

ASXL3 (non-ER binding) ATM (non-ER binding) [<=60] p = 0.20174No detectable trend: [<=60] p = 0.52436No detectable trend: 16 16 [>60] p = 0.27951 [>60] p = 0.18878 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.42068[All] p = 0.397344 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 ATR (non-ER binding) **AXIN1 (ER binding)** [<=60] p = 0.95954No detectable trend: [<=60] p = 0.51356No detectable trend: 16 16 [>60] p = 0.52051 [>60] p = 0.52246 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.92699[All] p = 0.536314 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω 9 9

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Age at diagnosis

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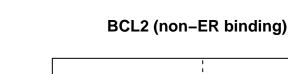
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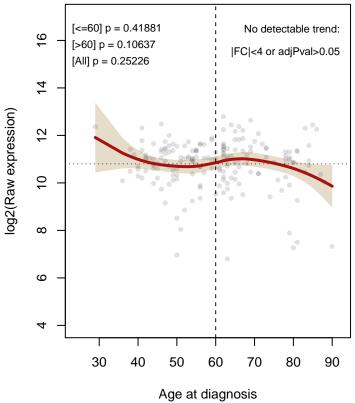
Age at diagnosis

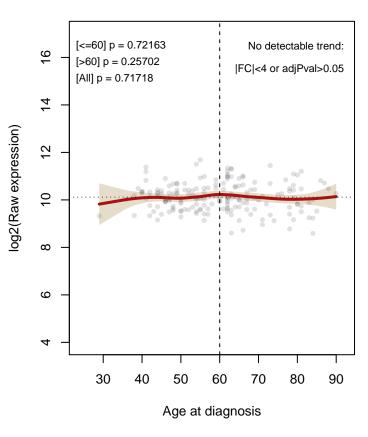
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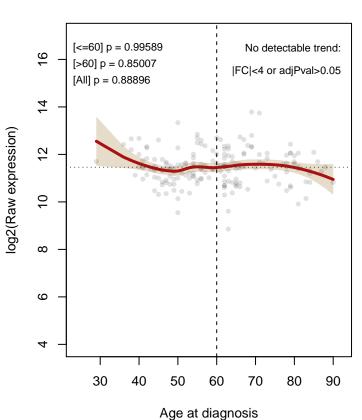


BIRC5 (non-ER binding)

[<=60] p = 0.66615No detectable trend: 16 [>60] p = 0.77014 |FC|<4 or adjPval>0.05 [All] p = 0.745114 log2(Raw expression) 12 10 ω 9 30 40 50 60 70 80 90

Age at diagnosis

BMI1 (non-ER binding)



BMX (non-ER binding) **BRCA1** (non-ER binding) [<=60] p = 0.29382No detectable trend: [<=60] p = 0.7874No detectable trend: 16 16 [>60] p = 0.11954 [>60] p = 0.83937 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.13002[All] p = 0.638934 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9 30 40 70 80 90 30 40 50 60 70 80 90 50 60 Age at diagnosis Age at diagnosis CA9 (non-ER binding) **CBX1** (non-ER binding) [<=60] p = 0.42786No detectable trend: [<=60] p = 0.8921No detectable trend: 16 16 [>60] p = 0.068429 [>60] p = 0.14043 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.25473[All] p = 0.0955344 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 9 9

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Age at diagnosis

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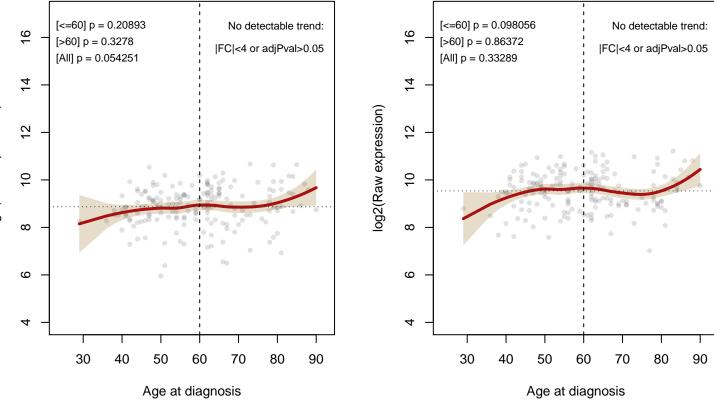
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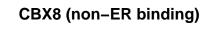
Age at diagnosis

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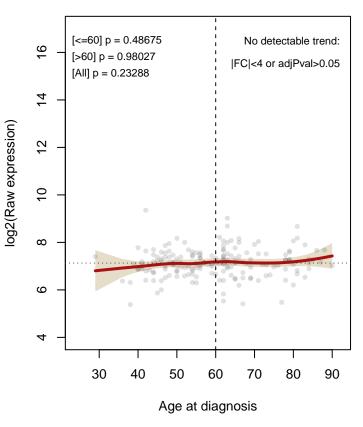
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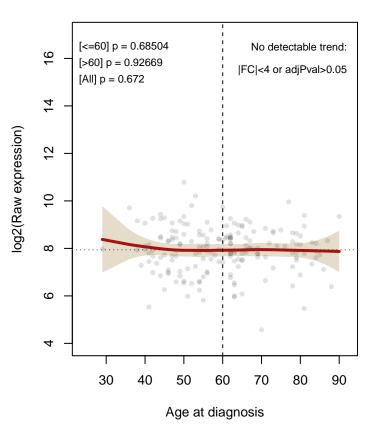
CBX2 (non-ER binding) **CBX4** (non-ER binding) [<=60] p = 0.93768No detectable trend: [<=60] p = 0.4569No detectable trend: 16 16 [>60] p = 0.82926 [>60] p = 0.44897 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.37811[All] p = 0.298674 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis CBX6 (non-ER binding) **CBX7 (non-ER binding)** [<=60] p = 0.20893No detectable trend: [<=60] p = 0.09805616 16 [>60] p = 0.3278 [>60] p = 0.86372 |FC|<4 or adjPval>0.05 [All] p = 0.054251[All] p = 0.332894 4 log2(Raw expression) 12 12





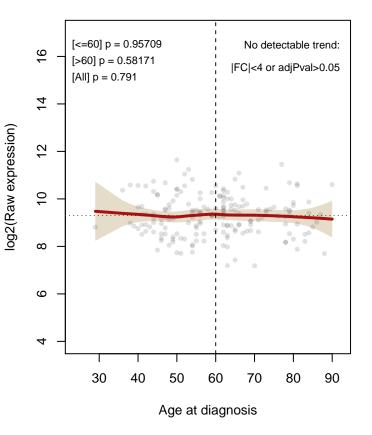
CCNA2 (non-ER binding)

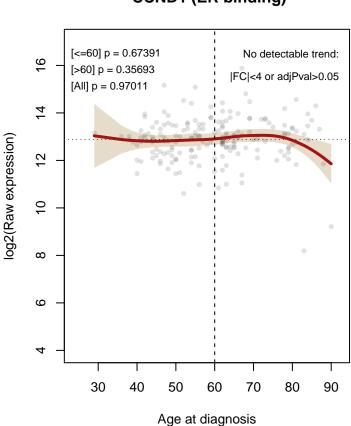




CCNB1 (non-ER binding)

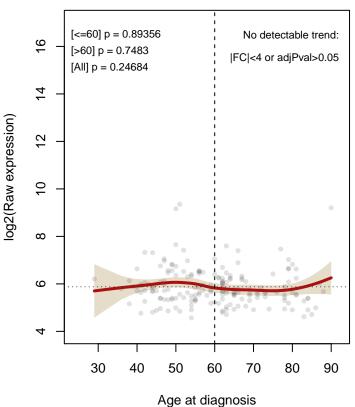
CCND1 (ER binding)

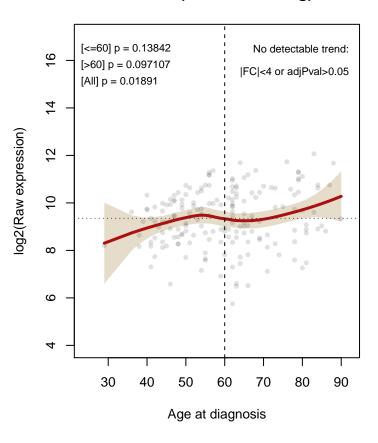






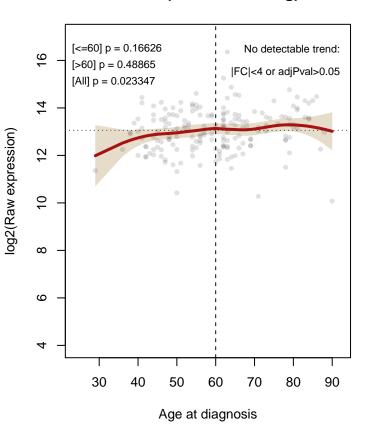
CD163 (non-ER binding)

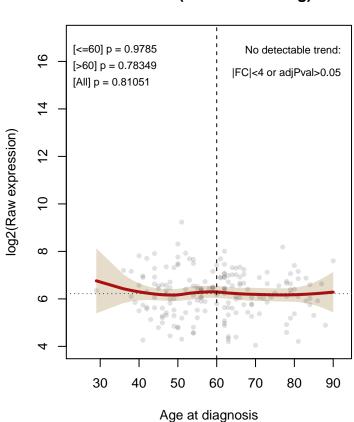


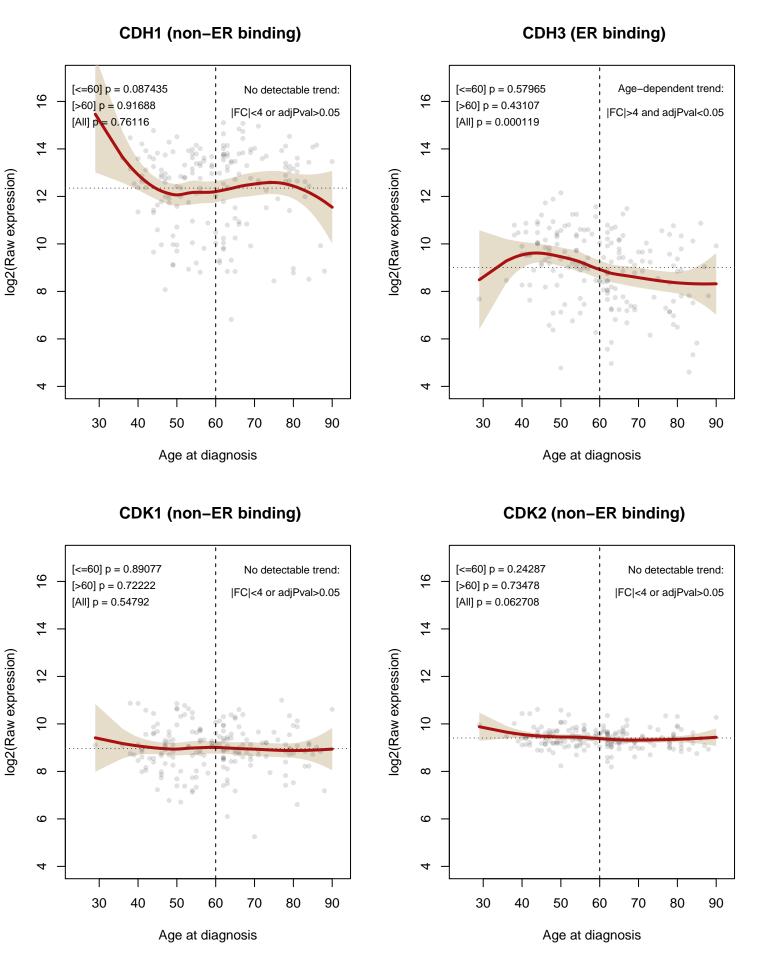


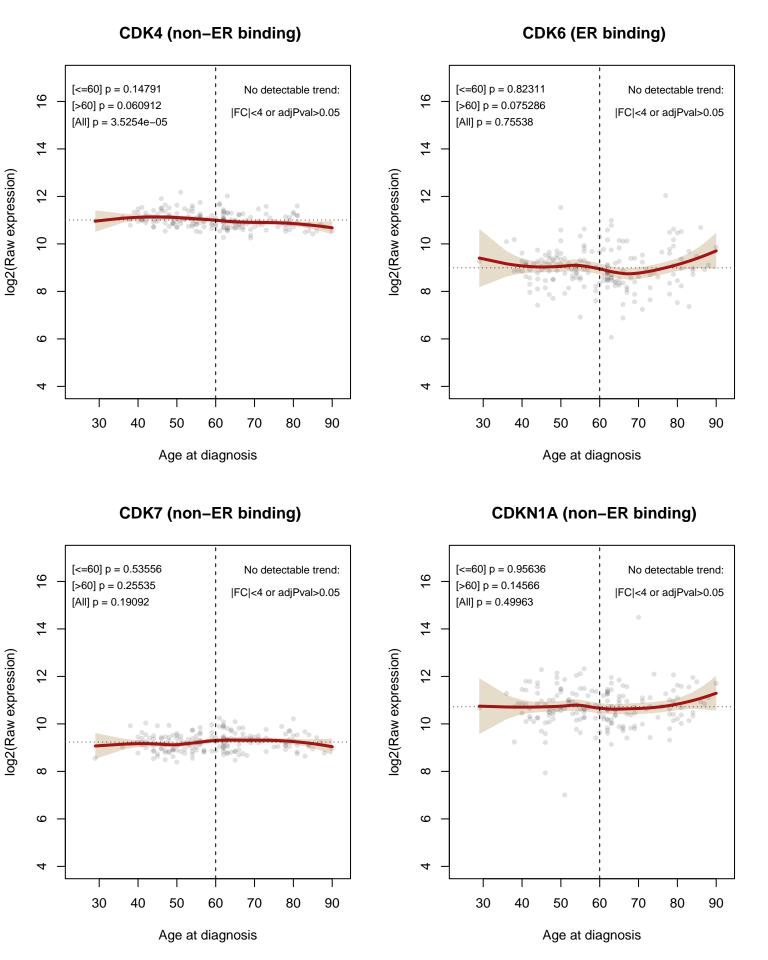
CD44 (non-ER binding)

CDC25C (non-ER binding)



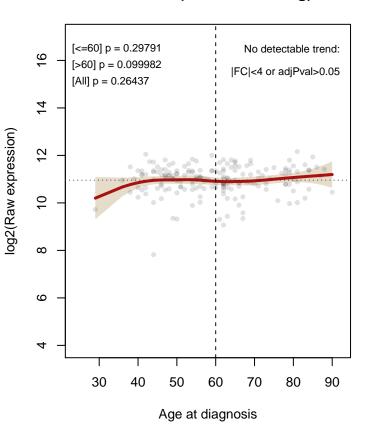


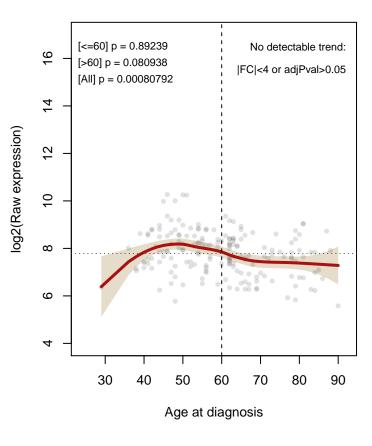




CDKN1B (non-ER binding)

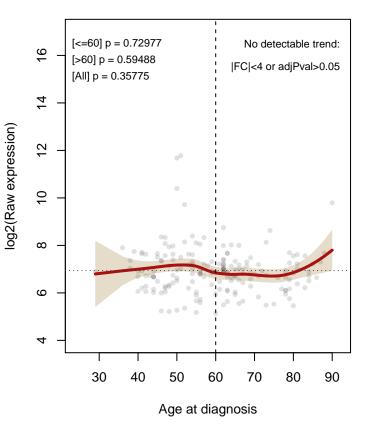
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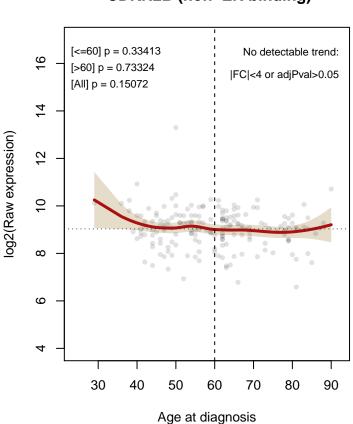


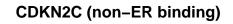


CDKN2A (non-ER binding)

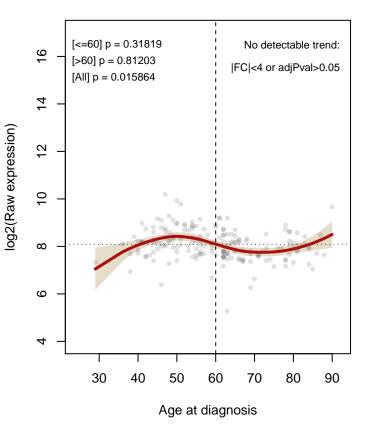
CDKN2B (non-ER binding)

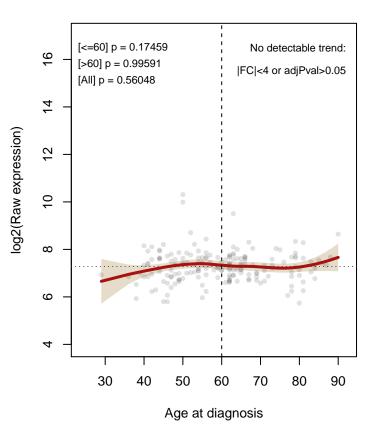






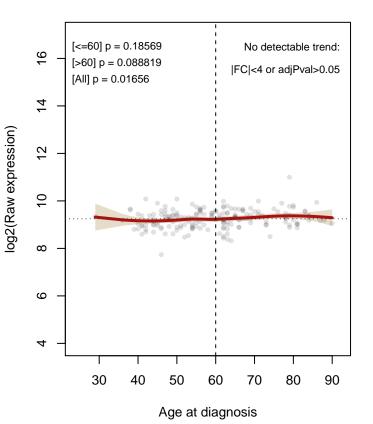
CDKN2D (non-ER binding)

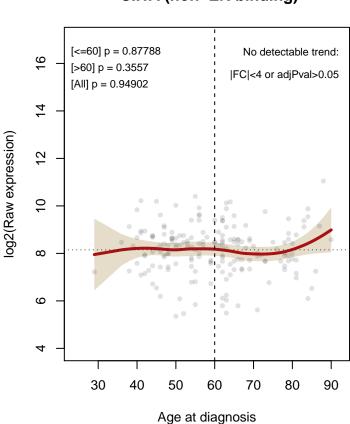




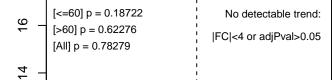
CHUK (non-ER binding)

CIITA (non-ER binding)

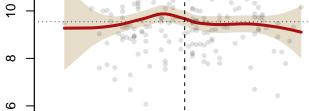




CLDN3 (non-ER binding)







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[<=60] p = 0.38118

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Age at diagnosis

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log2(Raw expression)

log2(Raw expression)



CRYAB (non-ER binding)

Age at diagnosis

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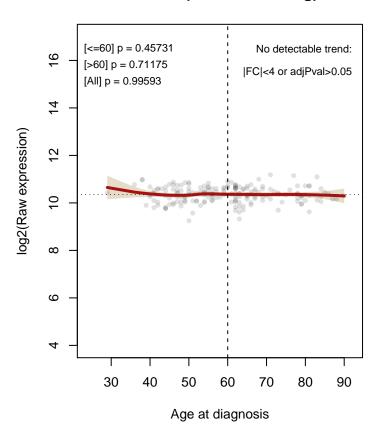
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No detectable trend:

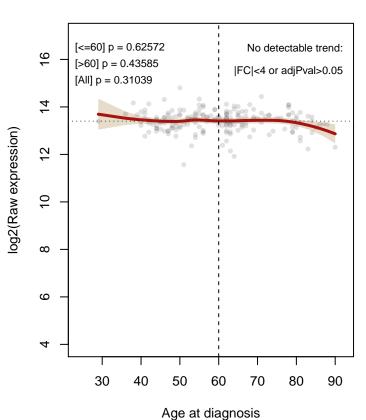
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16 [>60] p = 0.1942 |FC|<4 or adjPval>0.05 [AII] p = 0.00681864 12 19 ∞ 9

CREB1 (non-ER binding)



CTNNB1 (non-ER binding)



DLC1 (ER binding) DMAP1 (non-ER binding) [<=60] p = 0.21226No detectable trend: [<=60] p = 0.27978No detectable trend: 16 16 [>60] p = 0.0074285 [>60] p = 0.2294 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.052232[All] p = 0.000212944 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 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 = 0.60564No detectable trend: [<=60] p = 0.091705No detectable trend: 16 16 [>60] p = 0.90528 [>60] p = 0.1876|FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.44718[All] p = 0.000172544 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9

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Age at diagnosis

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Age at diagnosis

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DVL1 (non-ER binding) DNMT3B (non-ER binding) [<=60] p = 0.47913No detectable trend: [<=60] p = 0.51968No detectable trend: 16 16 [>60] p = 0.1384 [>60] p = 0.30678 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.052813[All] p = 0.551024 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis E2F1 (non-ER binding) E2F2 (non-ER binding) [<=60] p = 0.26471No detectable trend: [<=60] p = 0.7806No detectable trend: 16 16 [>60] p = 0.3754 [>60] p = 0.59124 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.52159[All] p = 0.498544 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 9 9

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Age at diagnosis

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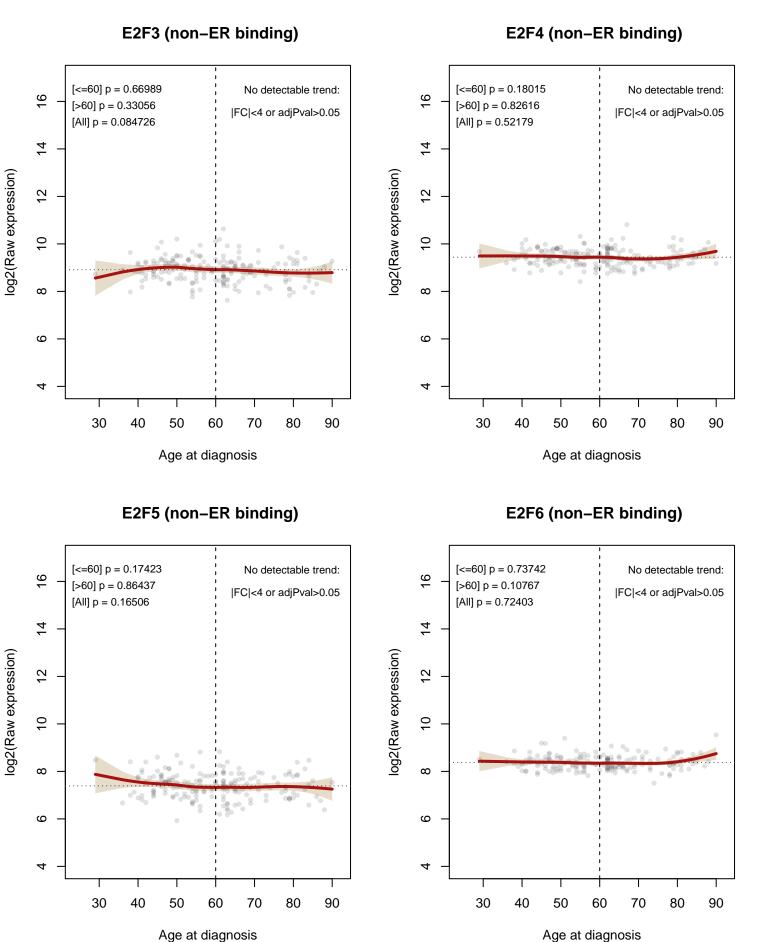
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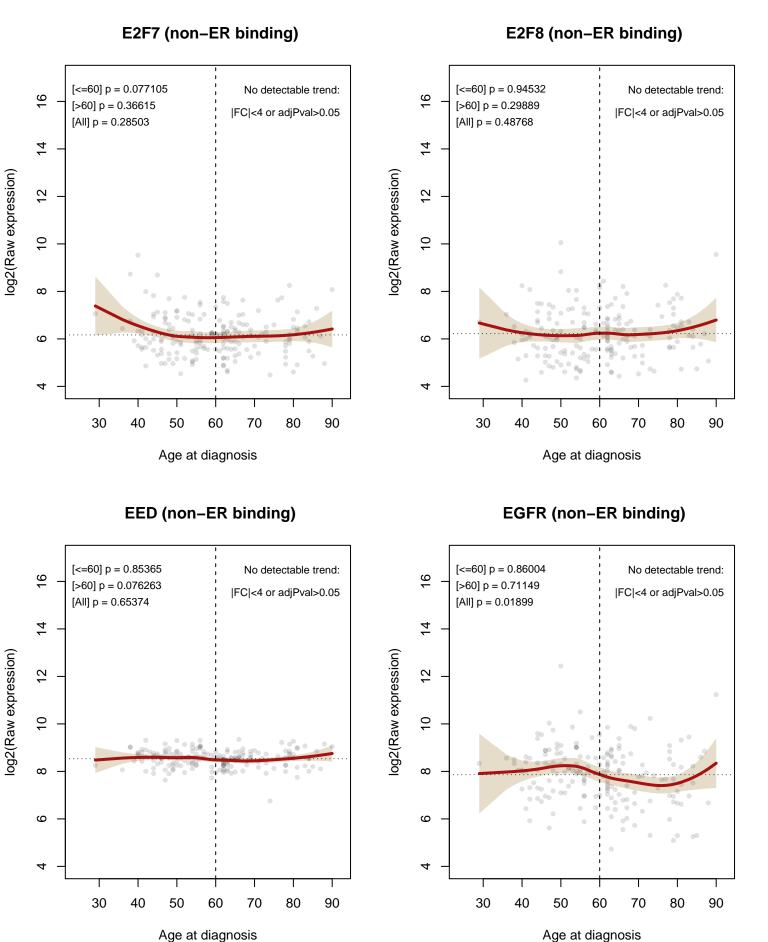
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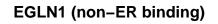
Age at diagnosis

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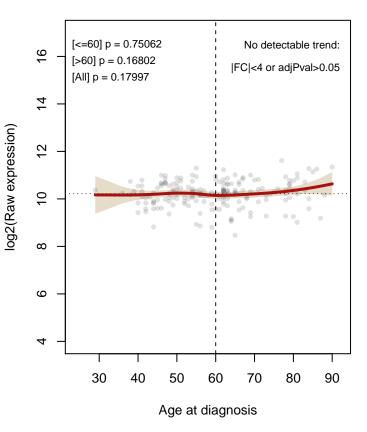
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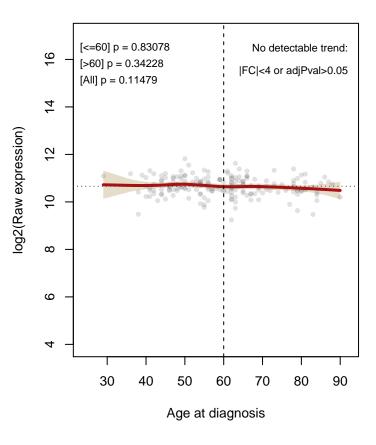






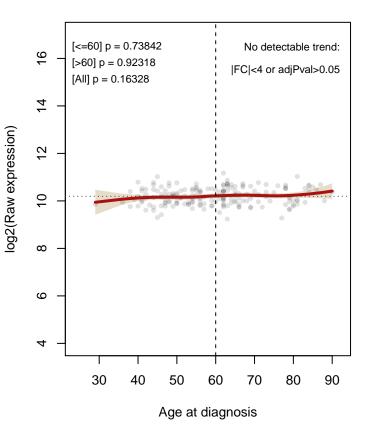
EHMT2 (non-ER binding)

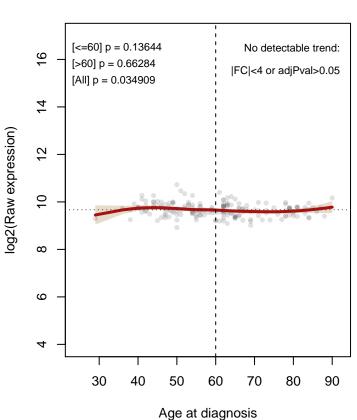




ELAC2 (non-ER binding)

ELK1 (non-ER binding)





EP300 (non-ER binding) **EPAS1** (non-ER binding) [<=60] p = 0.9641No detectable trend: [<=60] p = 0.3162No detectable trend: 16 16 [>60] p = 0.53232 [>60] p = 0.11424 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.46134[All] p = 0.442684 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis **EPC1** (non-ER binding) **EPC2** (non-ER binding) [<=60] p = 0.67605No detectable trend: [<=60] p = 0.99188No detectable trend: 16 16 [>60] p = 0.63677 [>60] p = 0.96265 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.76418[All] p = 0.377744 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ∞ 9 9

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Age at diagnosis

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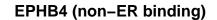
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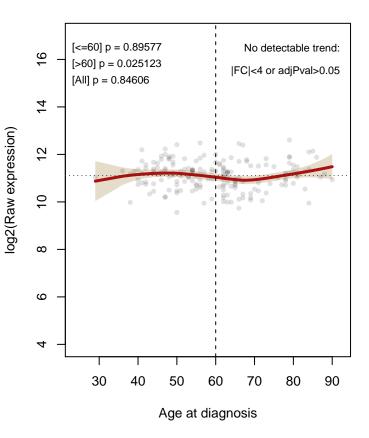
Age at diagnosis

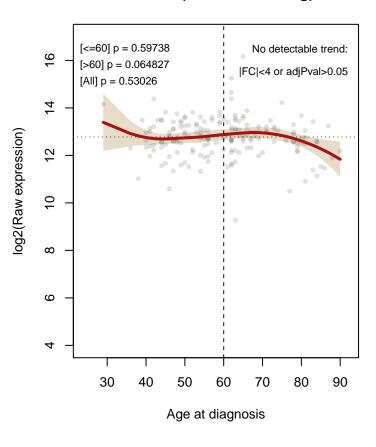
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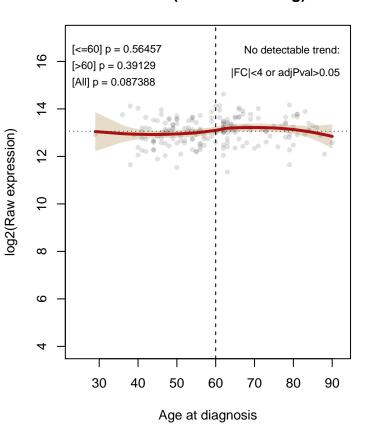
ERBB2 (non-ER binding)

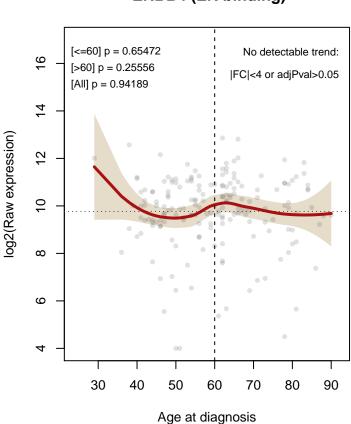


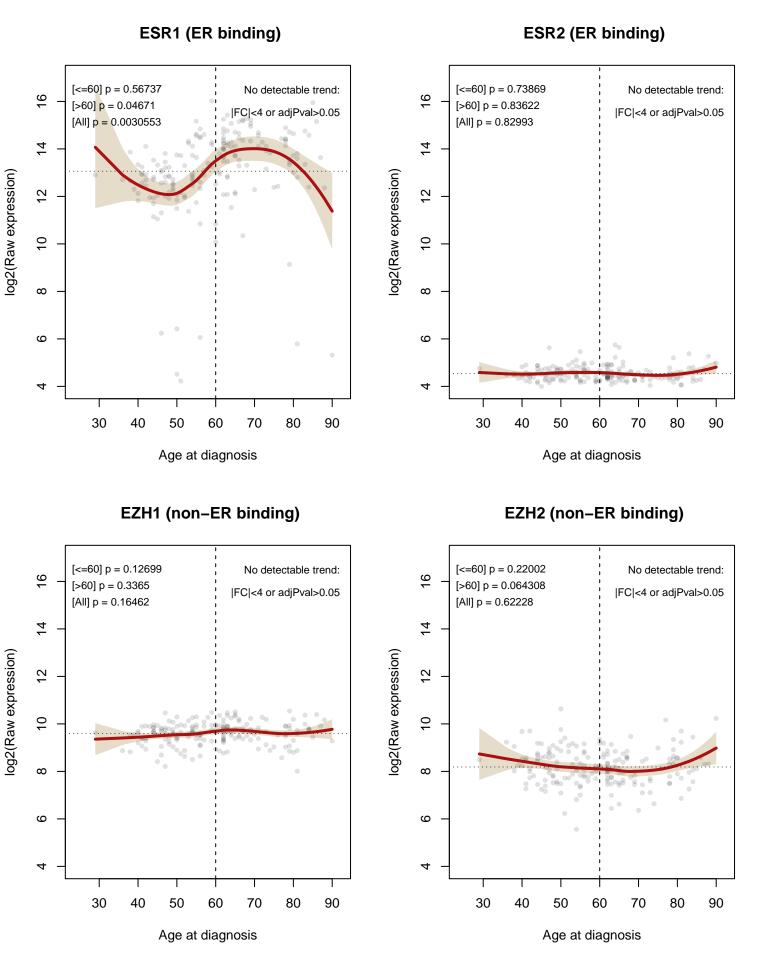


ERBB3 (non-ER binding)

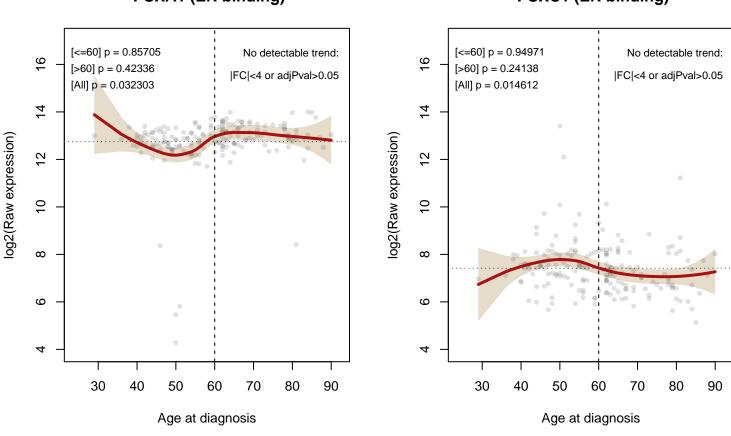
ERBB4 (ER binding)

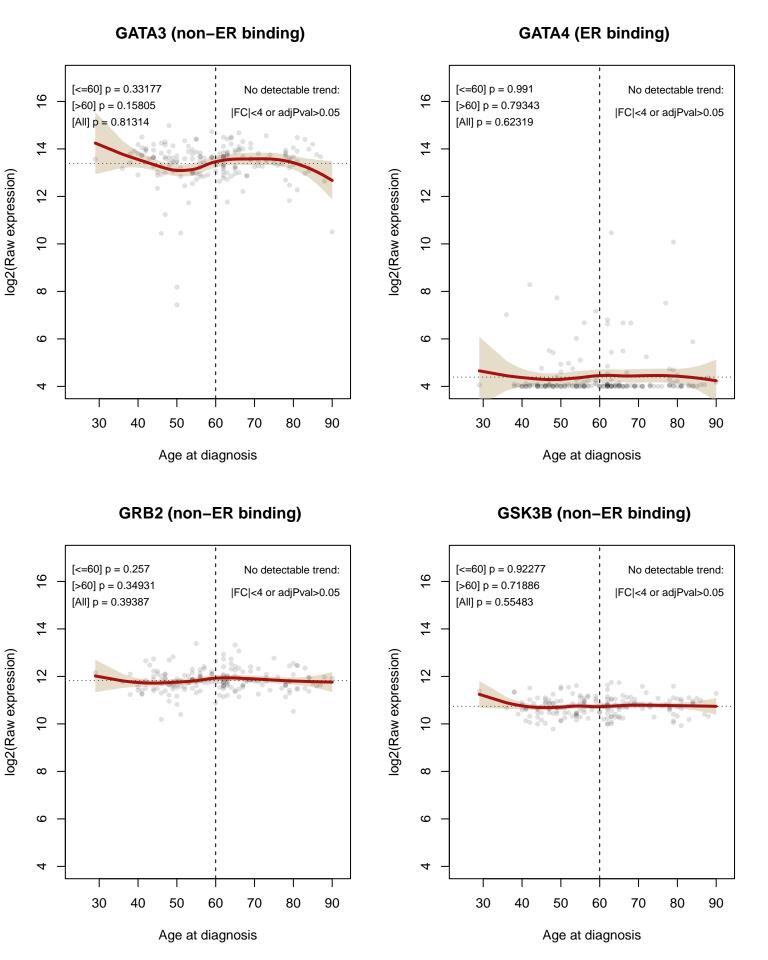


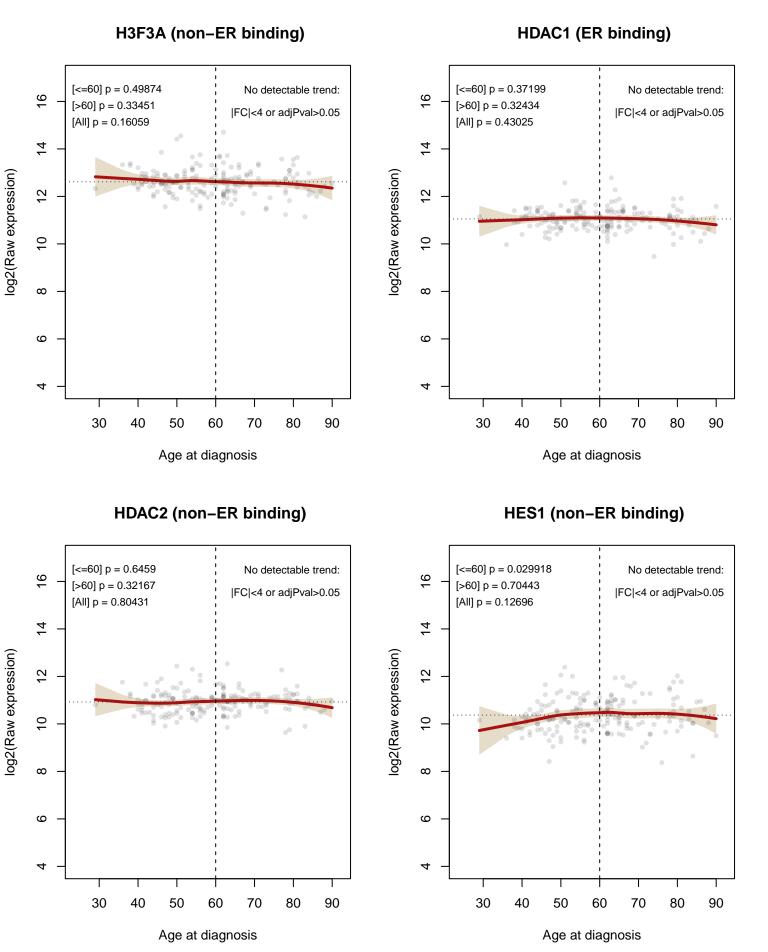




FOSL1 (non-ER binding) FOS (non-ER binding) [<=60] p = 0.29676No detectable trend: [<=60] p = 0.86198No detectable trend: 16 16 [>60] p = 0.976[>60] p = 0.69083|FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.7376[All] p = 0.335274 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 Age at diagnosis Age at diagnosis **FOXC1 (ER binding)** FOXA1 (ER binding) [<=60] p = 0.85705No detectable trend: [<=60] p = 0.9497116 16 [>60] p = 0.24138 [>60] p = 0.42336 |FC|<4 or adjPval>0.05 [AII] p = 0.014612[All] p = 0.0323034 4

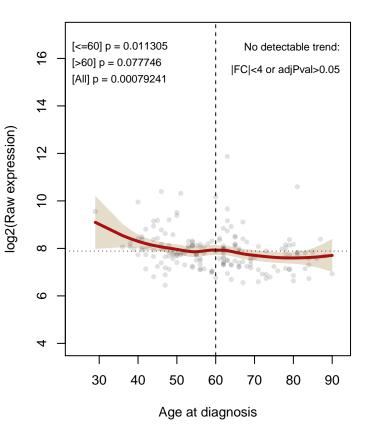


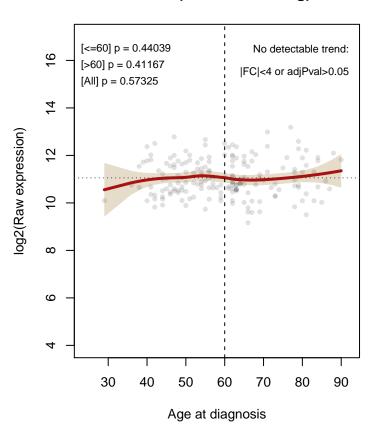






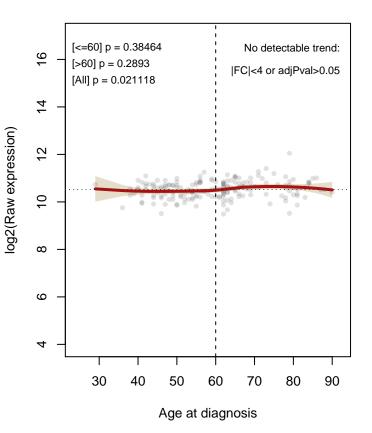
HIF1A (non-ER binding)

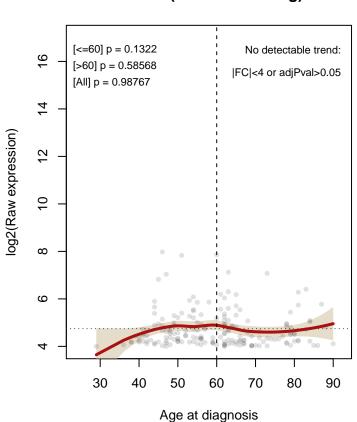




HIF1AN (non-ER binding)

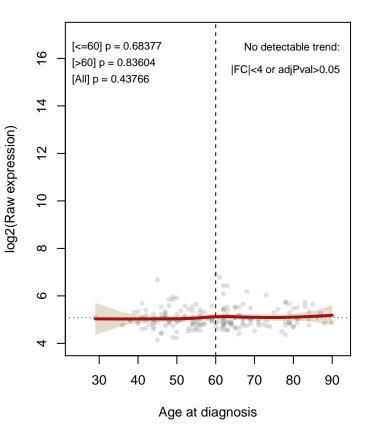
HIF3A (non-ER binding)

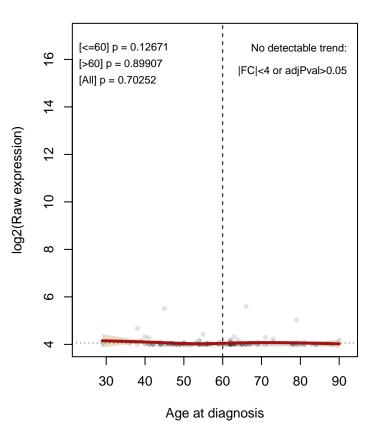






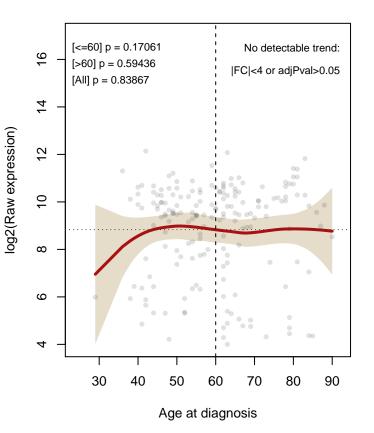
HNF1B (non-ER binding)

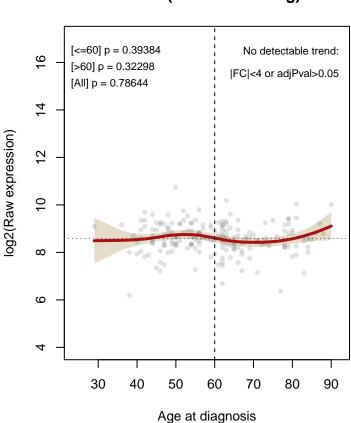




HOXC10 (non-ER binding)

HRAS (non-ER binding)





HSPB1 (non-ER binding) IGF1R (ER binding) [<=60] p = 0.010332 No detectable trend: [<=60] p = 0.01595No detectable trend: 16 16 [>60] p = 0.82602 [>60] p = 0.22269 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.34484[AII] p = 0.28344 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ∞ 9 9 30 40 50 70 80 90 30 40 50 60 70 80 90 60 Age at diagnosis Age at diagnosis IGFBP2 (non-ER binding) **IKBKB (ER binding)** [<=60] p = 0.37643No detectable trend: [<=60] p = 0.44244No detectable trend: 16 16 [>60] p = 0.66367[>60] p = 0.1462 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.73527[AII] p = 0.0988464 4 log2(Raw expression) log2(Raw expression) 12 12 10 10

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Age at diagnosis

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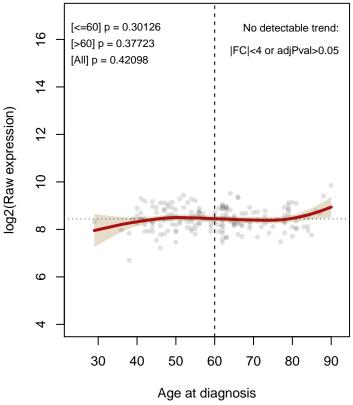
Age at diagnosis

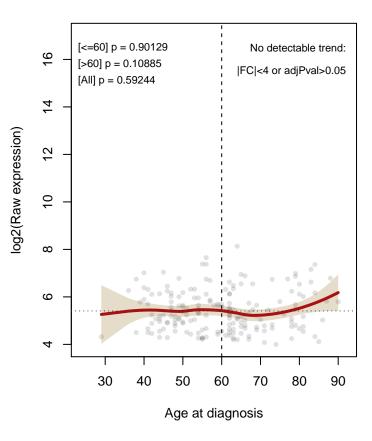
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IKBKG (ER binding)

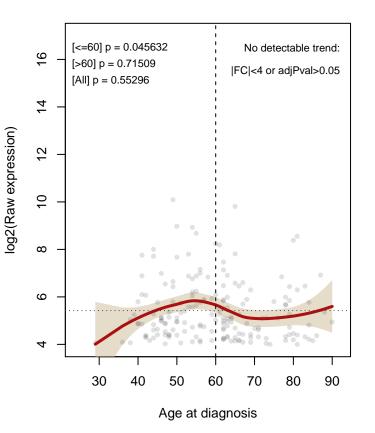
IL2RA (non-ER binding)

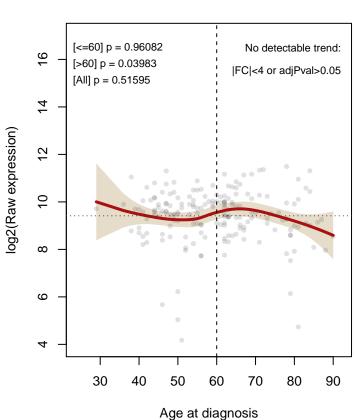


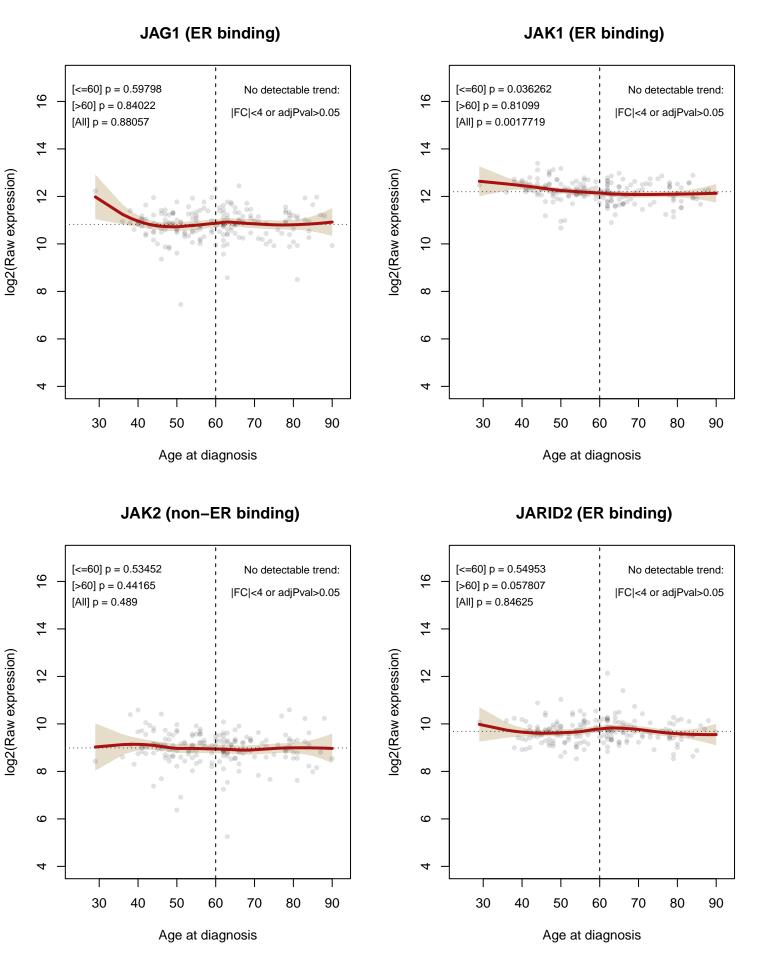


IL6 (non-ER binding)

INPP4B (non-ER binding)







JUN (non-ER binding) [<=60] p = 0.38187No detectable trend: 16 [>60] p = 0.35028 |FC|<4 or adjPval>0.05 [All] p = 0.664984 log2(Raw expression) 12 10

ω

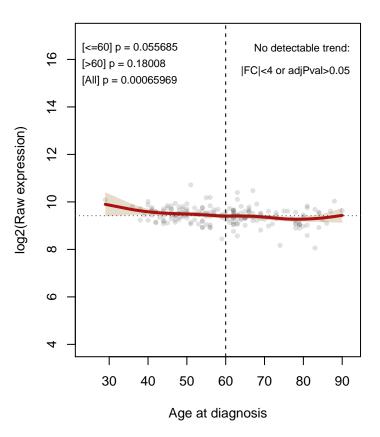
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KDM2B (non-ER binding)



KDM6A (non-ER binding)

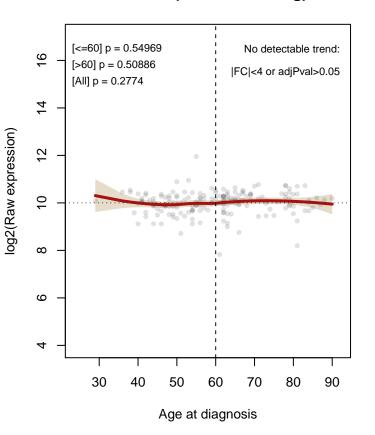
Age at diagnosis

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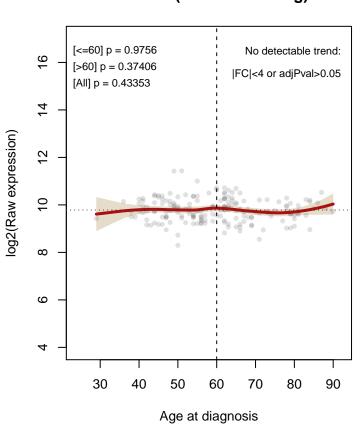
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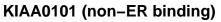
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KDM6B (non-ER binding)





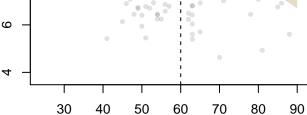




log2(Raw expression)

log2(Raw expression)

∞



KMT2C (non-ER binding)

Age at diagnosis

[<=60] p = 0.13083No detectable trend: 16 [>60] p = 0.40345 |FC|<4 or adjPval>0.05 [All] p = 0.155214 12 10 ω 9

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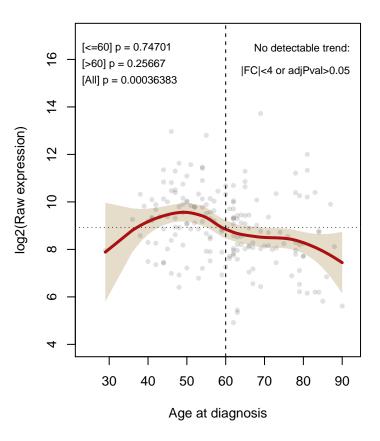
Age at diagnosis

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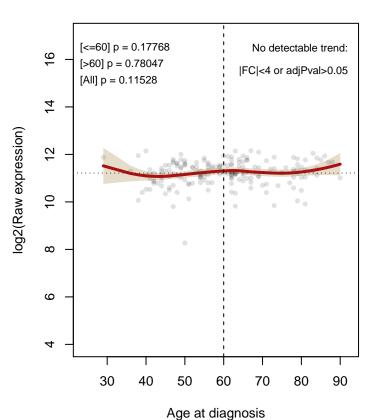
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KIT (non-ER binding)

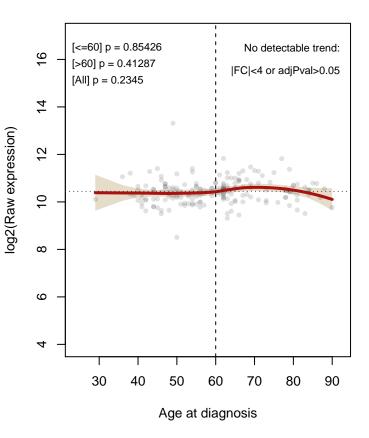


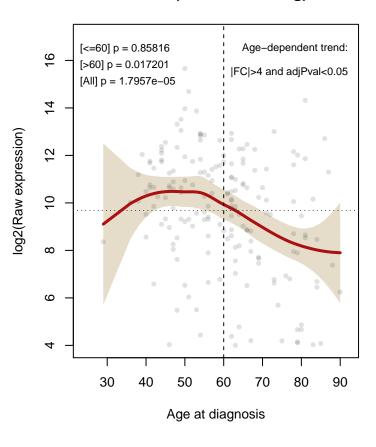
KMT2D (non-ER binding)





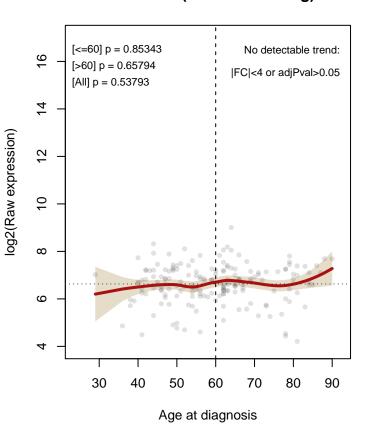
KRT5 (non-ER binding)

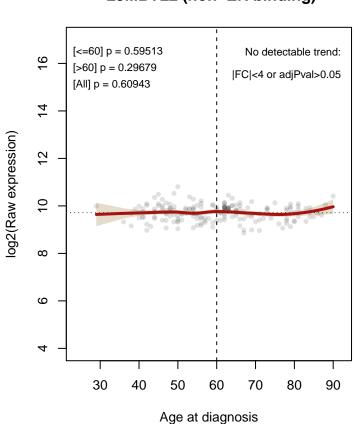




L3MBTL1 (non-ER binding)

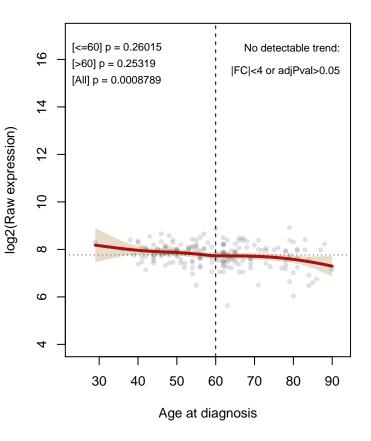
L3MBTL2 (non-ER binding)

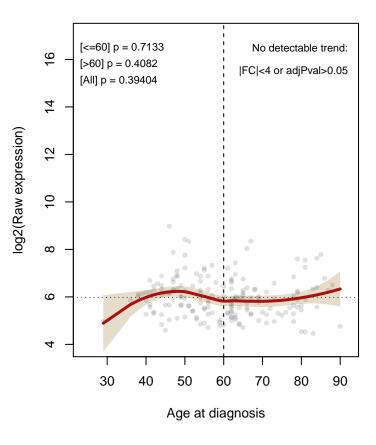




L3MBTL3 (ER binding)

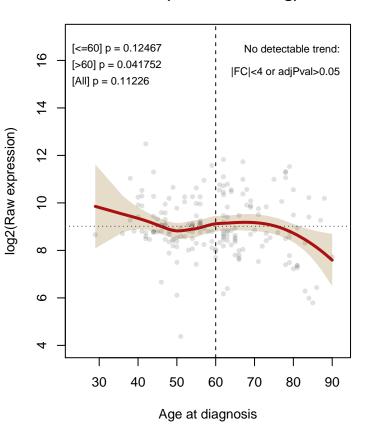
L3MBTL4 (non-ER binding)

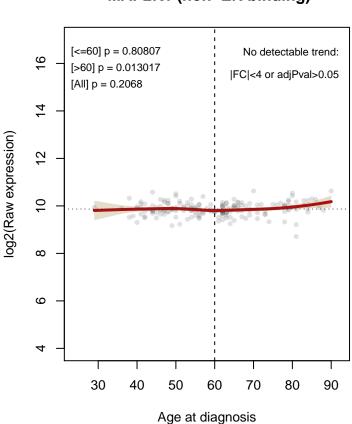


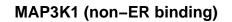


LEF1 (non-ER binding)

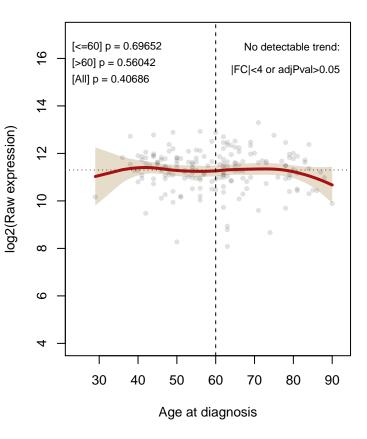
MAP2K1 (non-ER binding)

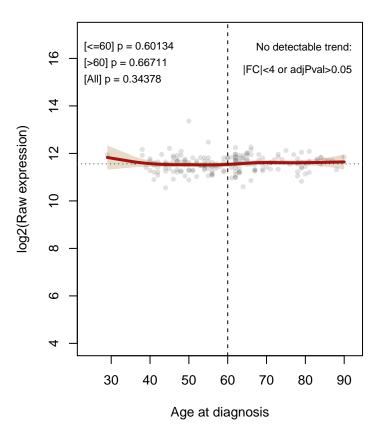






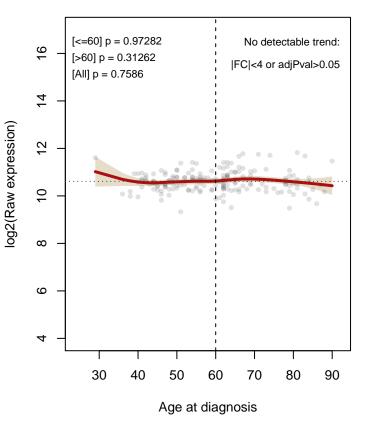
MAPK1 (non-ER binding)

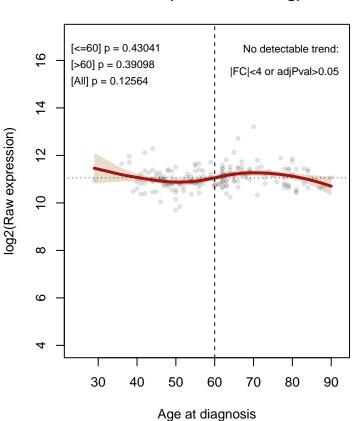


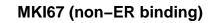


MAPK3 (non-ER binding)

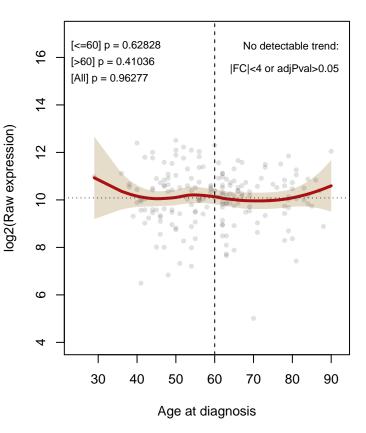
MDM2 (non-ER binding)

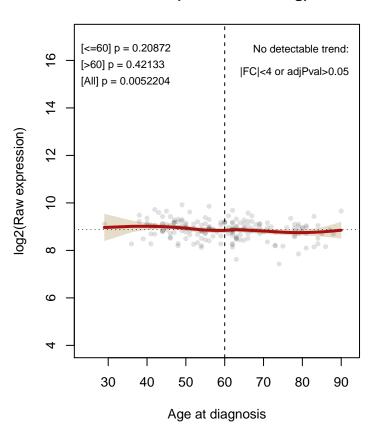






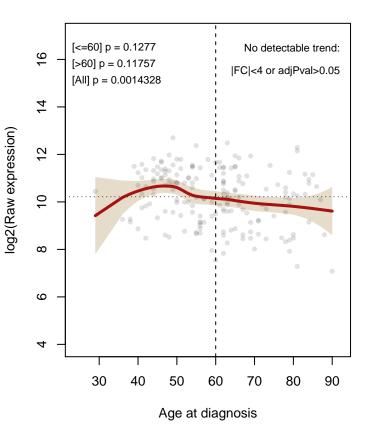
MTF2 (non-ER binding)

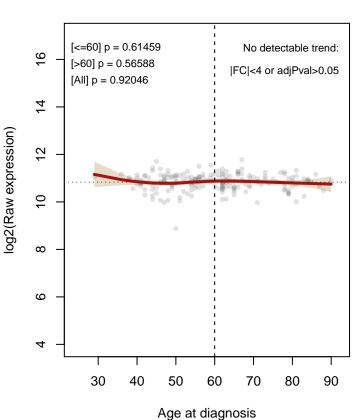




MYC (non-ER binding)

NCOA6 (non-ER binding)





NCOR1 (non-ER binding) **NES (non-ER binding)** [<=60] p = 0.96548No detectable trend: [<=60] p = 0.22262No detectable trend: 16 16 [>60] p = 0.96772 [>60] p = 0.63187 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.48094[AII] p = 0.00494084 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 NFKB1 (non-ER binding) NFKB2 (non-ER binding) [<=60] p = 0.084701No detectable trend: [<=60] p = 0.70101No detectable trend: 16 16 [>60] p = 0.71454 [>60] p = 0.31203 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.85668[All] p = 0.558974 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω

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Age at diagnosis

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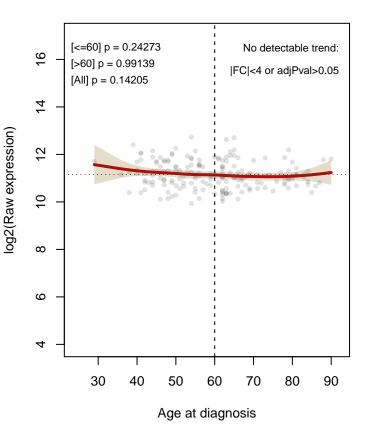
Age at diagnosis

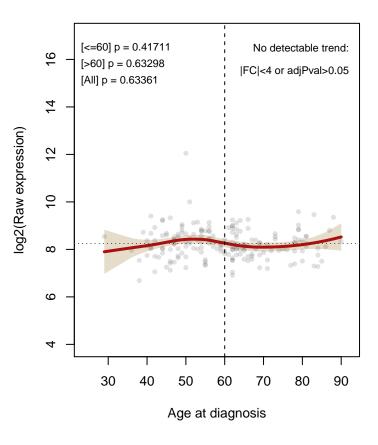
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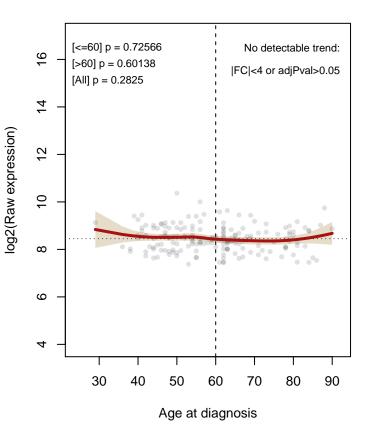
NFKBIB (non-ER binding)

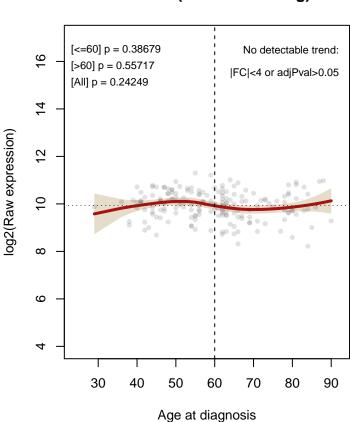




NFKBIE (non-ER binding)

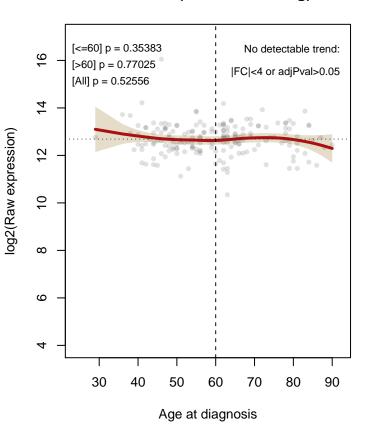
NOTCH1 (non-ER binding)

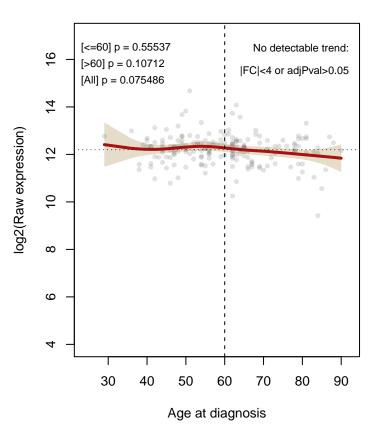




NOTCH2 (non-ER binding)

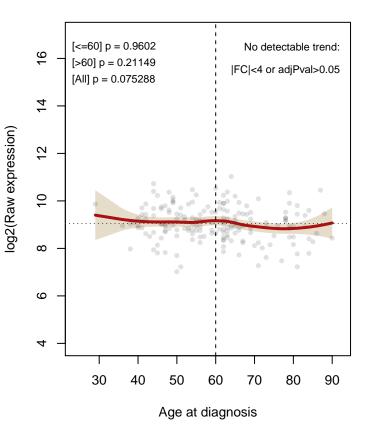
NOTCH3 (non-ER binding)

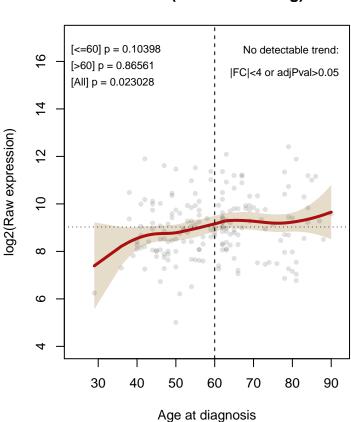




NOTCH4 (non-ER binding)

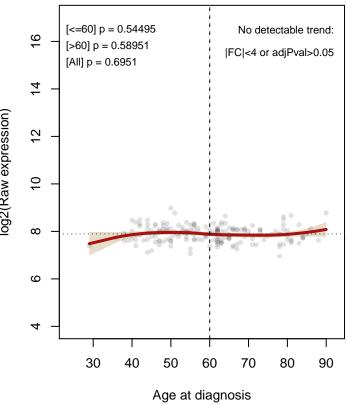
NR4A2 (non-ER binding)





NRAS (non-ER binding) [<=60] p = 0.031704No detectable trend: 16 16 [>60] p = 0.61163 |FC|<4 or adjPval>0.05 [AII] p = 0.005914 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

PCGF1 (non-ER binding)



PCGF2 (non-ER binding)

Age at diagnosis

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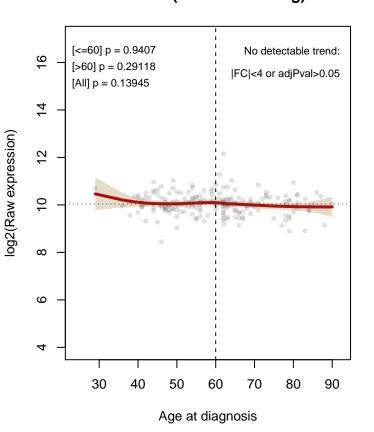
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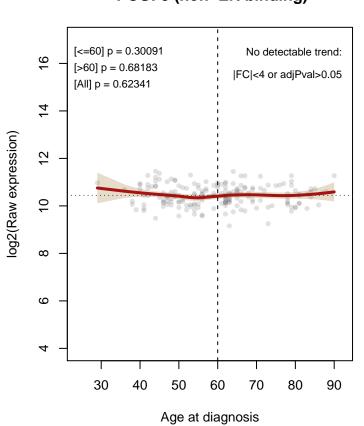
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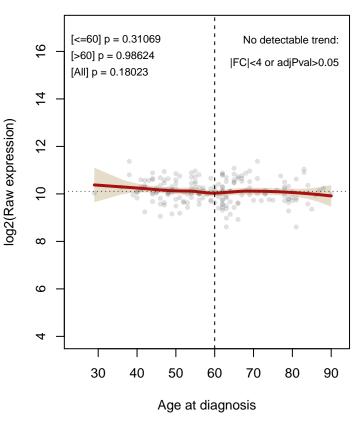


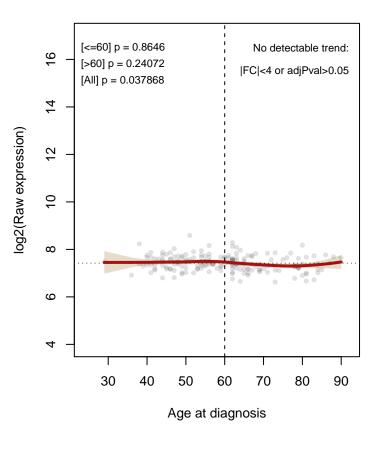
PCGF3 (non-ER binding)





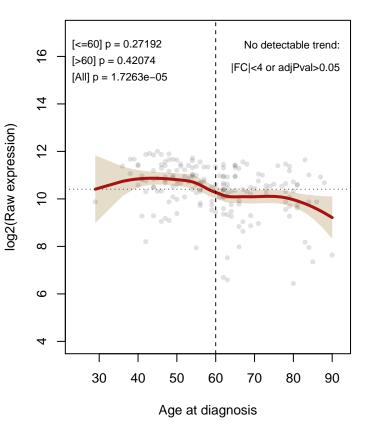
PCGF6 (non-ER binding)

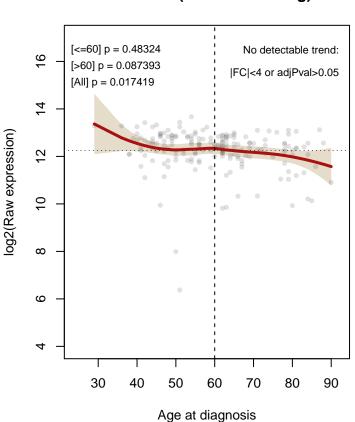




PDGFRA (non-ER binding)

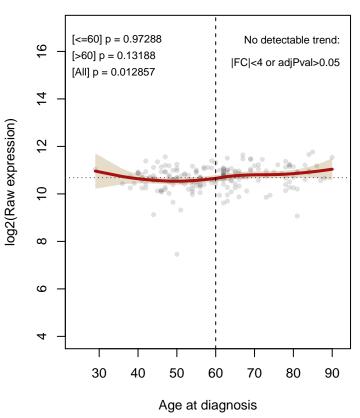
PDGFRB (non-ER binding)

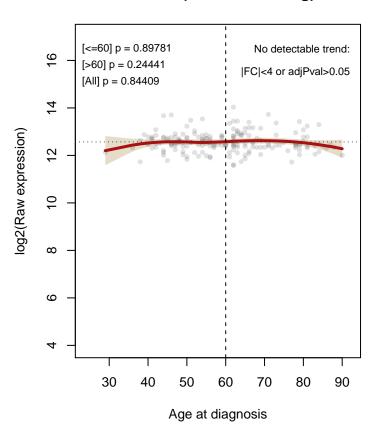






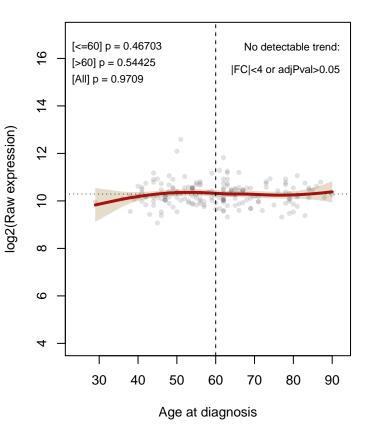
PEBP1 (non-ER binding)

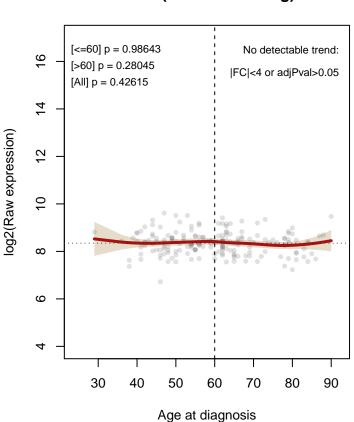


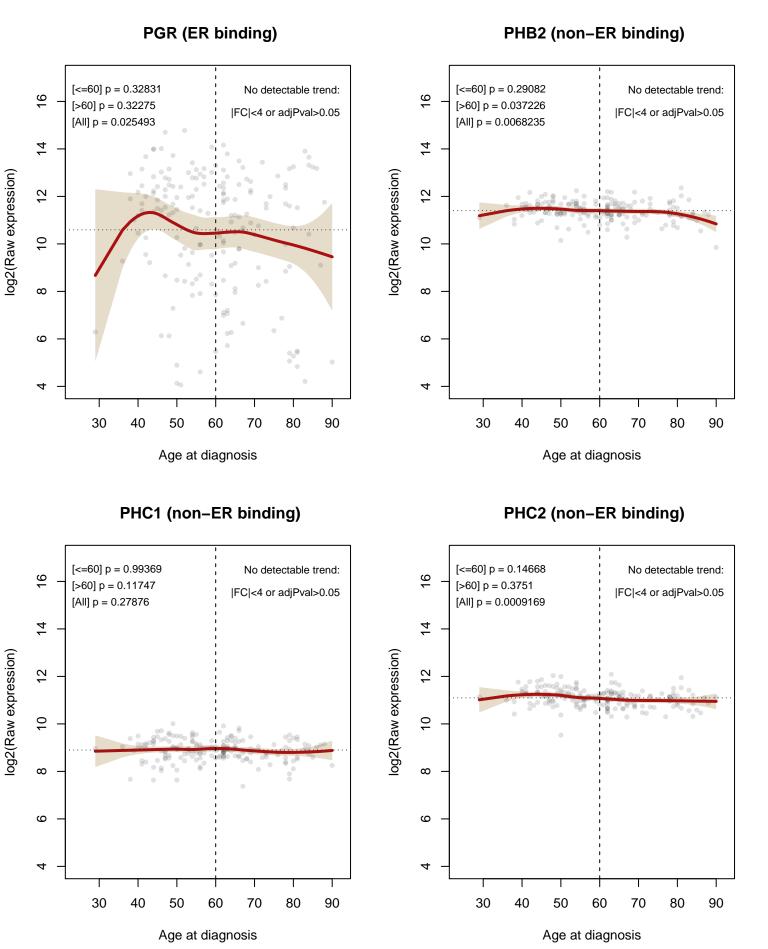


PELP1 (non-ER binding)

PGP (non-ER binding)







PHC3 (non-ER binding) PHF1 (non-ER binding) [<=60] p = 0.72899No detectable trend: [<=60] p = 0.029308No detectable trend: 16 16 [>60] p = 0.3991 [>60] p = 0.83395 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.088828[All] p = 0.33194 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 PHF19 (non-ER binding) PIK3CA (non-ER binding) [<=60] p = 0.83294No detectable trend: [<=60] p = 0.58663No detectable trend: 16 16 [>60] p = 0.20603 [>60] p = 0.65548|FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.021494[All] p = 0.822394 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω 9 9

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Age at diagnosis

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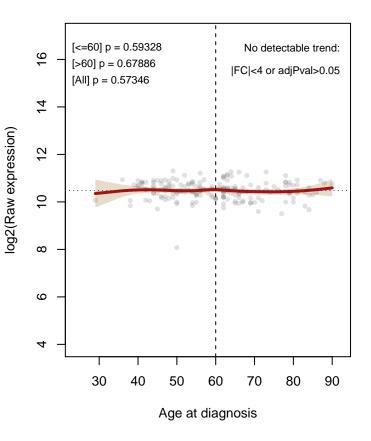
Age at diagnosis

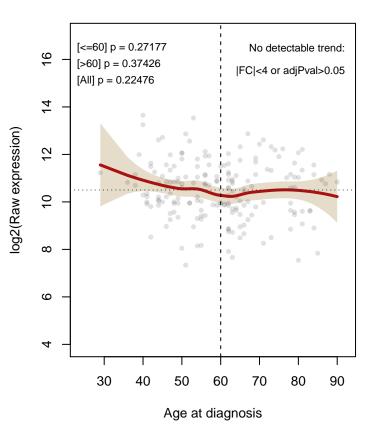
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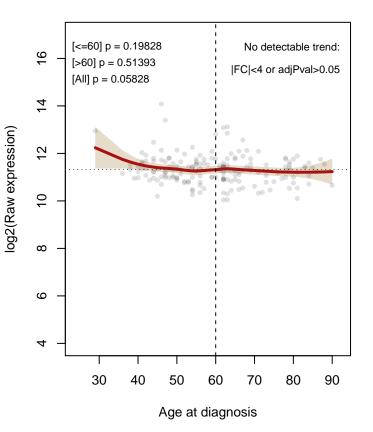
PLAU (non-ER binding)

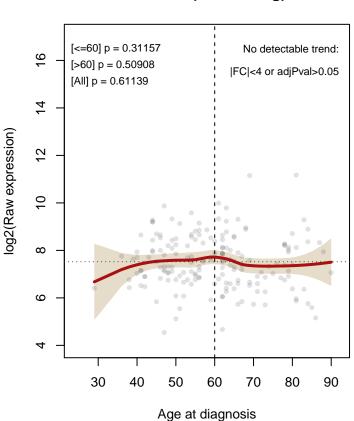


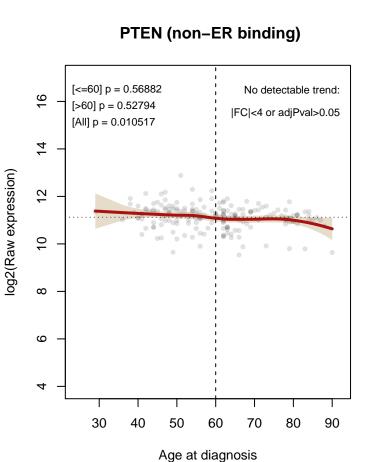


PODXL (non-ER binding)

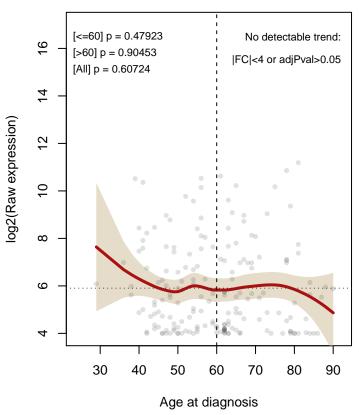
PPARG (ER binding)



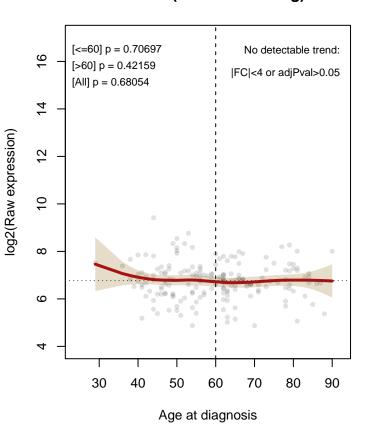




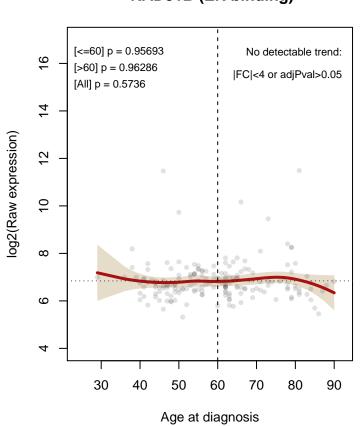
PYDC1 (non-ER binding)



RAD51 (non-ER binding)

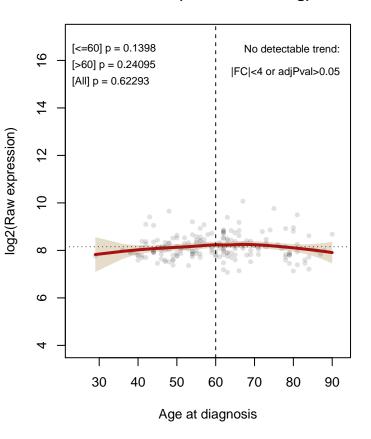


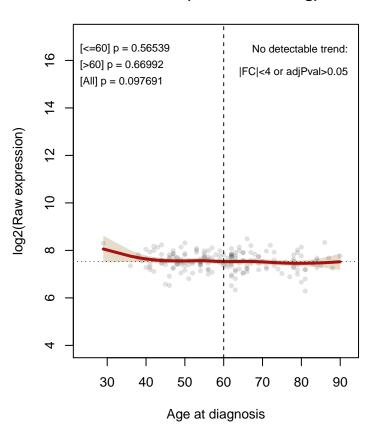
RAD51B (ER binding)



RAD51C (non-ER binding)

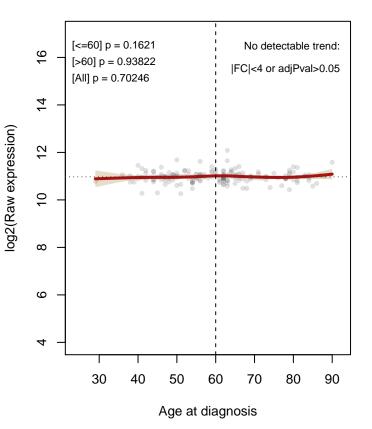
RAD51D (non-ER binding)

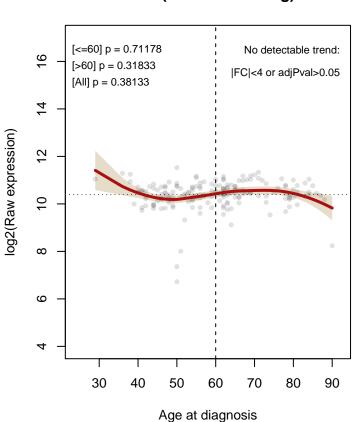




RAF1 (non-ER binding)

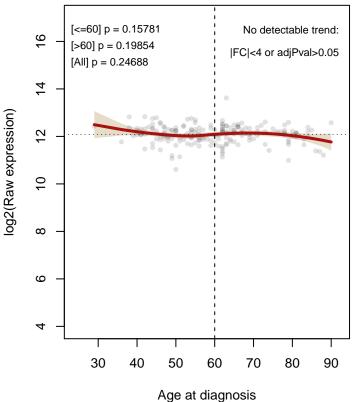
RB1 (non-ER binding)

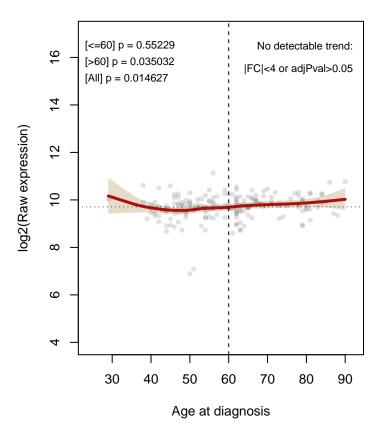




RBBP4 (non–ER binding)

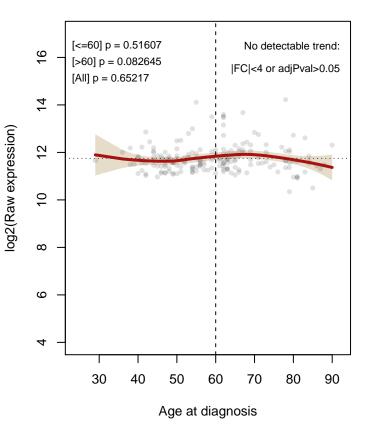
RBBP5 (non-ER binding)

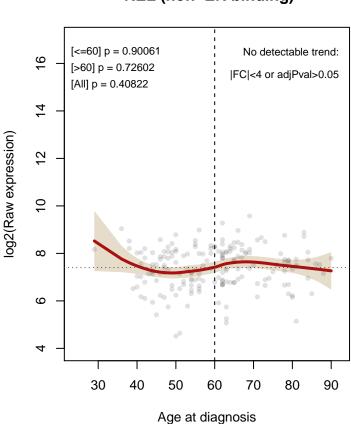




RBBP7 (non-ER binding)

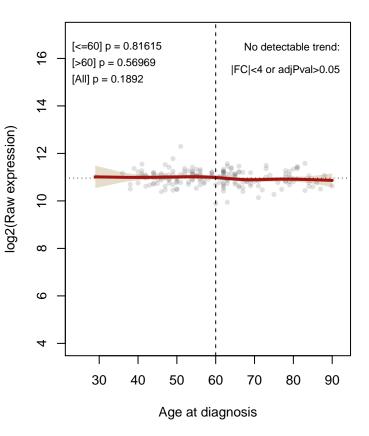
REL (non-ER binding)

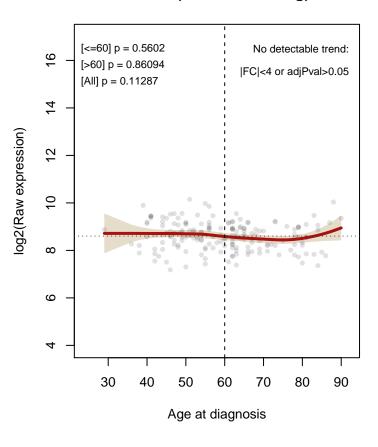






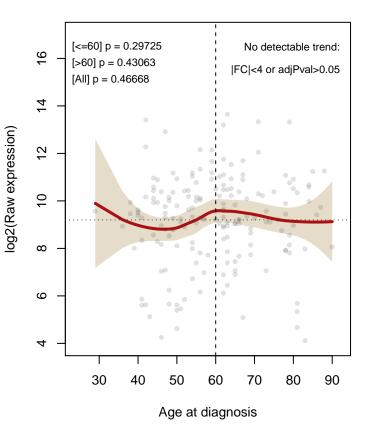
RELB (non-ER binding)

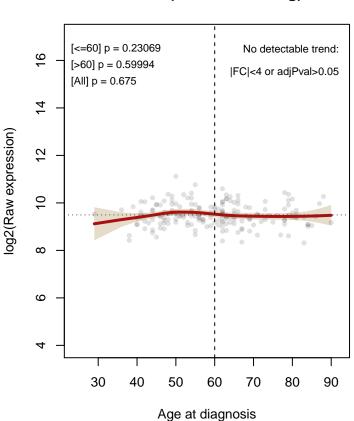


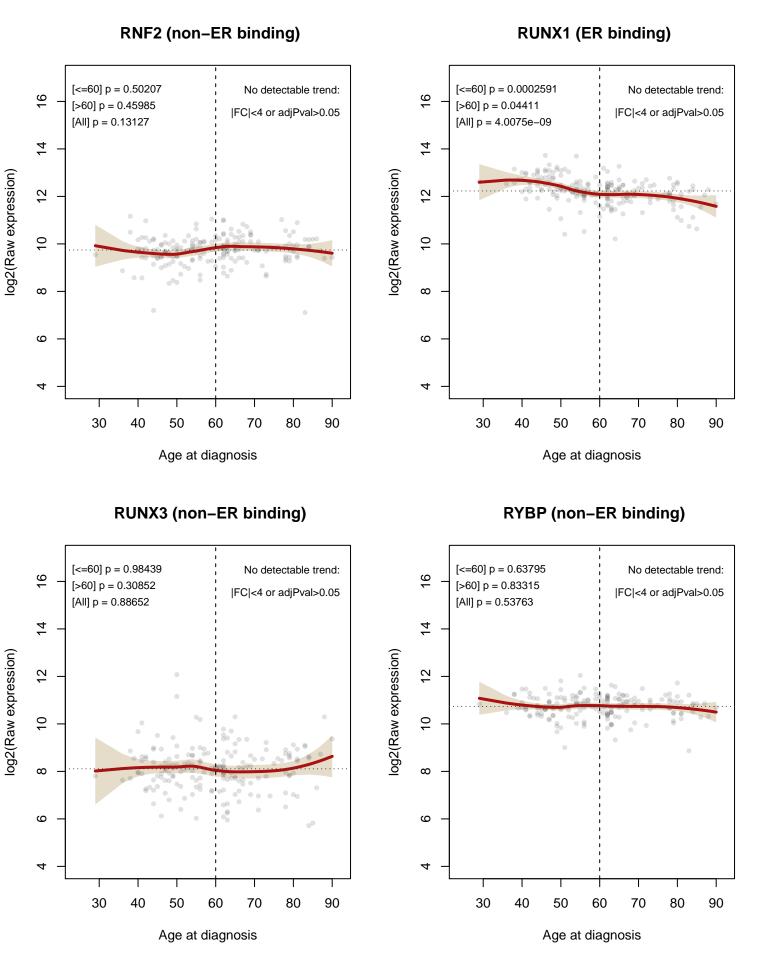


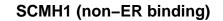
RET (ER binding)

RING1 (non-ER binding)

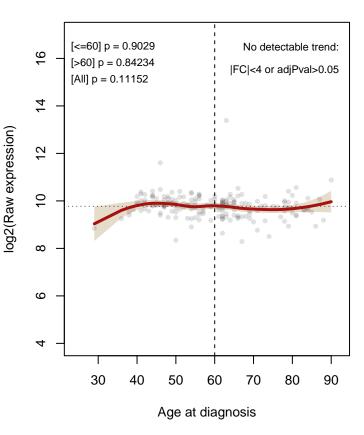


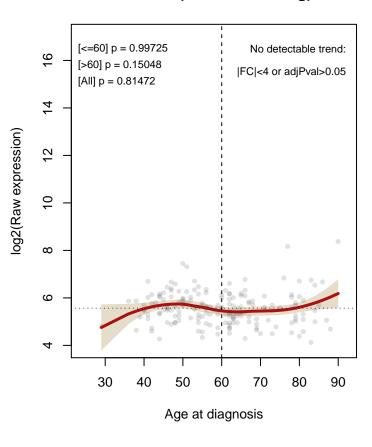






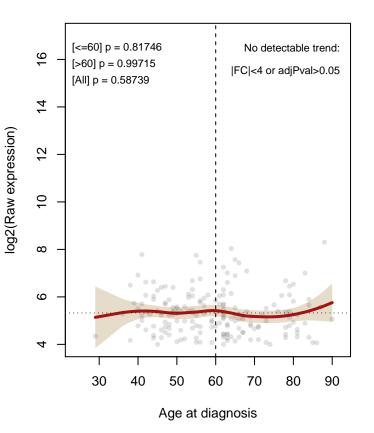
SCML2 (non-ER binding)

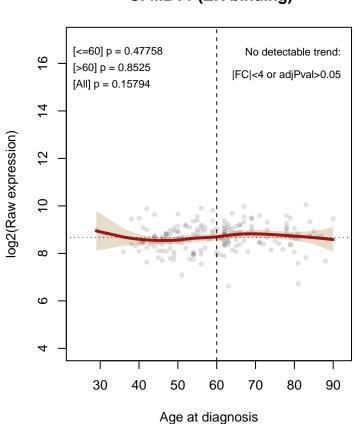




SCML4 (non-ER binding)

SFMBT1 (ER binding)





SFMBT2 (ER binding) SFPQ (non-ER binding) [<=60] p = 0.79158No detectable trend: [<=60] p = 0.29027No detectable trend: 16 16 [>60] p = 0.025898 [>60] p = 0.27223 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.22042[AII] p = 0.00623894 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 70 80 90 30 40 50 60 70 80 90 60 Age at diagnosis Age at diagnosis SHC1 (non-ER binding) SIRT1 (non-ER binding) [<=60] p = 0.20007No detectable trend: [<=60] p = 0.47048No detectable trend: 16 16 [>60] p = 0.65493[>60] p = 0.17351 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.06749[AII] p = 0.47474 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

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Age at diagnosis

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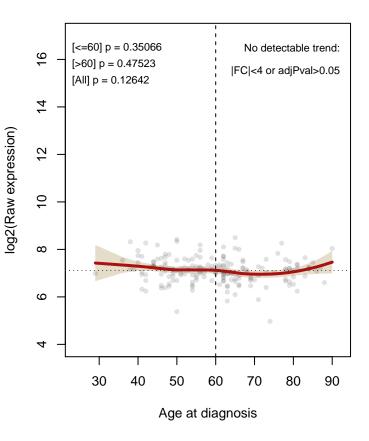
Age at diagnosis

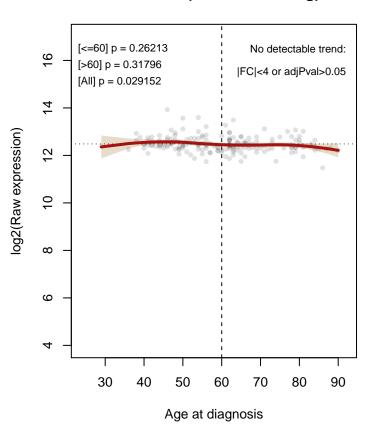
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SKP2 (non-ER binding)

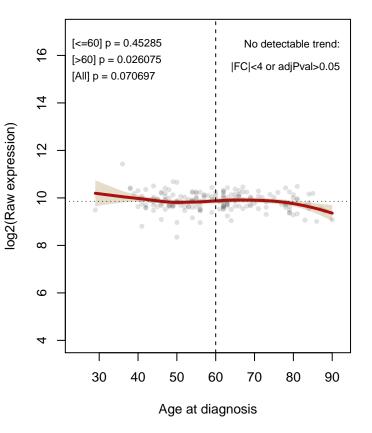
SLC25A3 (non-ER binding)

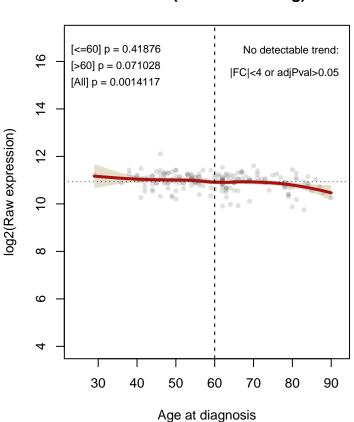




SMAD1 (non-ER binding)

SMAD2 (non-ER binding)





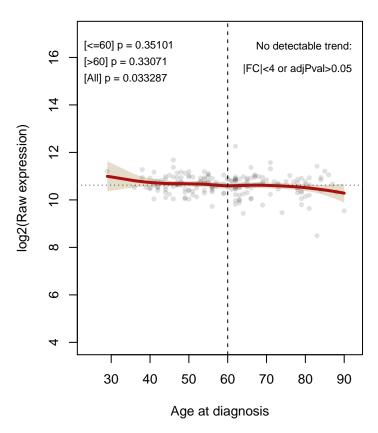
SMAD3 (ER binding) | Comparison of the comparis

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SMAD4 (non-ER binding)



SMAD5 (non-ER binding)

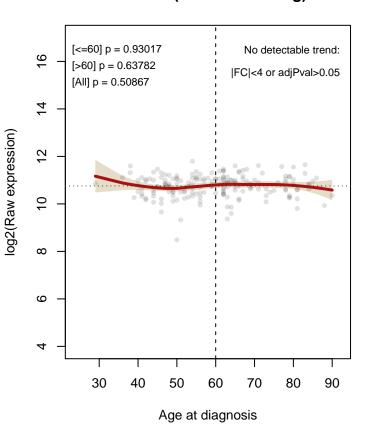
Age at diagnosis

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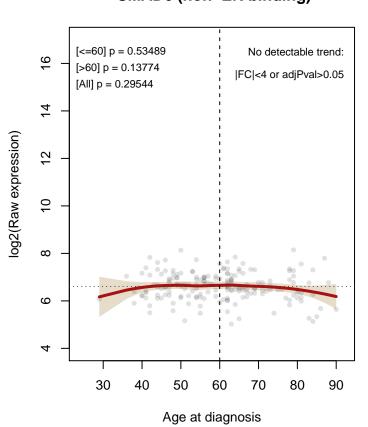
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SMAD6 (non-ER binding)



SMAD7 (non-ER binding) SMAD9 (non-ER binding) [<=60] p = 0.4427No detectable trend: [<=60] p = 0.33982No detectable trend: 16 16 [>60] p = 0.084732 [>60] p = 0.090401 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.010276[AII] p = 0.00773564 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 SOS1 (non-ER binding) SOS2 (non-ER binding) [<=60] p = 0.85125No detectable trend: [<=60] p = 0.44266No detectable trend: 16 16 [>60] p = 0.39207[>60] p = 0.8162 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.43642[All] p = 0.773424 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

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Age at diagnosis

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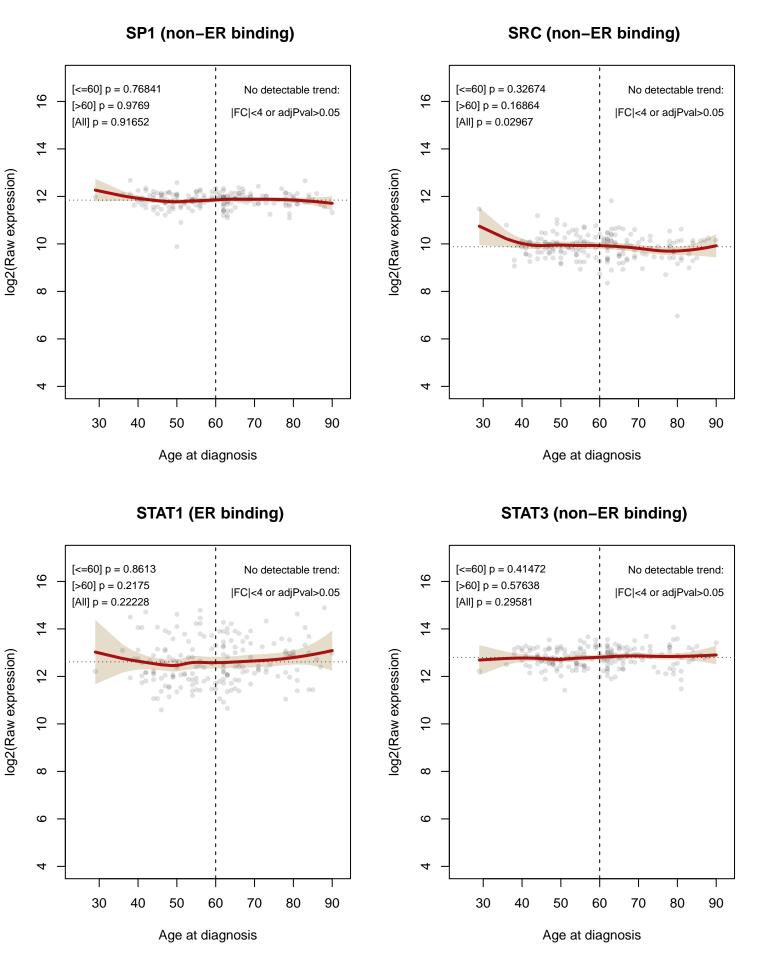
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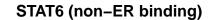
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Age at diagnosis

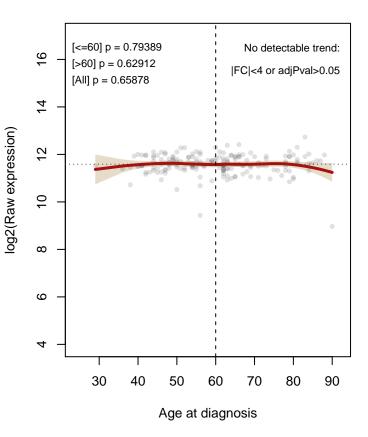
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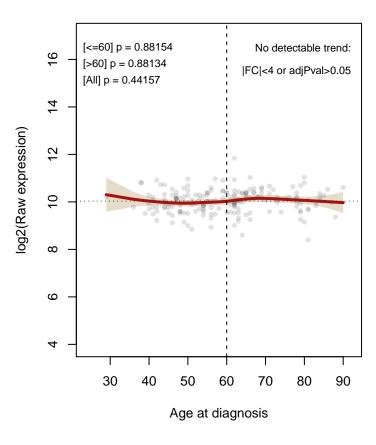
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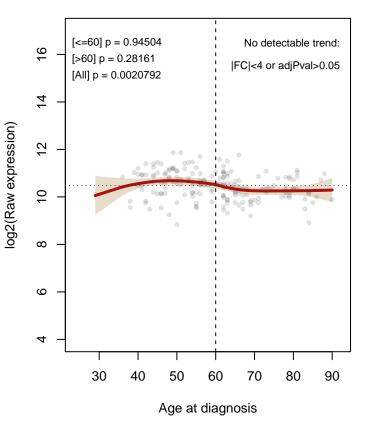
SUZ12 (non-ER binding)

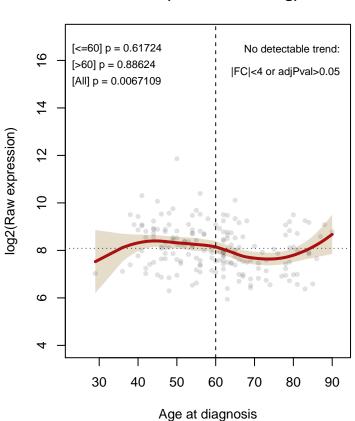




TCF3 (non-ER binding)

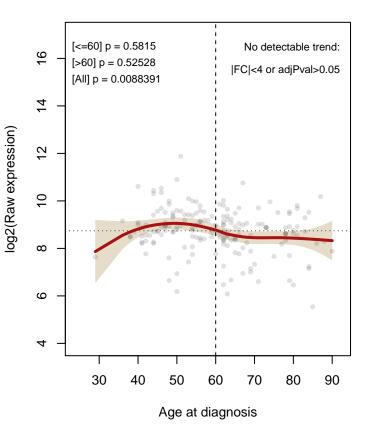
TCF7 (non-ER binding)

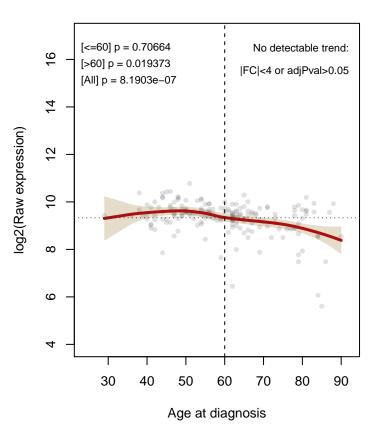






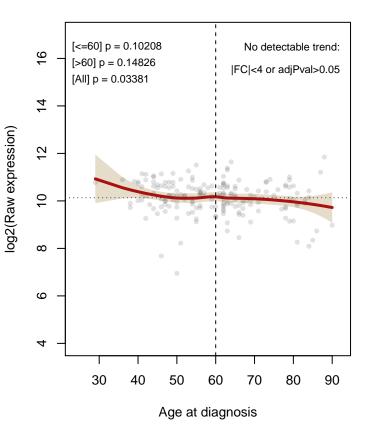
TCF7L2 (non-ER binding)

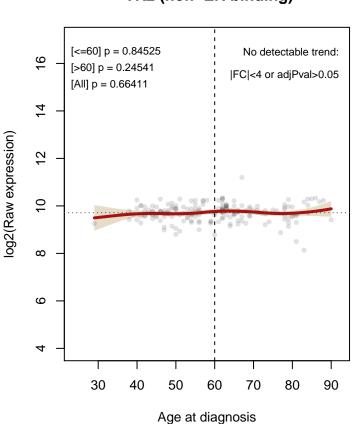


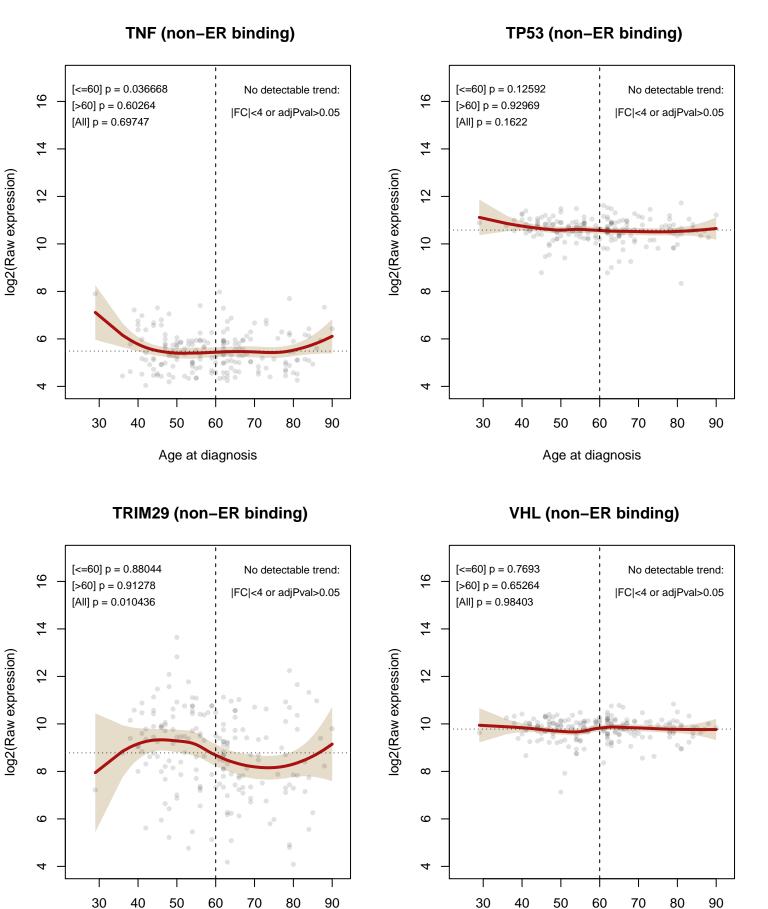


TGFB1 (non-ER binding)

TK2 (non-ER binding)



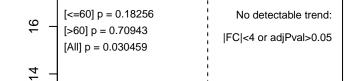


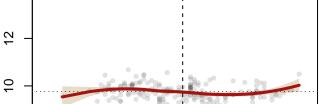


Age at diagnosis

Age at diagnosis







10 ω

log2(Raw expression)

log2(Raw expression)



50

30

40

Age at diagnosis

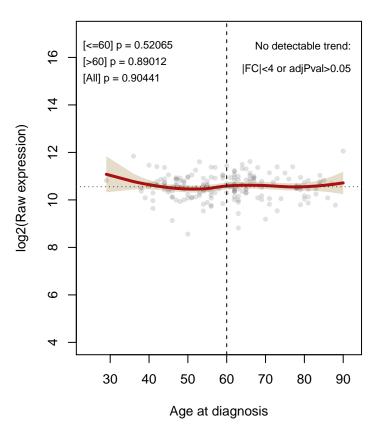
60

70

80

90

WHSC1 (non-ER binding)

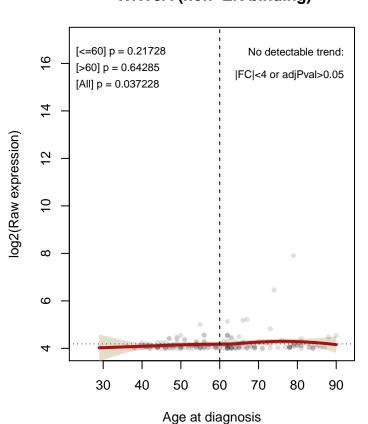


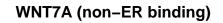
WNT1 (non-ER binding)

[<=60] p = 0.64847No detectable trend: 16 [>60] p = 0.63527 |FC|<4 or adjPval>0.05 [All] p = 0.305574 12 10 ω 9 30 40 50 60 70 80 90

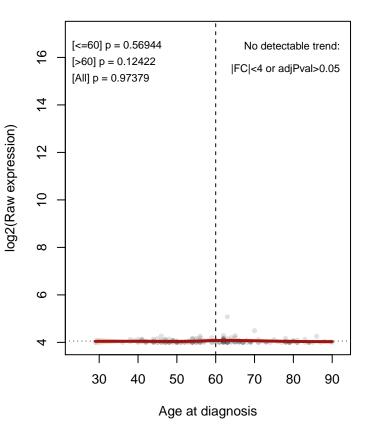
Age at diagnosis

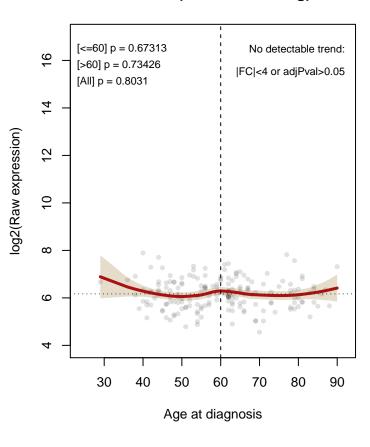
WNT3A (non-ER binding)





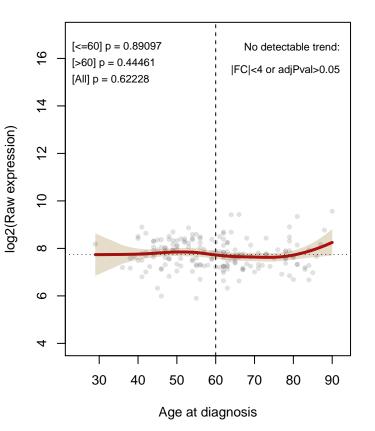
XRCC2 (non-ER binding)

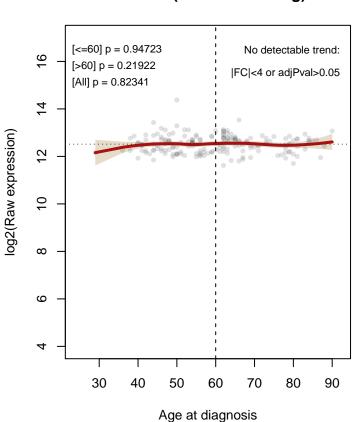




XRCC3 (non-ER binding)

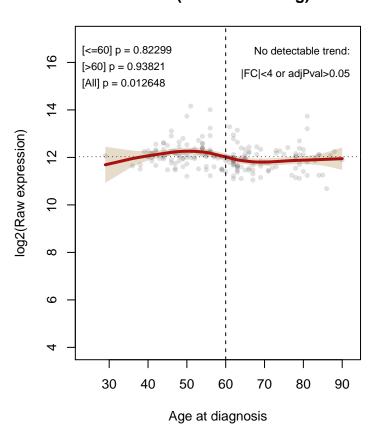
XRCC6 (non-ER binding)





YAF2 (non-ER binding)

YBX1 (non-ER binding)



YY1 (non-ER binding)

Age at diagnosis

