

ASXL3 (non-ER binding) ATM (non-ER binding) [<=60] p = 0.40667No detectable trend: [<=60] p = 0.5111No detectable trend: 16 16 [>60] p = 0.38385 [>60] p = 0.00047518 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.047805[All] p = 0.0694474 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis ATR (non-ER binding) **AXIN1 (ER binding)** [<=60] p = 0.61264No detectable trend: [<=60] p = 0.91077 No detectable trend: 16 16 [>60] p = 0.00045735 [>60] p = 0.015557 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.022647[AII] p = 0.000727984 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ∞ 9 9

30

40

50

60

Age at diagnosis

70

80

90

30

40

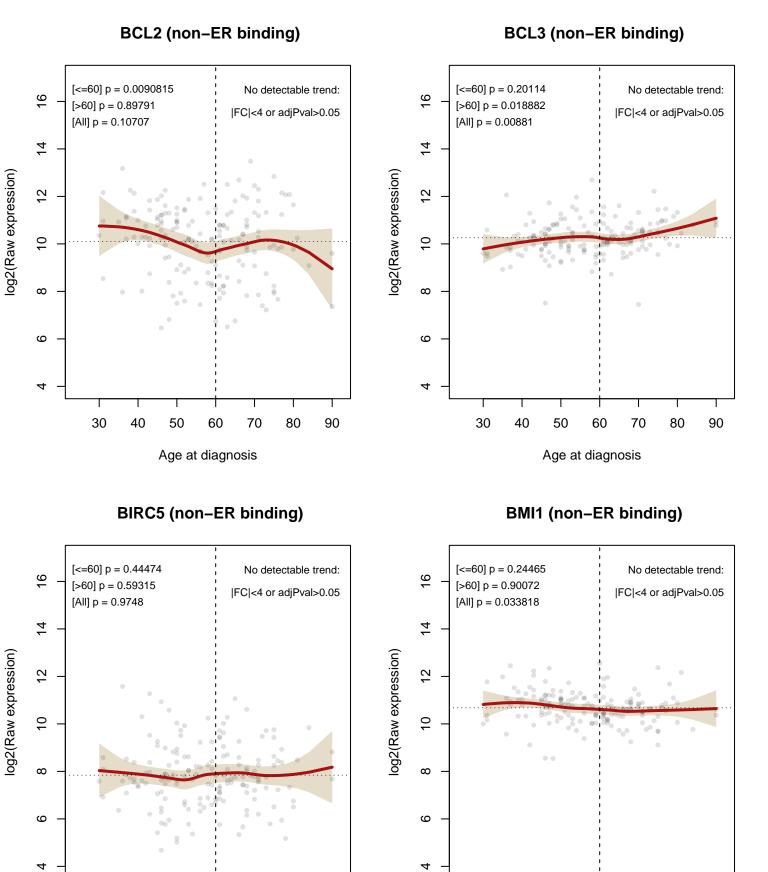
50

60

Age at diagnosis

70

80



Age at diagnosis

Age at diagnosis

BMX (non-ER binding) **BRCA1** (non-ER binding) [<=60] p = 0.97954No detectable trend: [<=60] p = 0.40367No detectable trend: 16 16 [>60] p = 0.3256 [>60] p = 0.23195 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.21115[All] p = 0.632764 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 9 9 30 40 50 70 80 90 30 40 50 60 70 80 90 60 Age at diagnosis Age at diagnosis CA9 (non-ER binding) **CBX1** (non-ER binding) [<=60] p = 0.03286No detectable trend: [<=60] p = 0.99786No detectable trend: 16 16 [>60] p = 0.37439 [>60] p = 0.0062245 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.091064[All] p = 0.317794 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞

9

30

40

50

60

Age at diagnosis

70

80

90

9

30

40

50

70

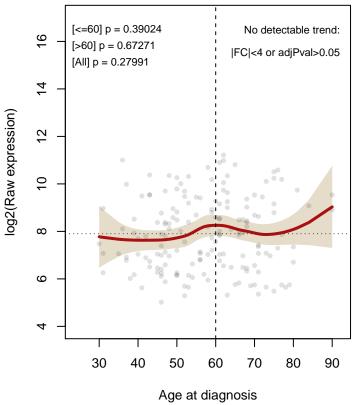
60

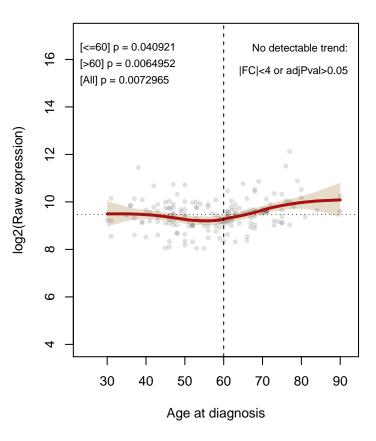
Age at diagnosis

80

CBX2 (non-ER binding)

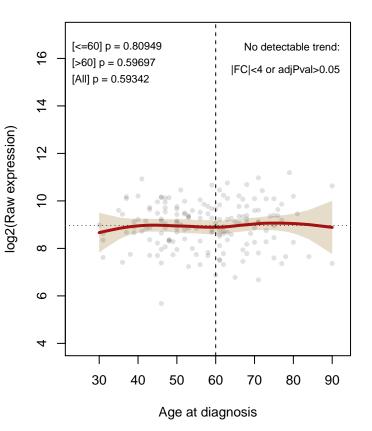
CBX4 (non-ER binding)

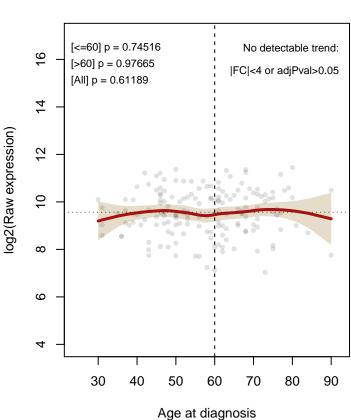


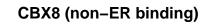


CBX6 (non-ER binding)

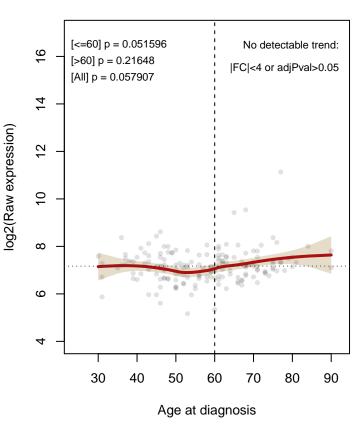
CBX7 (non-ER binding)

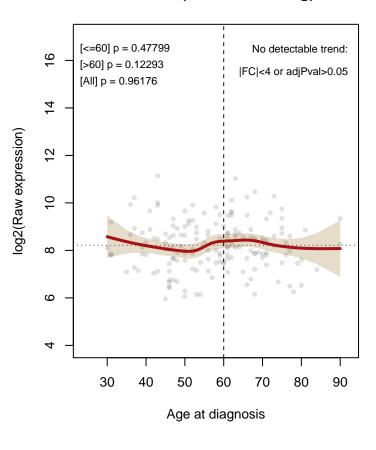






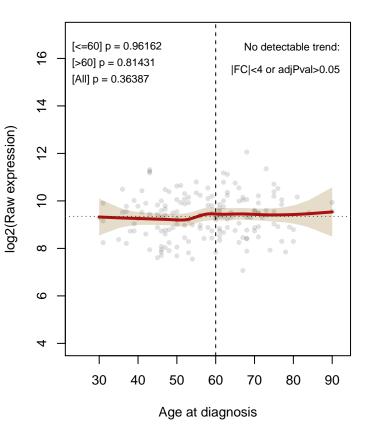
CCNA2 (non-ER binding)

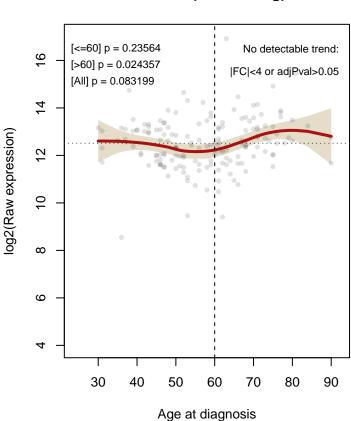




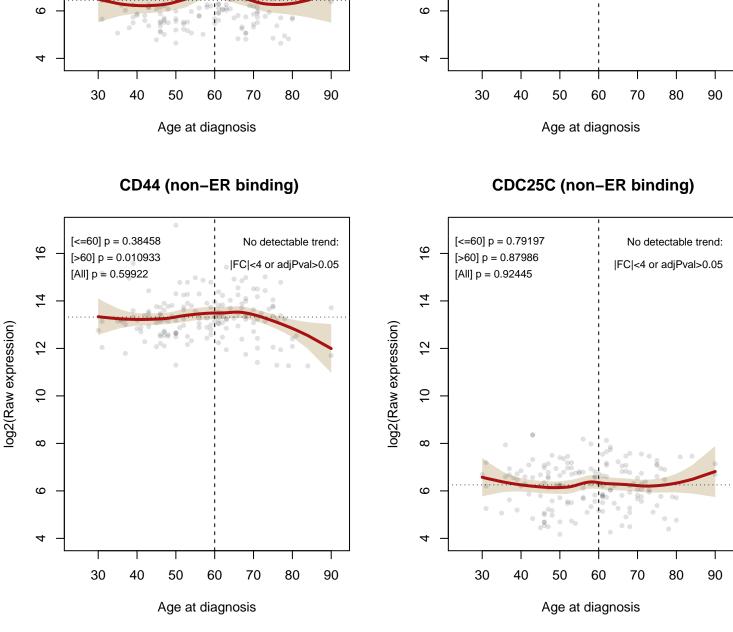
CCNB1 (non-ER binding)

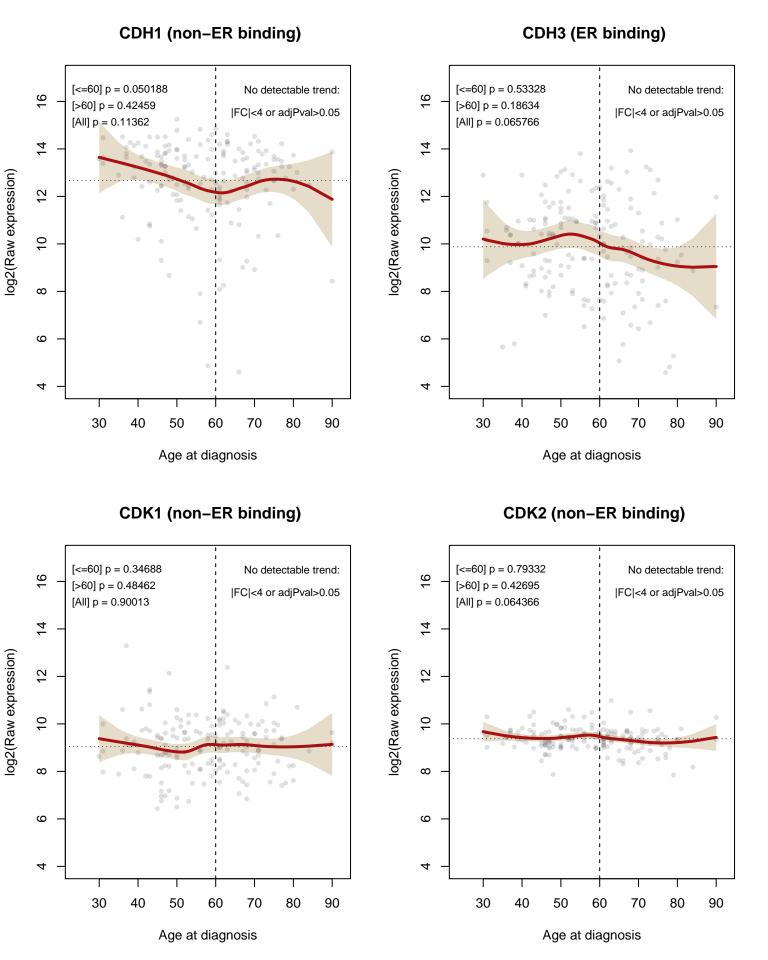
CCND1 (ER binding)

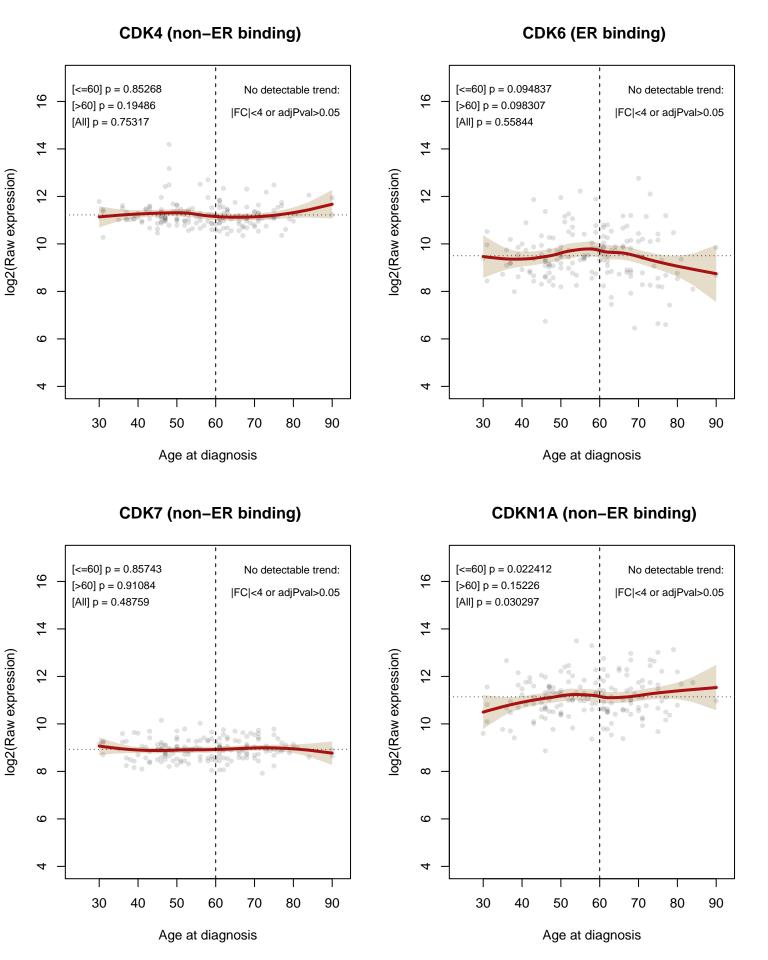




CCNE1 (non-ER binding) CD163 (non-ER binding) [<=60] p = 0.18184No detectable trend: [<=60] p = 0.008014No detectable trend: 16 16 [>60] p = 0.23031 [>60] p = 0.1543 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.17864[All] p = 0.683724 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 Age at diagnosis Age at diagnosis CD44 (non-ER binding) [<=60] p = 0.38458No detectable trend: [<=60] p = 0.79197

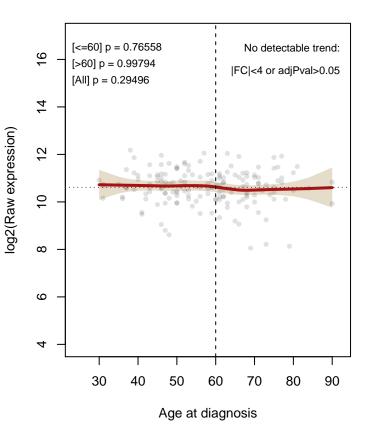


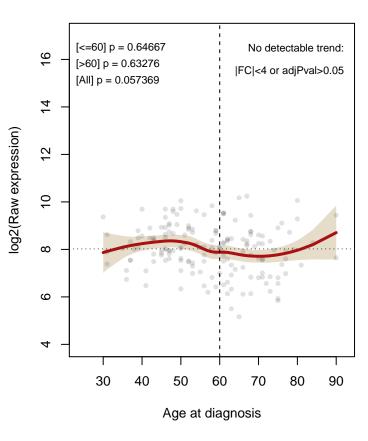




CDKN1B (non-ER binding)

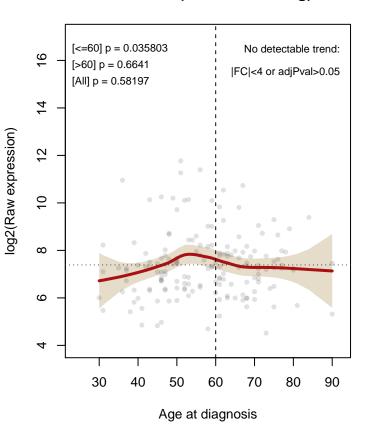
CDKN1C (non-ER binding)

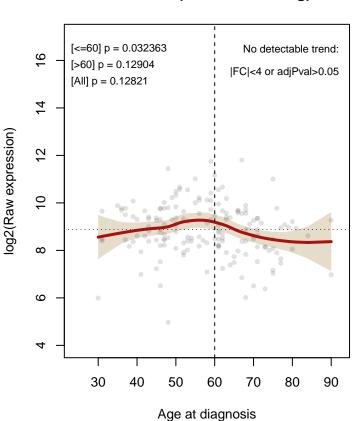




CDKN2A (non-ER binding)

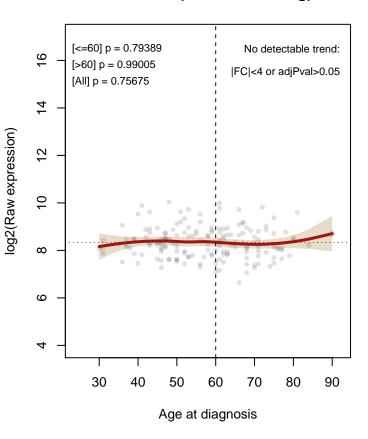
CDKN2B (non-ER binding)

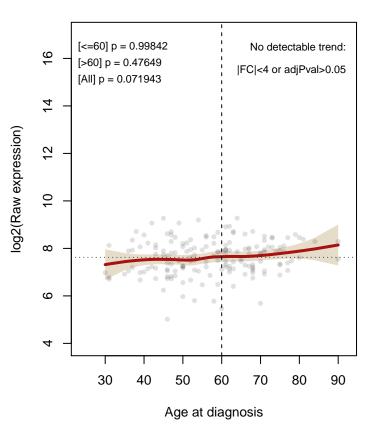




CDKN2C (non-ER binding)

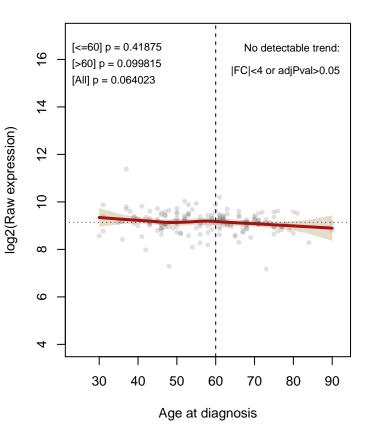
CDKN2D (non-ER binding)

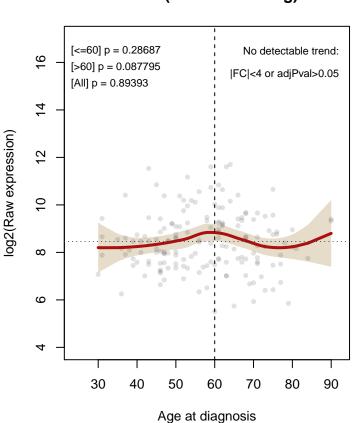




CHUK (non-ER binding)

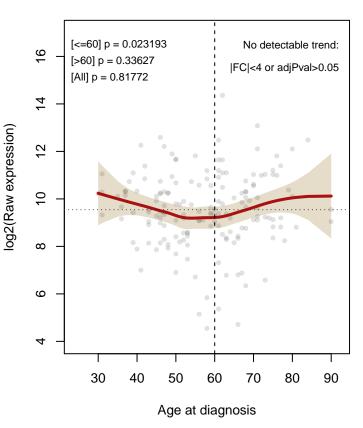
CIITA (non-ER binding)

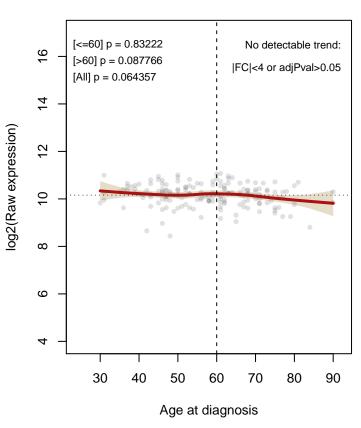




CLDN3 (non-ER binding)

CREB1 (non-ER binding)



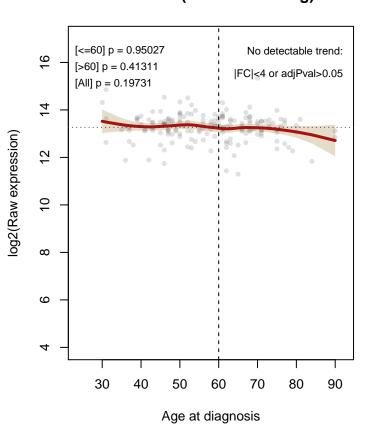


CRYAB (non-ER binding)

[<=60] p = 0.75311No detectable trend: 16 [>60] p = 0.33537 |FC|<4 or adjPval>0.05 [All] p = 0.743314 log2(Raw expression) 12 19 ω 9 30 40 50 70 80 90 60

Age at diagnosis

CTNNB1 (non-ER binding)



DLC1 (ER binding) DMAP1 (non-ER binding) [<=60] p = 0.14524No detectable trend: [<=60] p = 0.91061No detectable trend: 16 16 [>60] p = 0.32924 [>60] p = 0.14359 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.034483[All] p = 0.267024 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis **DNMT1** (non-ER binding) **DNMT3A (non-ER binding)** [<=60] p = 0.74174No detectable trend: [<=60] p = 0.76078No detectable trend: 16 16 [>60] p = 0.024103 [>60] p = 0.29604 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.54225[All] p = 0.162134 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

30

40

50

60

Age at diagnosis

70

80

90

30

40

50

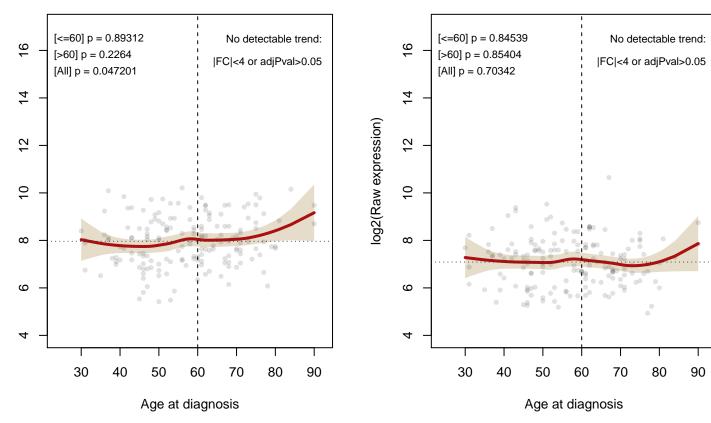
60

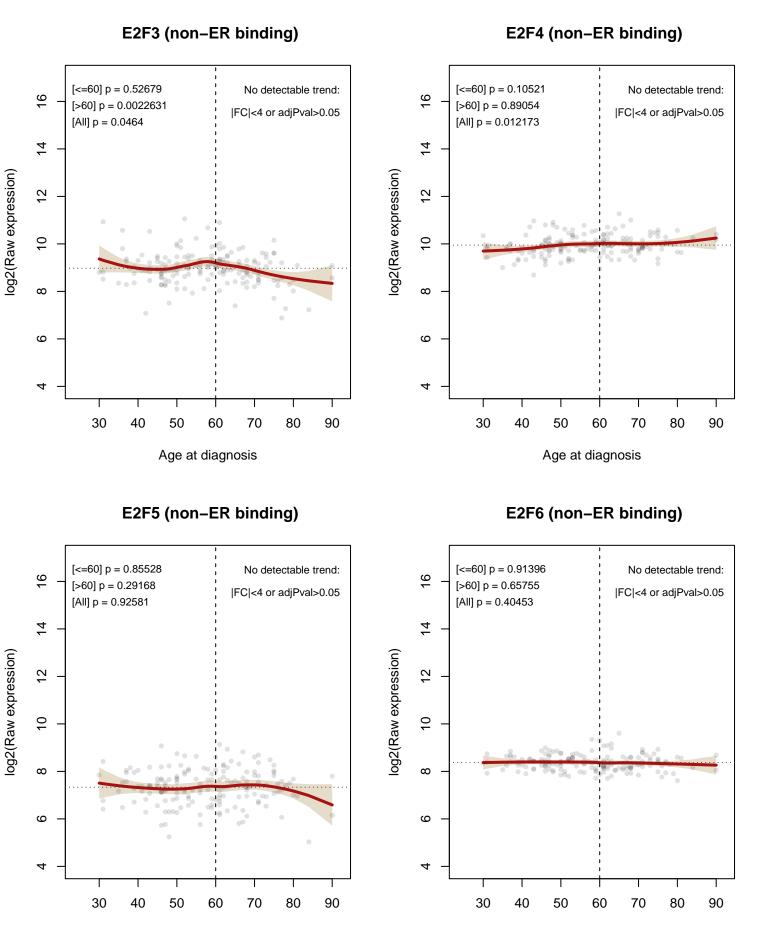
Age at diagnosis

70

80

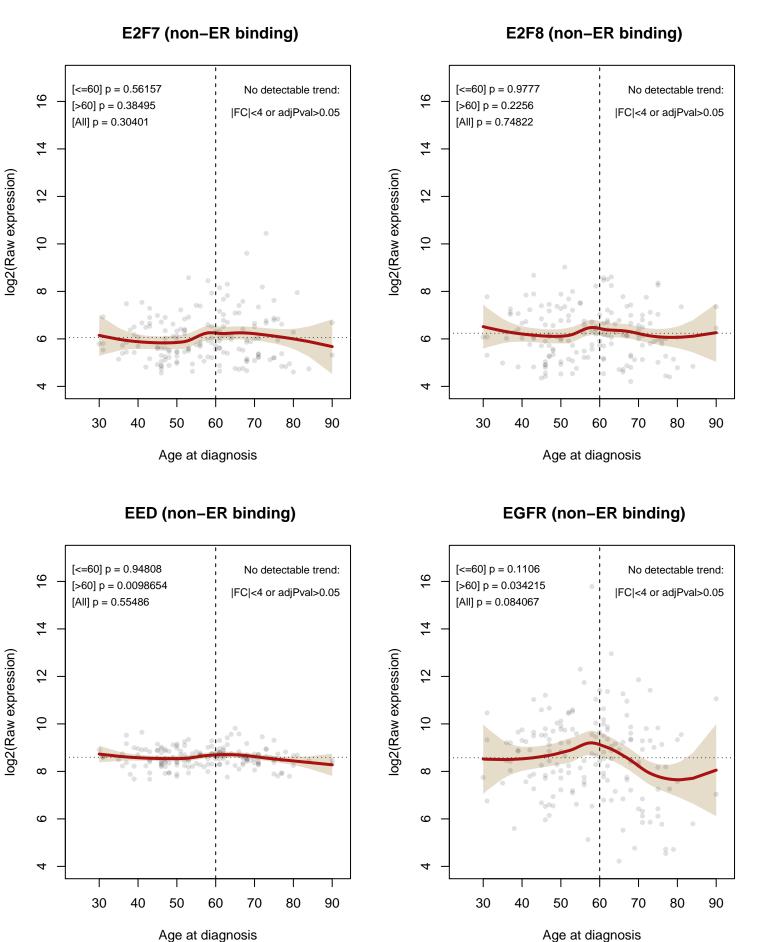
DVL1 (non-ER binding) DNMT3B (non-ER binding) [<=60] p = 0.99274No detectable trend: [<=60] p = 0.68028No detectable trend: 16 16 [>60] p = 0.58589 [>60] p = 0.0043341 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.50121[All] p = 0.0091494 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 Age at diagnosis Age at diagnosis E2F1 (non-ER binding) E2F2 (non-ER binding) [<=60] p = 0.89312No detectable trend: [<=60] p = 0.8453916 16 [>60] p = 0.85404[>60] p = 0.2264 |FC|<4 or adjPval>0.05 [AII] p = 0.047201[AII] p = 0.703424 4 log2(Raw expression) 12 12

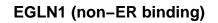




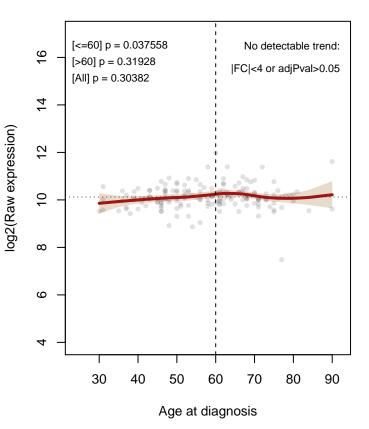
Age at diagnosis

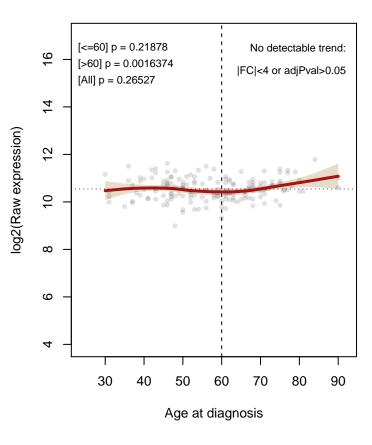
Age at diagnosis





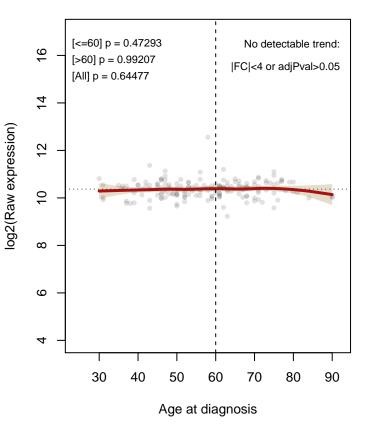
EHMT2 (non-ER binding)

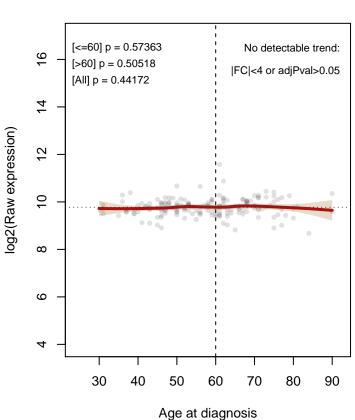




ELAC2 (non-ER binding)

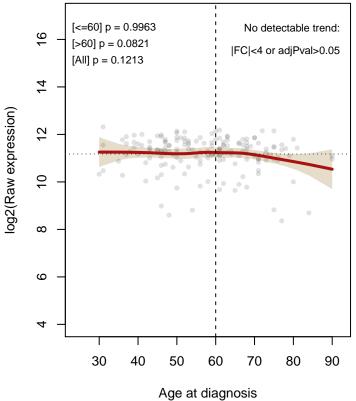
ELK1 (non-ER binding)

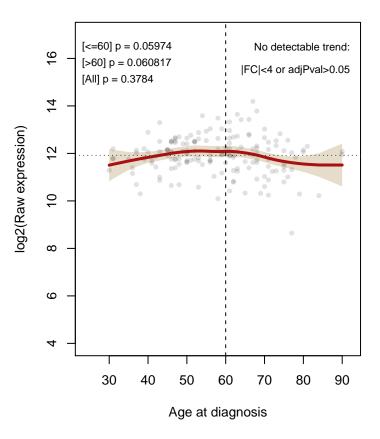




EP300 (non–ER binding) [<=60] p = 0.9963 No detectable

EPAS1 (non-ER binding)



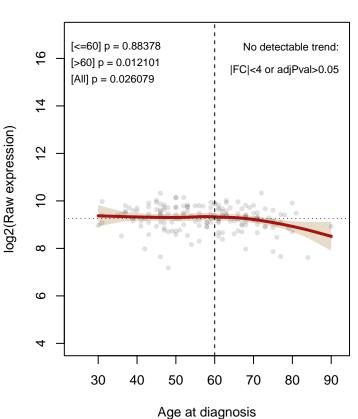


EPC1 (non-ER binding)

[<=60] p = 0.91452 No detectable trend: 16 [>60] p = 0.024518 |FC|<4 or adjPval>0.05 [AII] p = 0.01674 log2(Raw expression) 12 19 ∞ 9 30 40 50 60 70 80 90

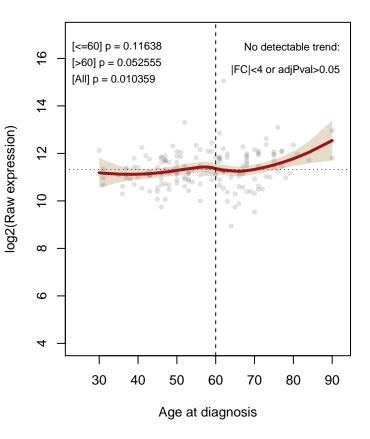
Age at diagnosis

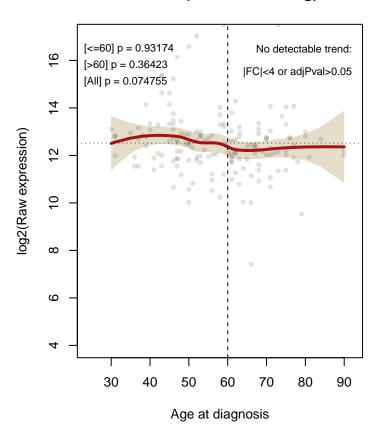
EPC2 (non-ER binding)





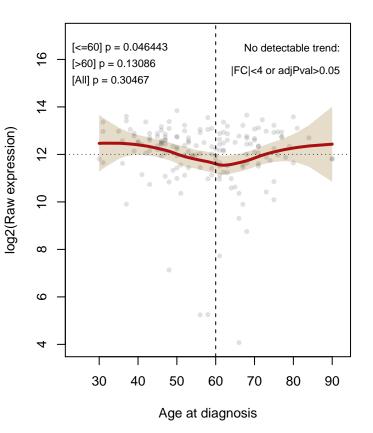
ERBB2 (non-ER binding)

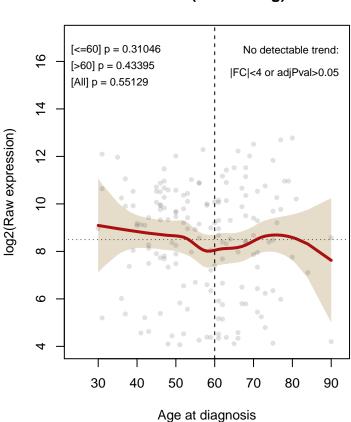


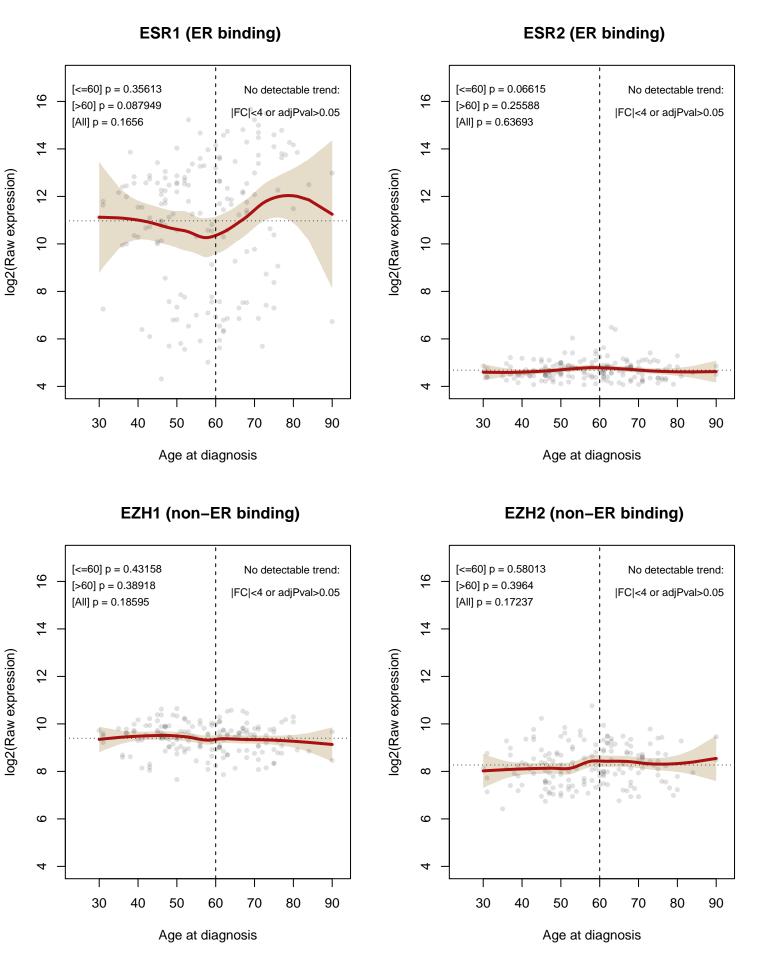


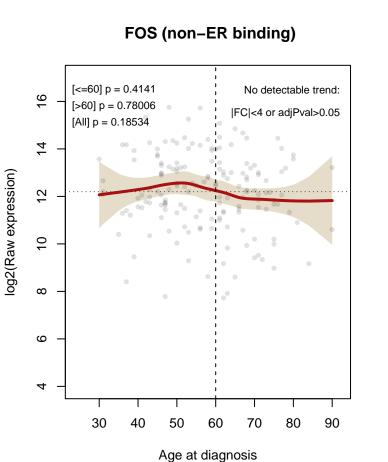
ERBB3 (non-ER binding)

ERBB4 (ER binding)

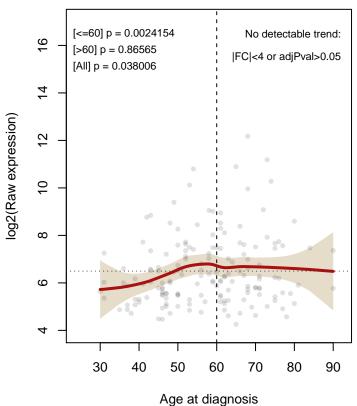




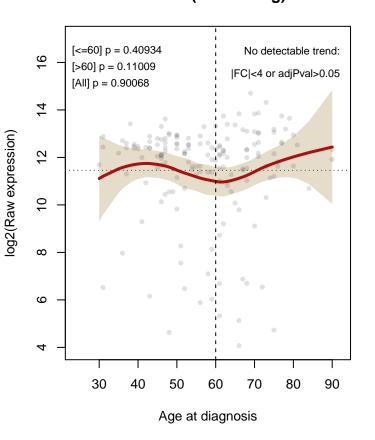




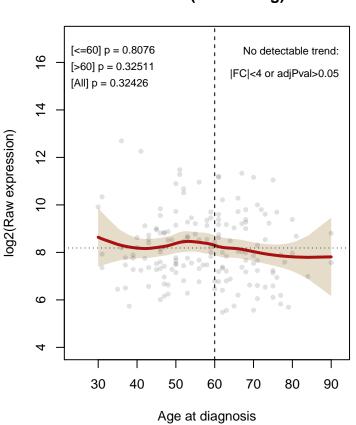
FOSL1 (non-ER binding)

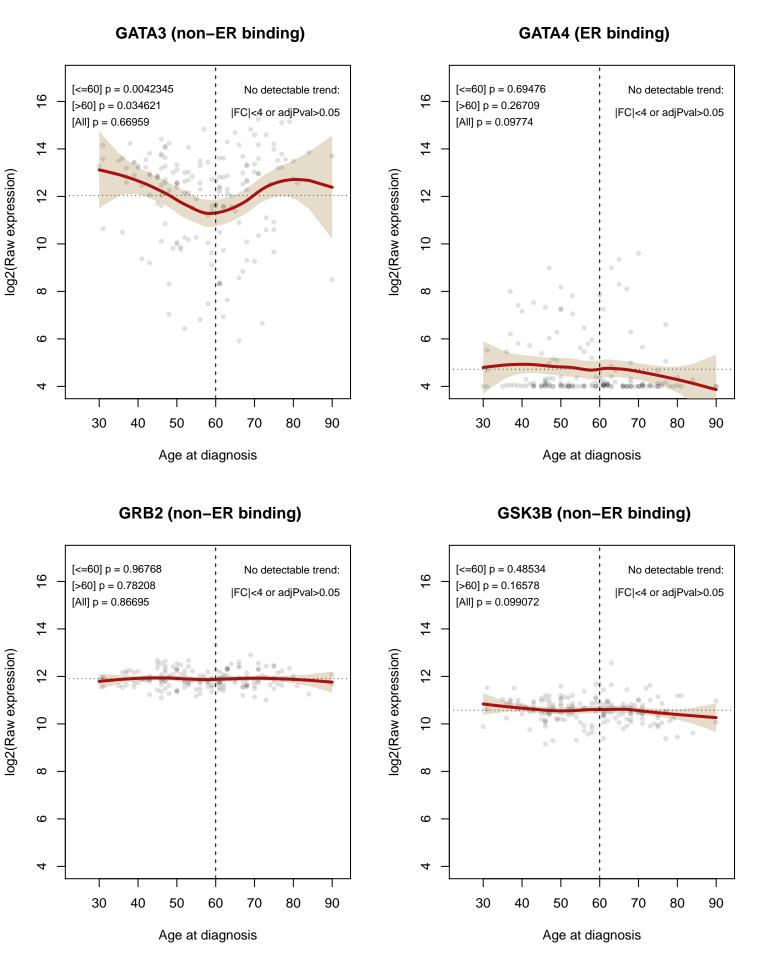


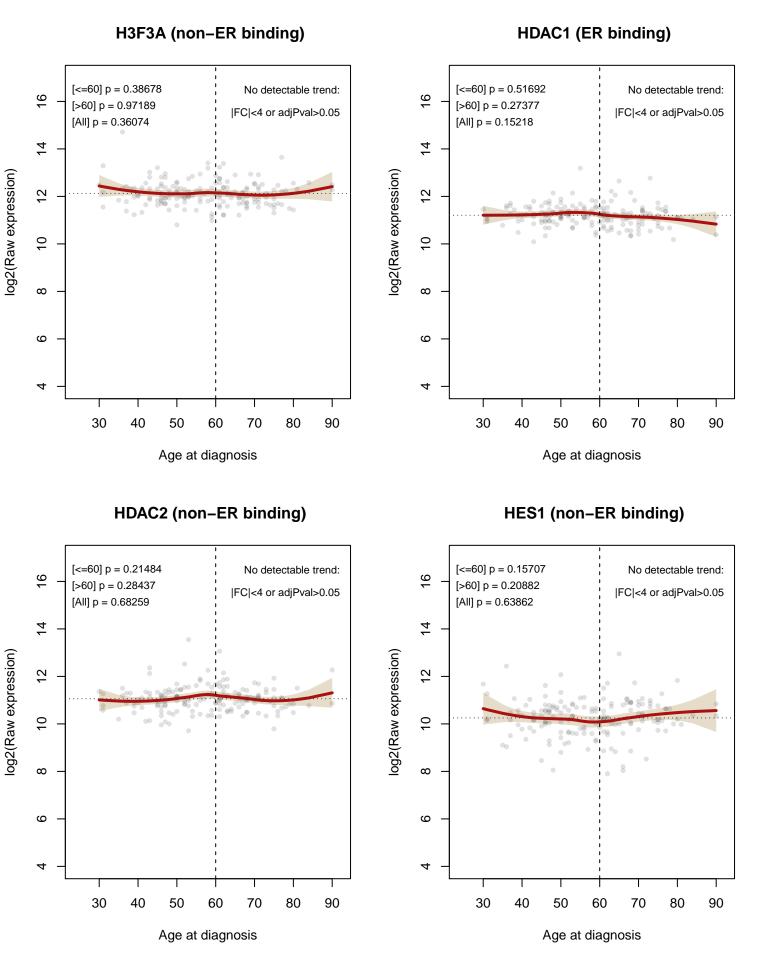
FOXA1 (ER binding)



FOXC1 (ER binding)

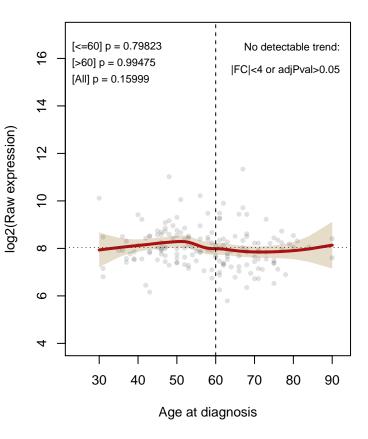


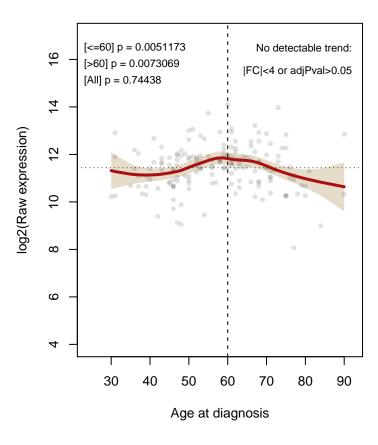






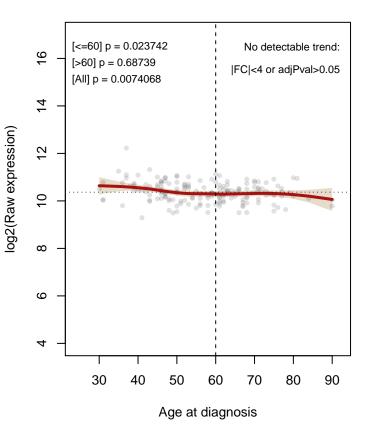
HIF1A (non-ER binding)

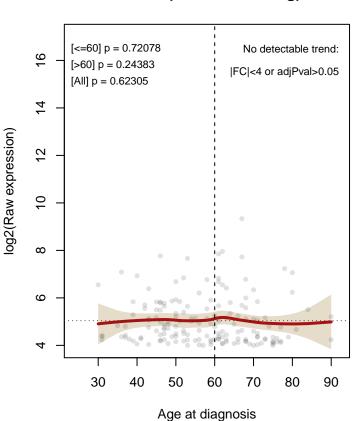




HIF1AN (non-ER binding)

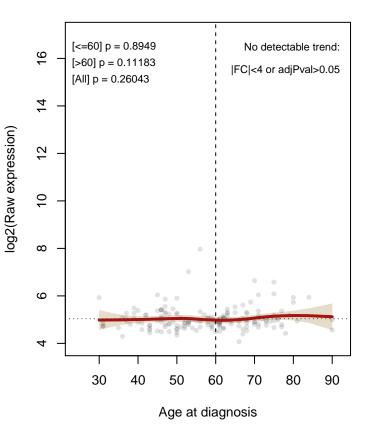
HIF3A (non-ER binding)

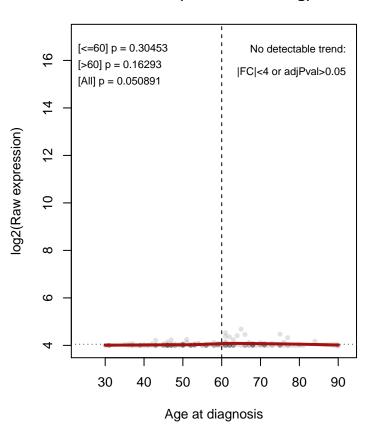






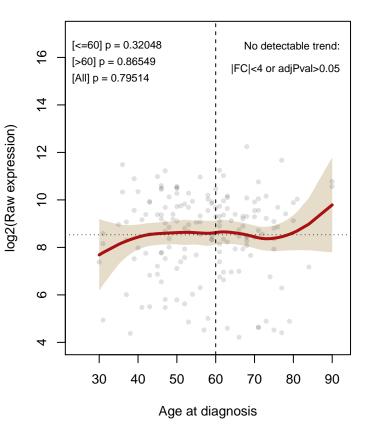
HNF1B (non-ER binding)

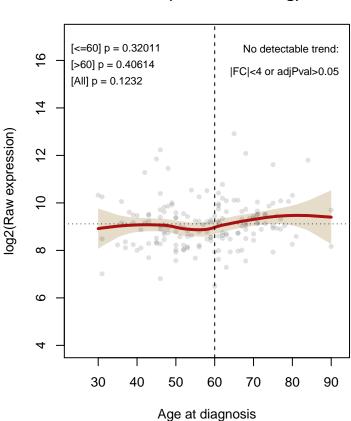




HOXC10 (non-ER binding)

HRAS (non-ER binding)





HSPB1 (non-ER binding) IGF1R (ER binding) [<=60] p = 0.70579No detectable trend: [<=60] p = 0.5004No detectable trend: 16 16 [>60] p = 0.024216 [>60] p = 0.48609|FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.022096[All] p = 0.108574 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis IGFBP2 (non-ER binding) **IKBKB (ER binding)** [<=60] p = 0.093984No detectable trend: [<=60] p = 0.2389No detectable trend: 16 16 [>60] p = 0.067002 [>60] p = 0.2996 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.59914[All] p = 0.0387314 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9

30

40

50

60

Age at diagnosis

70

80

90

30

40

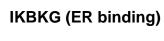
50

60

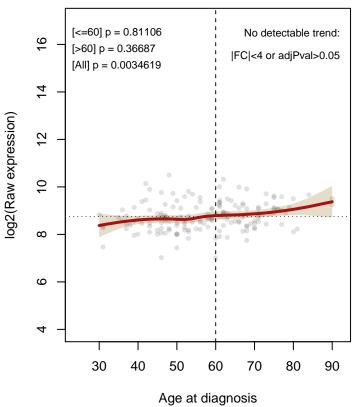
Age at diagnosis

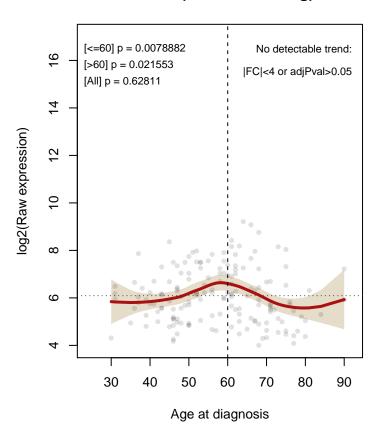
70

80



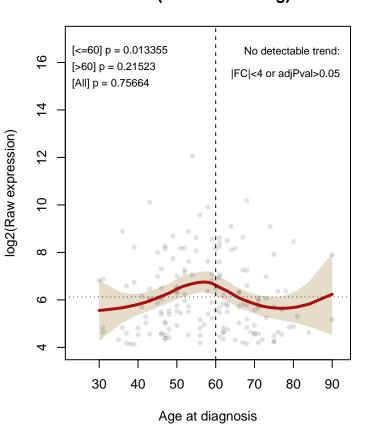
IL2RA (non-ER binding)

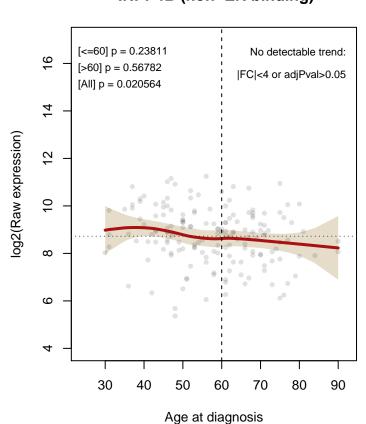


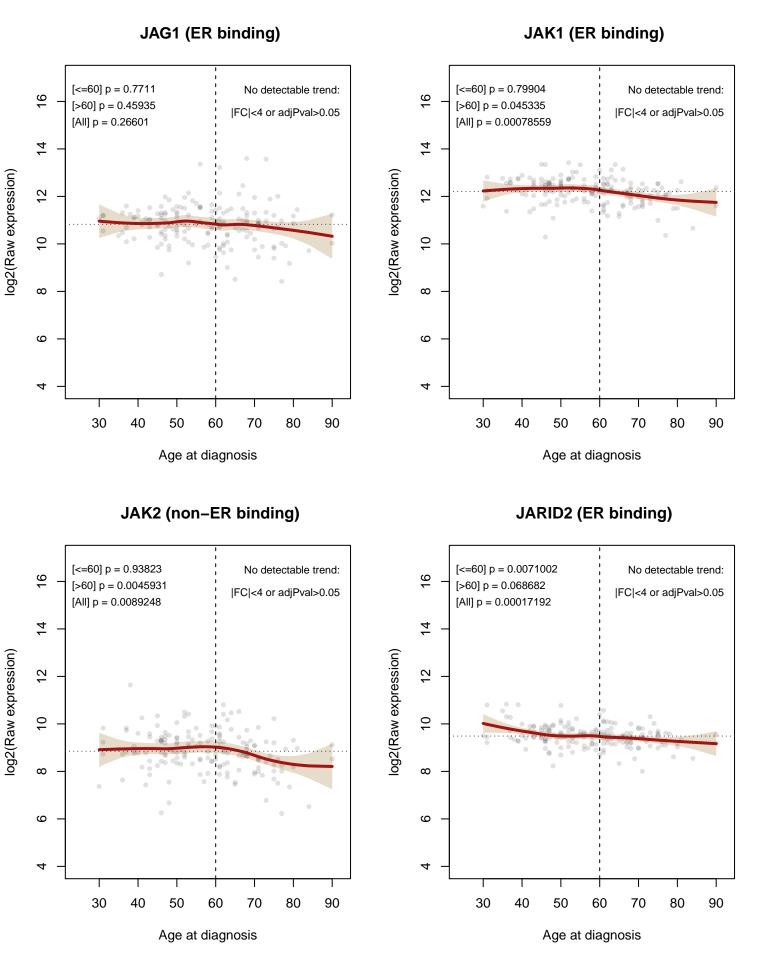


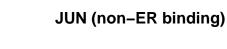
IL6 (non-ER binding)

INPP4B (non-ER binding)

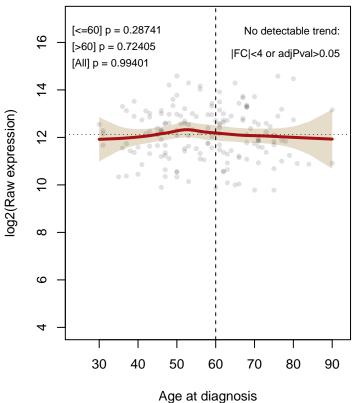


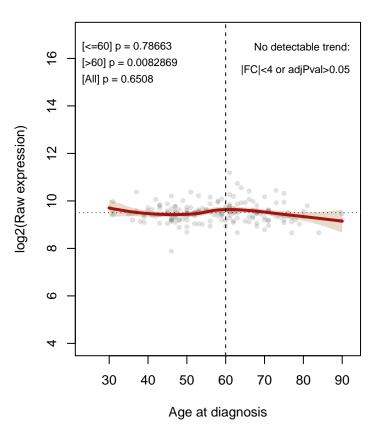






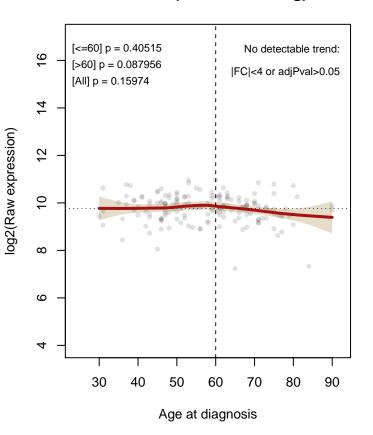
KDM2B (non-ER binding)

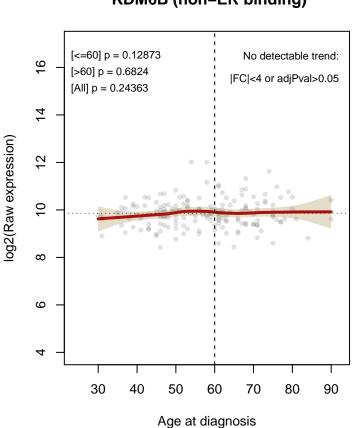




KDM6A (non-ER binding)

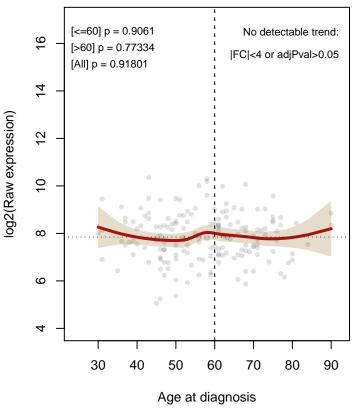
KDM6B (non-ER binding)

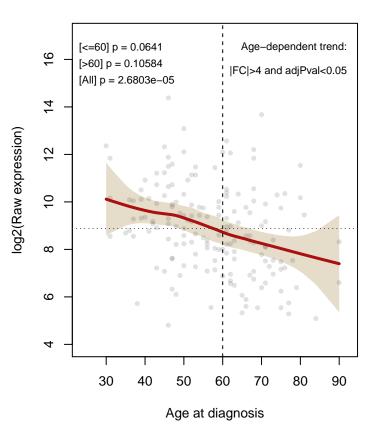






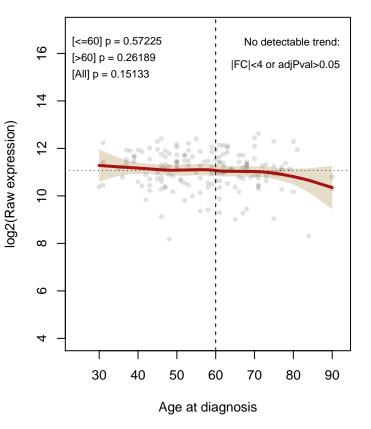
KIT (non-ER binding)

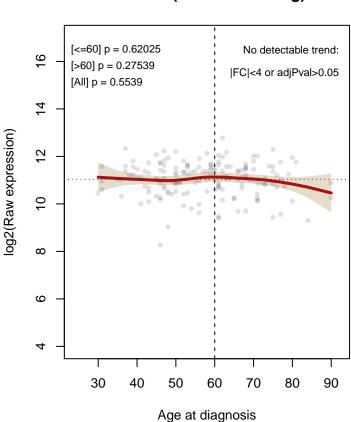




KMT2C (non-ER binding)

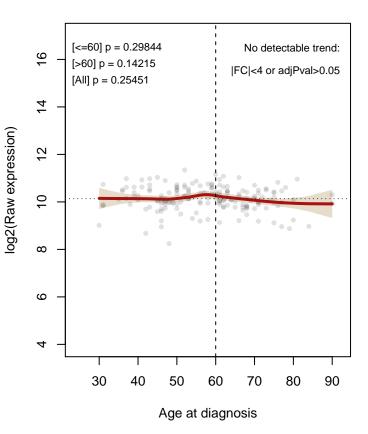
KMT2D (non-ER binding)

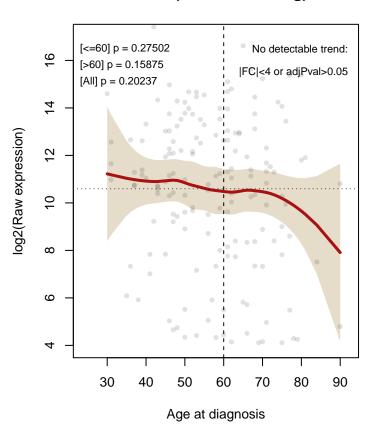






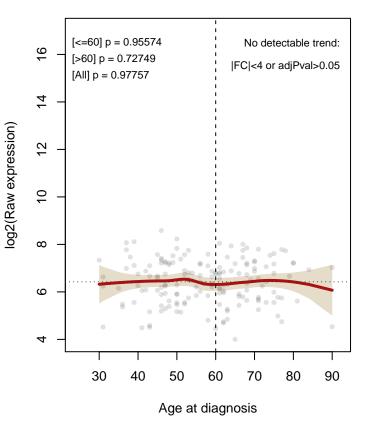
KRT5 (non-ER binding)

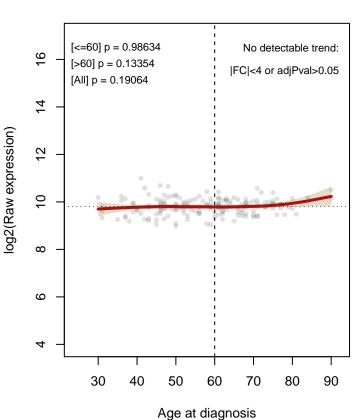




L3MBTL1 (non-ER binding)

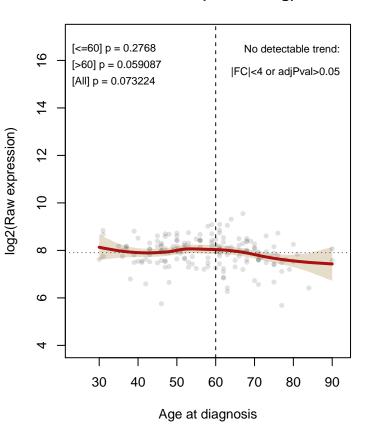
L3MBTL2 (non-ER binding)

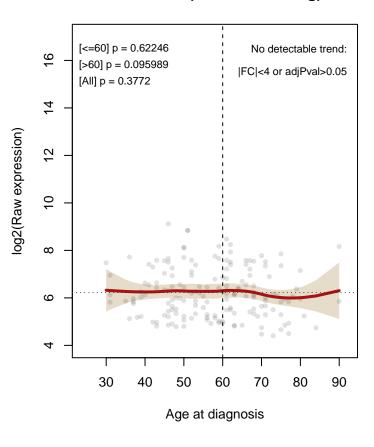




L3MBTL3 (ER binding)

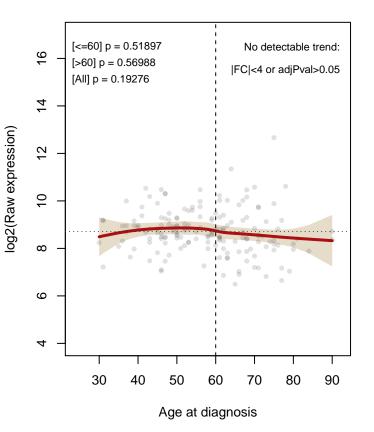
L3MBTL4 (non-ER binding)

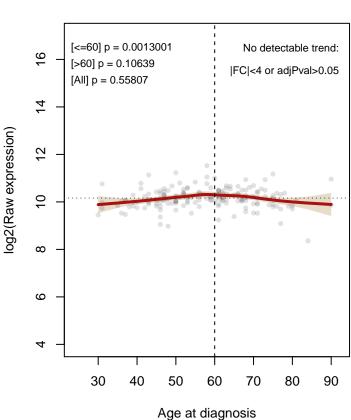


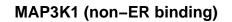


LEF1 (non-ER binding)

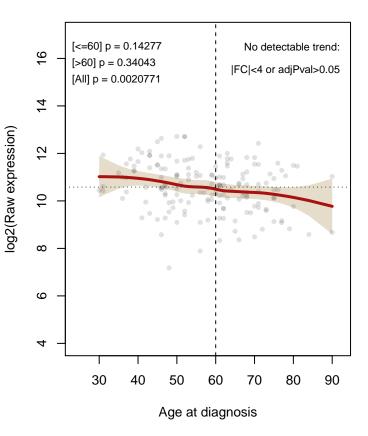
MAP2K1 (non-ER binding)

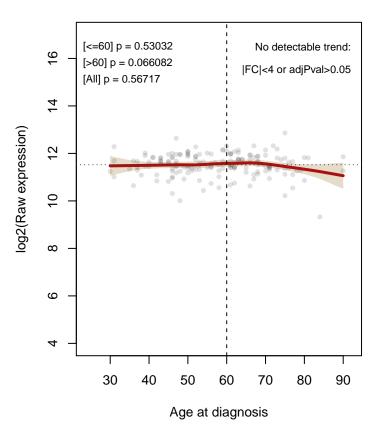






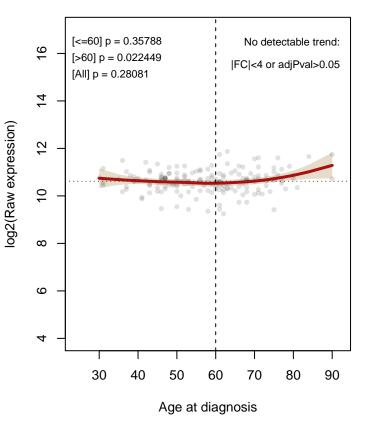
MAPK1 (non-ER binding)

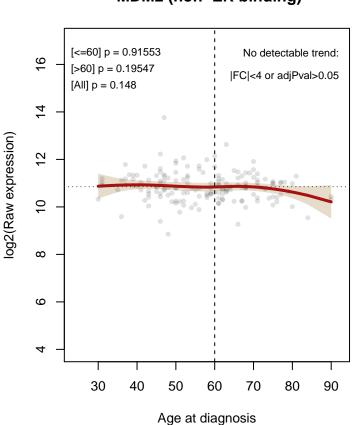


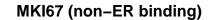


MAPK3 (non-ER binding)

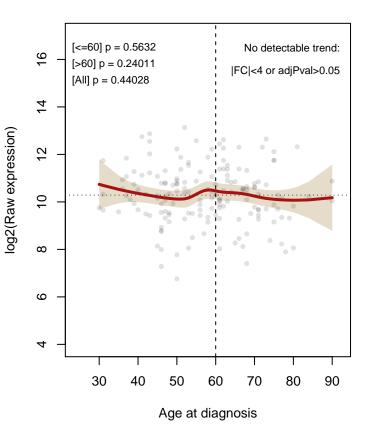
MDM2 (non-ER binding)

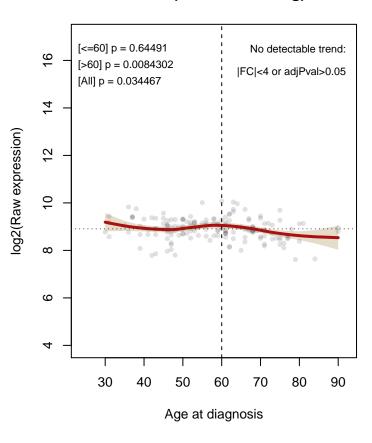






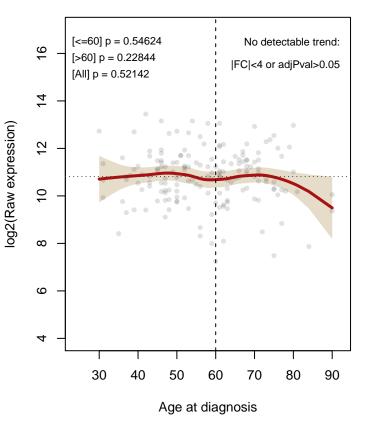
MTF2 (non-ER binding)

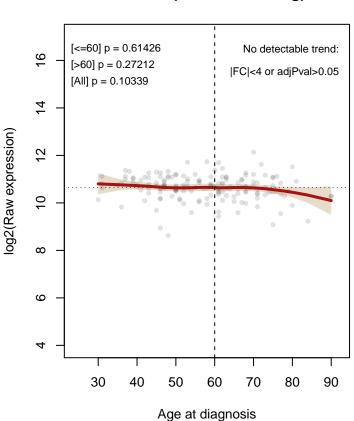




MYC (non-ER binding)

NCOA6 (non-ER binding)





NCOR1 (non-ER binding) **NES (non-ER binding)** [<=60] p = 0.97414No detectable trend: [<=60] p = 0.3443No detectable trend: 16 16 [>60] p = 0.098245 [>60] p = 0.46091 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.085719[All] p = 0.146354 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis NFKB1 (non-ER binding) NFKB2 (non-ER binding) [<=60] p = 0.3712No detectable trend: [<=60] p = 0.49772No detectable trend: 16 16 [>60] p = 0.36979 [>60] p = 0.85175 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.17343[AII] p = 0.598994 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9

30

40

50

60

Age at diagnosis

70

80

90

30

40

50

60

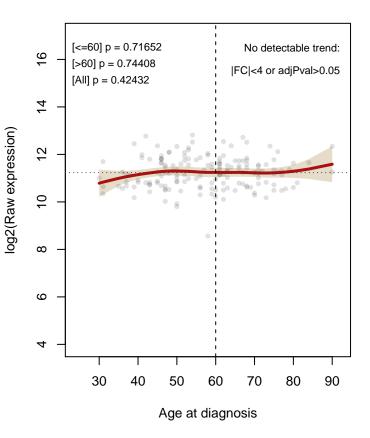
Age at diagnosis

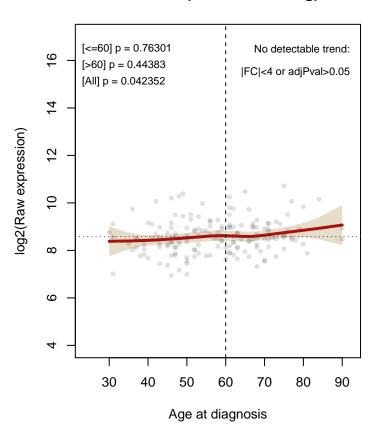
70

80



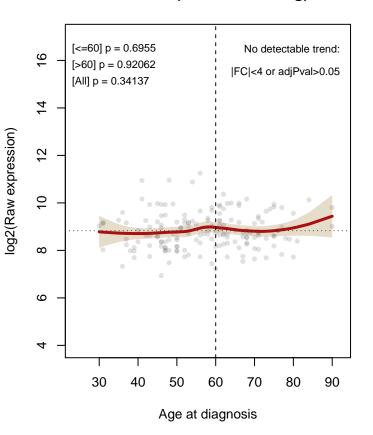
NFKBIB (non-ER binding)

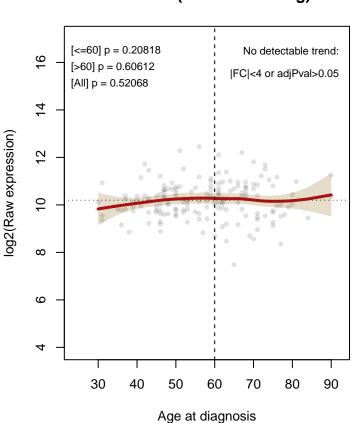




NFKBIE (non-ER binding)

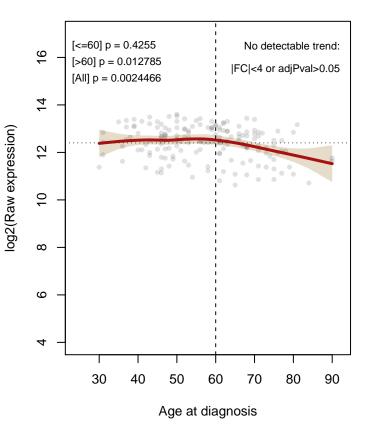
NOTCH1 (non-ER binding)

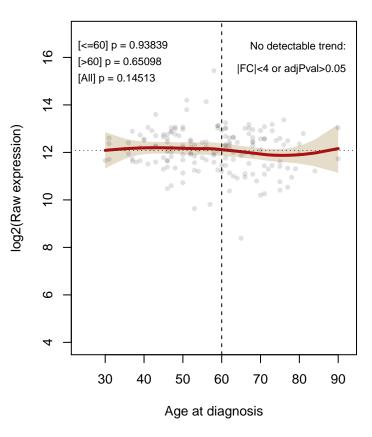




NOTCH2 (non-ER binding)

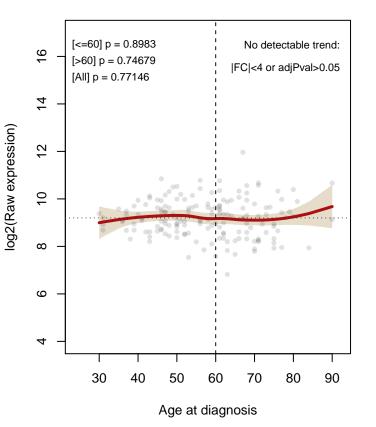
nding) NOTCH3 (non-ER binding)

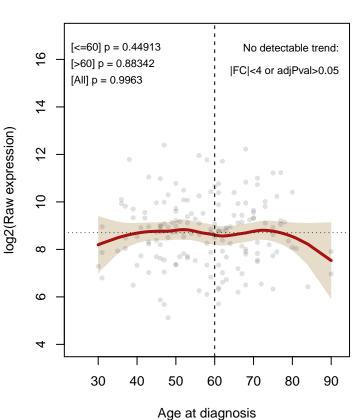




NOTCH4 (non-ER binding)

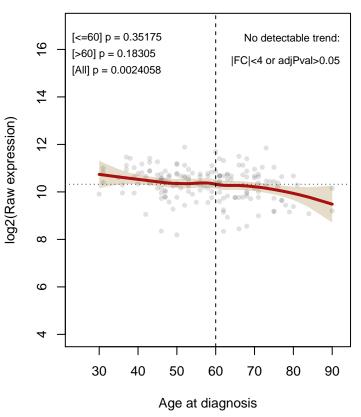
NR4A2 (non-ER binding)

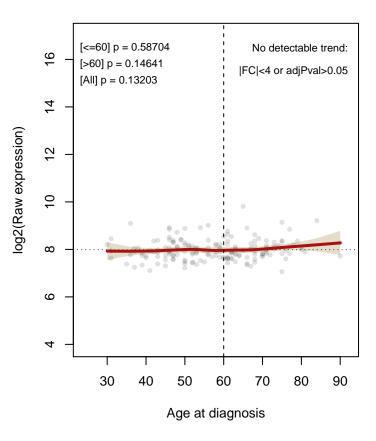






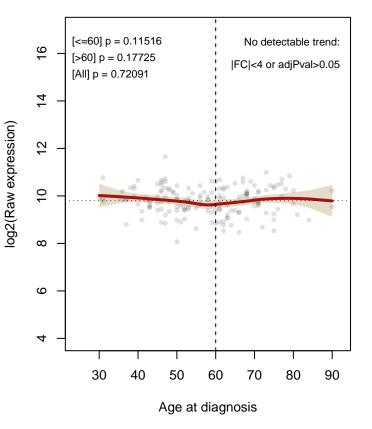
PCGF1 (non-ER binding)

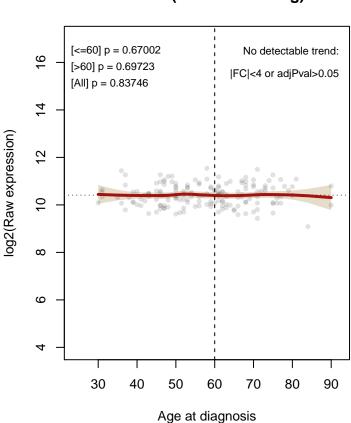


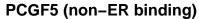


PCGF2 (non-ER binding)

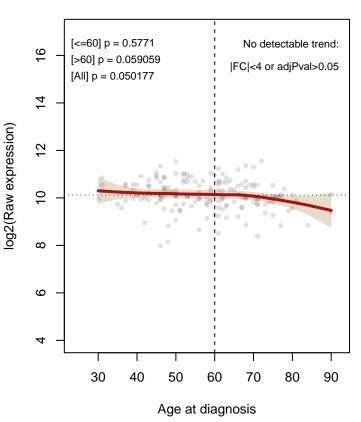
PCGF3 (non-ER binding)

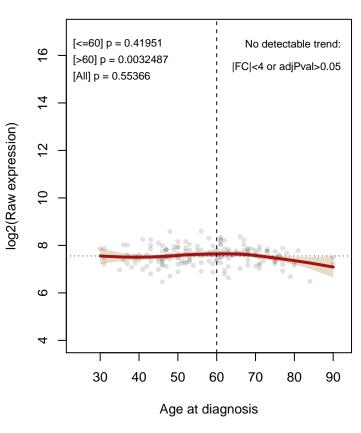






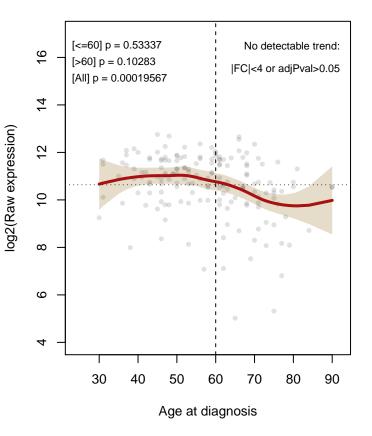
PCGF6 (non-ER binding)

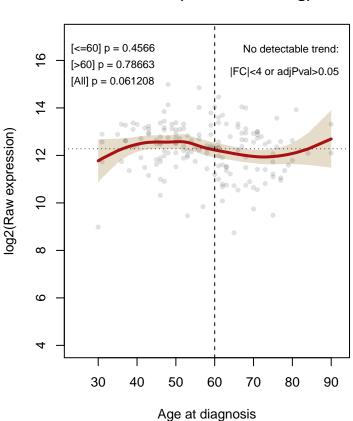




PDGFRA (non-ER binding)

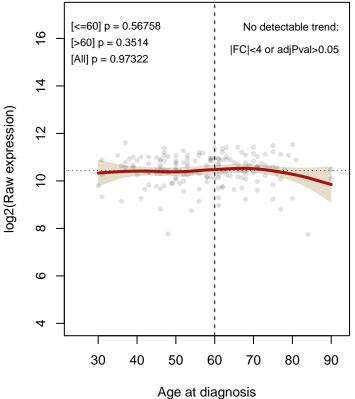
PDGFRB (non-ER binding)

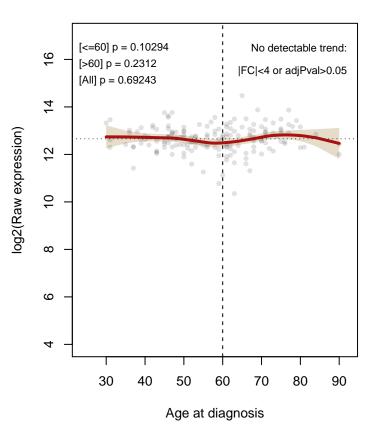






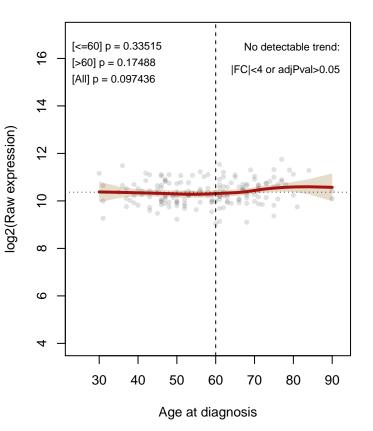
PEBP1 (non-ER binding)

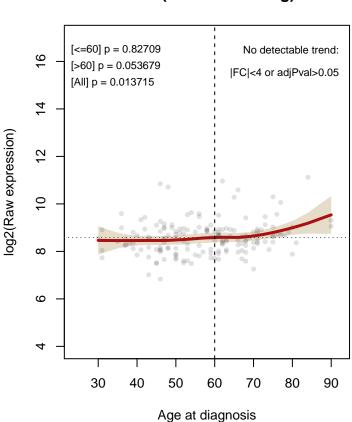


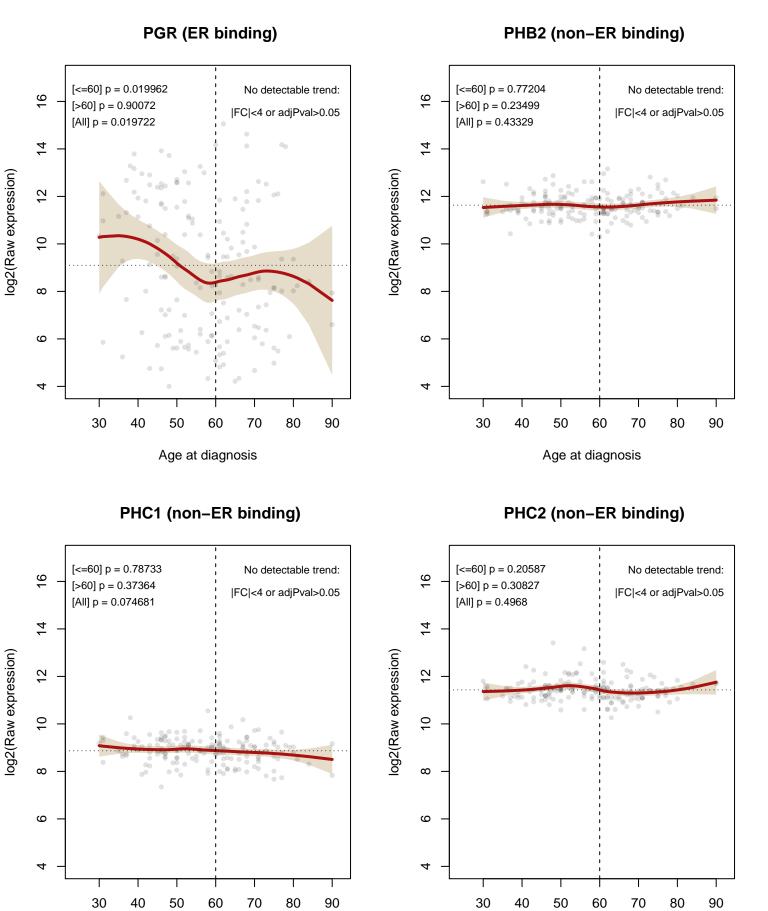


PELP1 (non-ER binding)

PGP (non-ER binding)







Age at diagnosis

Age at diagnosis

PHC3 (non-ER binding) PHF1 (non-ER binding) [<=60] p = 0.91457No detectable trend: [<=60] p = 0.42558No detectable trend: 16 16 [>60] p = 0.010024 [>60] p = 0.25561 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.064228[AII] p = 0.0567964 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis PHF19 (non-ER binding) PIK3CA (non-ER binding) [<=60] p = 0.76894No detectable trend: [<=60] p = 0.63698No detectable trend: 16 16 [>60] p = 0.68564[>60] p = 8.2298e-05 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.80832[AII] p = 0.000349164 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω

9

30

40

50

60

Age at diagnosis

70

80

90

9

30

40

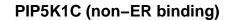
50

60

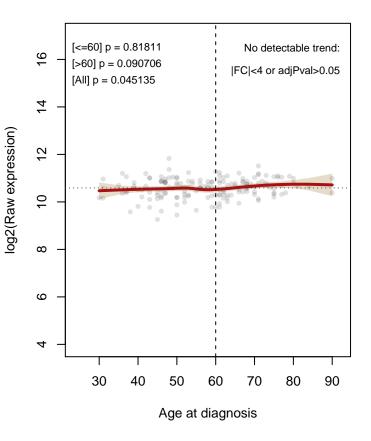
Age at diagnosis

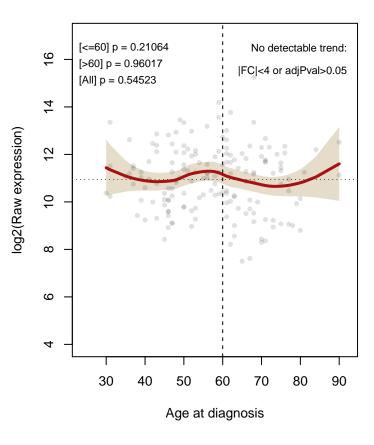
70

80



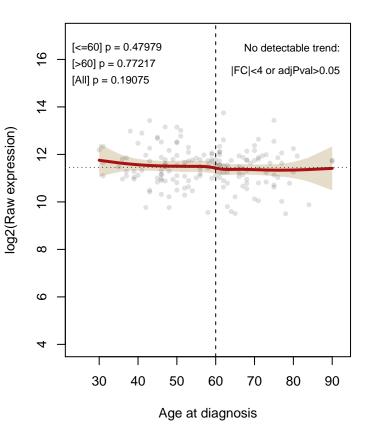
PLAU (non-ER binding)

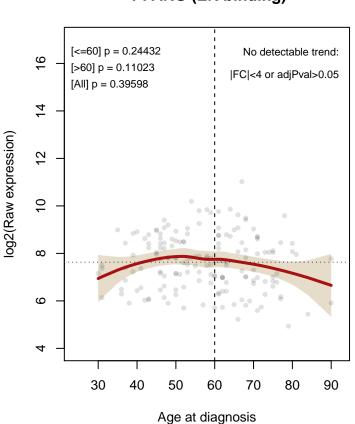


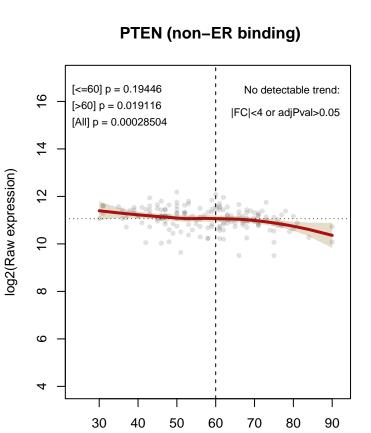


PODXL (non-ER binding)

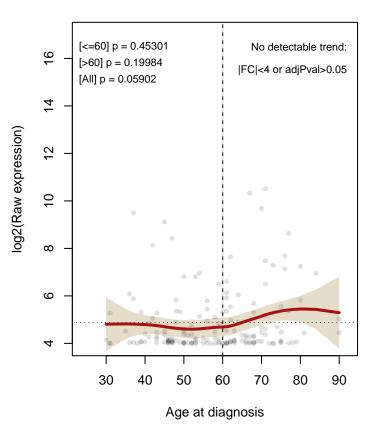
PPARG (ER binding)





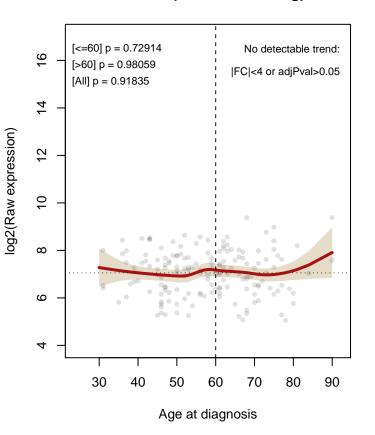


PYDC1 (non-ER binding)

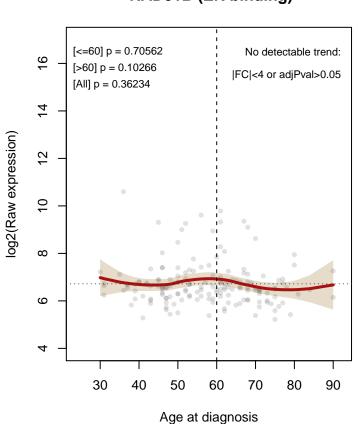


RAD51 (non-ER binding)

Age at diagnosis

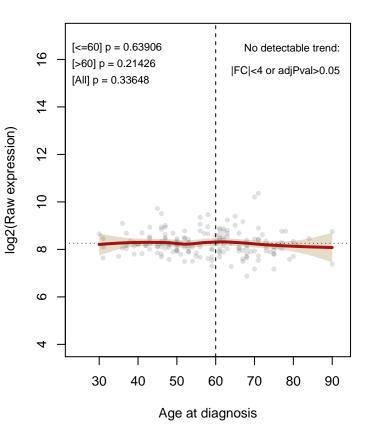


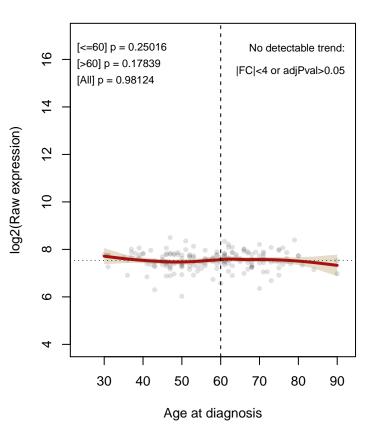
RAD51B (ER binding)



RAD51C (non-ER binding)

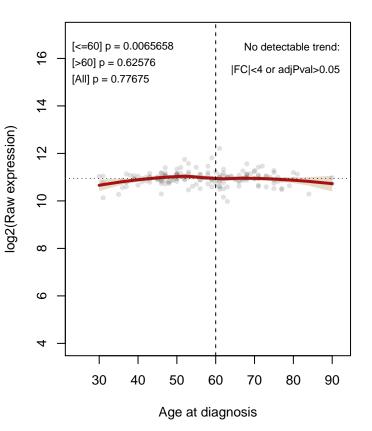
RAD51D (non-ER binding)

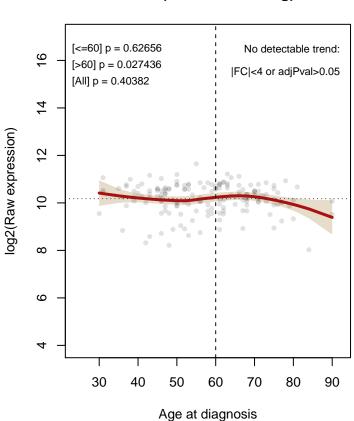




RAF1 (non-ER binding)

RB1 (non-ER binding)





RBBP4 (non-ER binding) RBBP5 (non-ER binding) [<=60] p = 0.92888No detectable trend: [<=60] p = 0.97991No detectable trend: 16 16 [>60] p = 0.045665 [>60] p = 0.068536 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.0031877[AII] p = 0.112944 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis RBBP7 (non-ER binding) **REL** (non-ER binding) [<=60] p = 0.39981No detectable trend: [<=60] p = 0.91615No detectable trend: 16 16 [>60] p = 0.020672 [>60] p = 0.037788 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.12202[All] p = 0.453184 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

30

40

50

60

Age at diagnosis

70

80

90

30

40

50

60

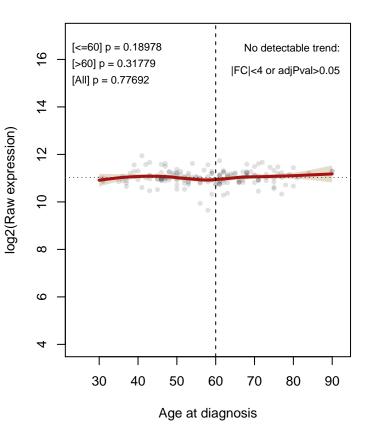
Age at diagnosis

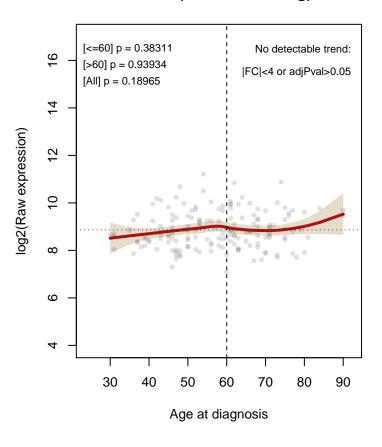
70

80



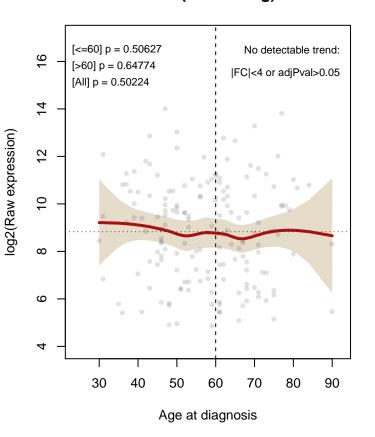
RELB (non-ER binding)

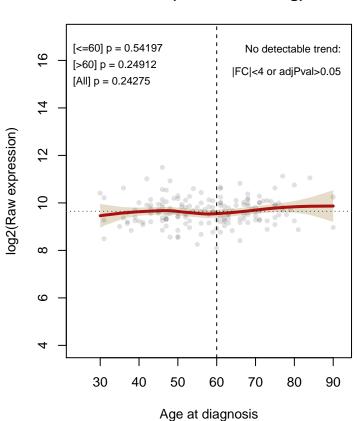


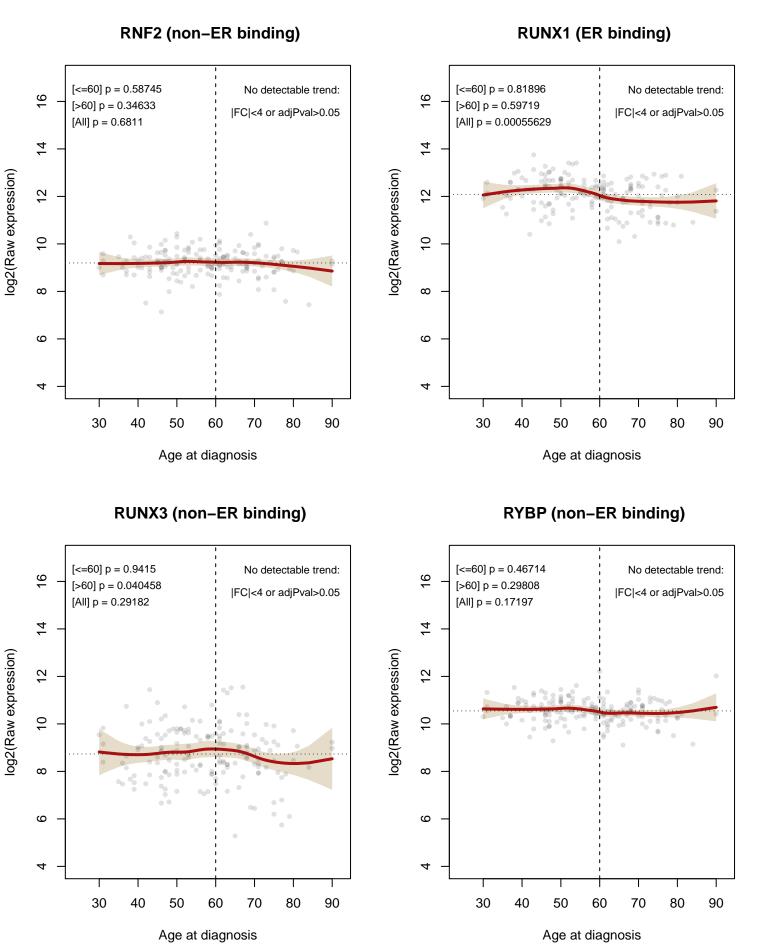


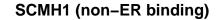
RET (ER binding)

RING1 (non-ER binding)

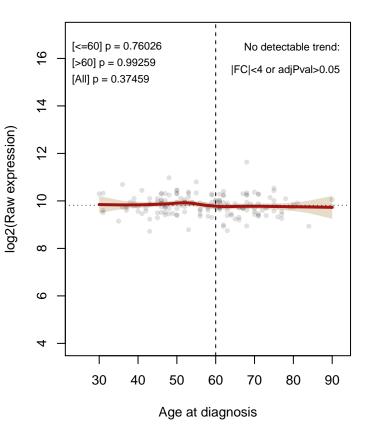


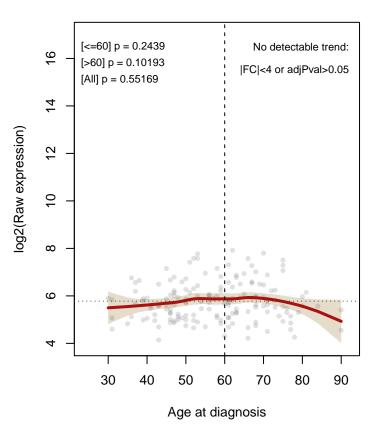






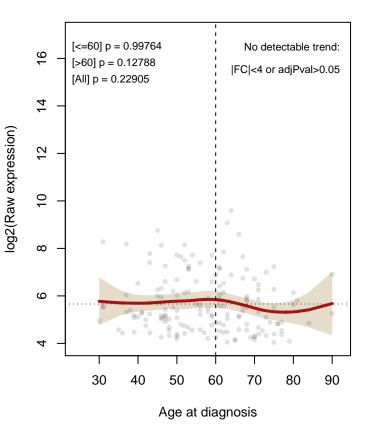
SCML2 (non-ER binding)

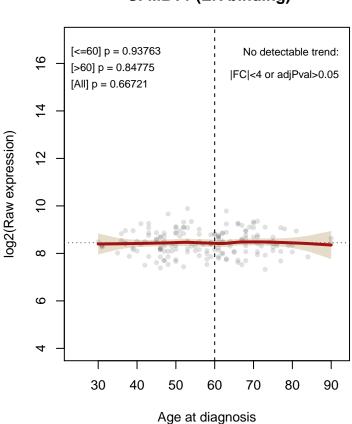




SCML4 (non-ER binding)

SFMBT1 (ER binding)





SFMBT2 (ER binding) SFPQ (non-ER binding) [<=60] p = 0.54164No detectable trend: [<=60] p = 0.8443No detectable trend: 16 16 [>60] p = 0.072376 [>60] p = 0.22766 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.030762[All] p = 0.18434 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis SHC1 (non-ER binding) SIRT1 (non-ER binding) [<=60] p = 0.04297No detectable trend: [<=60] p = 0.74849No detectable trend: 16 16 [>60] p = 0.99356 [>60] p = 0.059343 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.93289[All] p = 0.0712754 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

30

40

50

60

Age at diagnosis

70

80

90

30

40

50

60

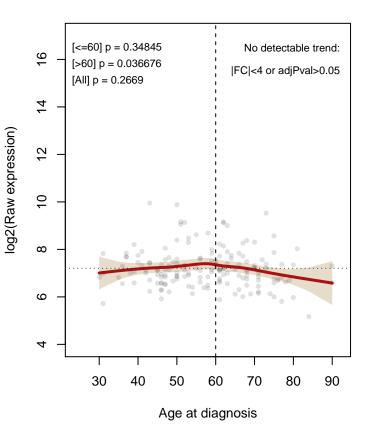
Age at diagnosis

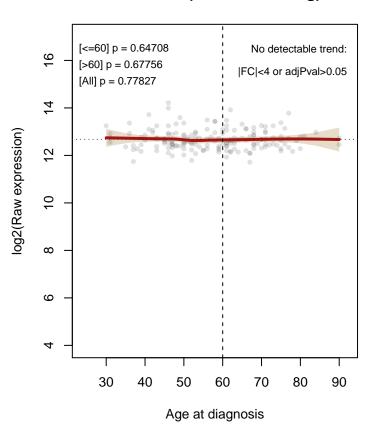
70

80

SKP2 (non-ER binding)

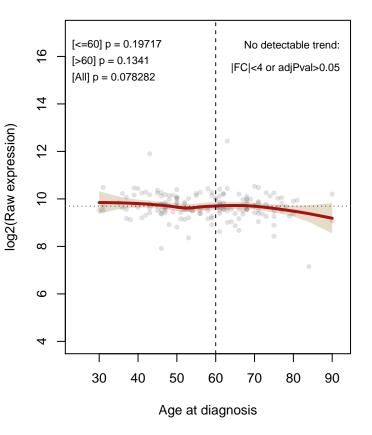
SLC25A3 (non-ER binding)

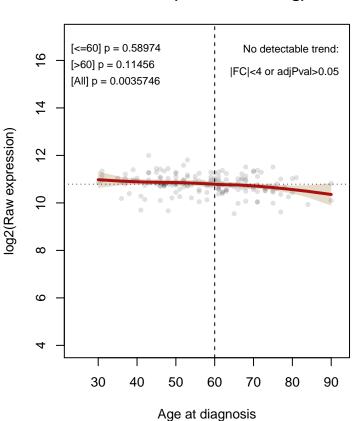




SMAD1 (non-ER binding)

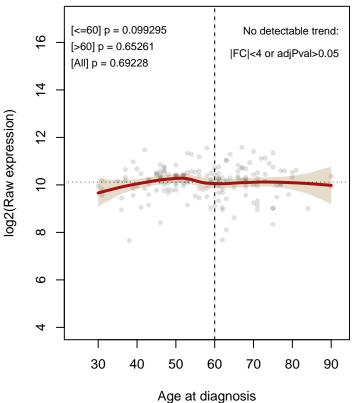
SMAD2 (non-ER binding)

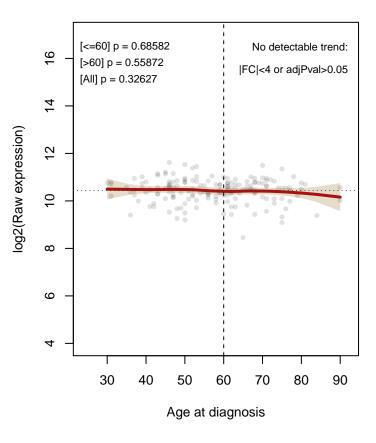




SMAD3 (ER binding)

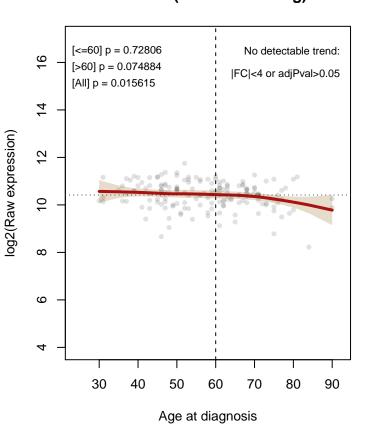
SMAD4 (non-ER binding)

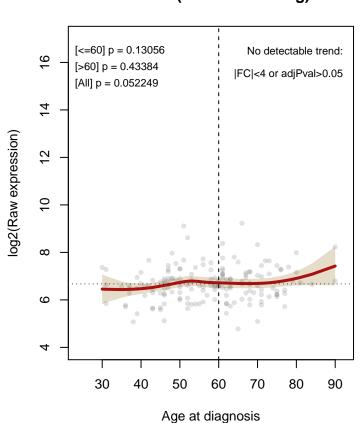


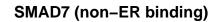


SMAD5 (non-ER binding)

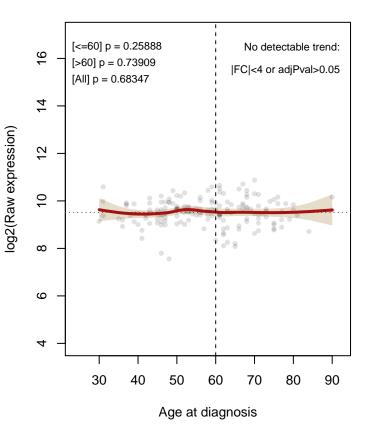
SMAD6 (non-ER binding)

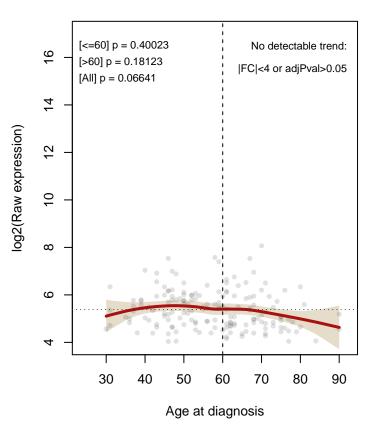






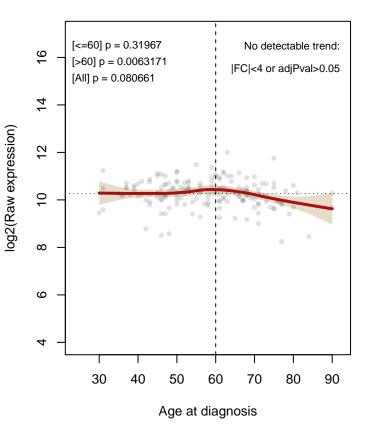
SMAD9 (non-ER binding)

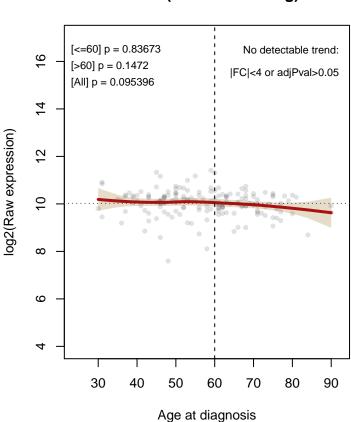


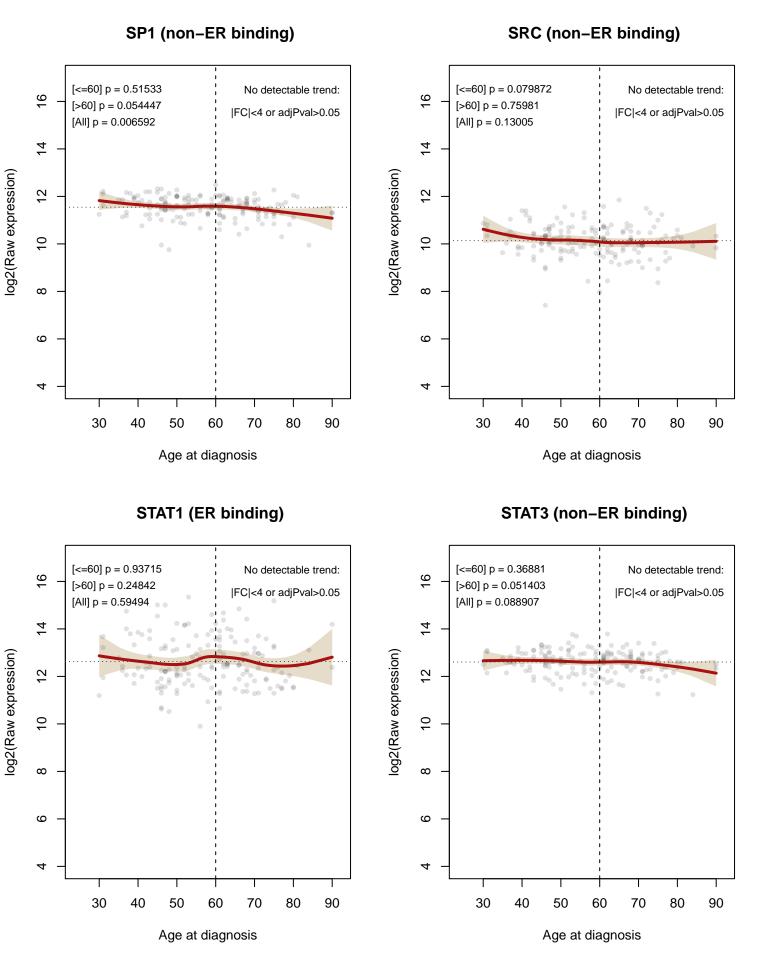


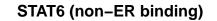
SOS1 (non-ER binding)

SOS2 (non-ER binding)

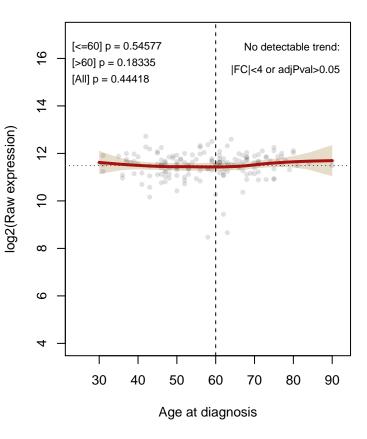


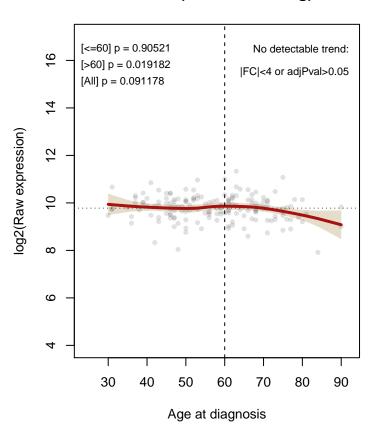






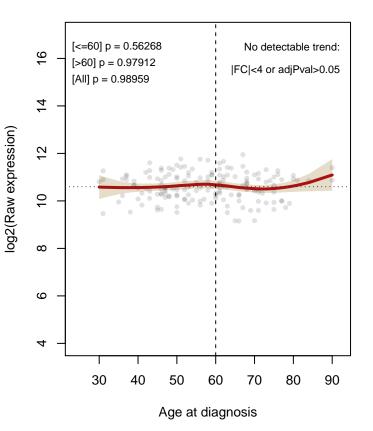
SUZ12 (non-ER binding)

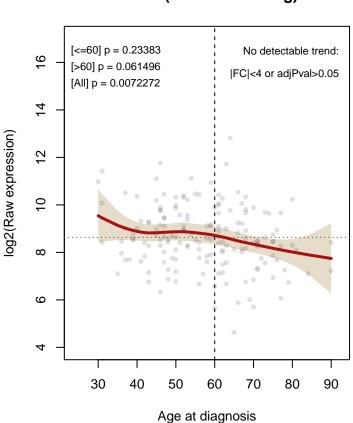




TCF3 (non-ER binding)

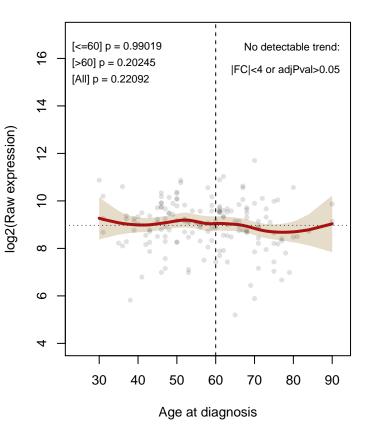
TCF7 (non-ER binding)

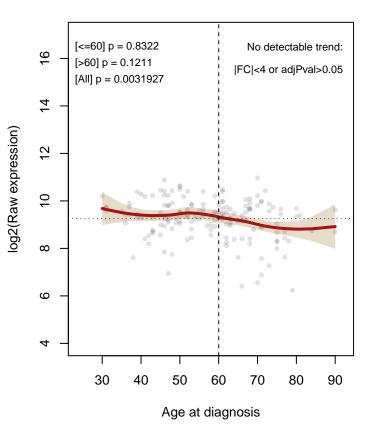






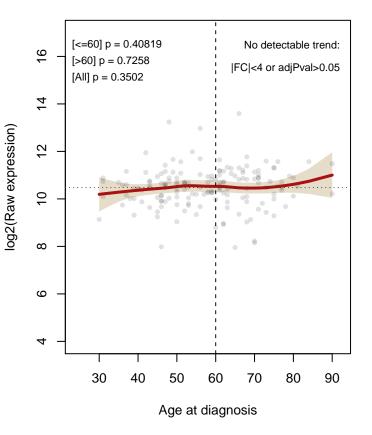
j) TCF7L2 (non–ER binding)

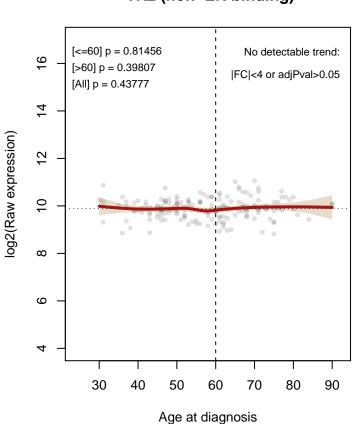


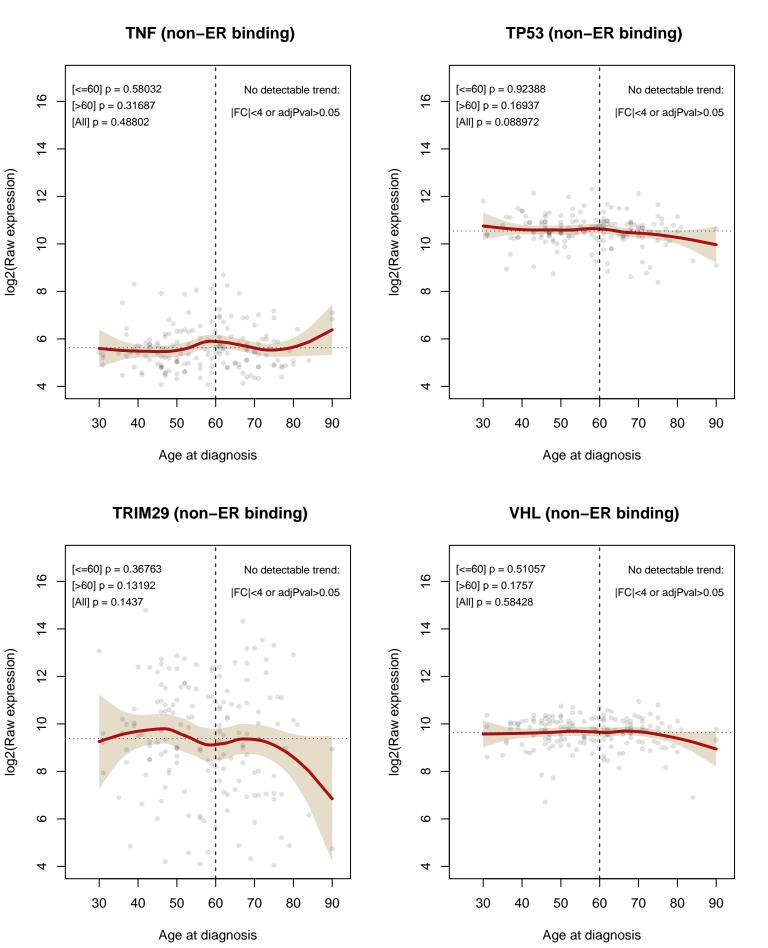


TGFB1 (non-ER binding)

TK2 (non-ER binding)



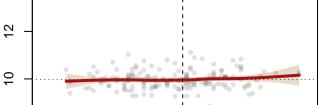






[<=60] p = 0.85951No detectable trend:





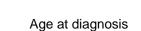
ω

log2(Raw expression)

9

30

40



60

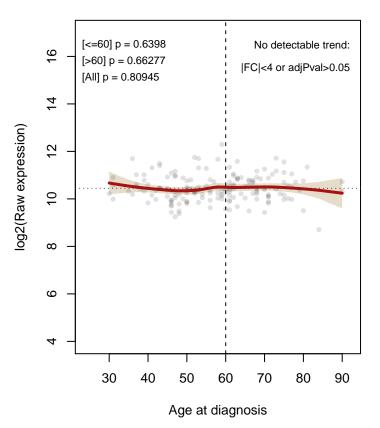
70

80

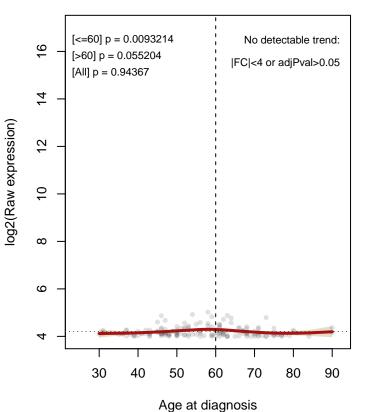
90

50

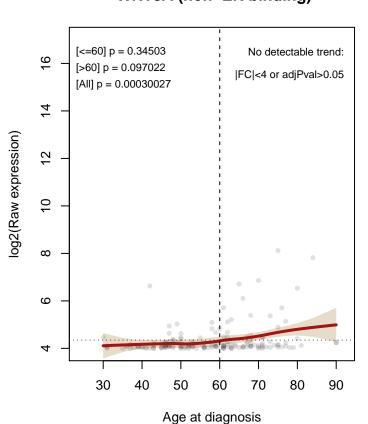
WHSC1 (non-ER binding)



WNT1 (non-ER binding)

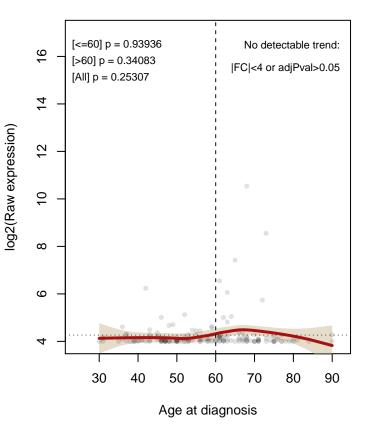


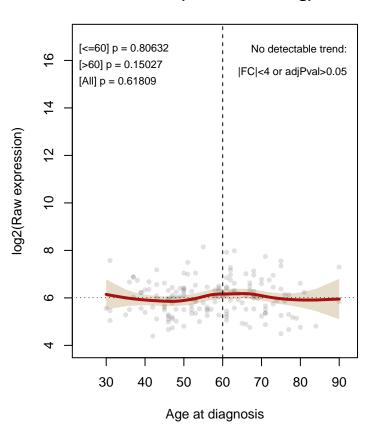
WNT3A (non-ER binding)





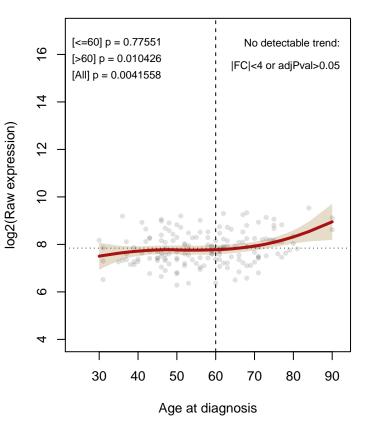
XRCC2 (non-ER binding)

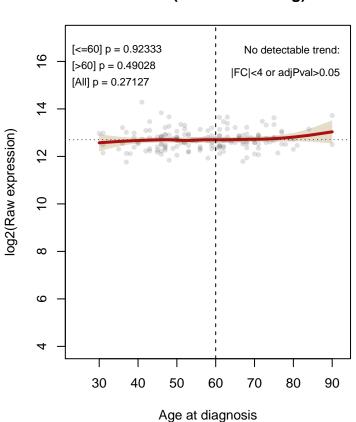




XRCC3 (non-ER binding)

XRCC6 (non-ER binding)





YAF2 (non-ER binding)

log2(Raw expression)

ω

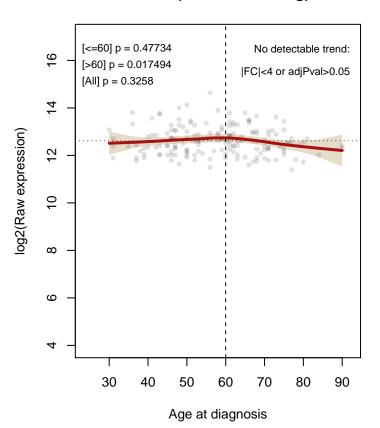
9

30

40

50

YBX1 (non-ER binding)



YY1 (non-ER binding)

Age at diagnosis

60

70

80

