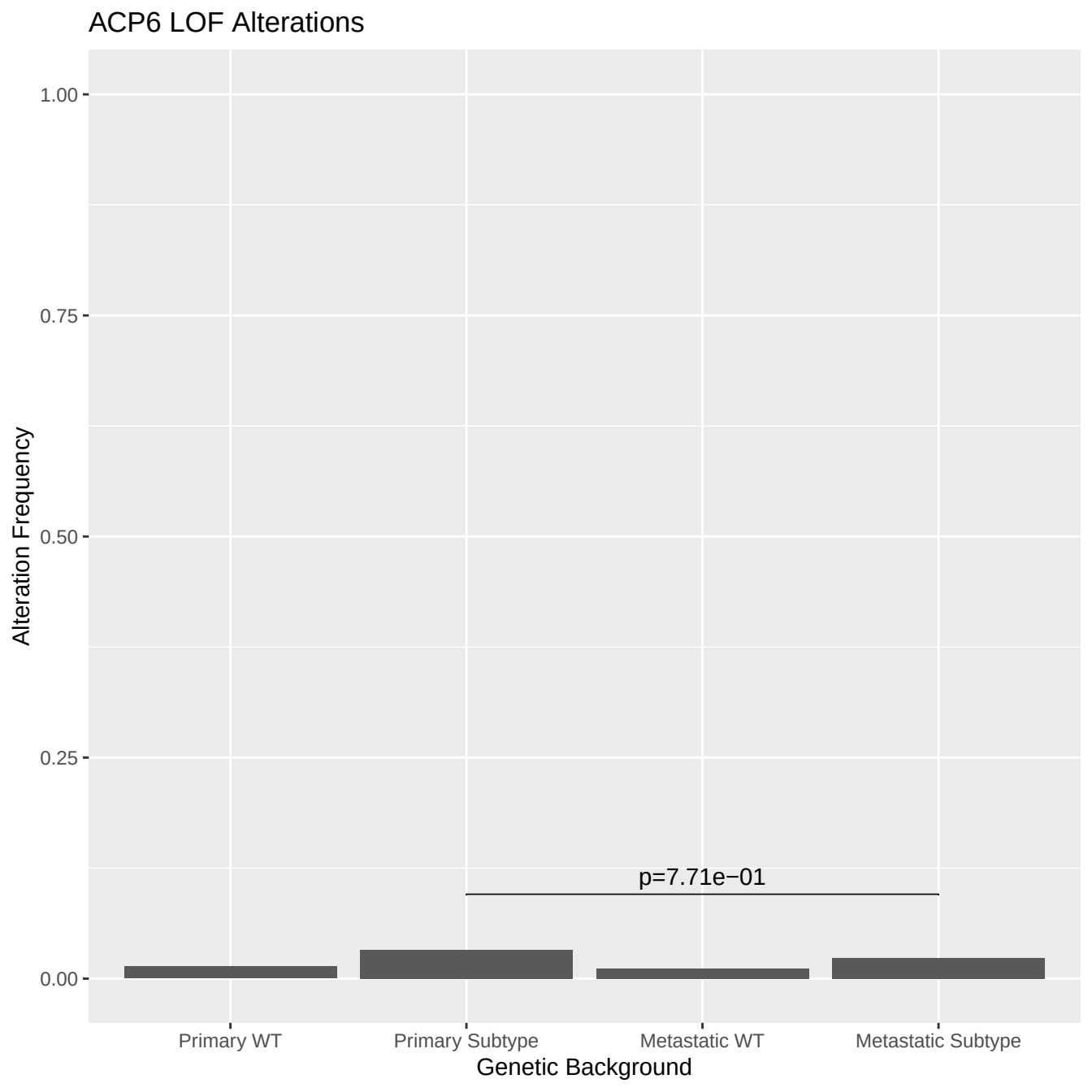

PHOSPHO1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.16e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

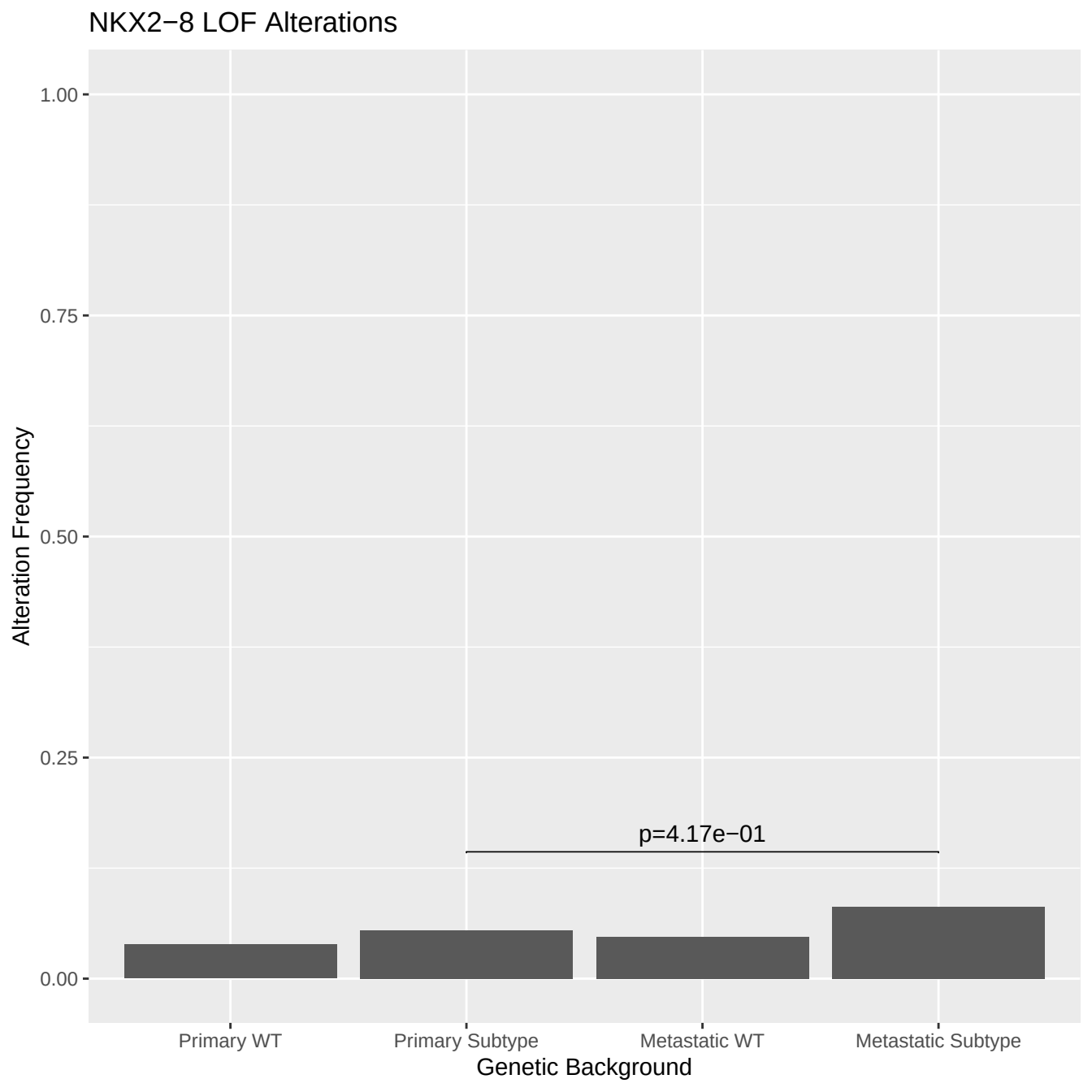

DIDO1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.35e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

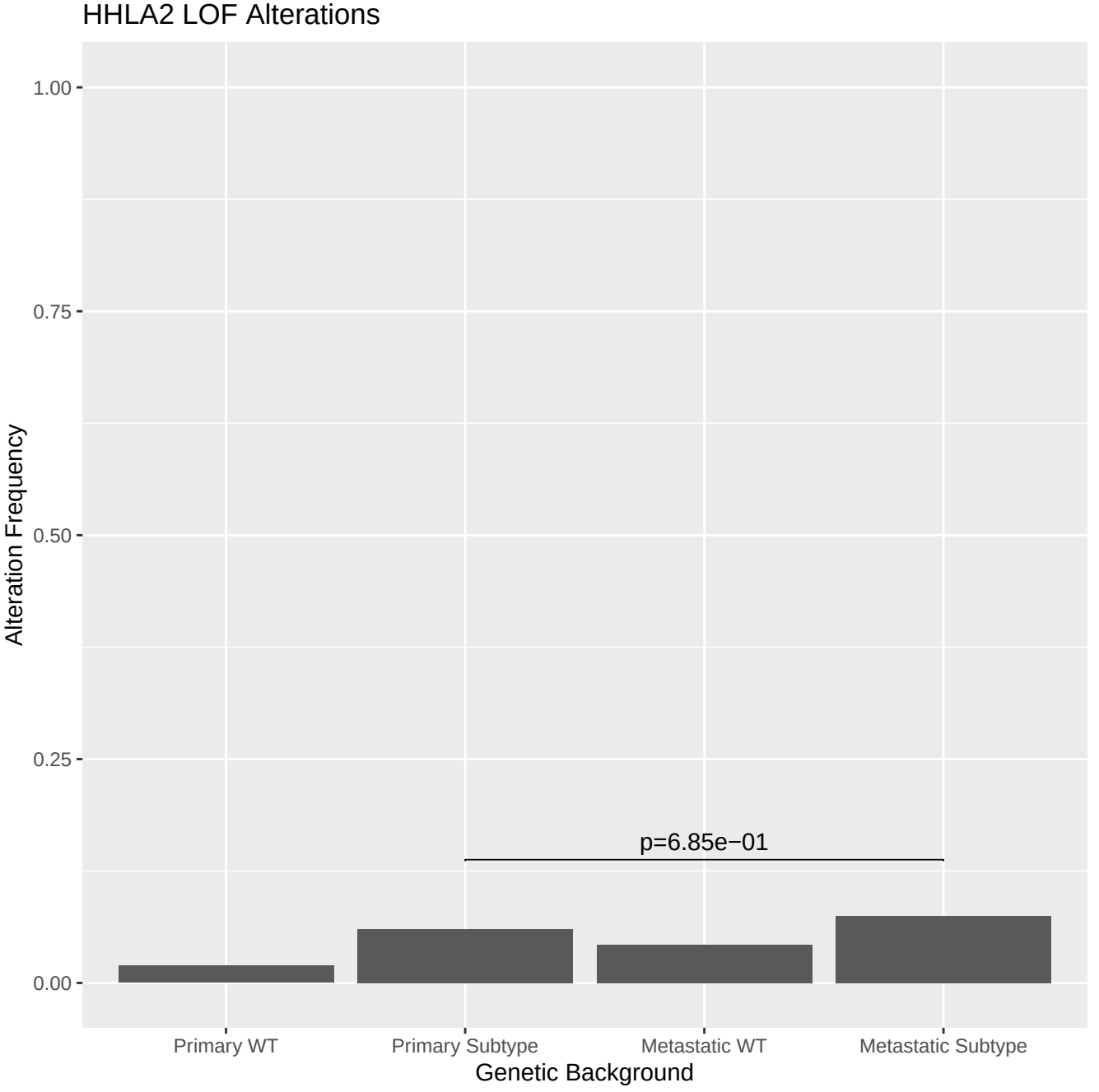

CFL2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

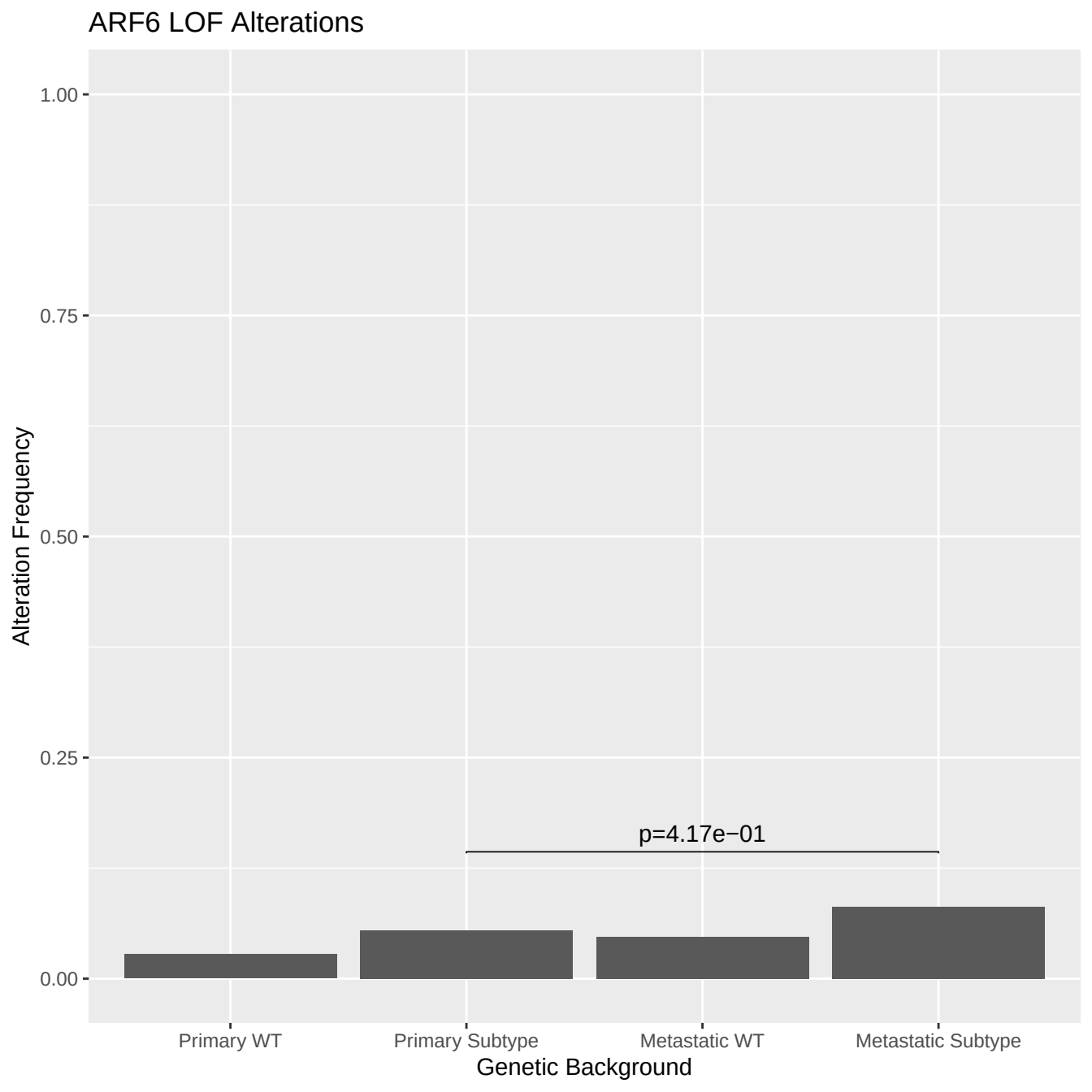

SYT11 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.92e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

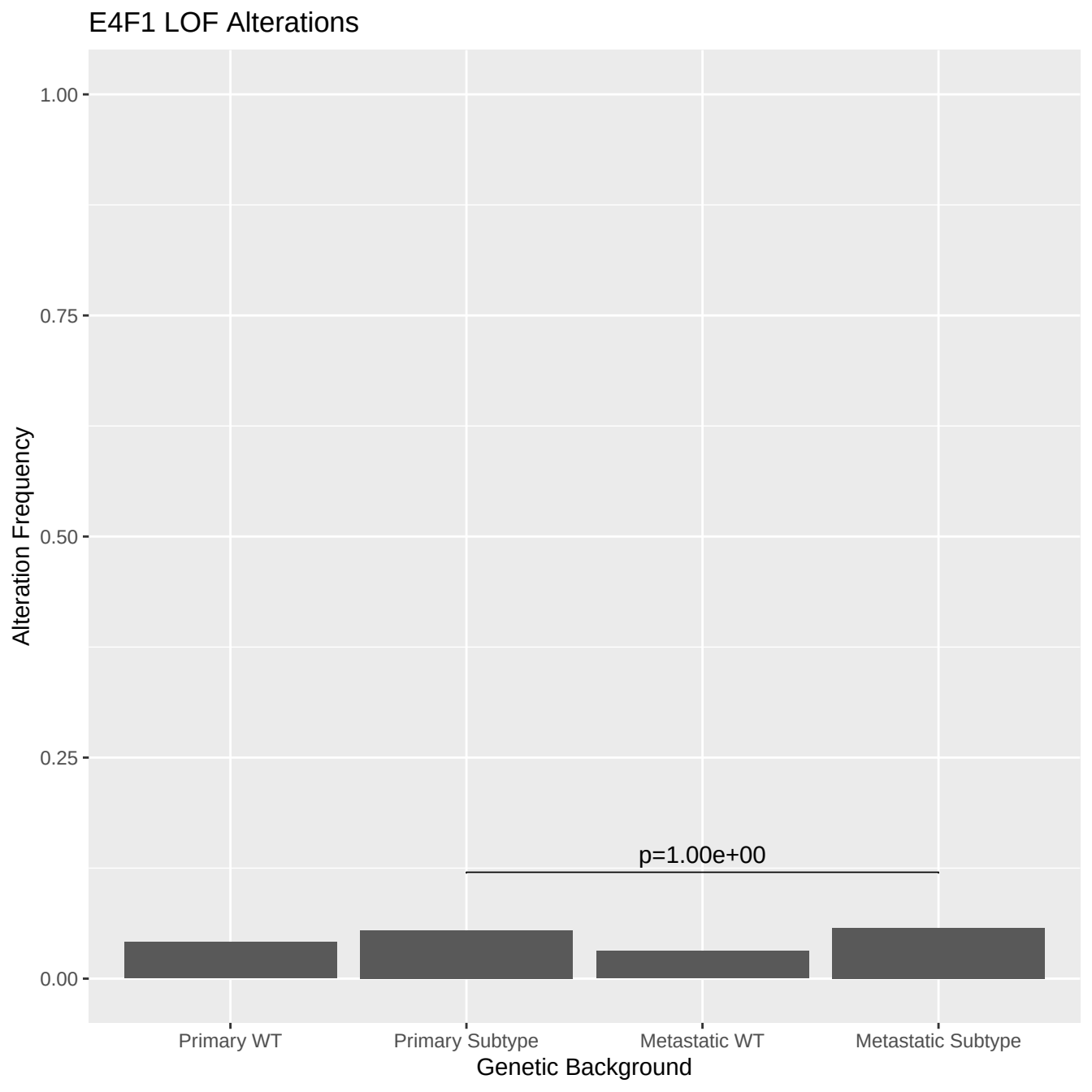

FAM78B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=2.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

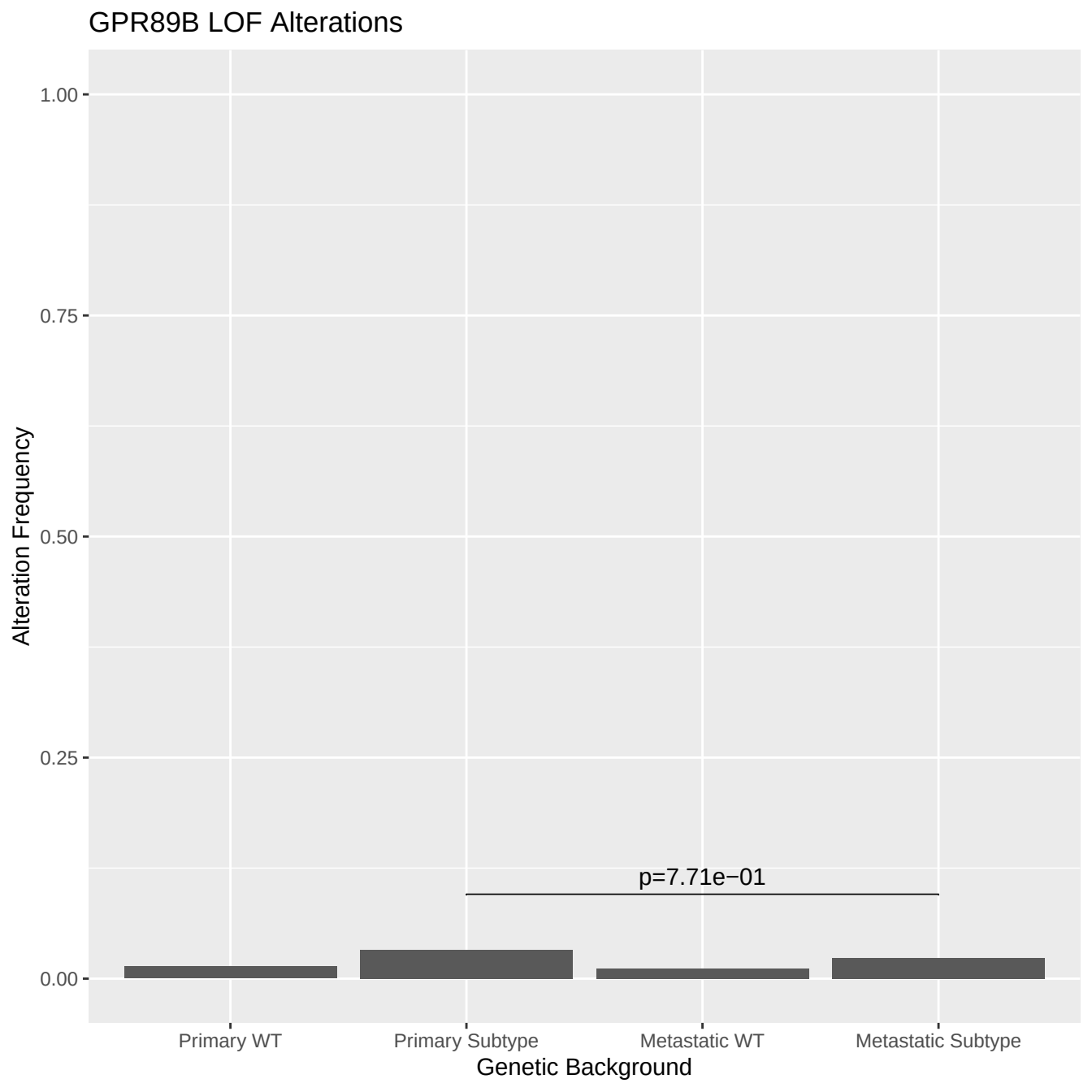

ACP6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

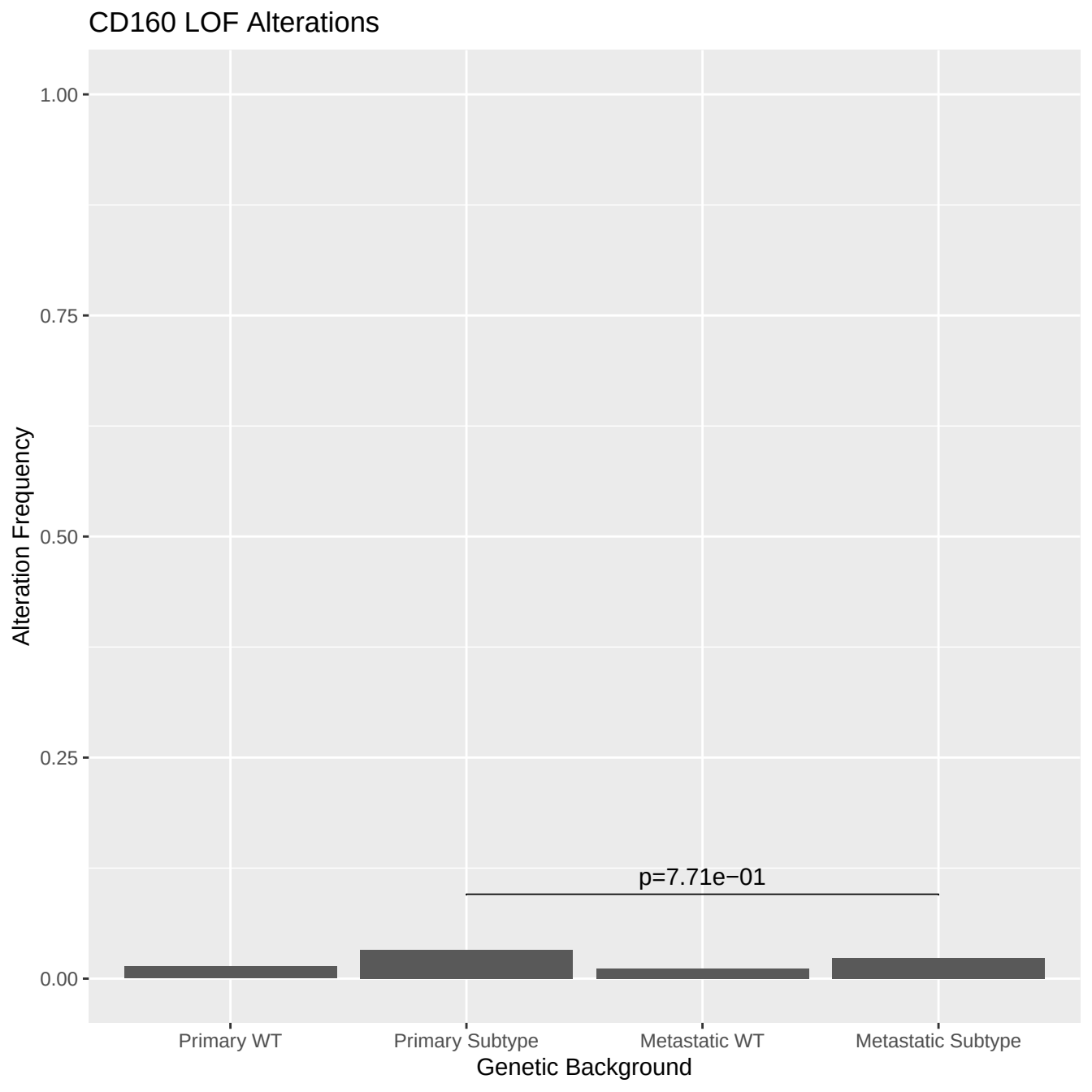

NKX2−8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

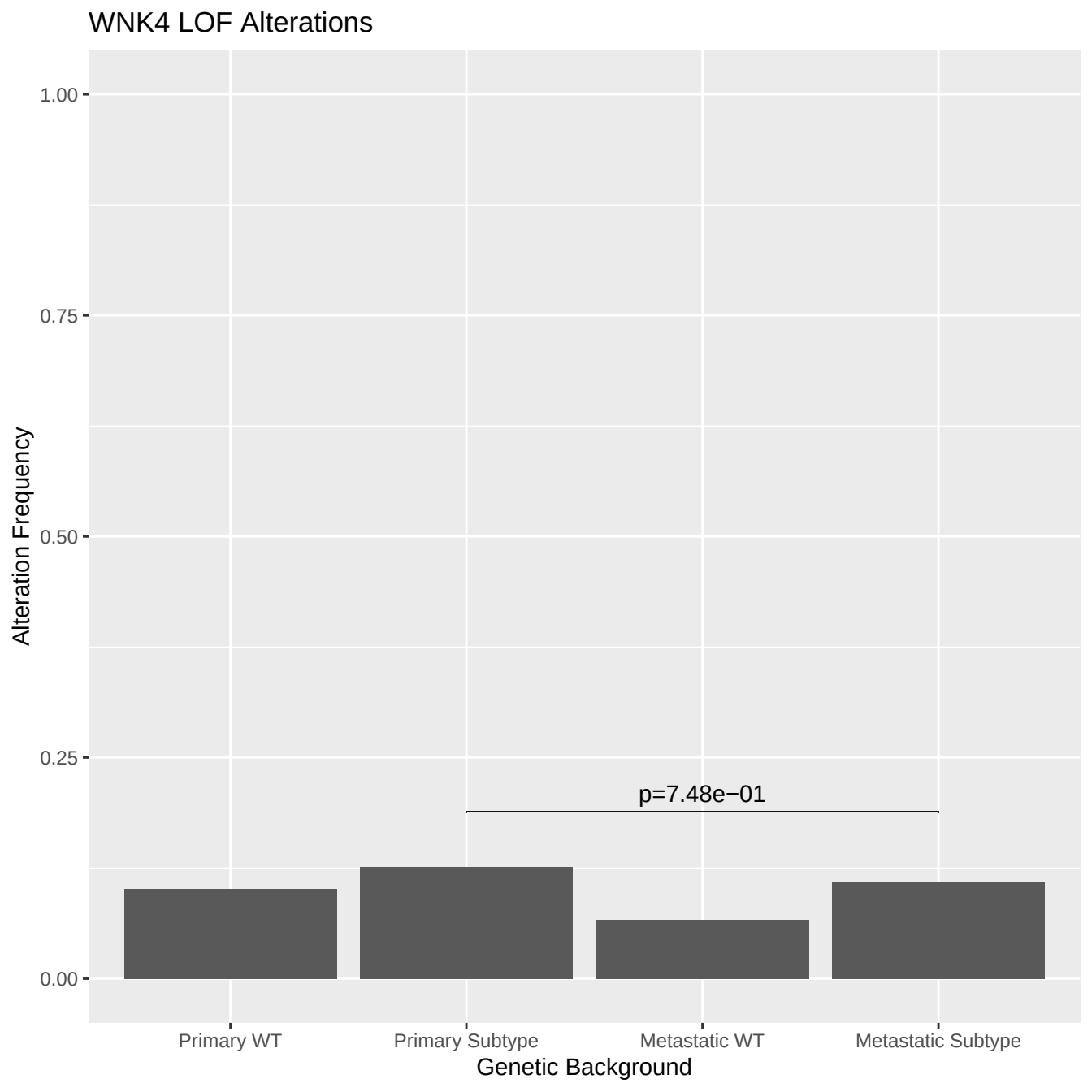

HHLA2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

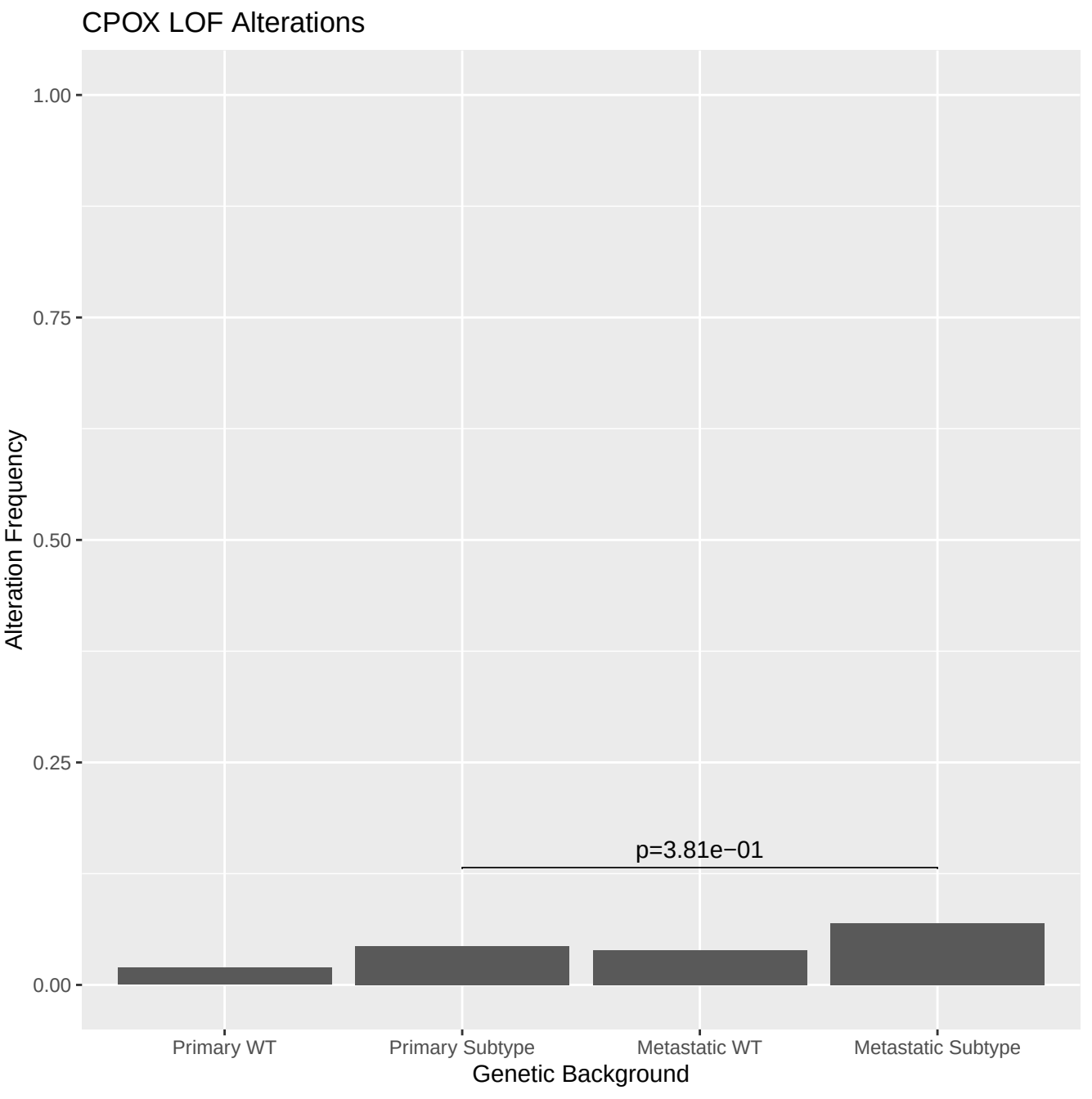

ARF6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.17e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

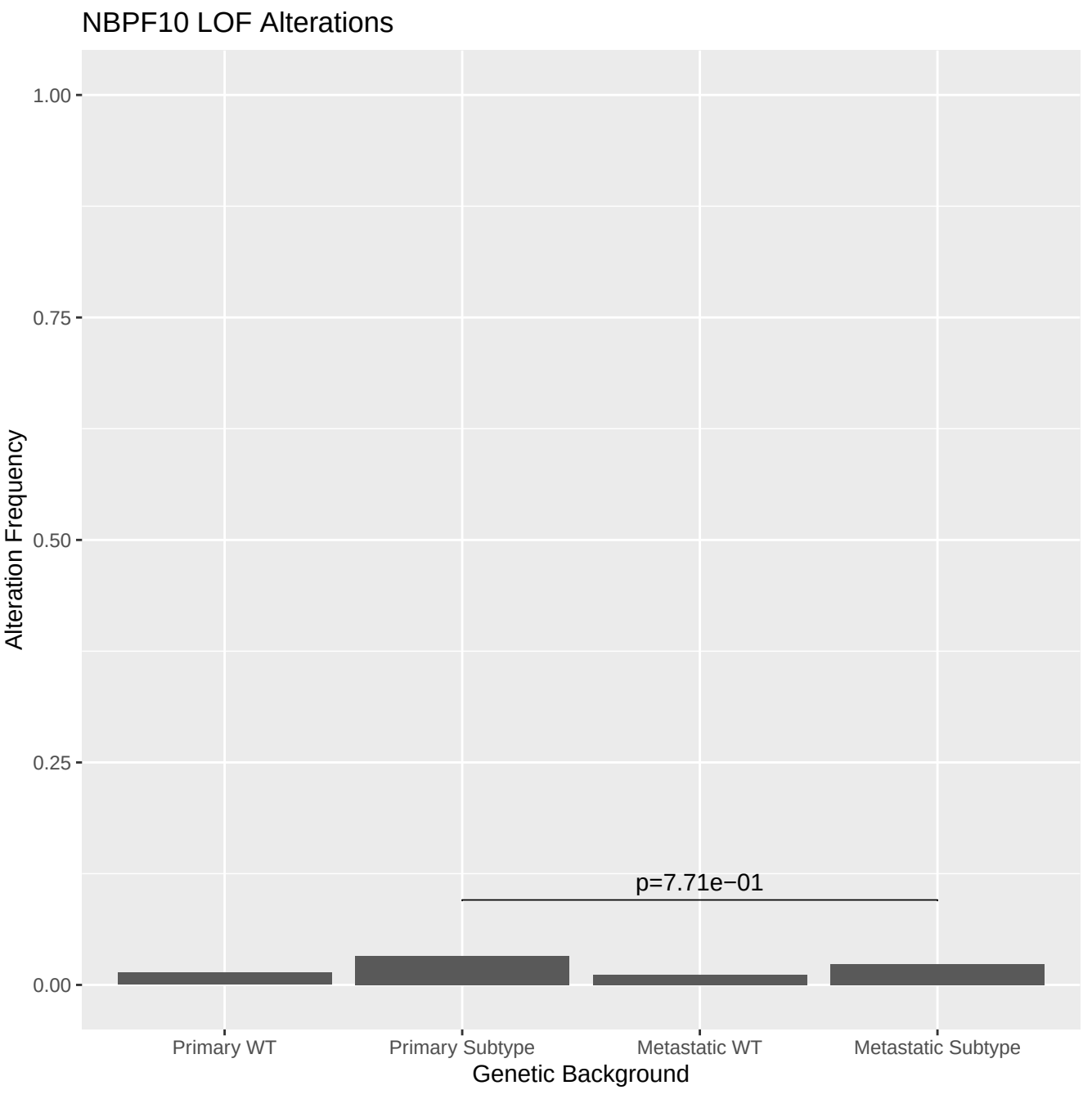

E4F1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

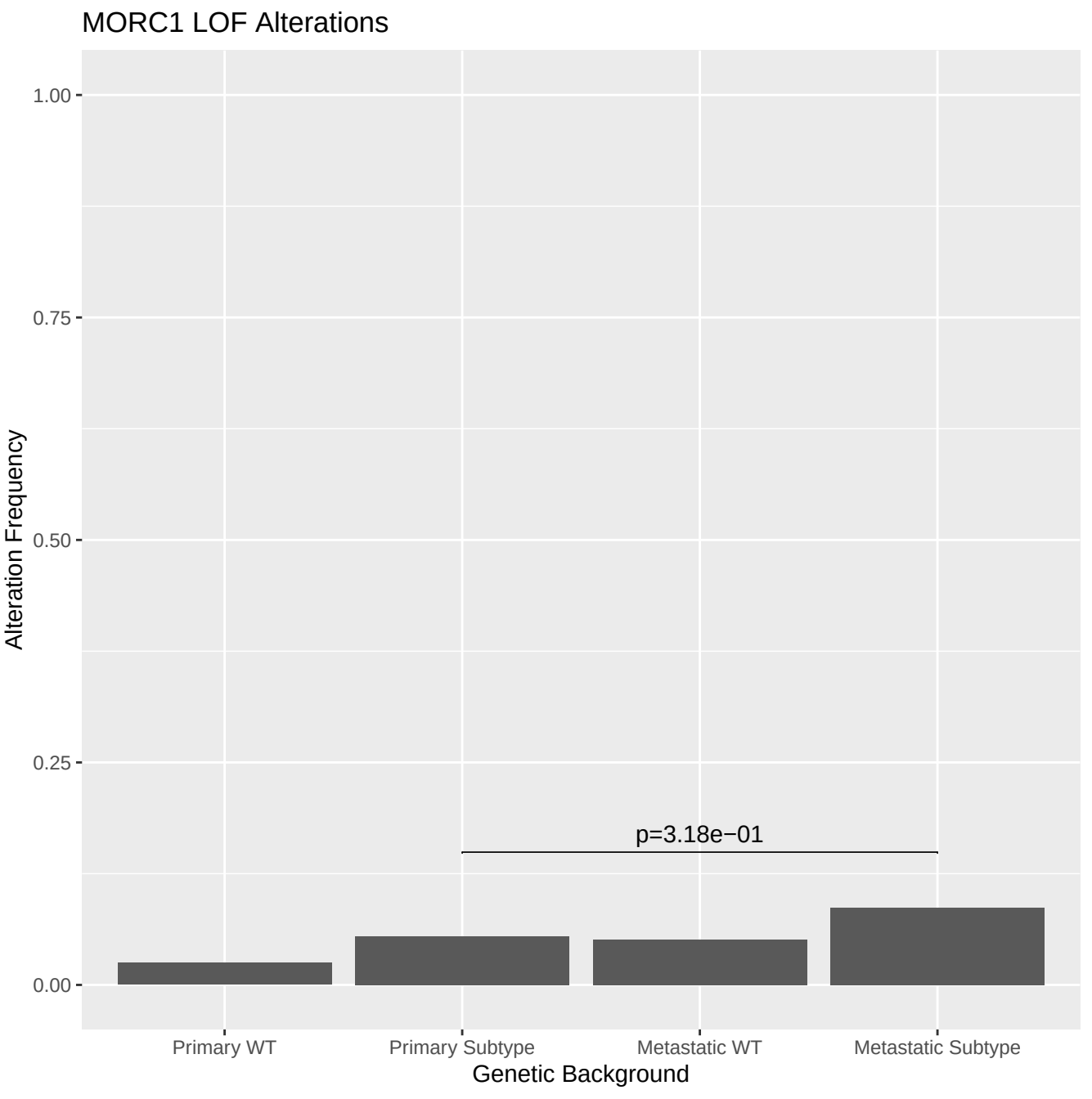

GPR89B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

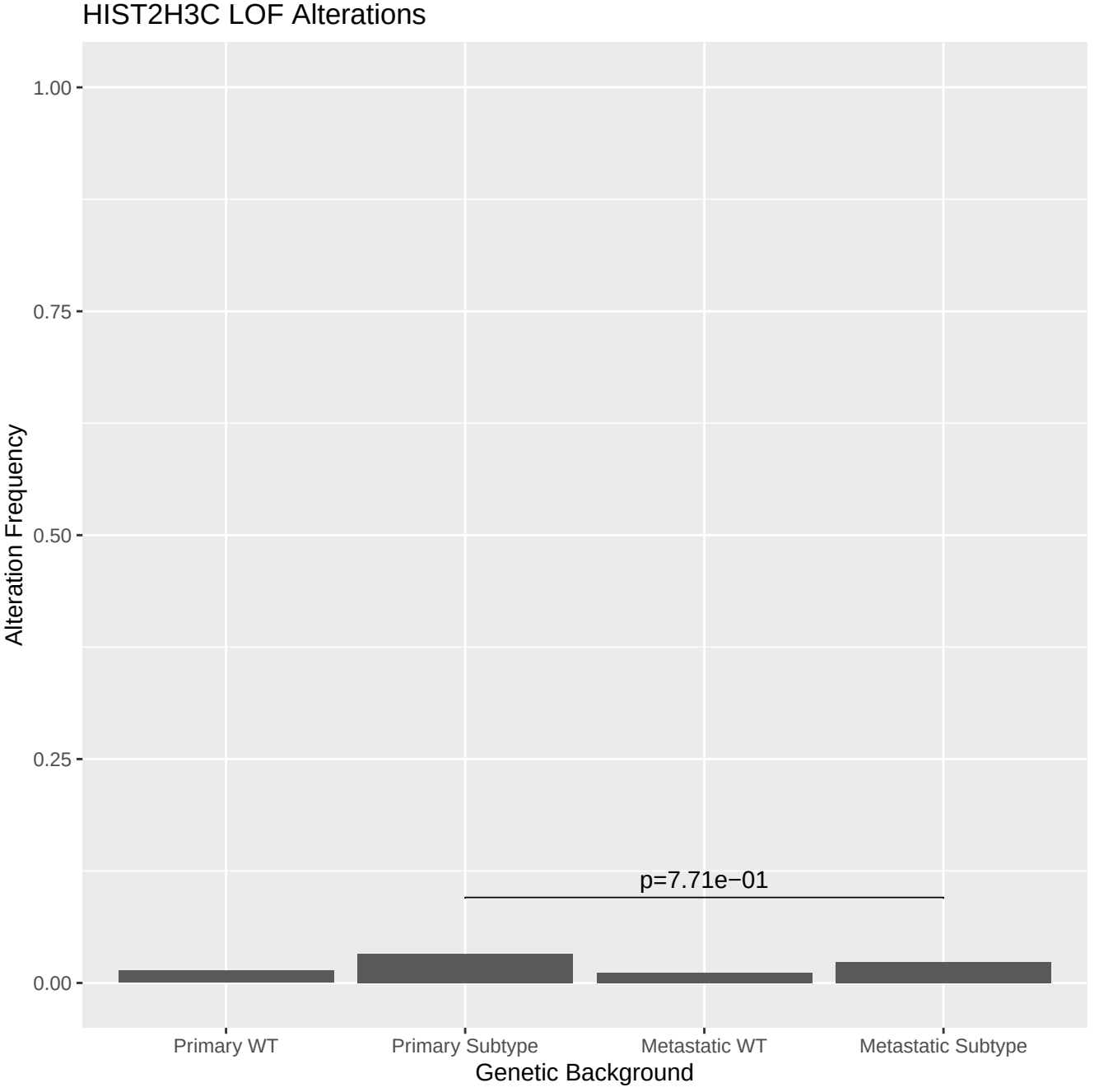

CD160 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

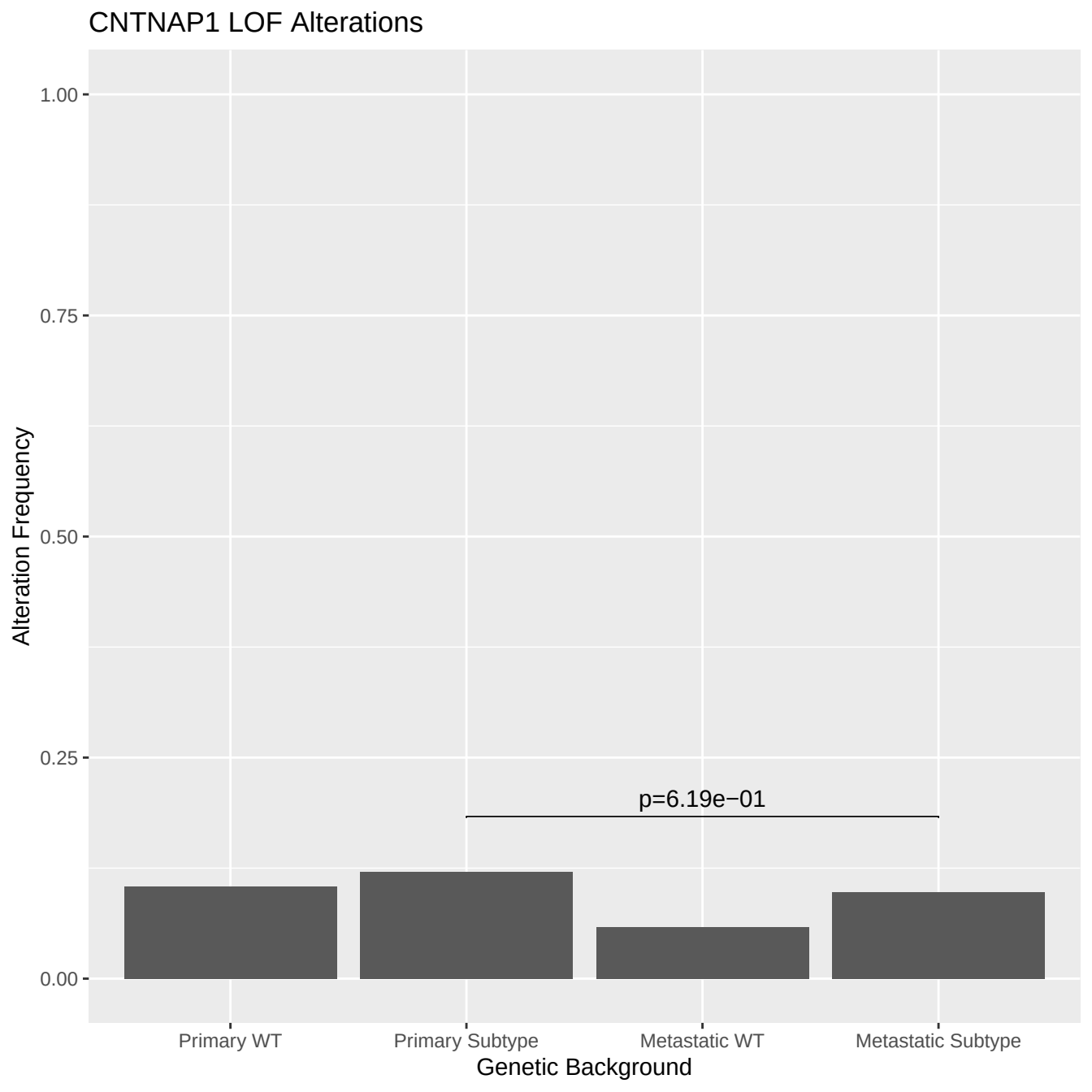

WNK4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.48e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

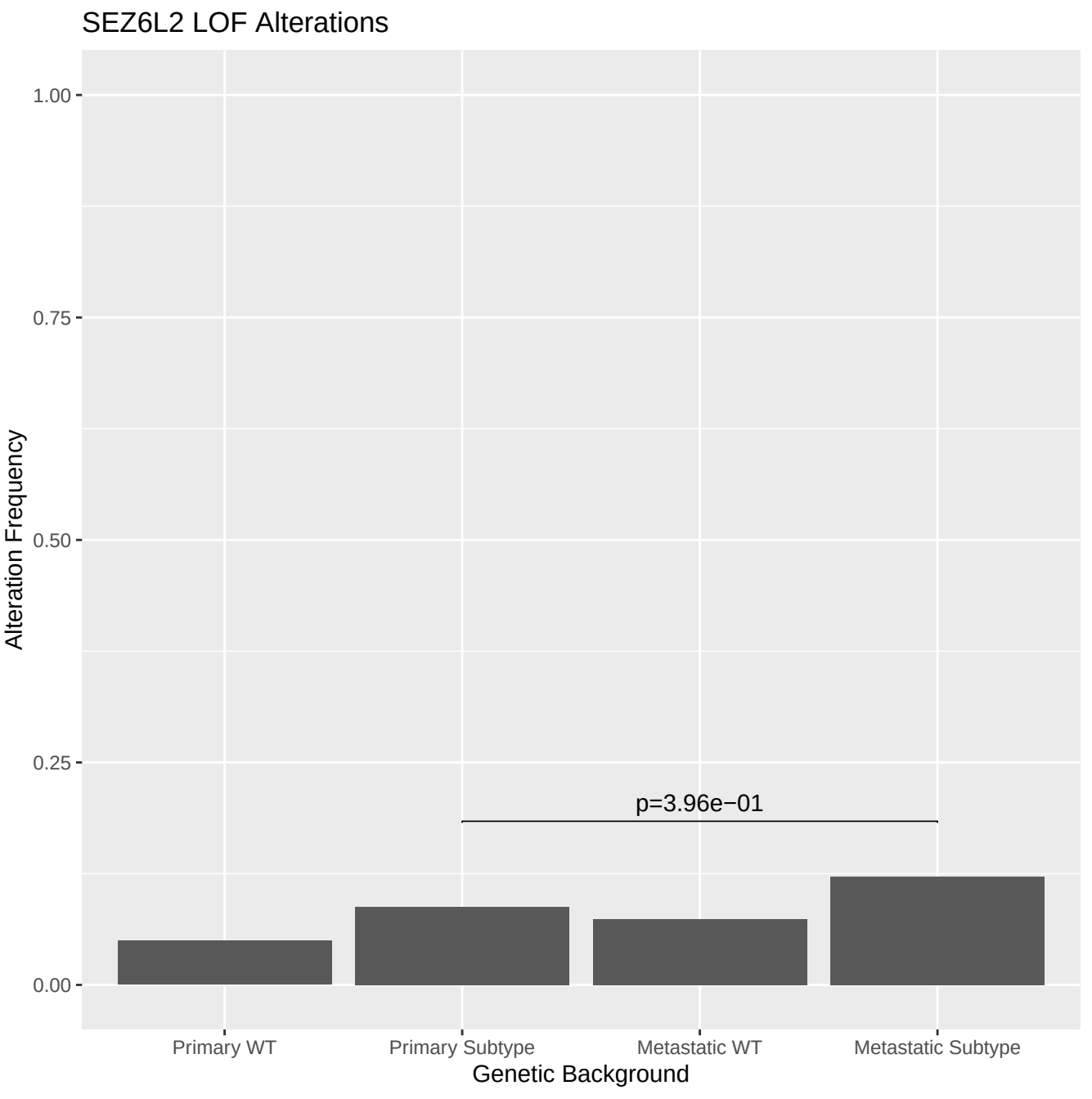

CPOX LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.81e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

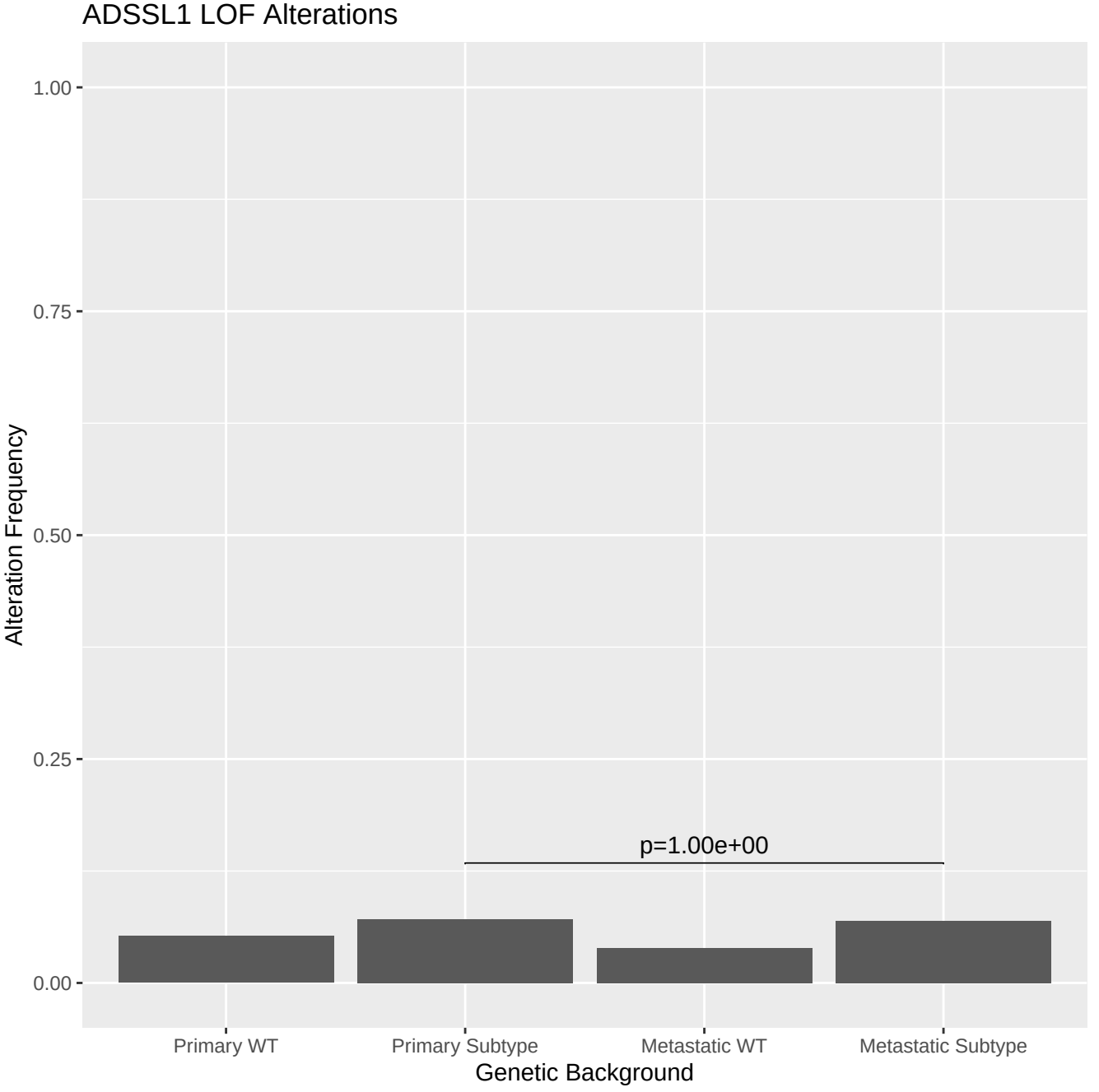

NBPF10 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

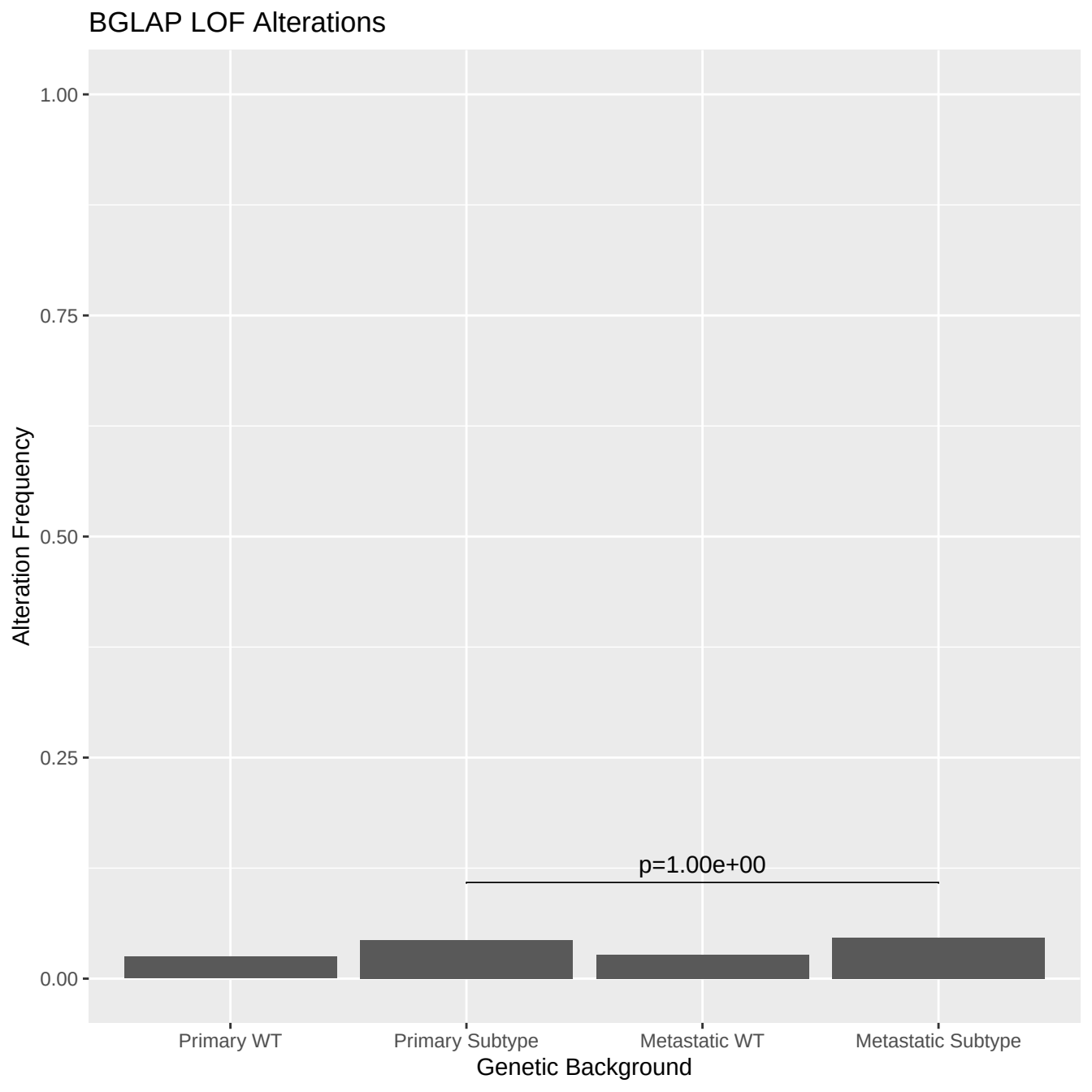

MORC1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.18e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

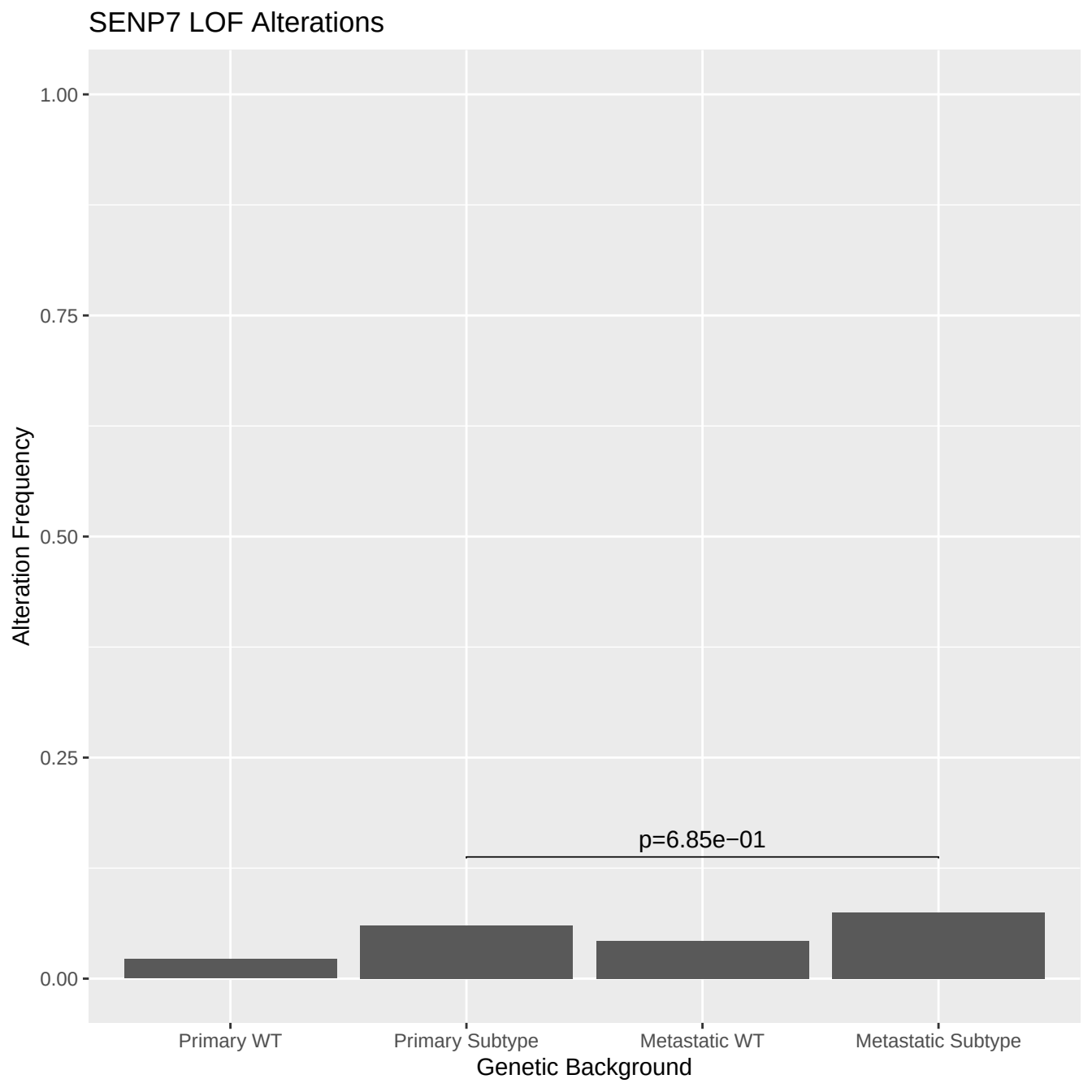

HIST2H3C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

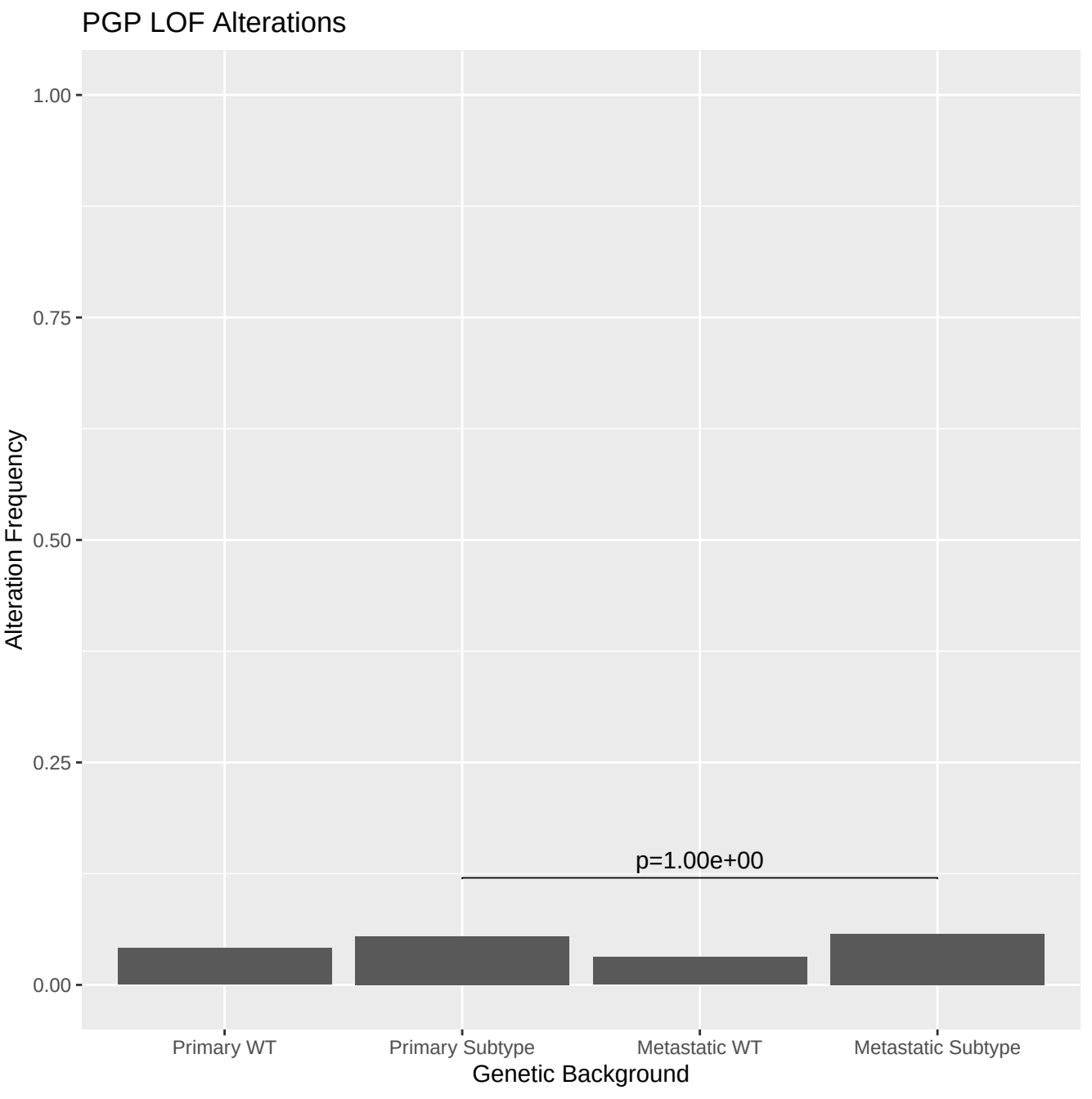

CNTNAP1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.19e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

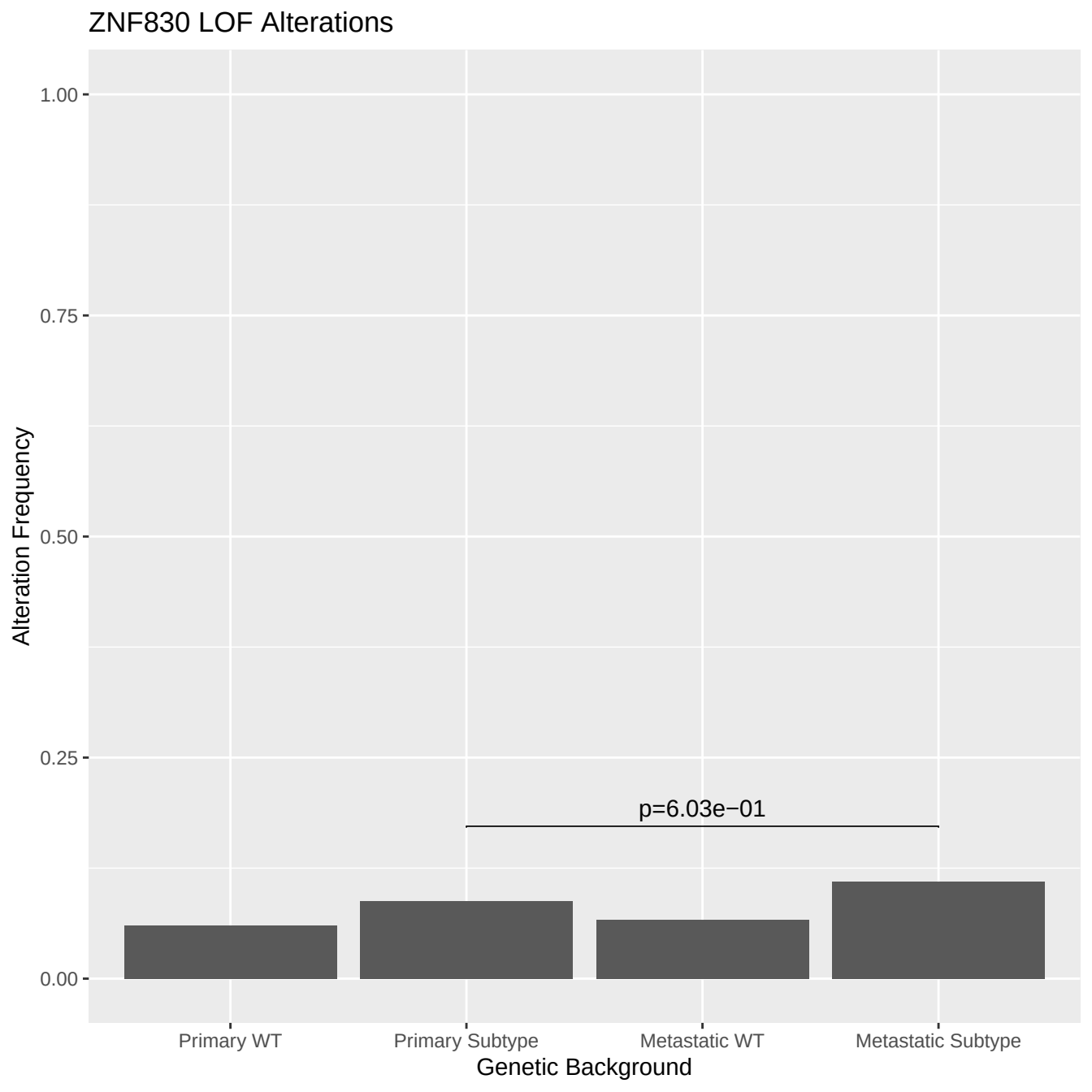

SEZ6L2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=3.96e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

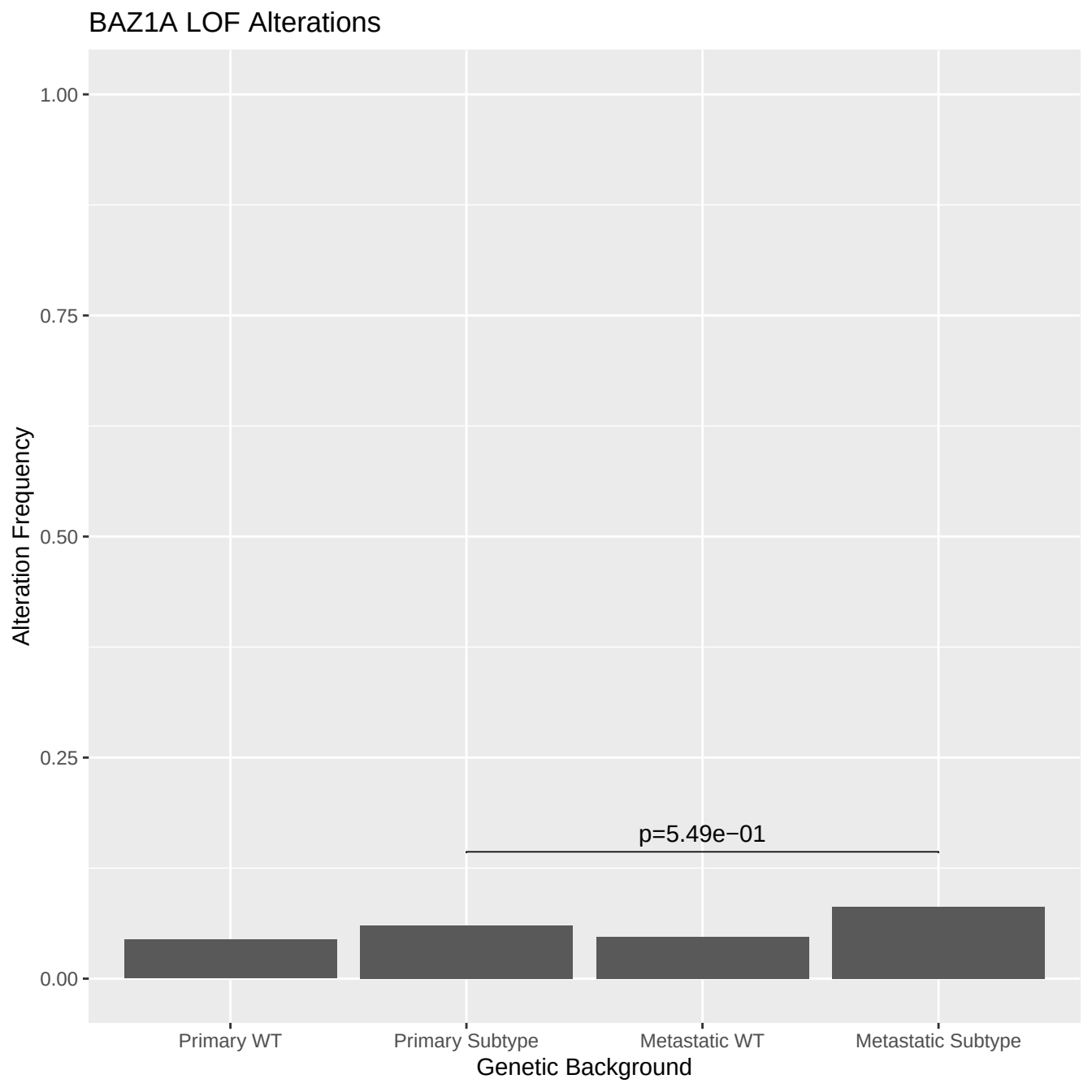

ADSSL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

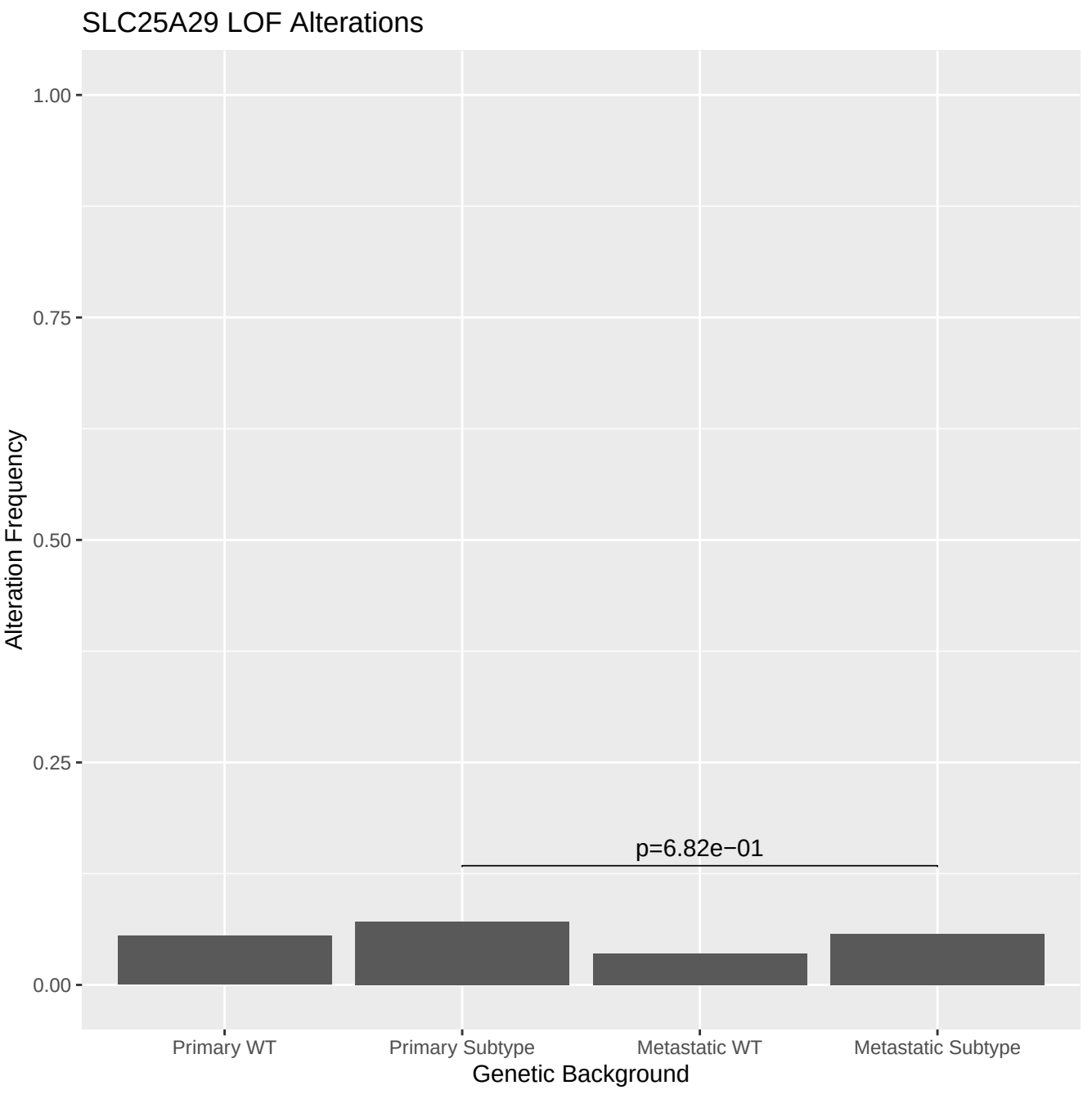

BGLAP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

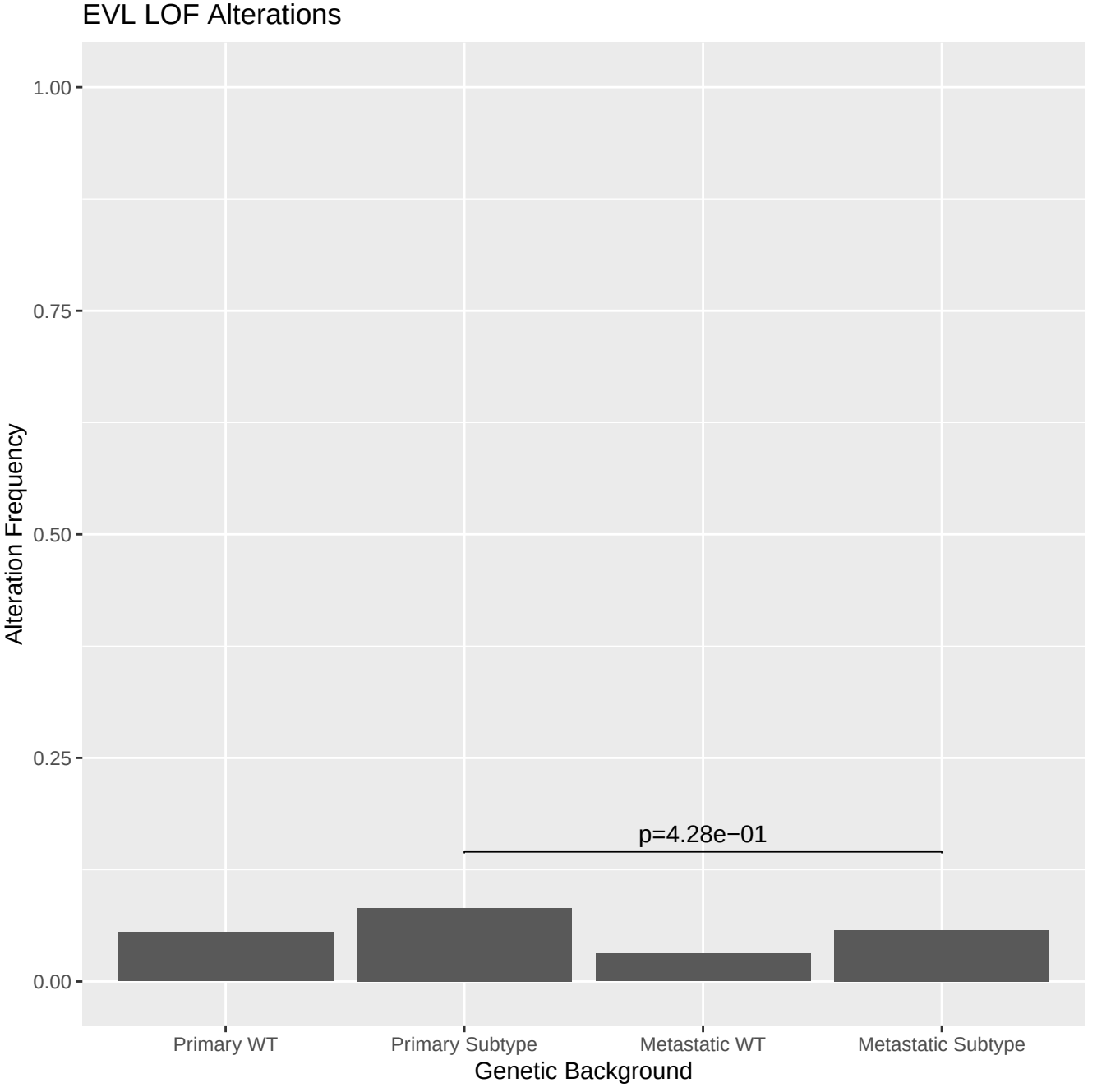

SENP7 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.85e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

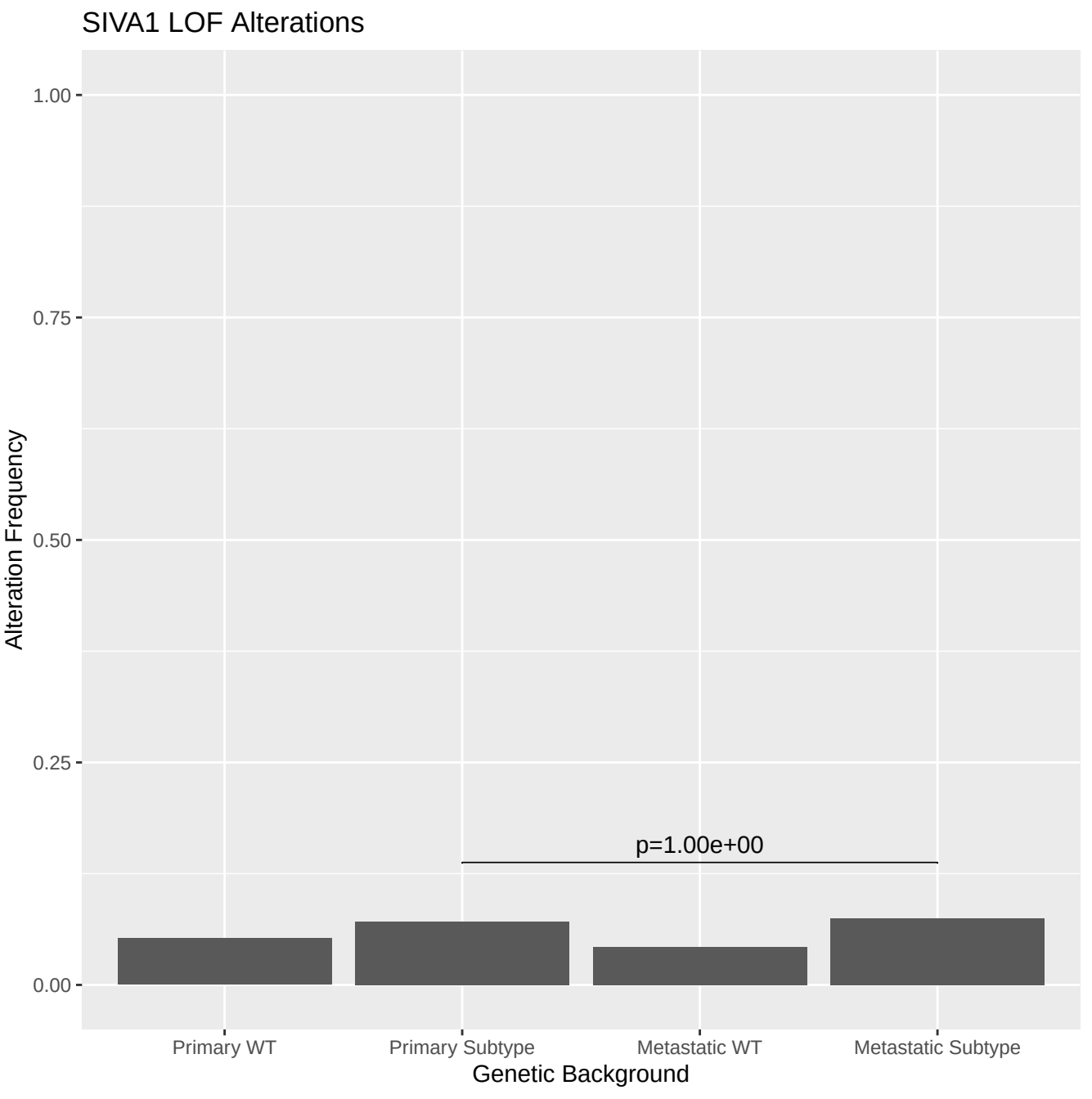

PGP LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

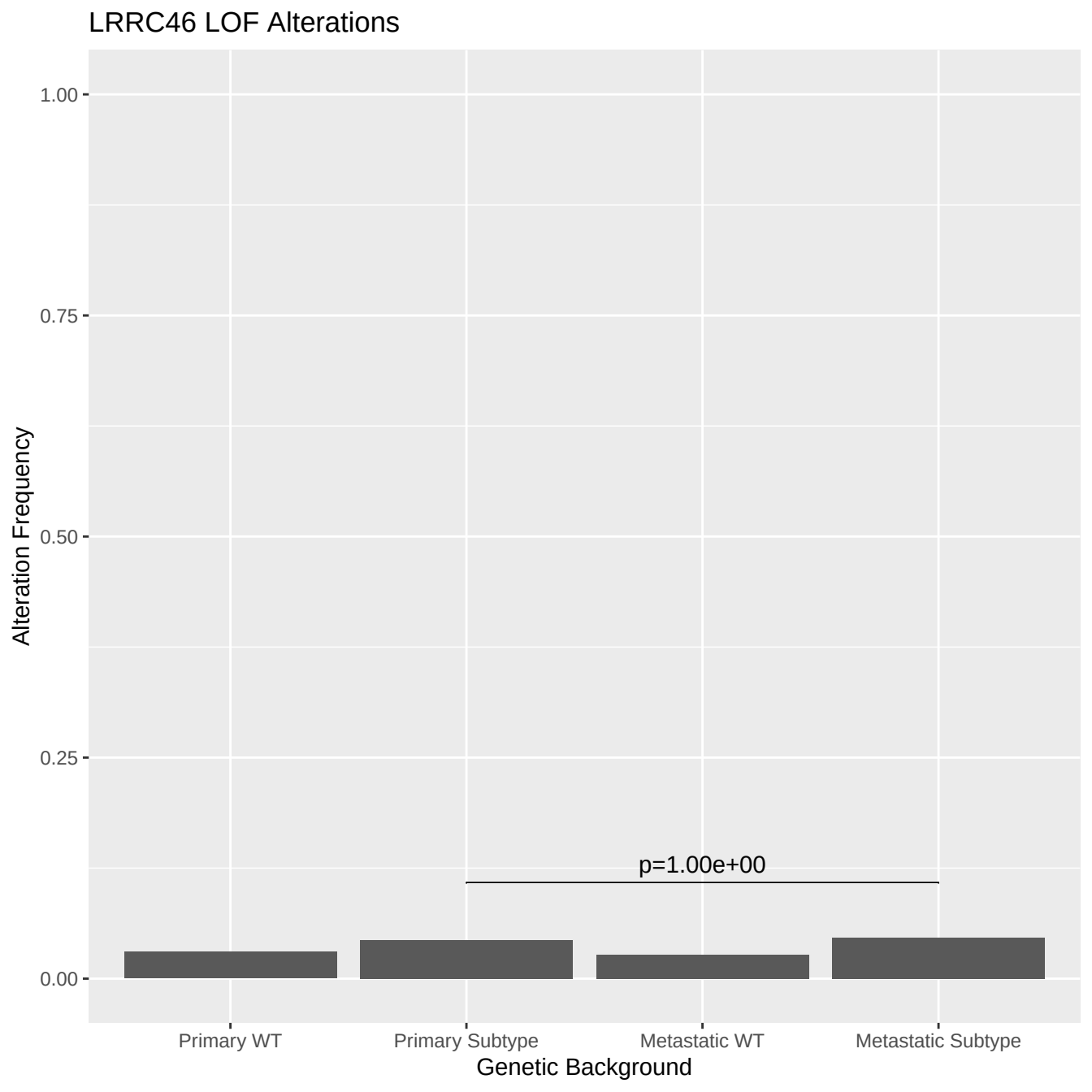

ZNF830 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

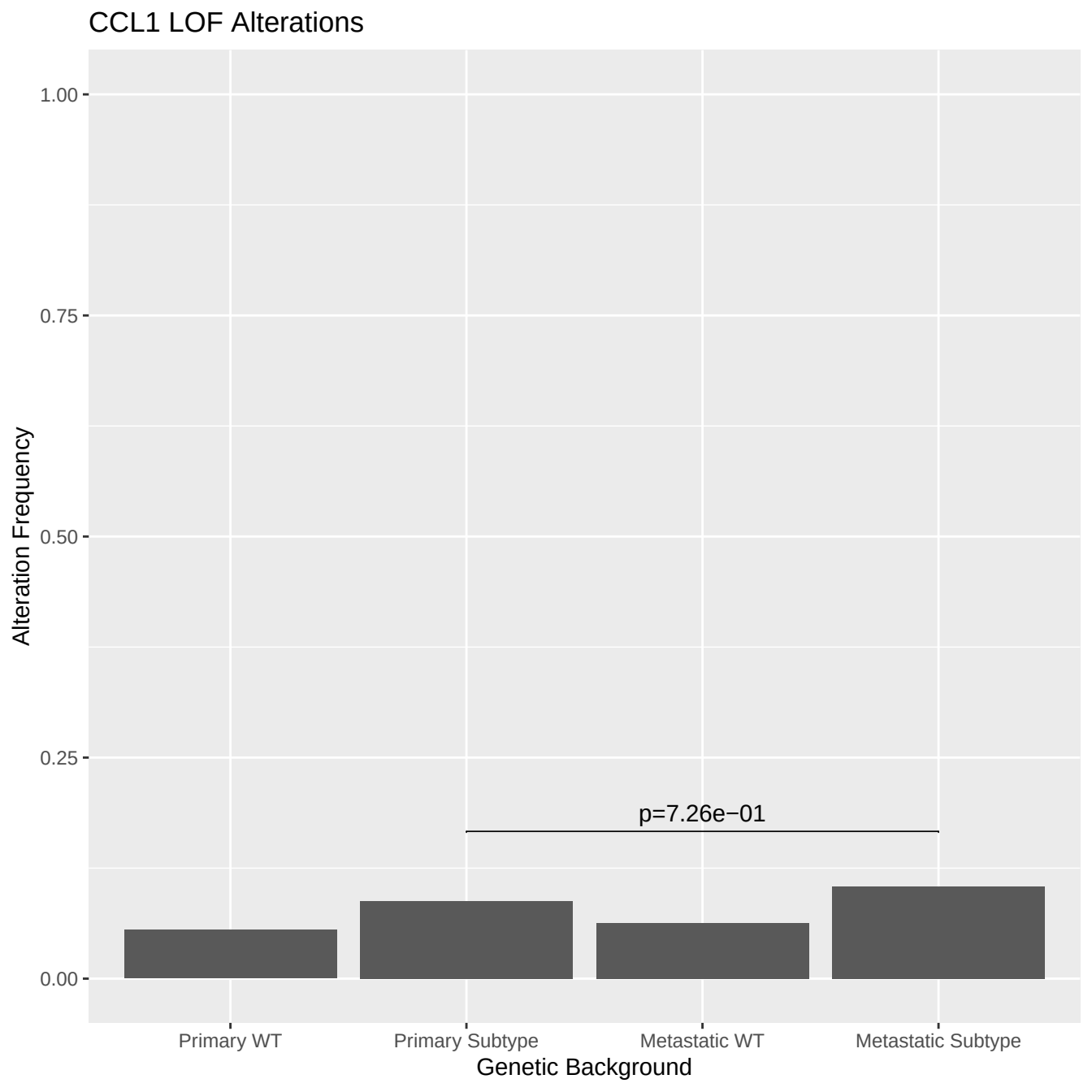

BAZ1A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.49e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

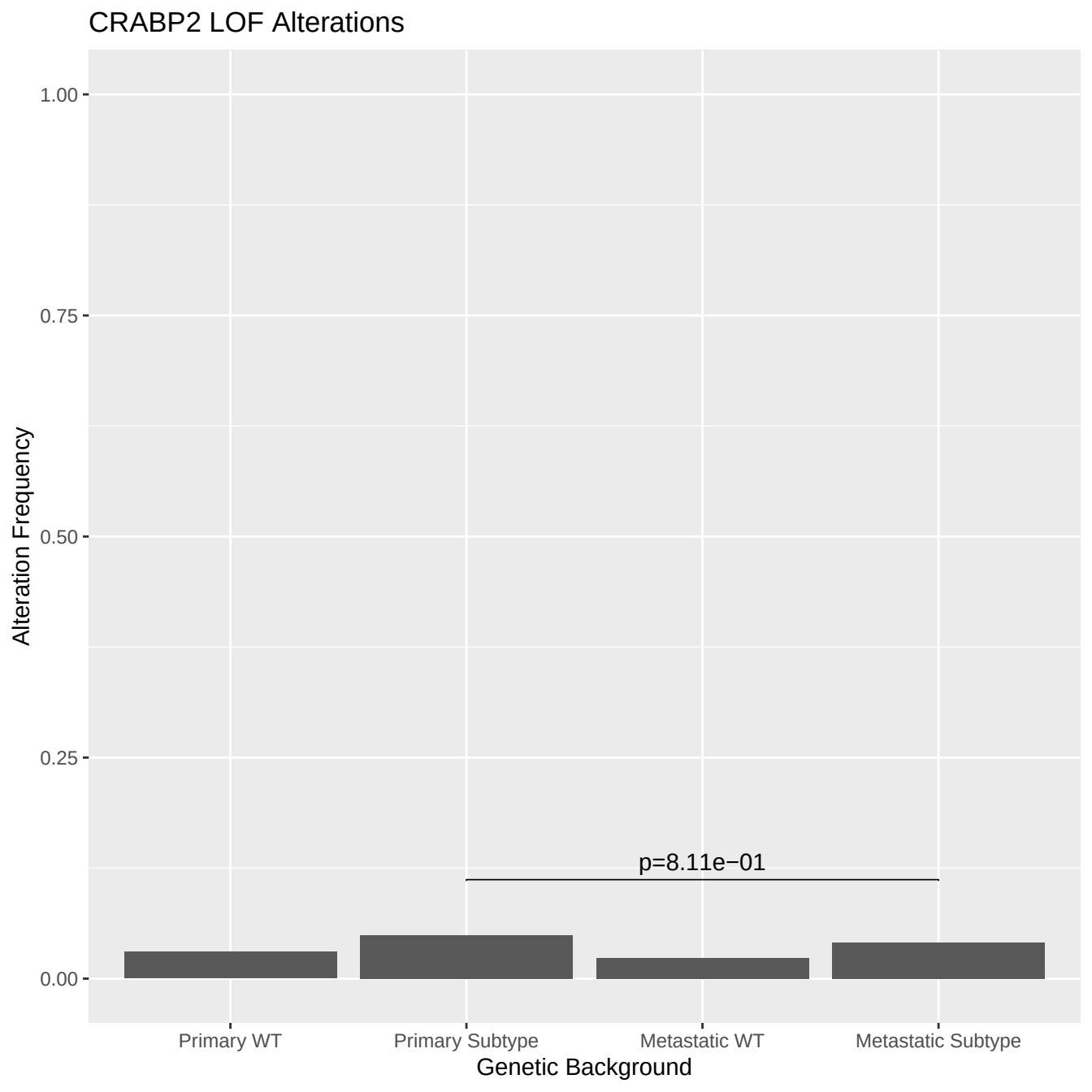

SLC25A29 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=6.82e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

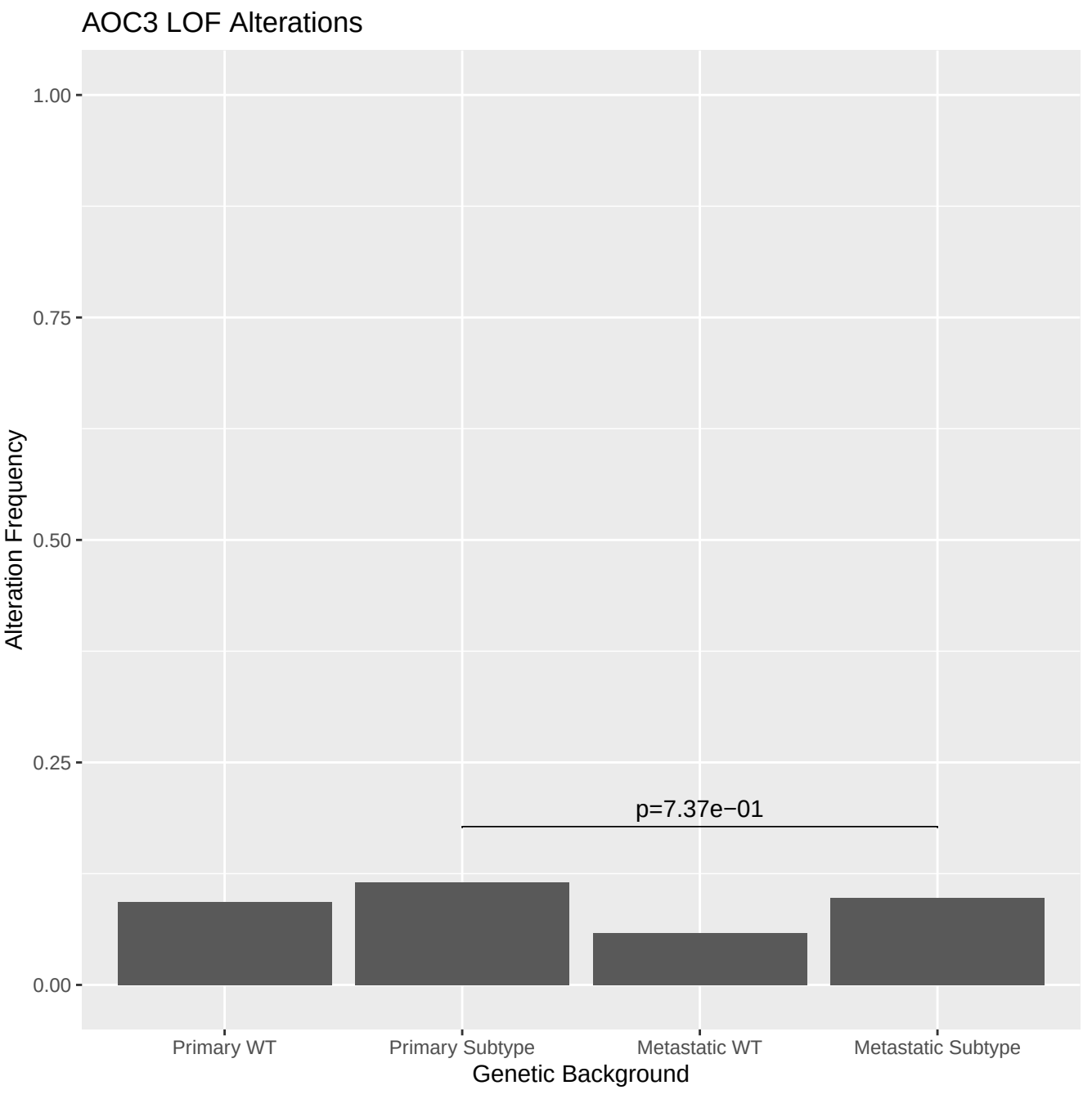

EVL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.28e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

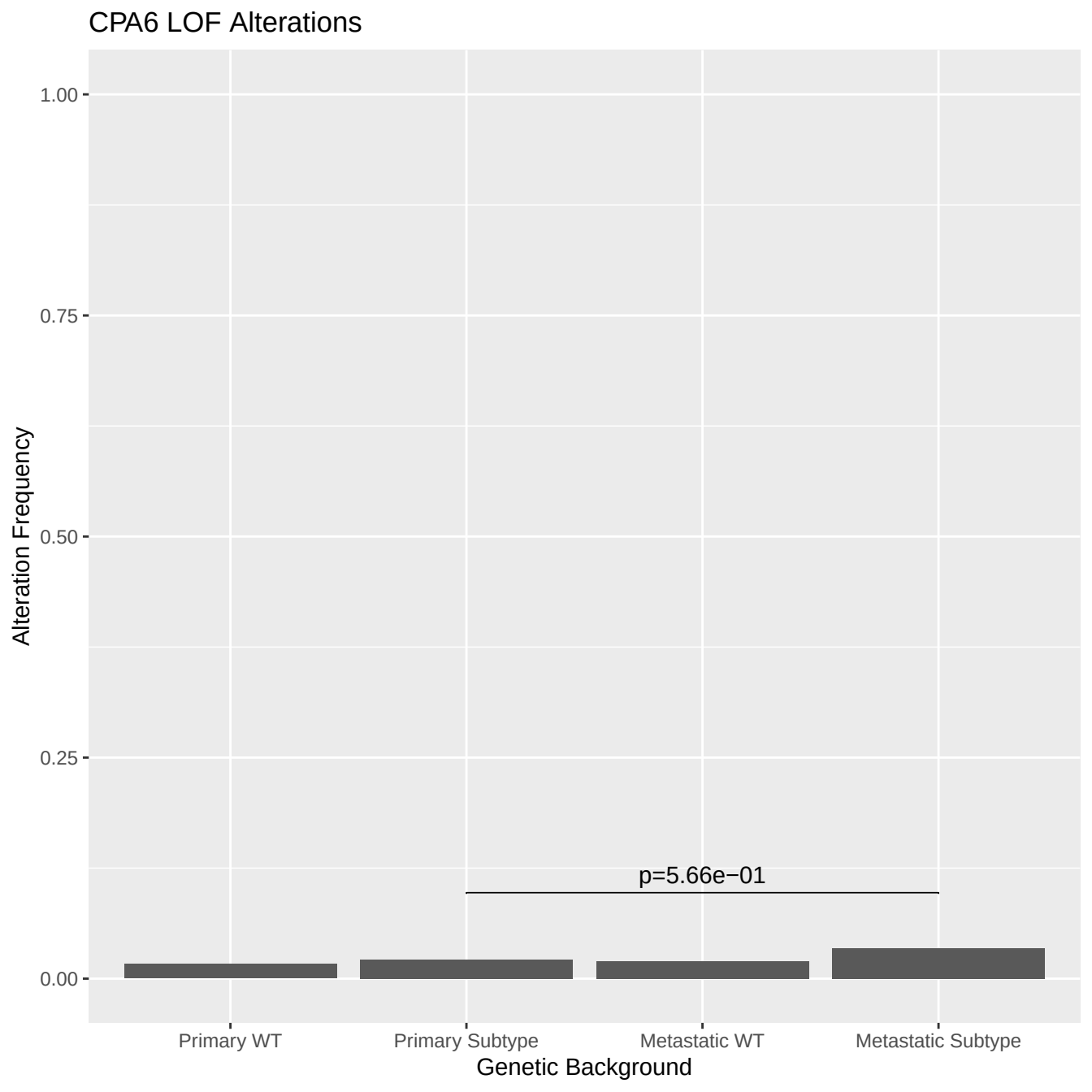

SIVA1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

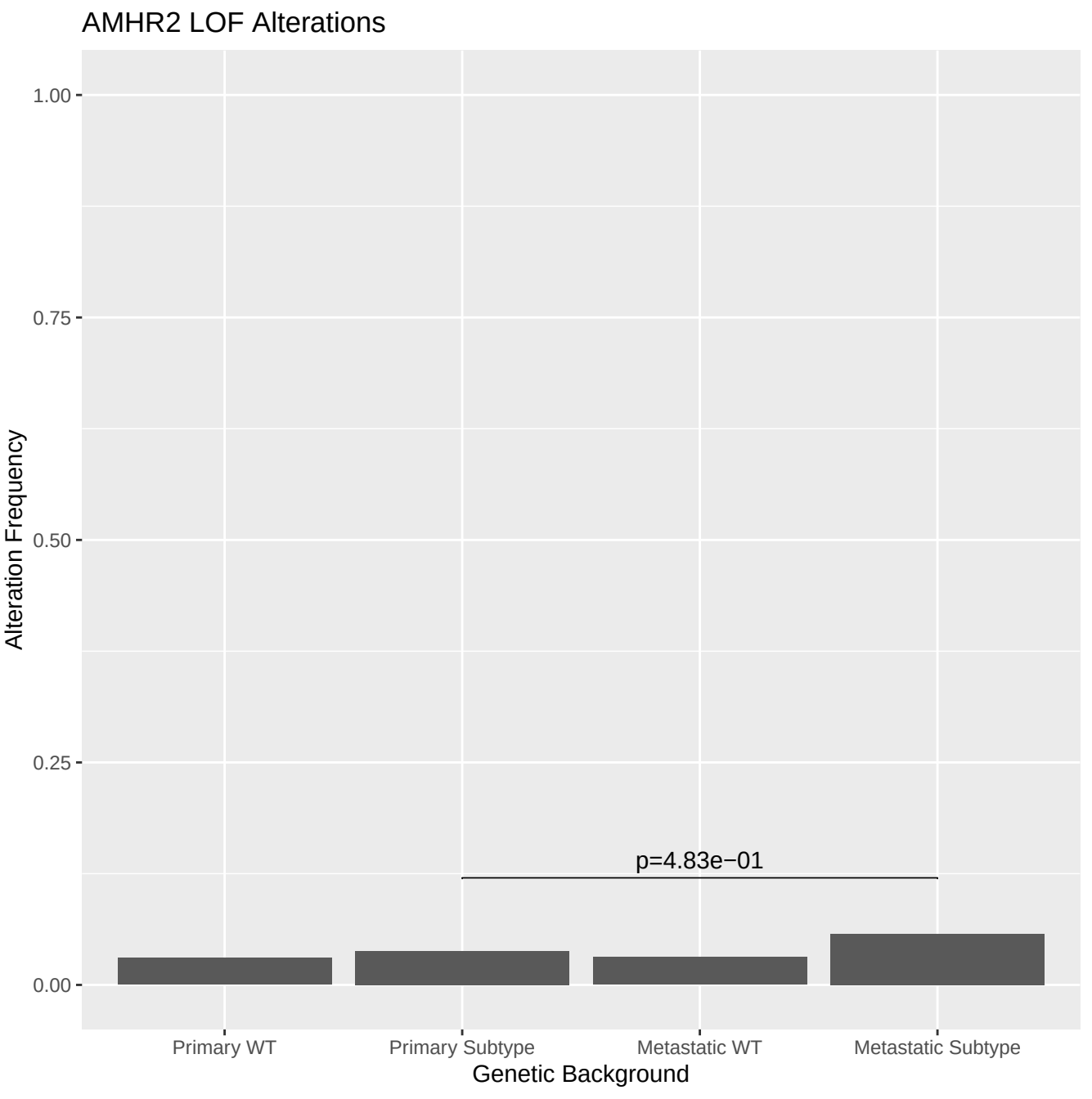

LRRC46 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

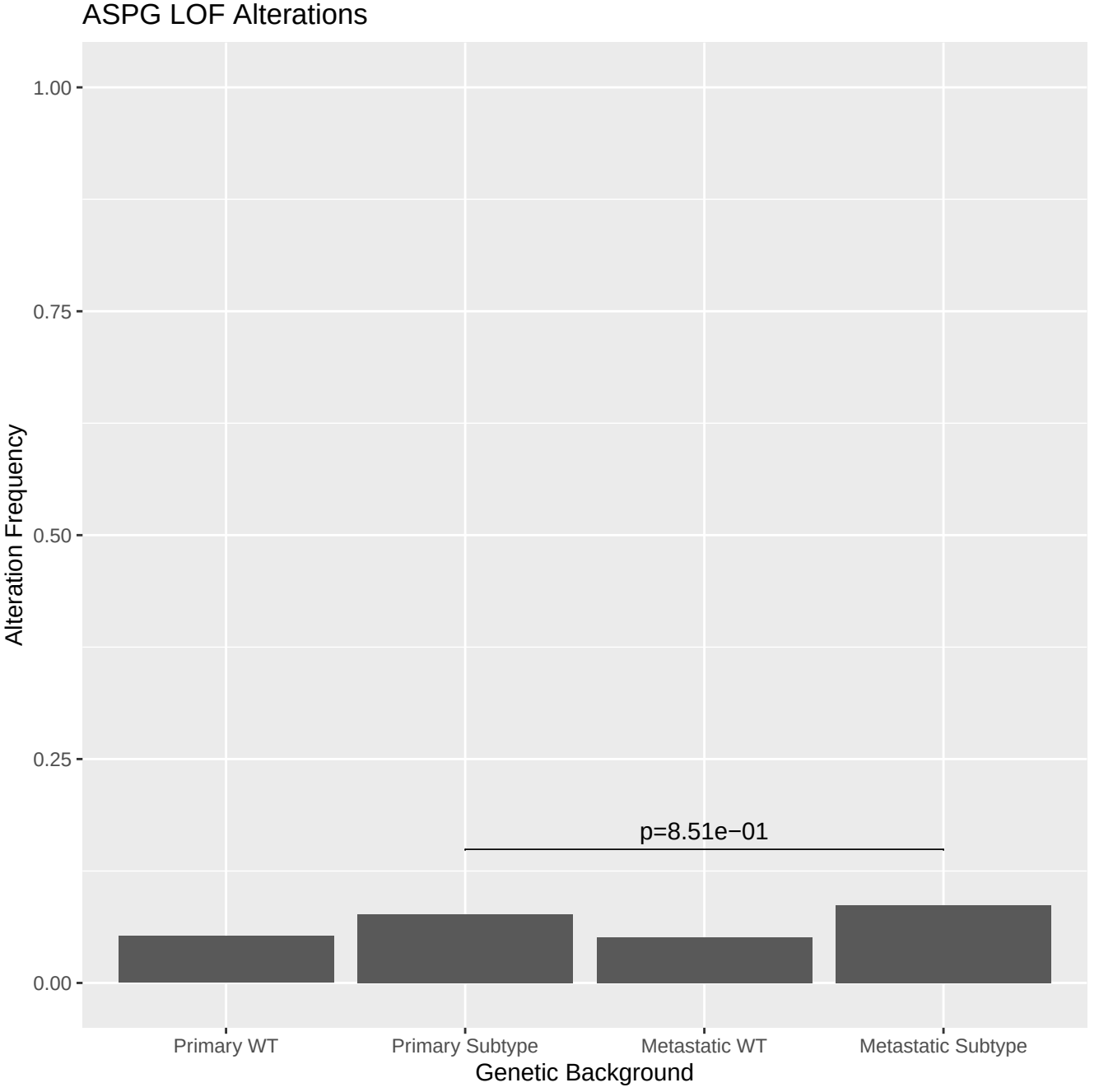

CCL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.26e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

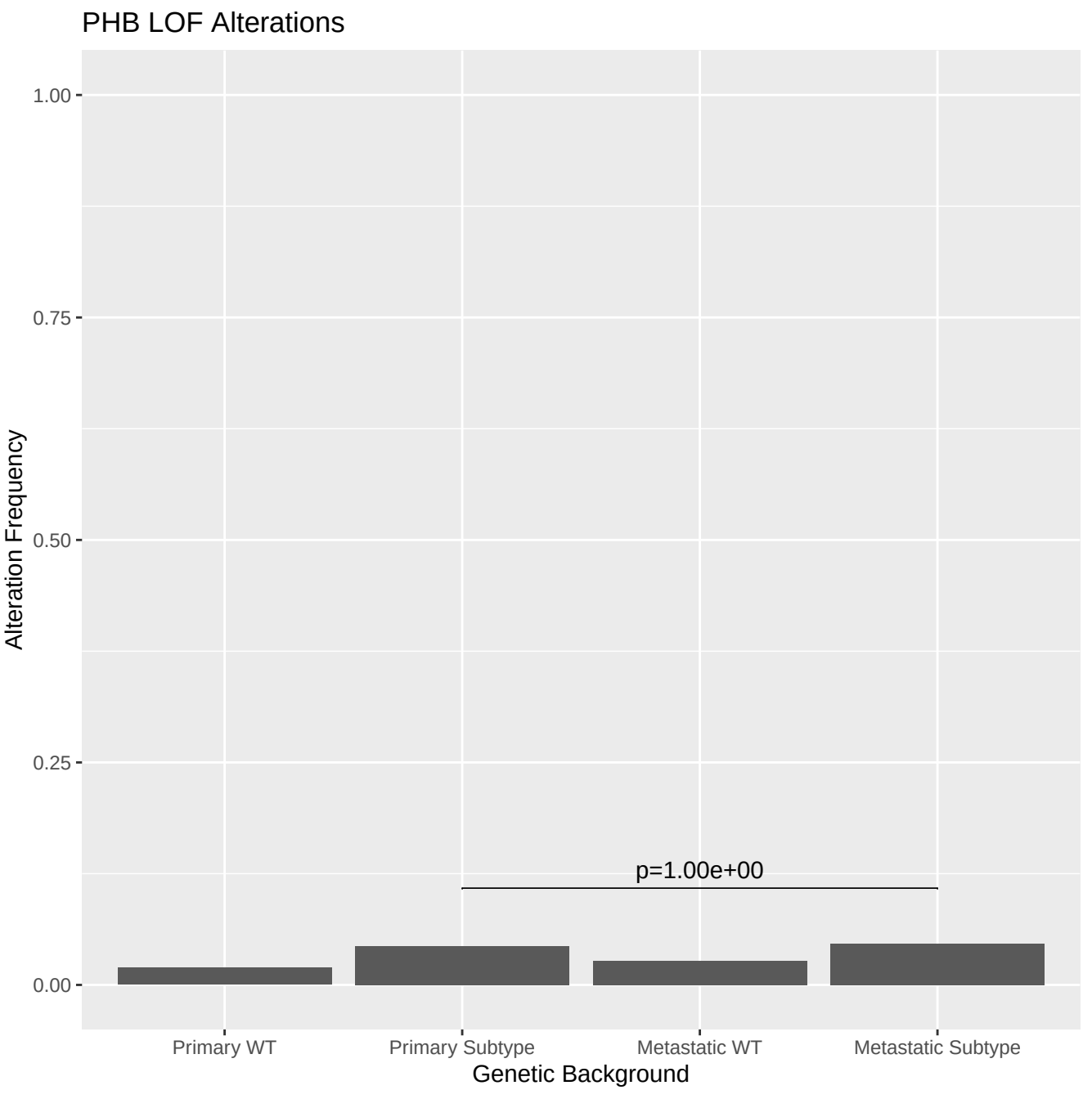

CRABP2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

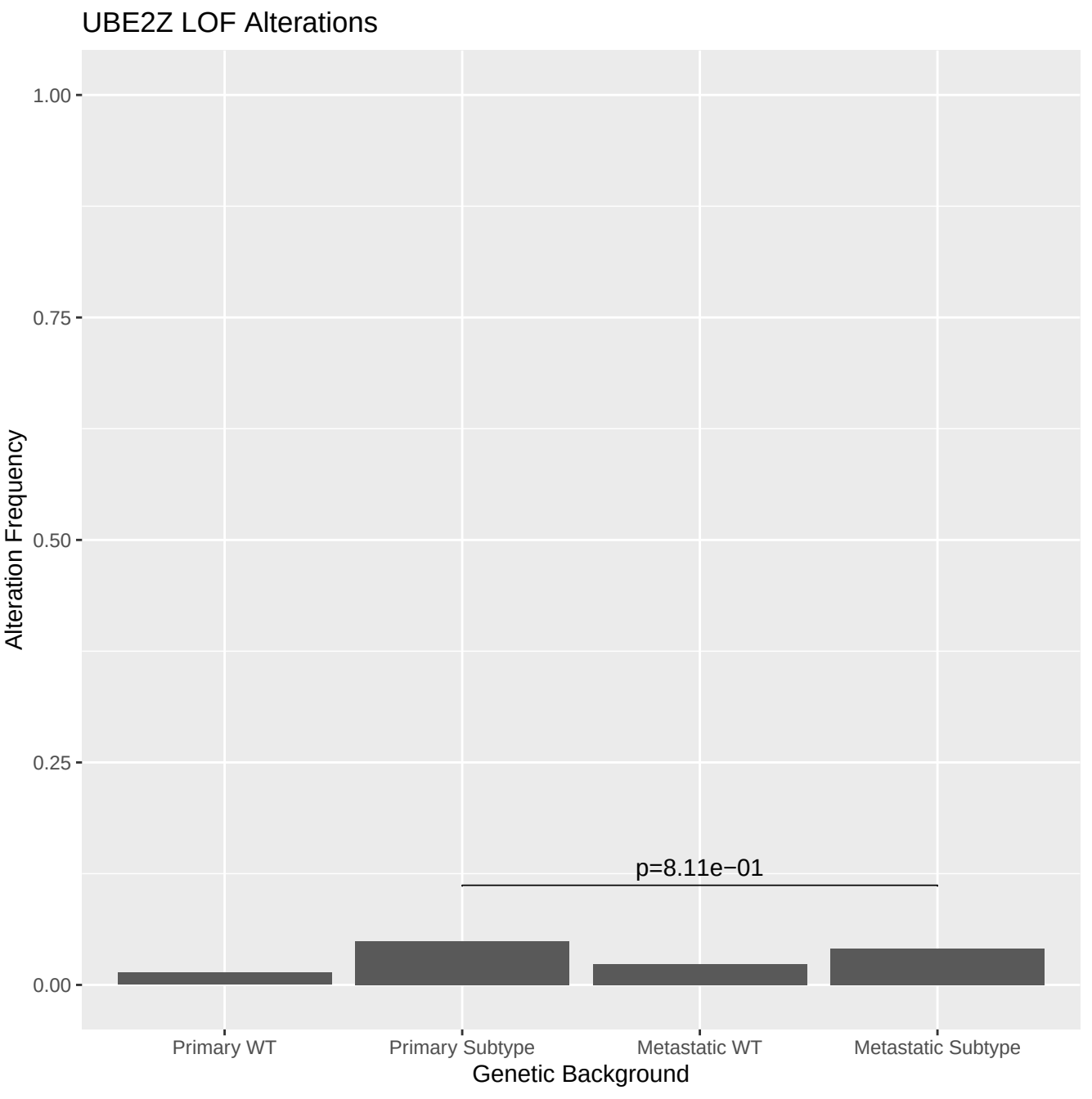

AOC3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.37e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

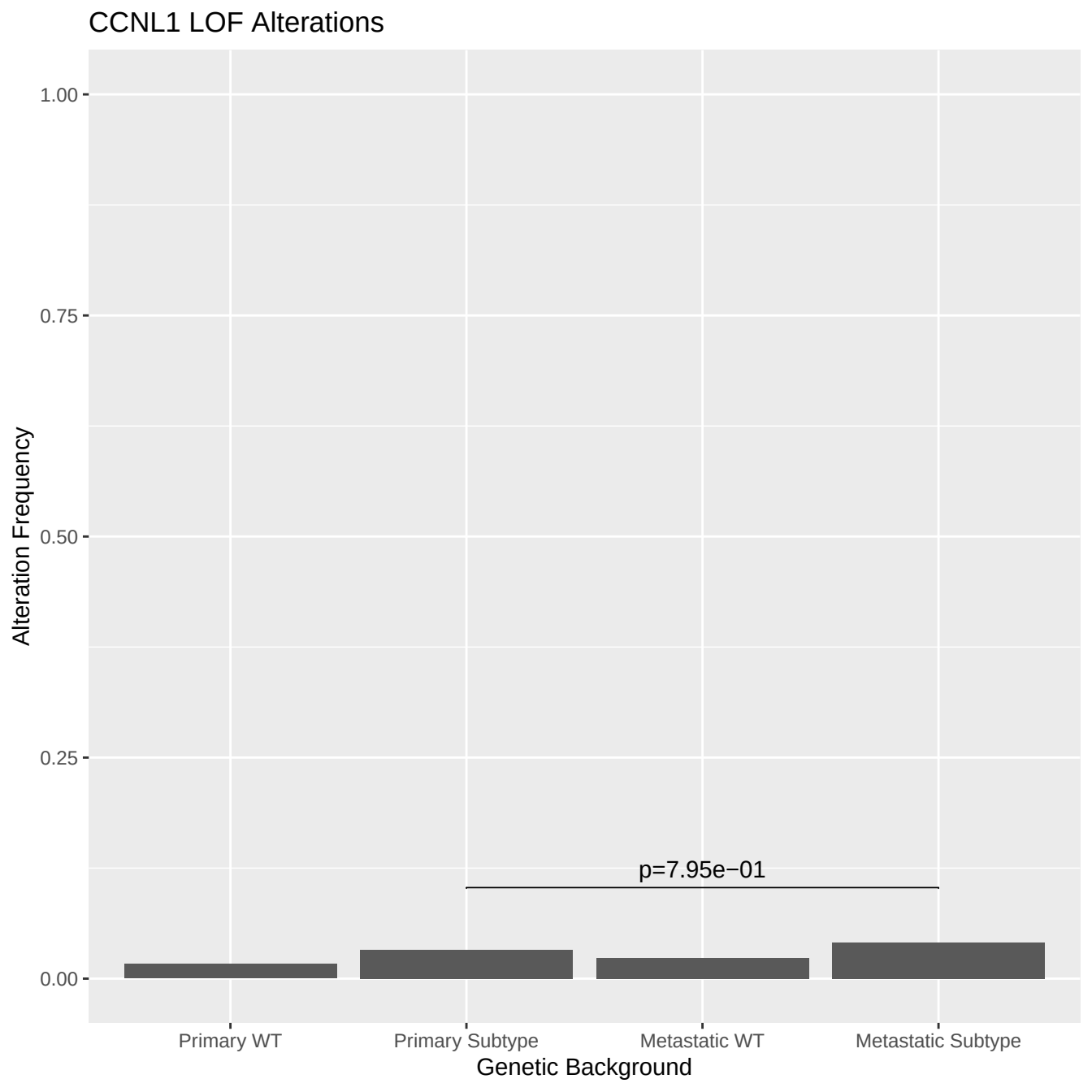

CPA6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.66e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

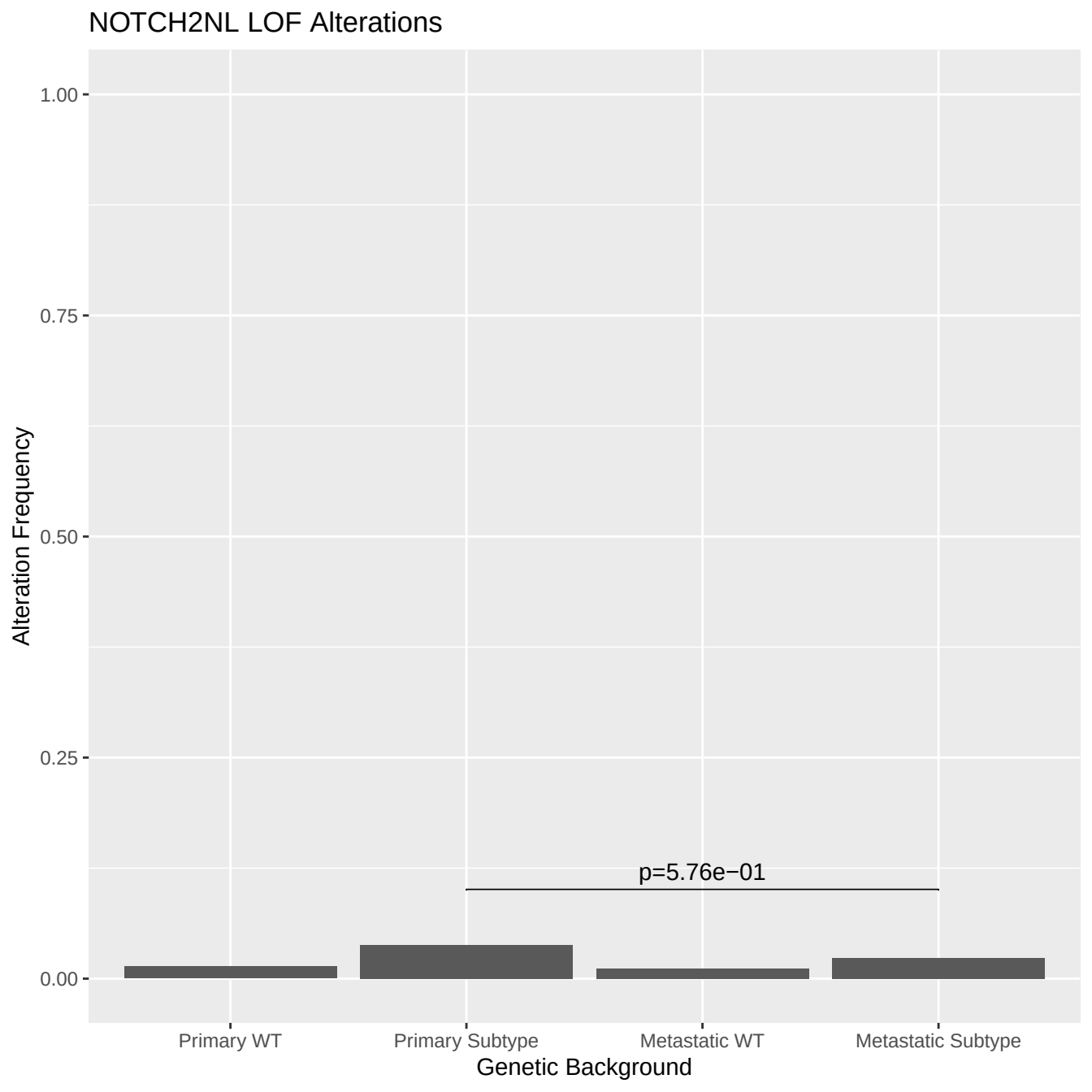

AMHR2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=4.83e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

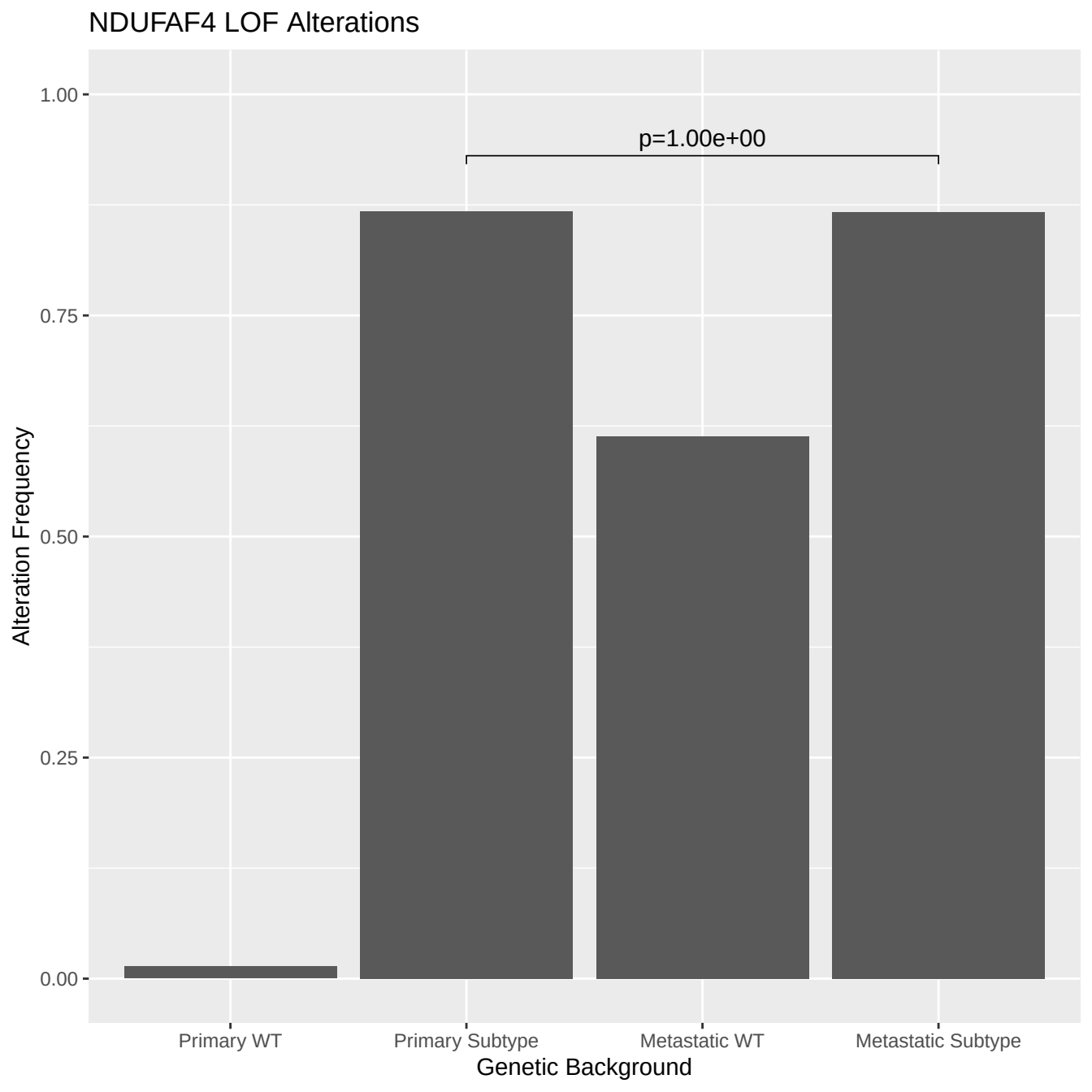

ASPG LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.51e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

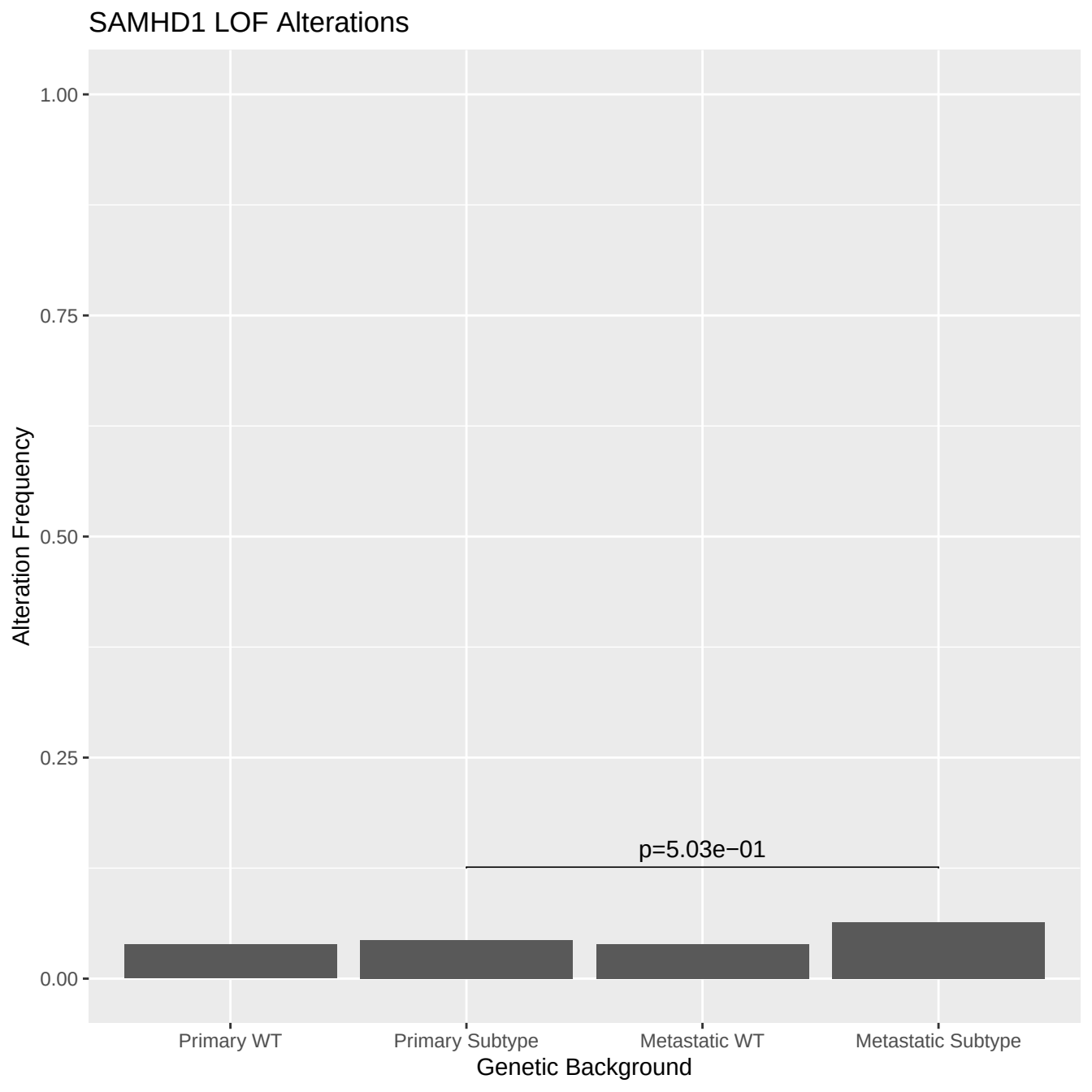

PHB LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

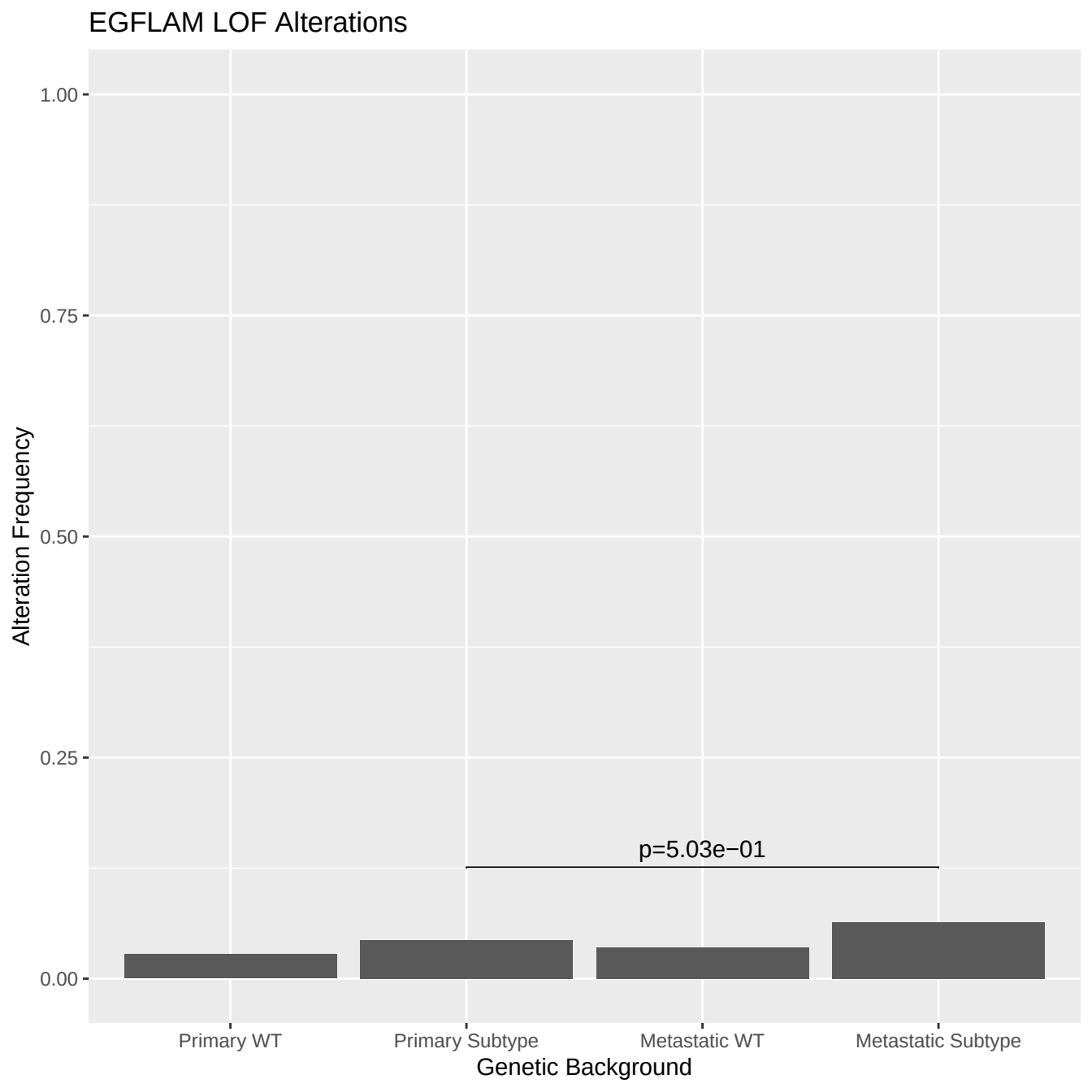

UBE2Z LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

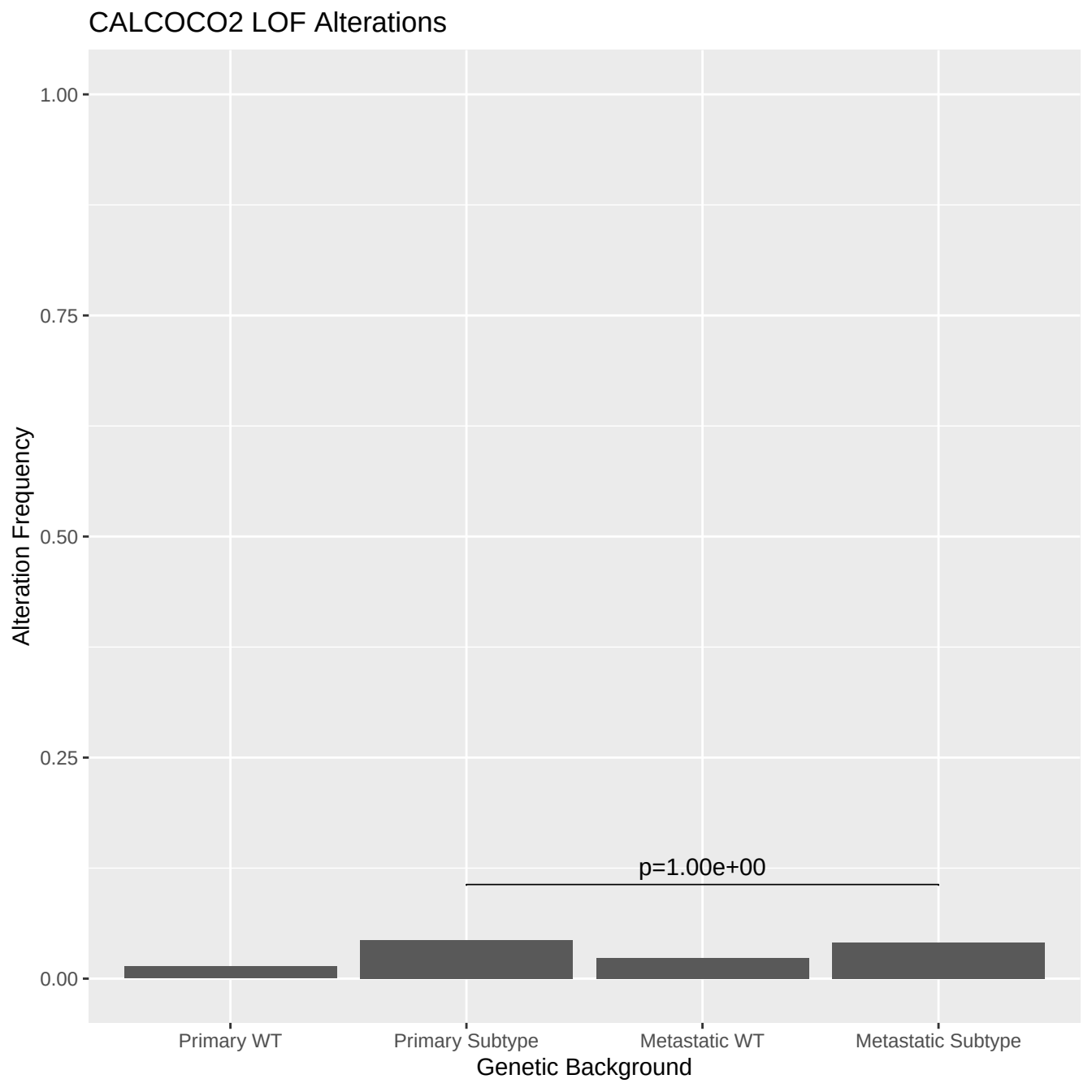

CCNL1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.95e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

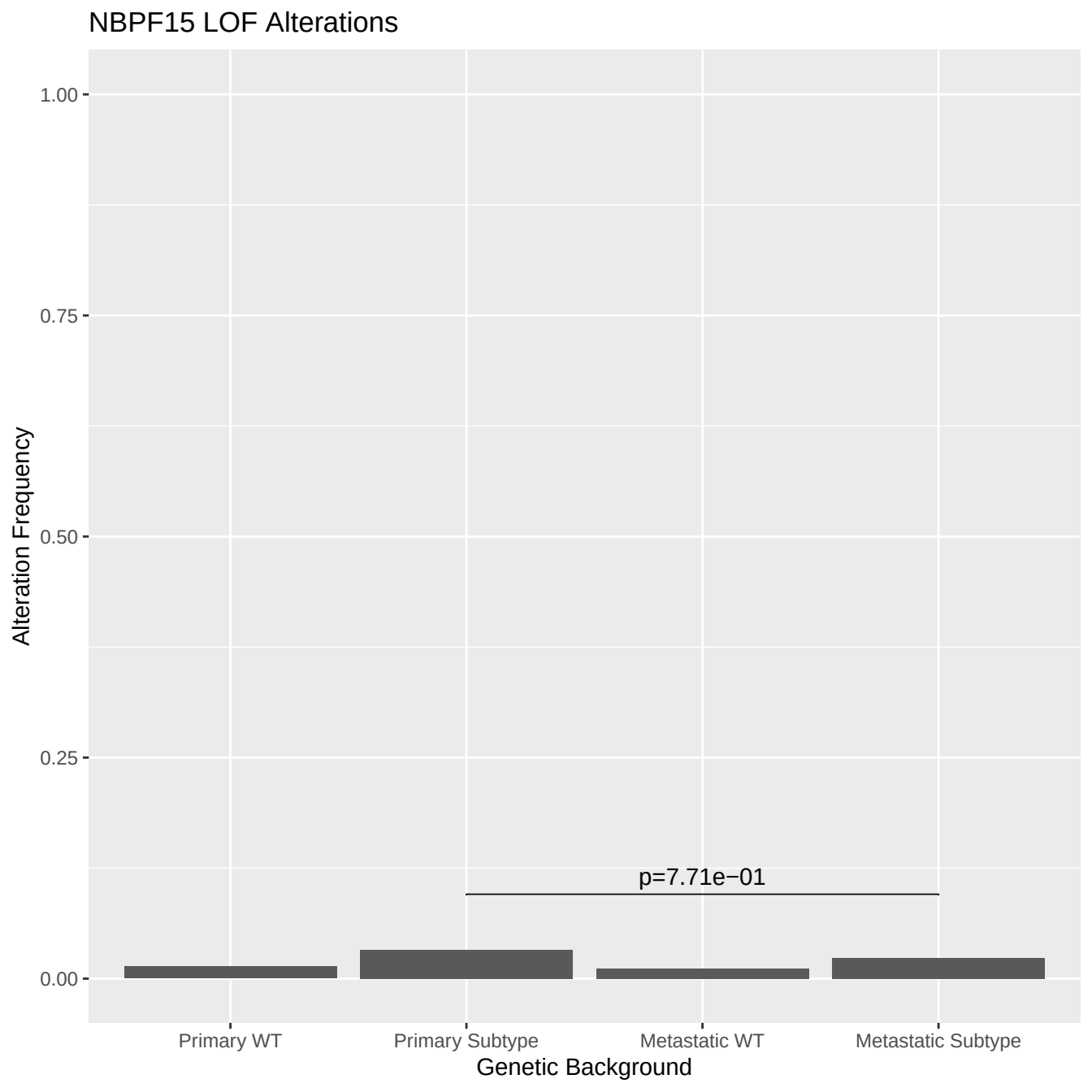

NOTCH2NL LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.76e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

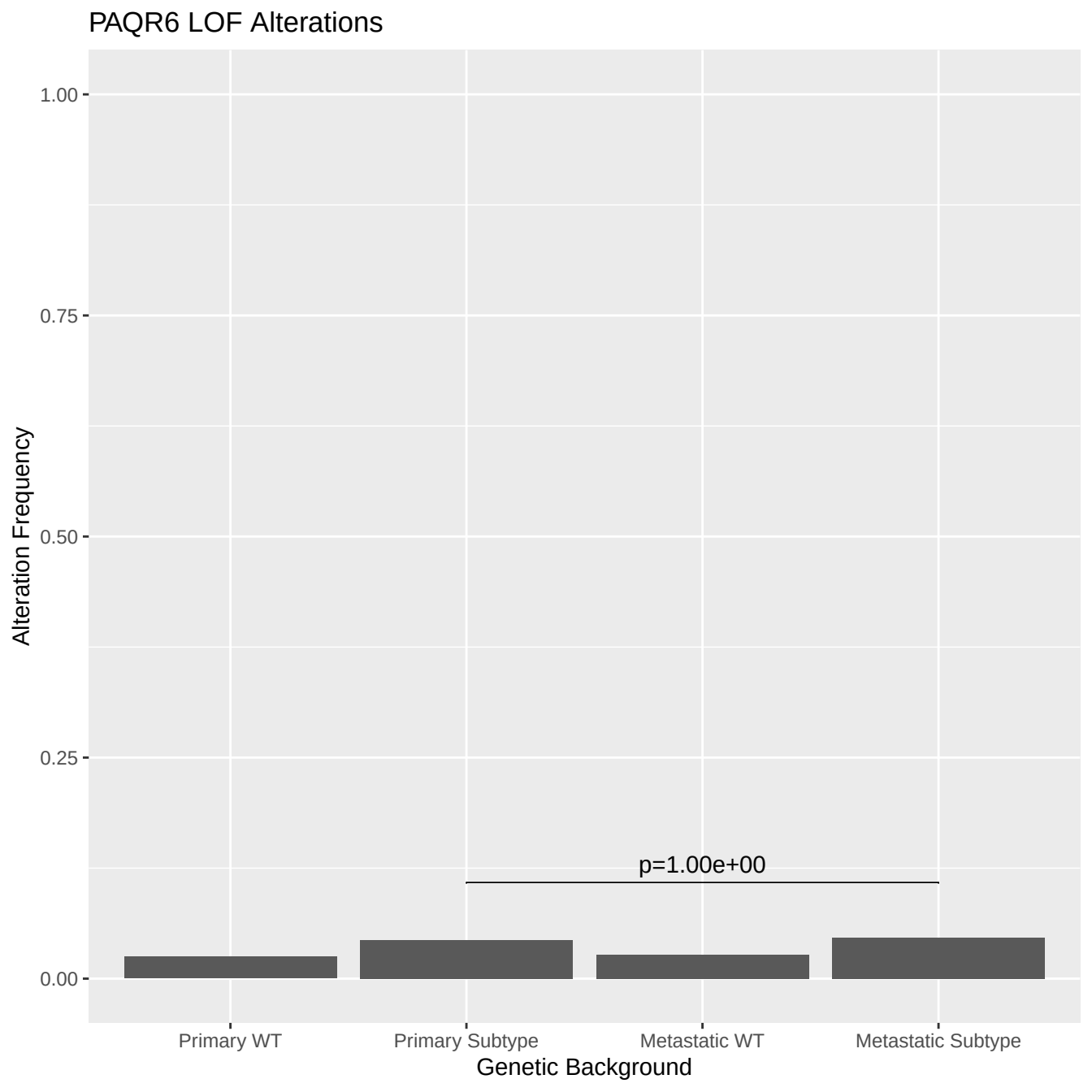

NDUFAF4 LOF Alterations
p=1.00e+00
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

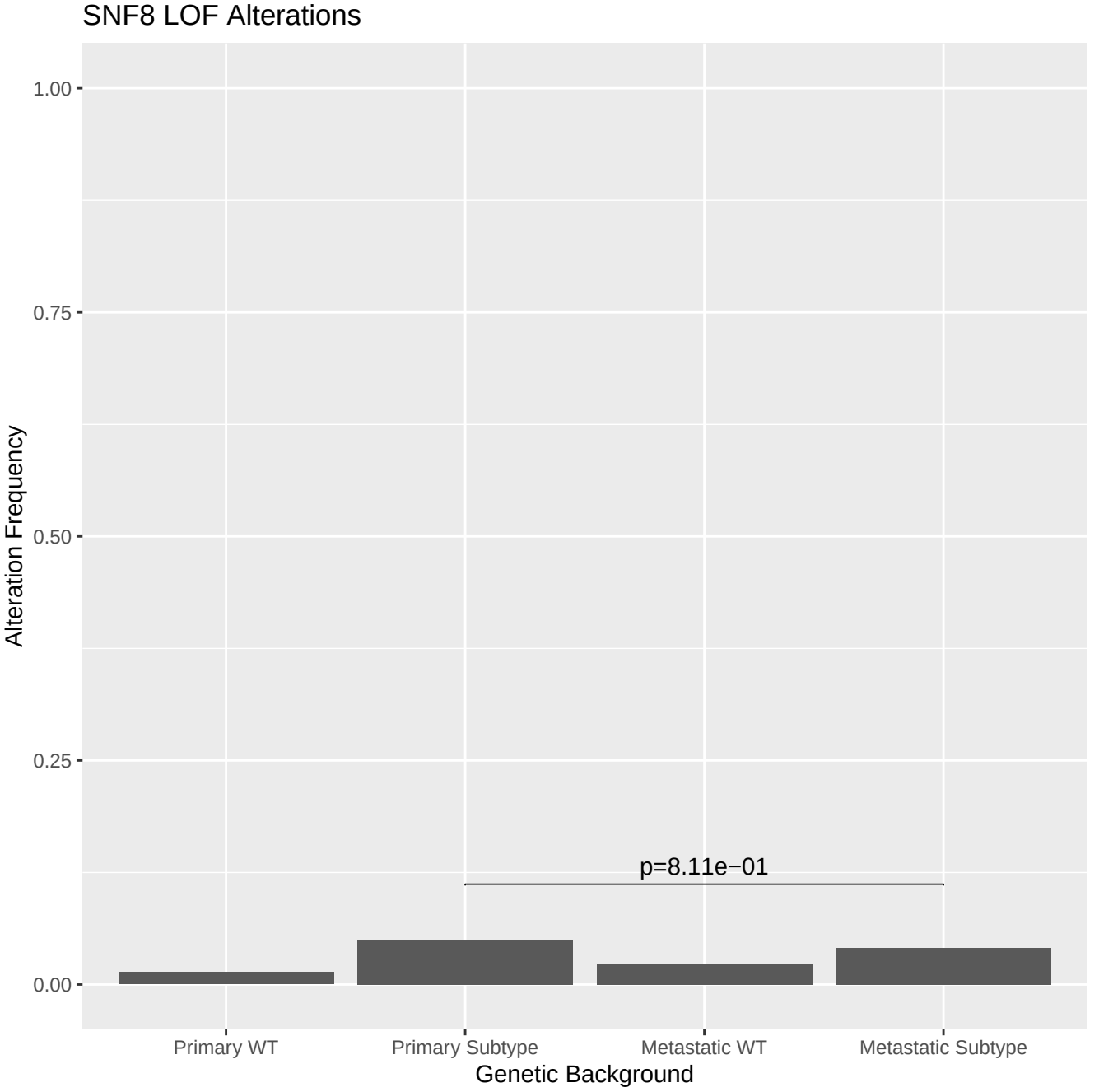

SAMHD1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

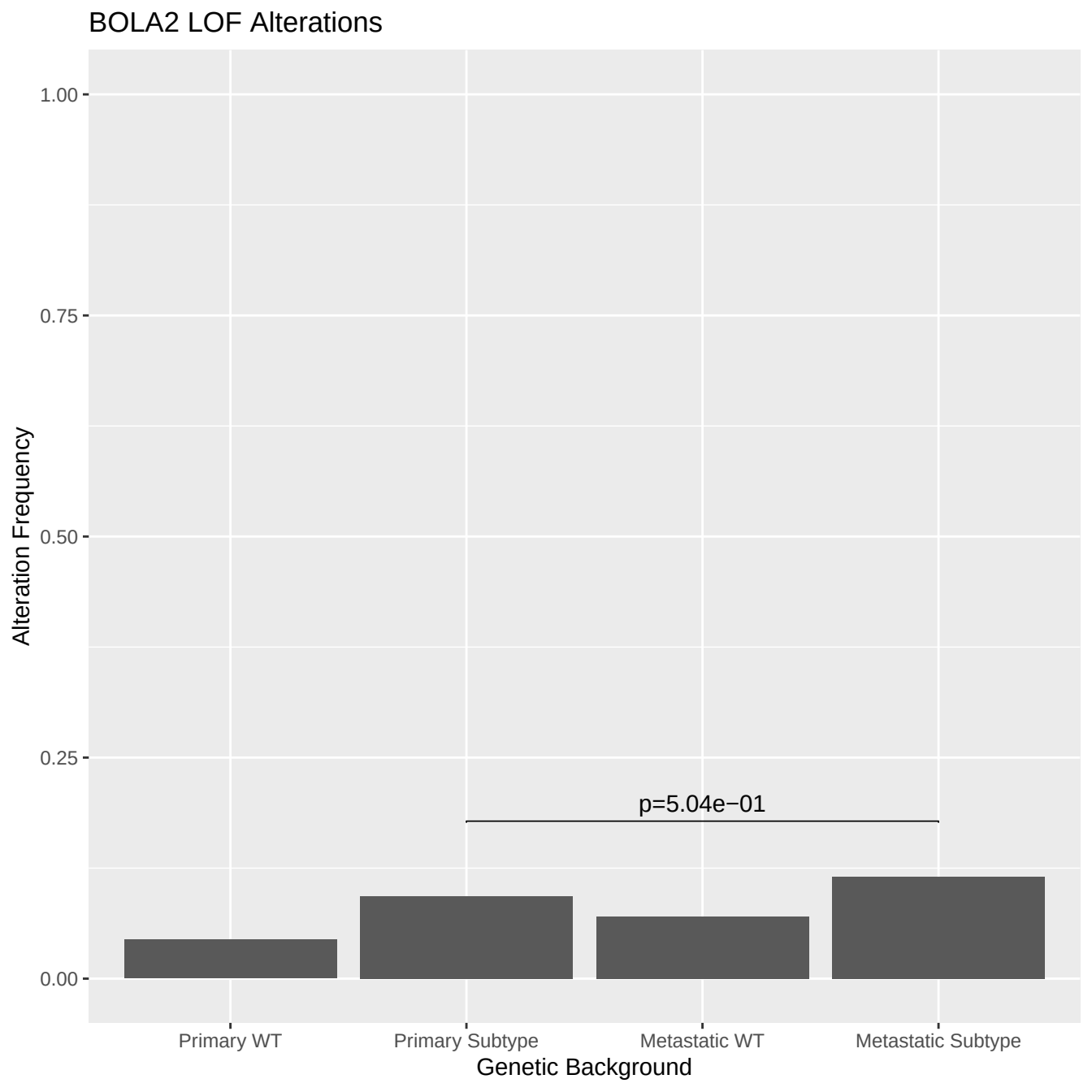

EGFLAM LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.03e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

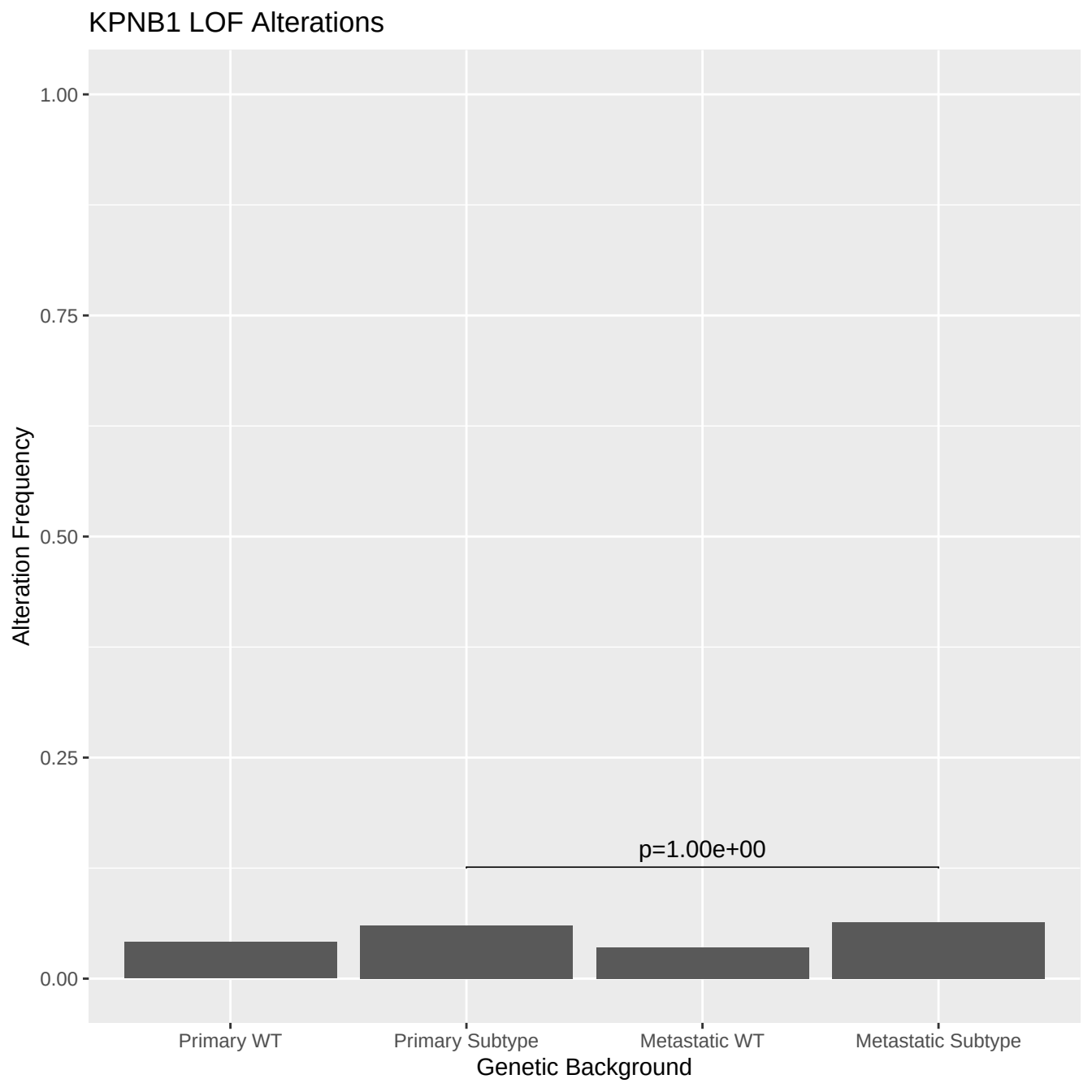

CALCOCO2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

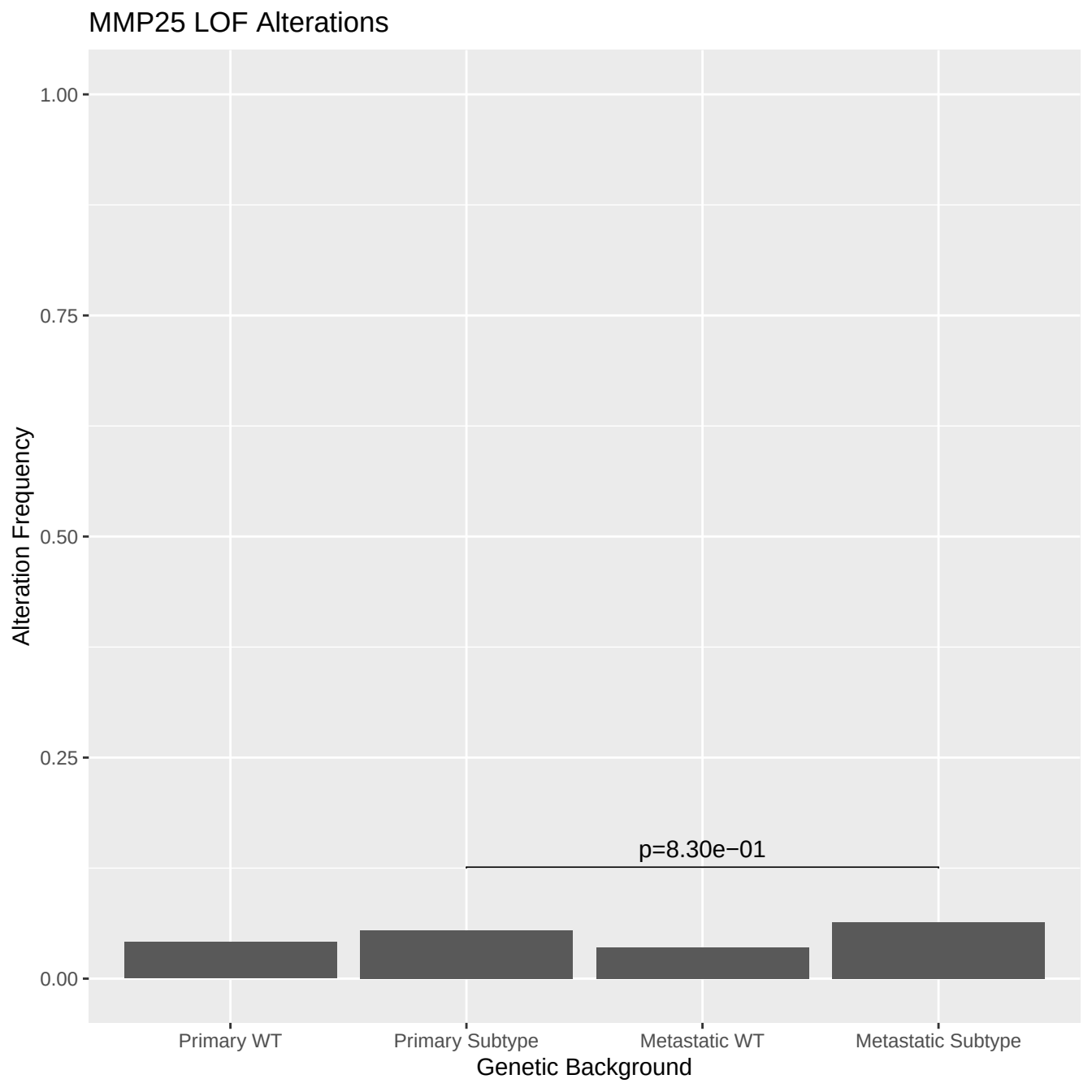

NBPF15 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

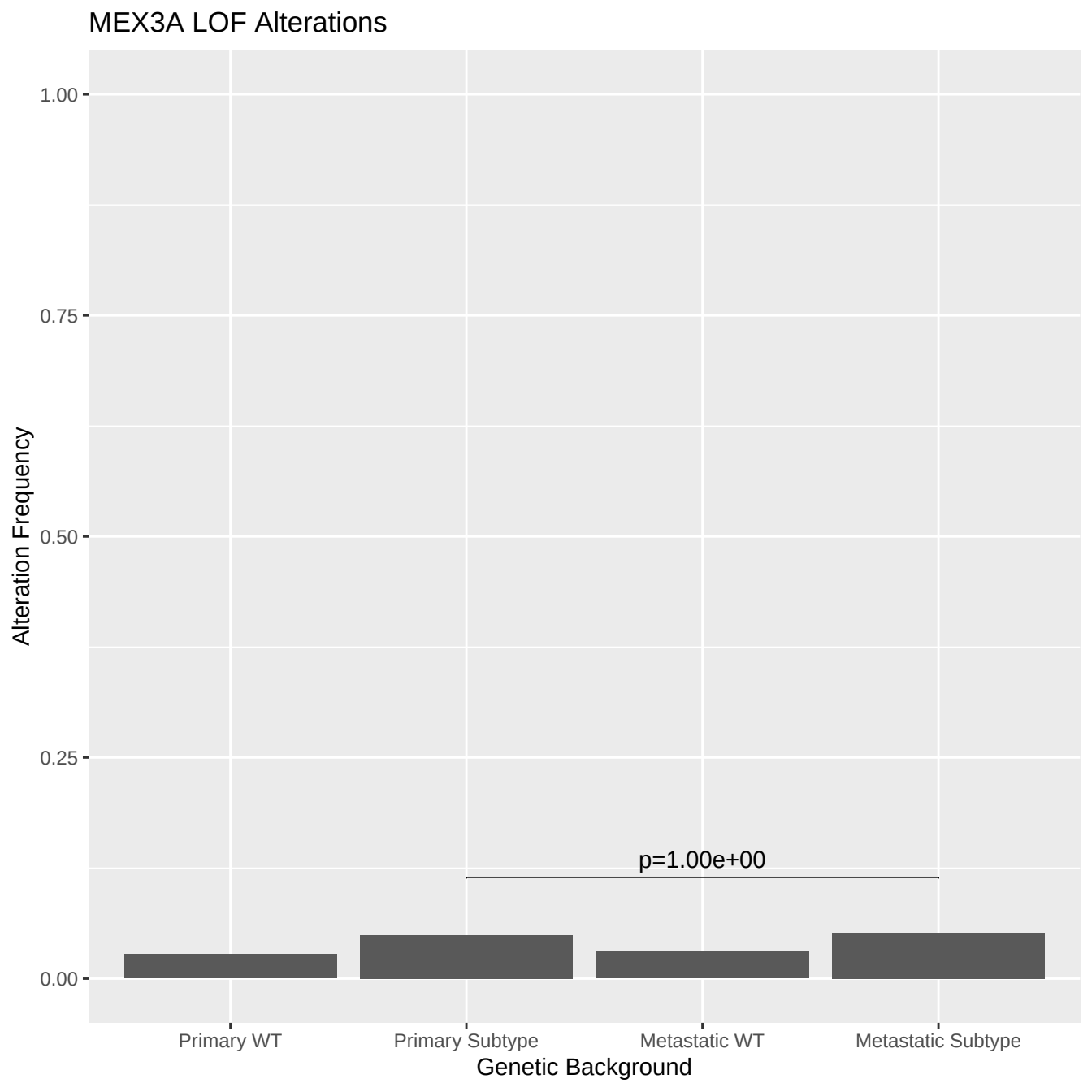

PAQR6 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

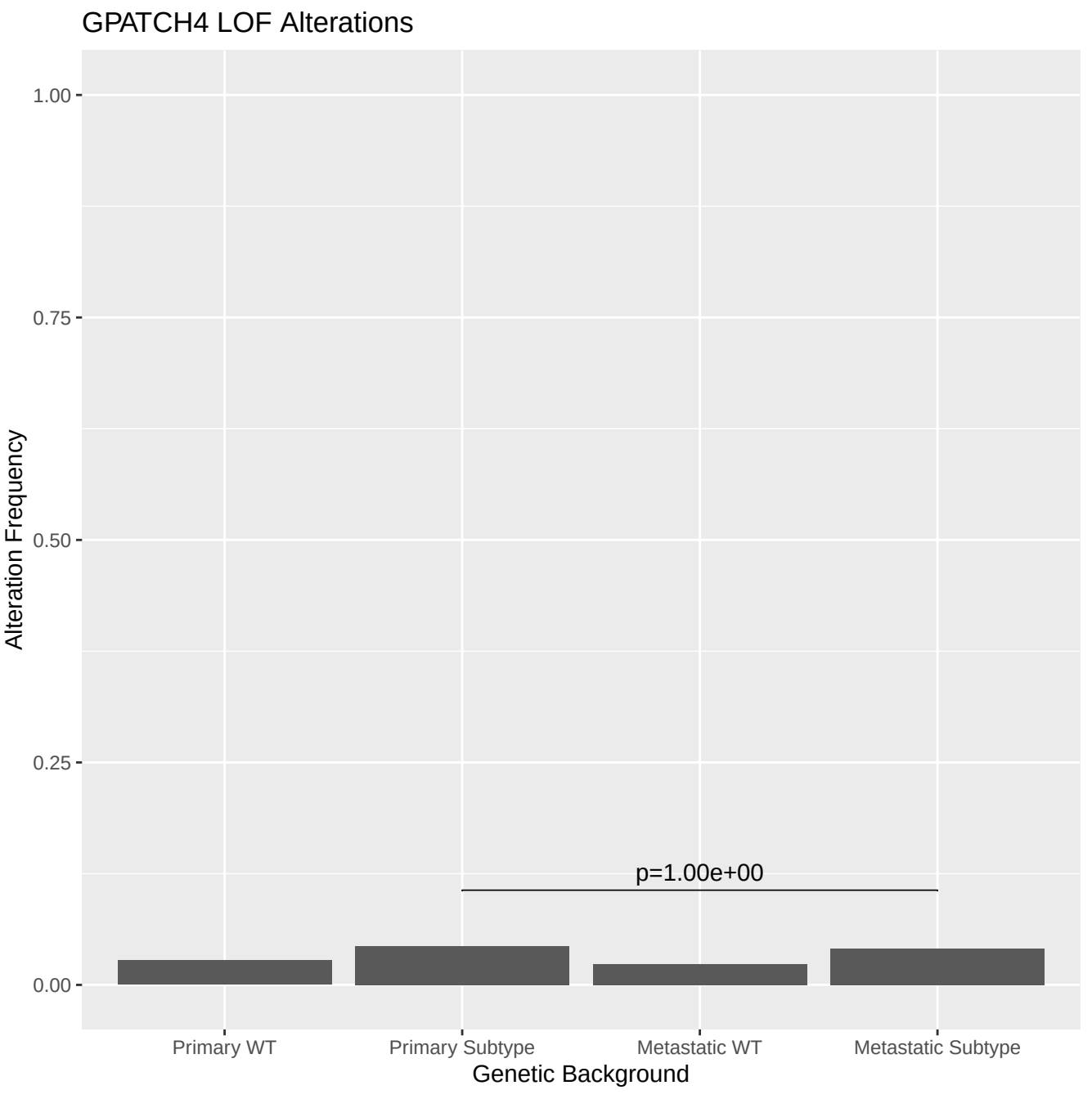

SNF8 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.11e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

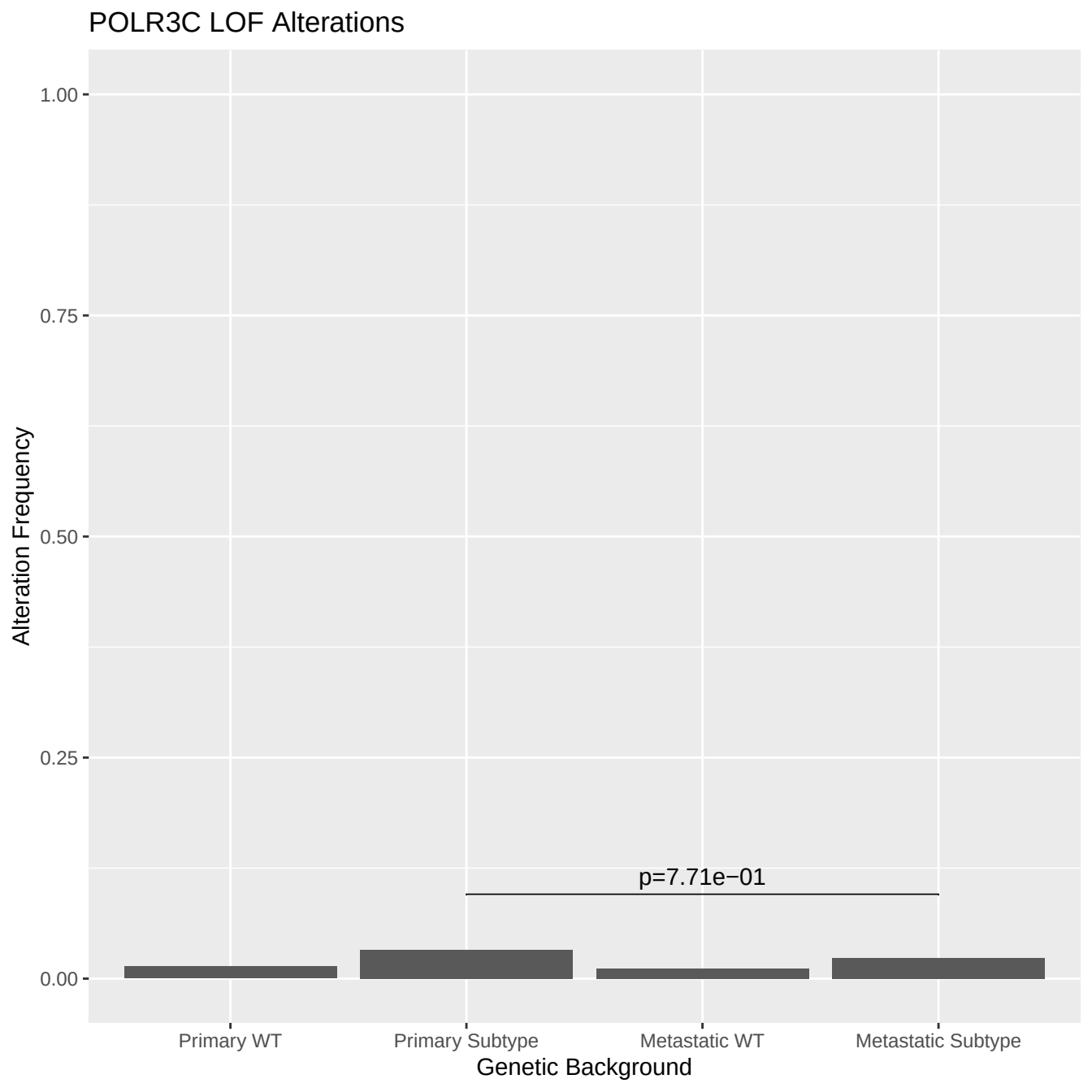

BOLA2 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=5.04e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

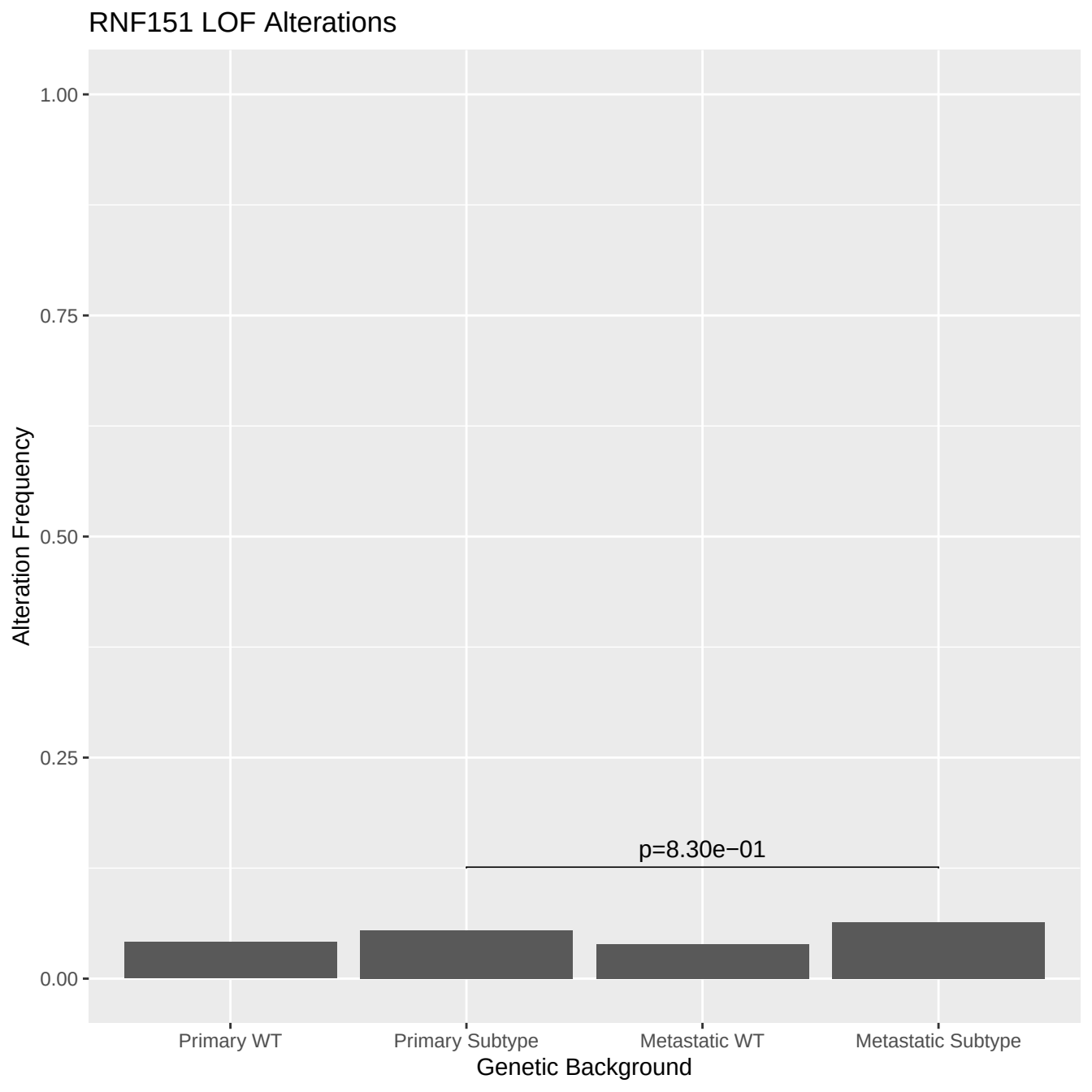

KPNB1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

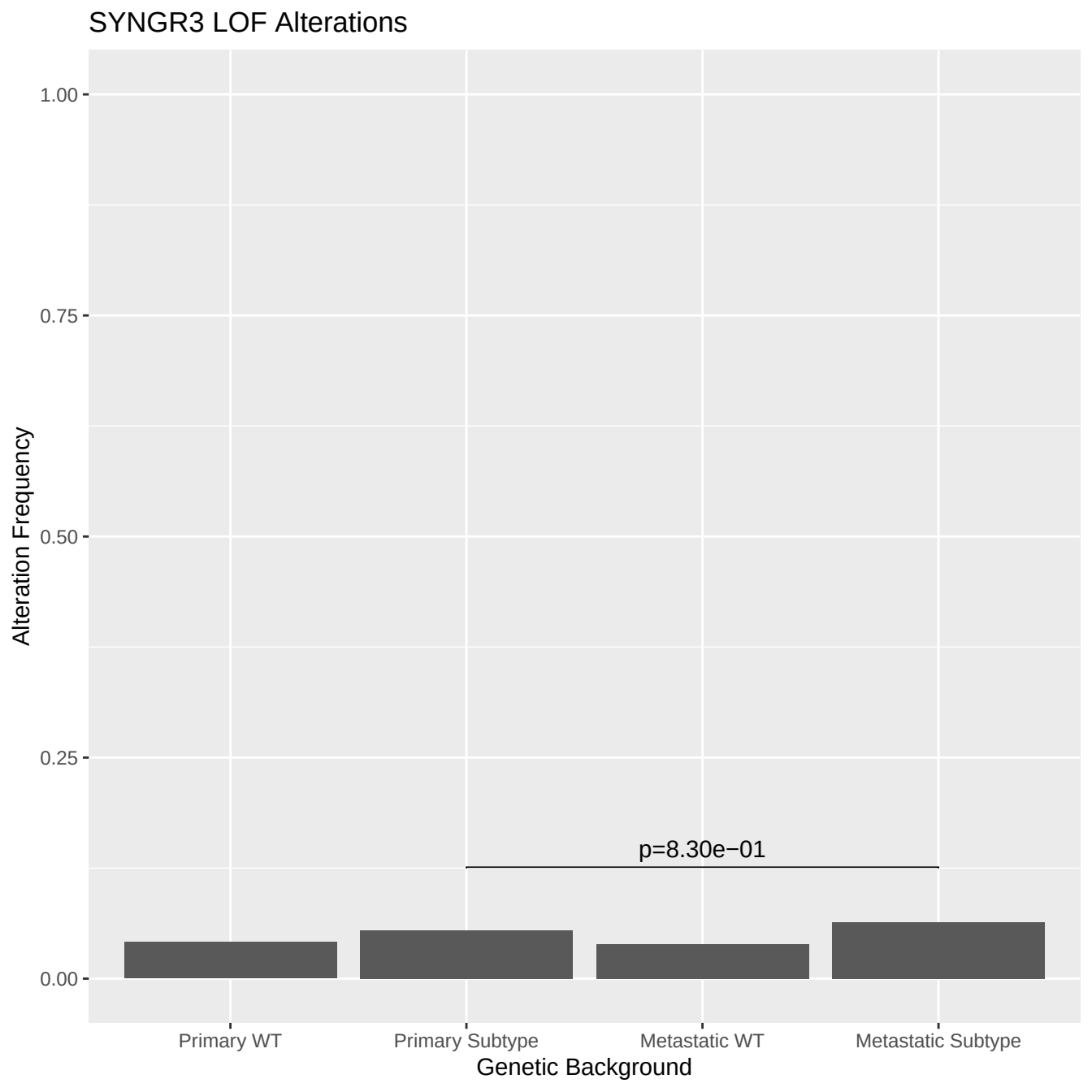

MMP25 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

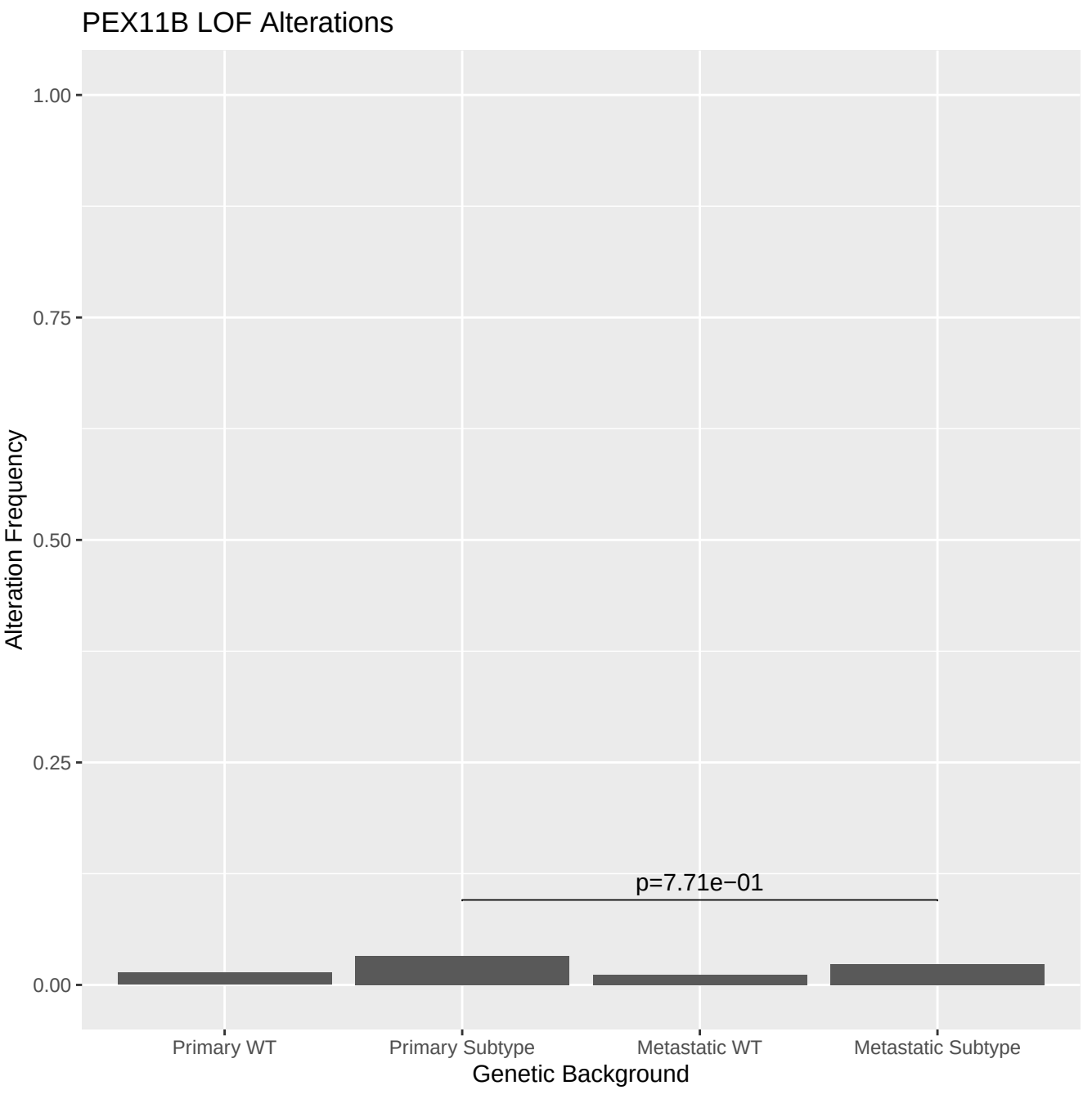

MEX3A LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

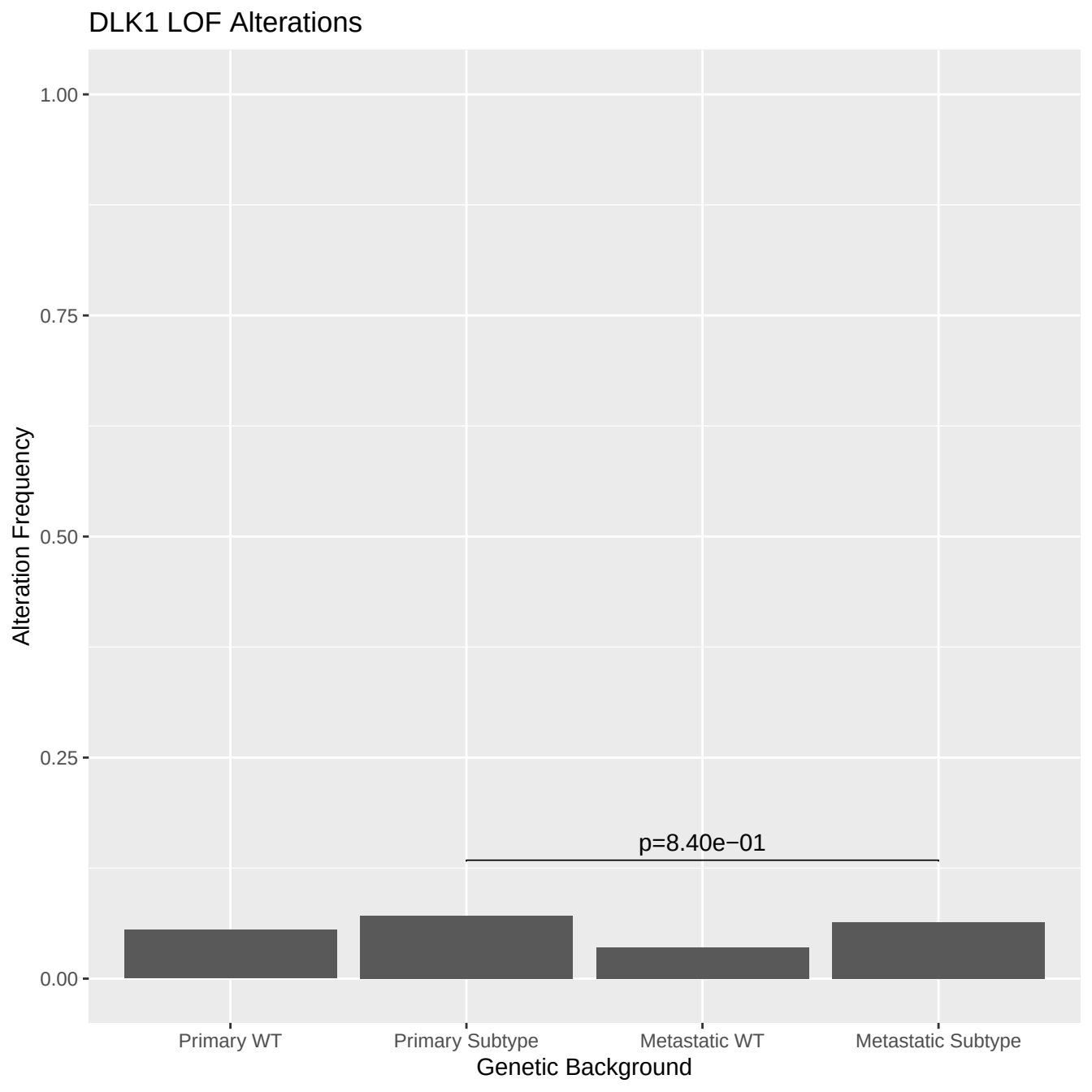

GPATCH4 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

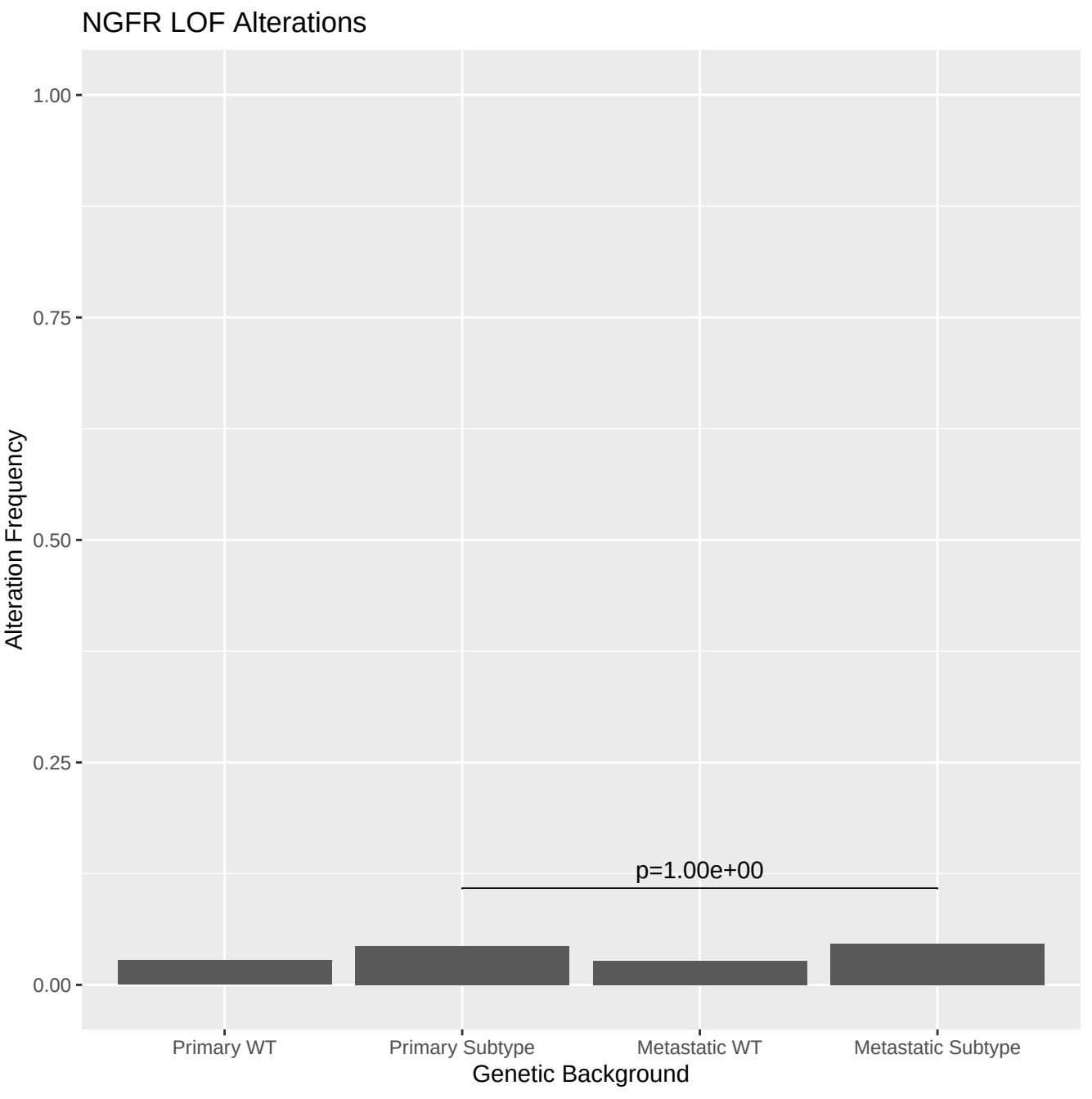

POLR3C LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background

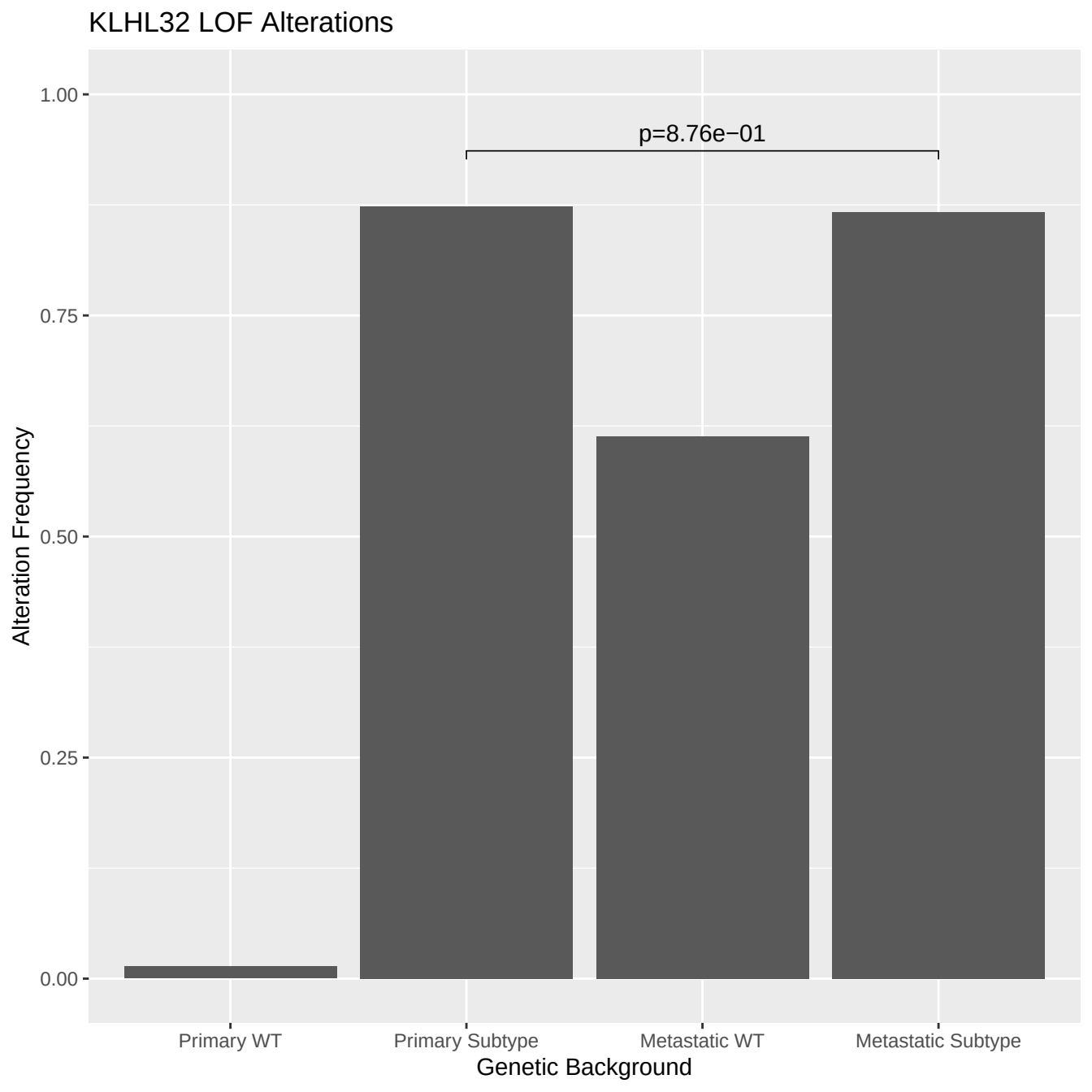

RNF151 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


SYNGR3 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.30e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


PEX11B LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=7.71e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


DLK1 LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=8.40e−01
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


NGFR LOF Alterations
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
p=1.00e+00
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background


KLHL32 LOF Alterations
p=8.76e−01
1.00
0.75
0.50
0.25
0.00
Alteration Frequency
Primary WT
Primary Subtype
Metastatic WT
Metastatic Subtype
Genetic Background