

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|<1.25 or adjPval>0.05 |FC|<1.25 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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.53631[All] p = 0.926994 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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BCL2 (non-ER binding) [<=60] p = 0.41881No detectable trend: 16 [>60] p = 0.10637 |FC|<1.25 or adjPval>0.05 [AII] p = 0.252264 log2(Raw expression) 12 10

ω

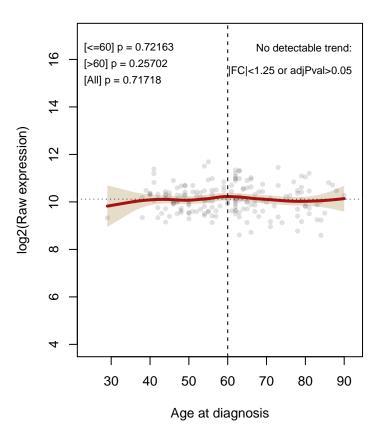
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BCL3 (non-ER binding)



BIRC5 (non-ER binding)

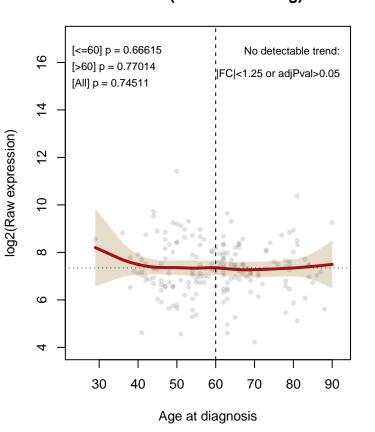
Age at diagnosis

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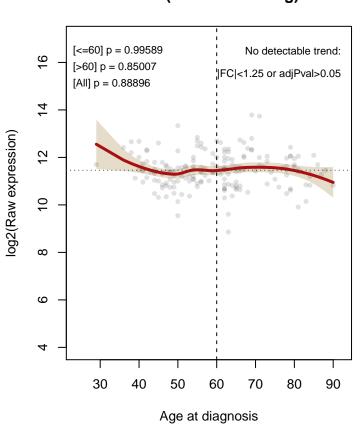
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BMI1 (non-ER binding)



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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [AII] p = 0.13002[All] p = 0.638934 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω 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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.25473[All] p = 0.0955344 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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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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [AII] p = 0.37811[All] p = 0.298674 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 CBX6 (non-ER binding) **CBX7 (non-ER binding)** [<=60] p = 0.20893No detectable trend: [<=60] p = 0.098056No detectable trend: 16 16 [>60] p = 0.3278 [>60] p = 0.86372 |FC|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.054251[All] p = 0.332894 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω

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Age at diagnosis

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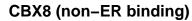
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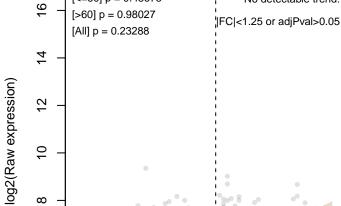
Age at diagnosis

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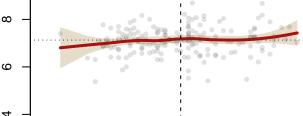
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[<=60] p = 0.48675No detectable trend: [>60] p = 0.98027



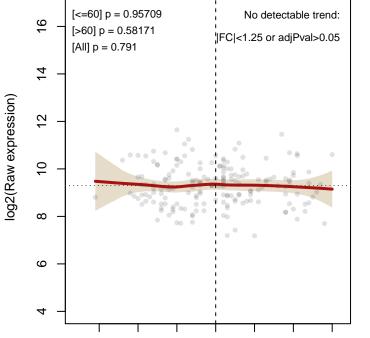




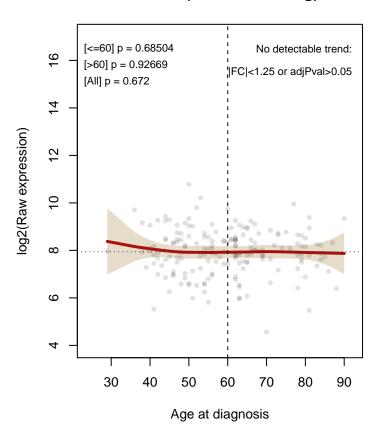
Age at diagnosis

CCNB1 (non-ER binding)

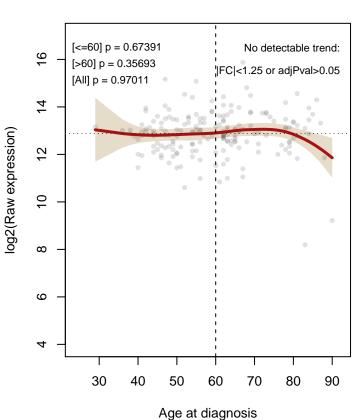
Age at diagnosis



CCNA2 (non-ER binding)

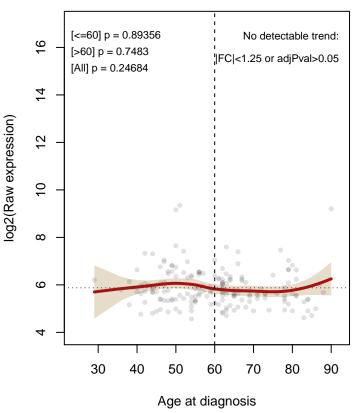


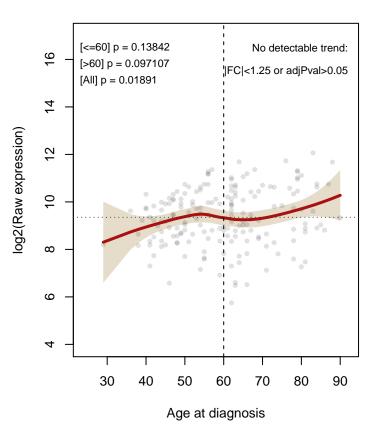
CCND1 (ER binding)





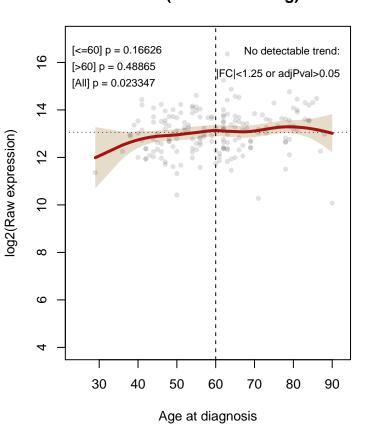
CD163 (non-ER binding)

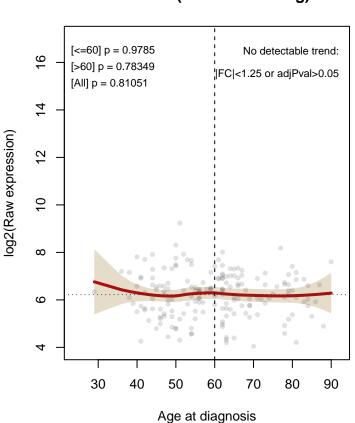


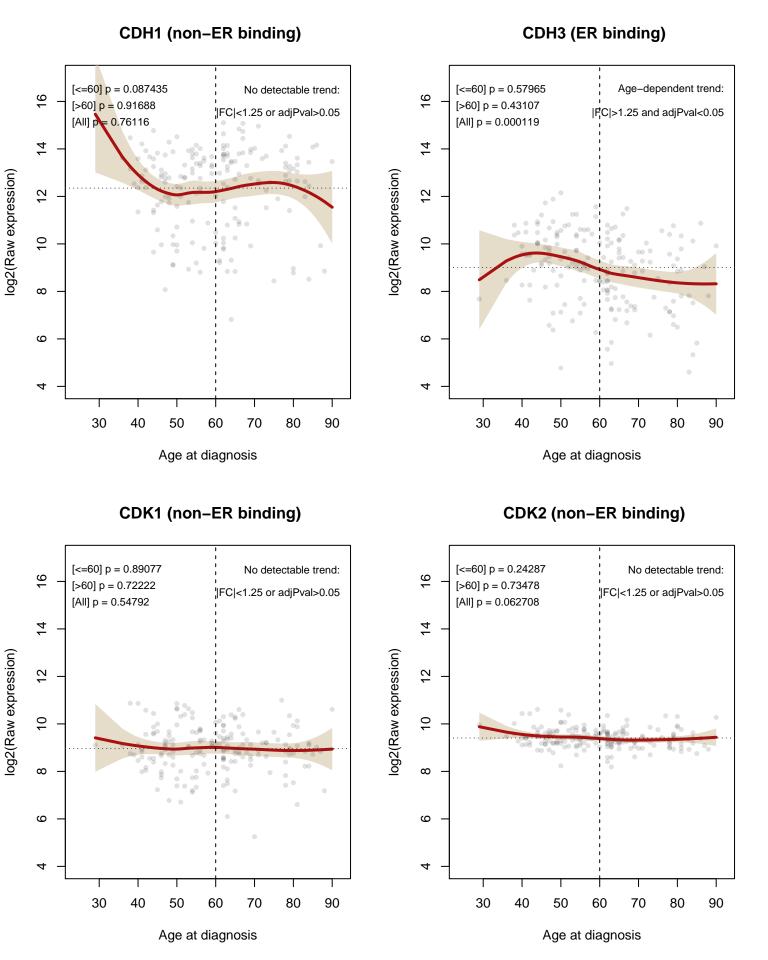


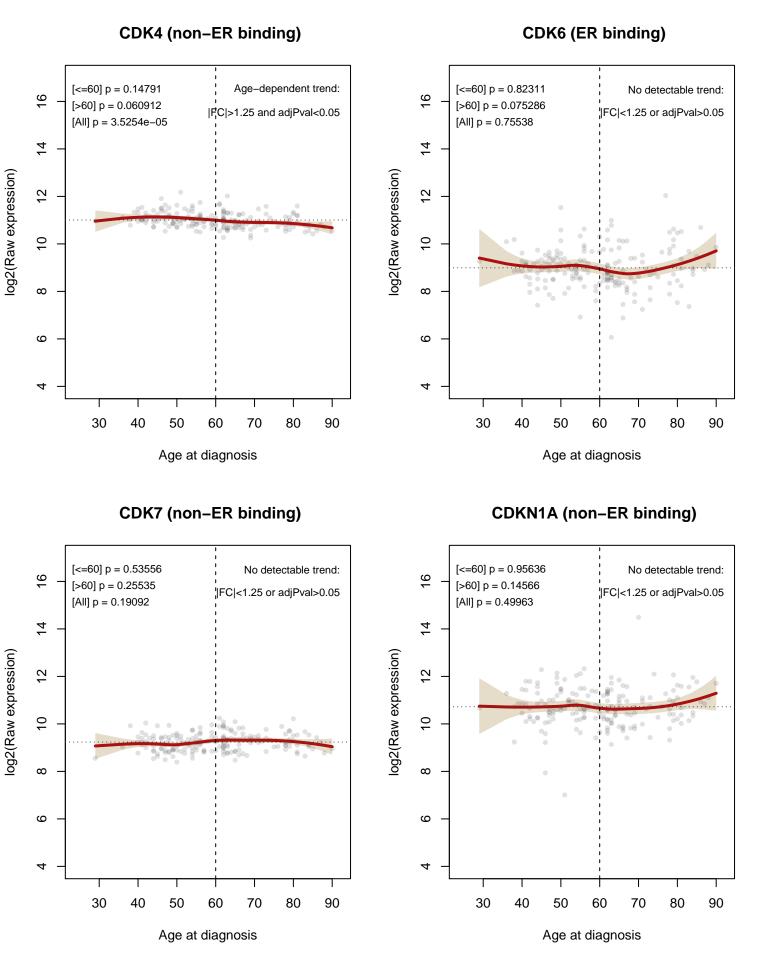
CD44 (non-ER binding)

CDC25C (non-ER binding)



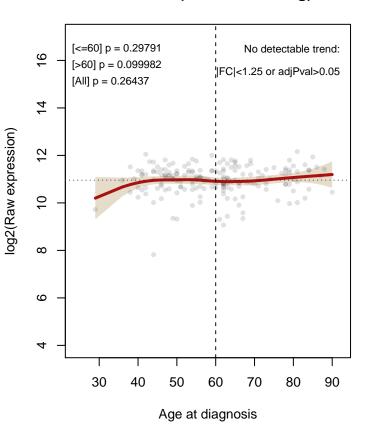


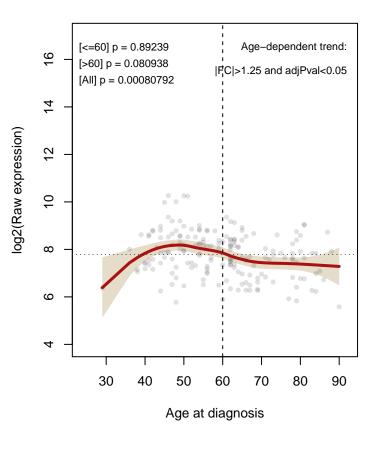




CDKN1B (non-ER binding)

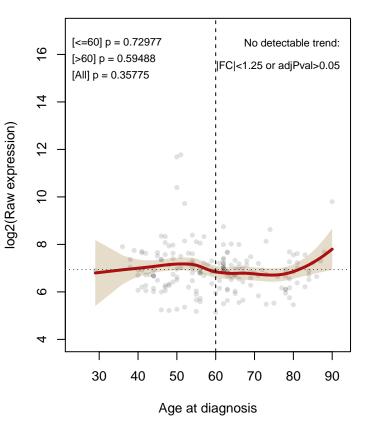
CDKN1C (non-ER binding)

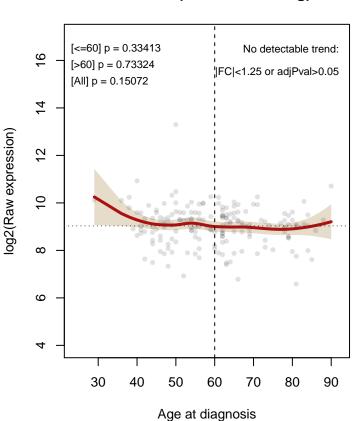


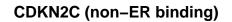


CDKN2A (non-ER binding)

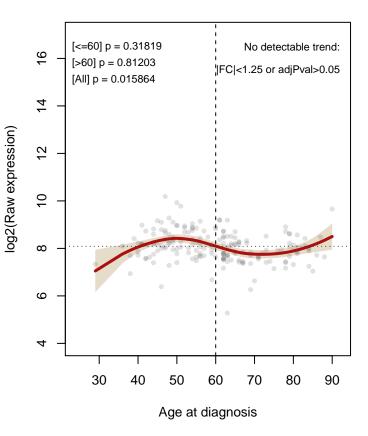
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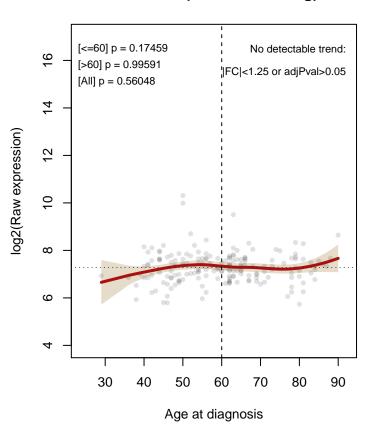






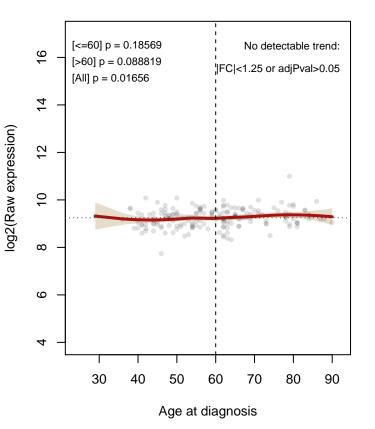
CDKN2D (non-ER binding)

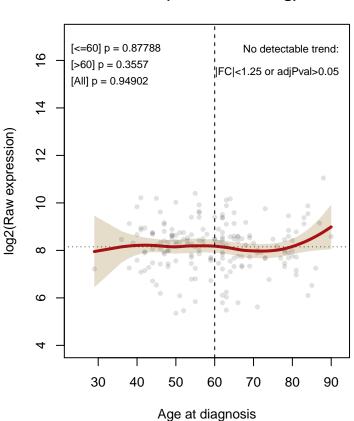


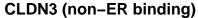


CHUK (non-ER binding)

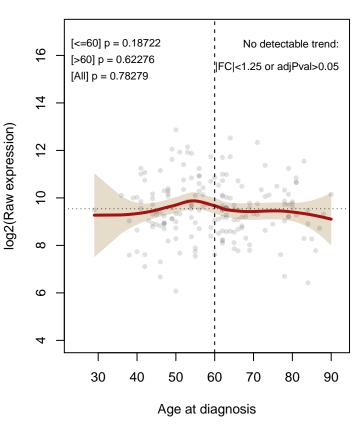
CIITA (non-ER binding)

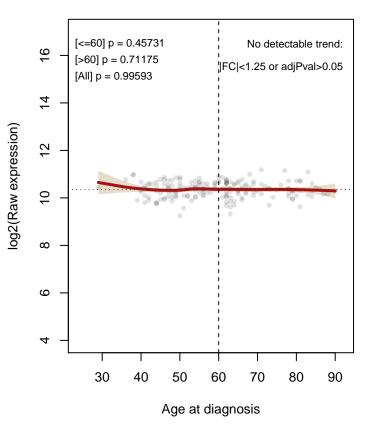






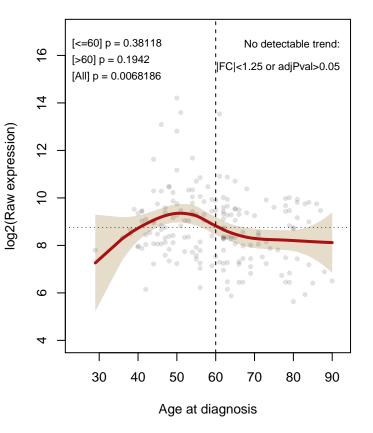
CREB1 (non-ER binding)

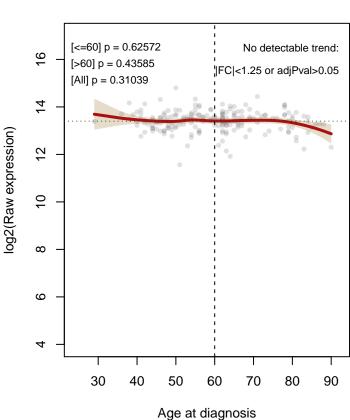




CRYAB (non-ER binding)

CTNNB1 (non-ER binding)





DLC1 (ER binding) DMAP1 (non-ER binding) [<=60] p = 0.21226 Age-dependent trend: [<=60] p = 0.27978No detectable trend: 16 16 [>60] p = 0.0074285 [>60] p = 0.2294 |FC|>1.25 and adjPval<0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.00021294[All] p = 0.0522324 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 **DNMT1** (non-ER binding) **DNMT3A (non-ER binding)** [<=60] p = 0.60564No detectable trend: [<=60] p = 0.091705Age-dependent trend: 16 16 [>60] p = 0.90528 [>60] p = 0.1876 |FC|<1.25 or adjPval>0.05 |FC|>1.25 and adjPval<0.05 [All] p = 0.44718[All] p = 0.000172544 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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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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.052813[All] p = 0.551024 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 E2F1 (non-ER binding) E2F2 (non-ER binding) [<=60] p = 0.26471No detectable trend: [<=60] p = 0.7806No detectable trend: 16 16 [>60] p = 0.59124 [>60] p = 0.3754 |FC|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.52159[All] p = 0.498544 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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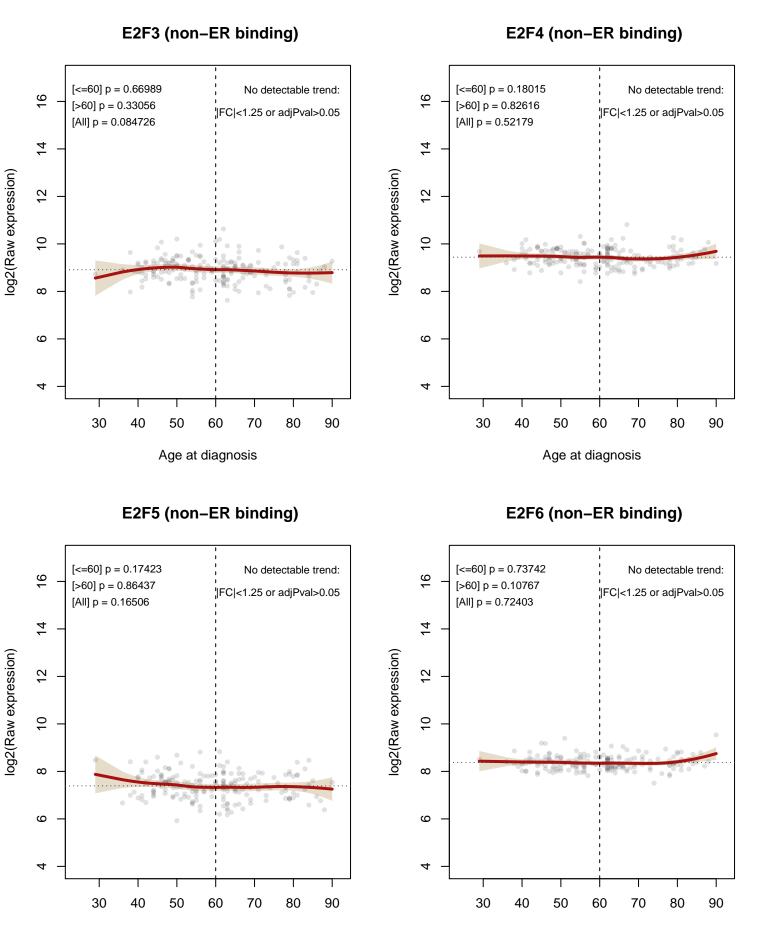
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Age at diagnosis

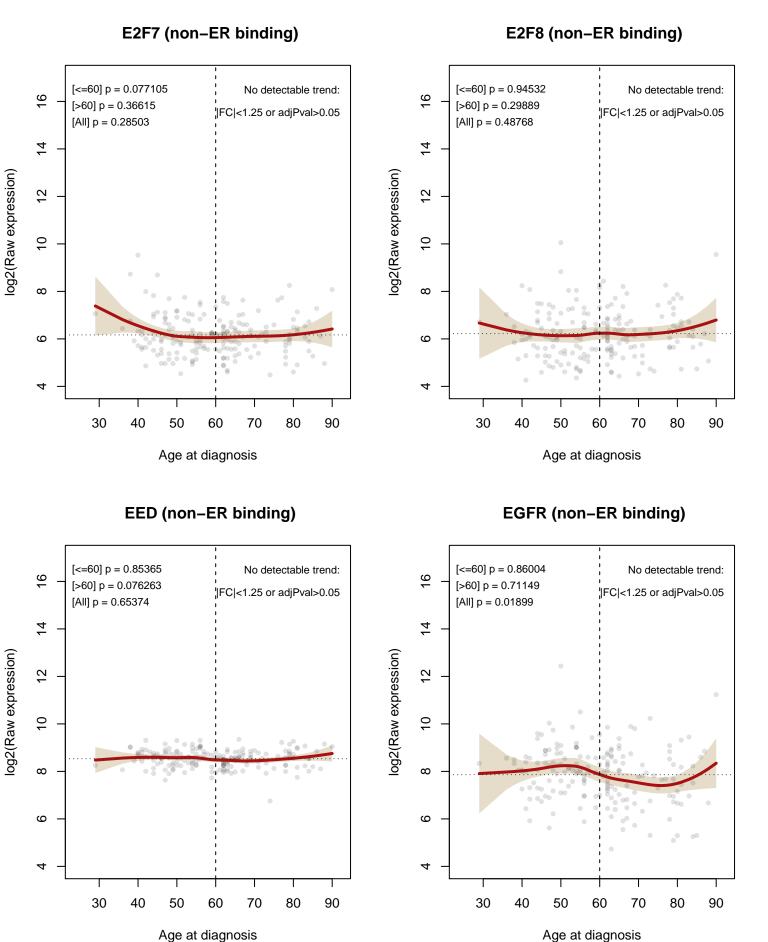
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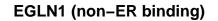
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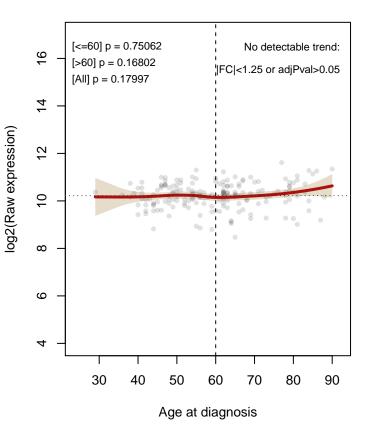
Age at diagnosis

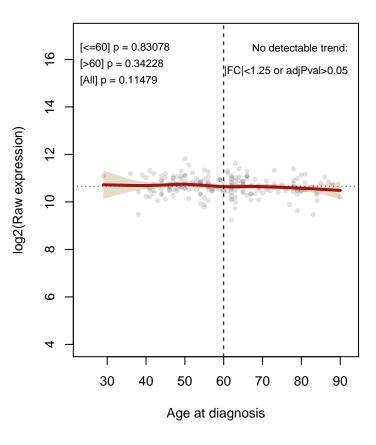
Age at diagnosis





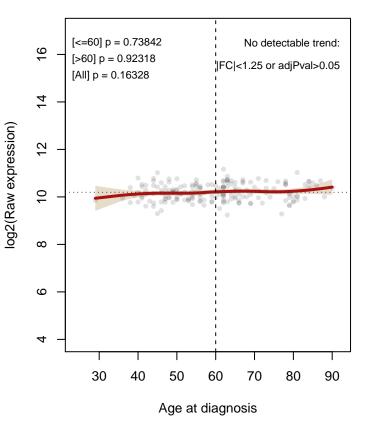
EHMT2 (non-ER binding)

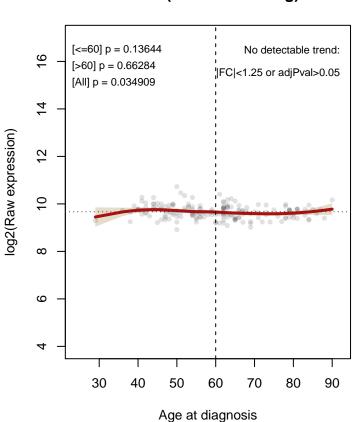


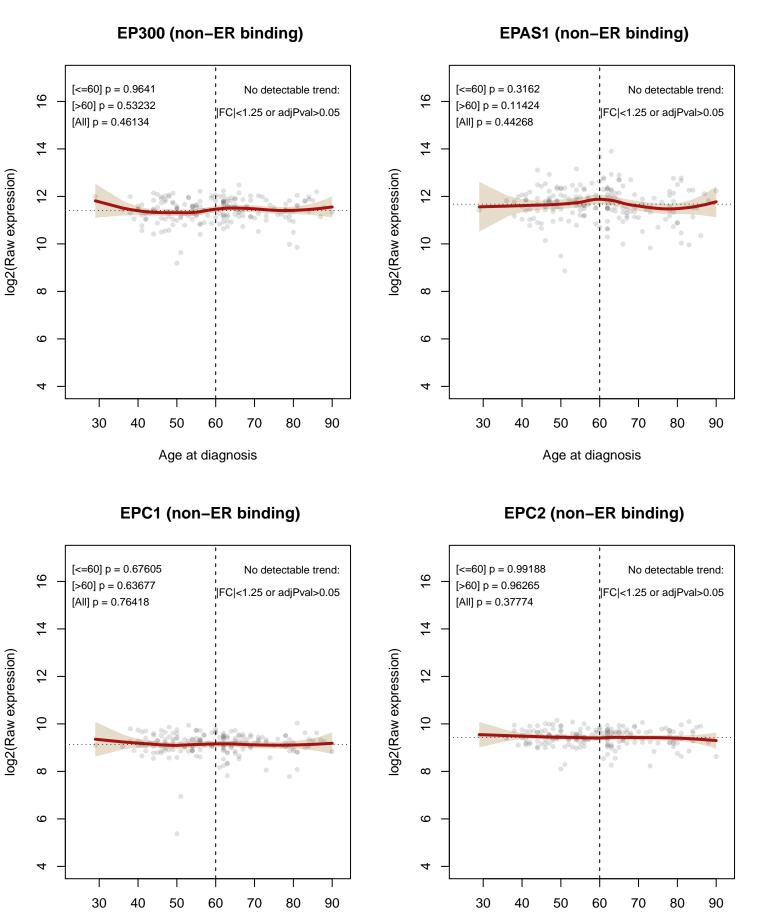


ELAC2 (non-ER binding)

ELK1 (non-ER binding)

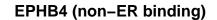




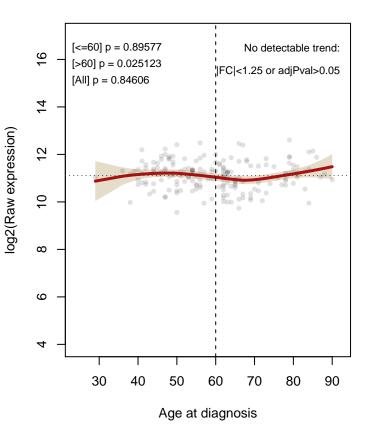


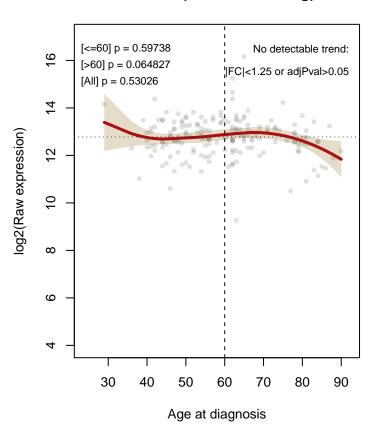
Age at diagnosis

Age at diagnosis



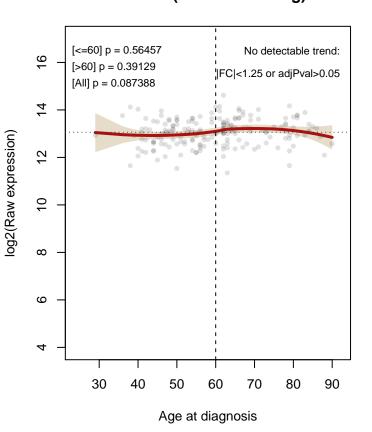
ERBB2 (non-ER binding)

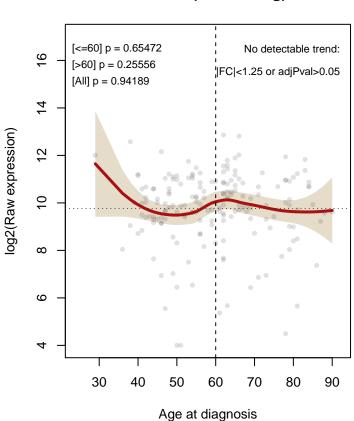


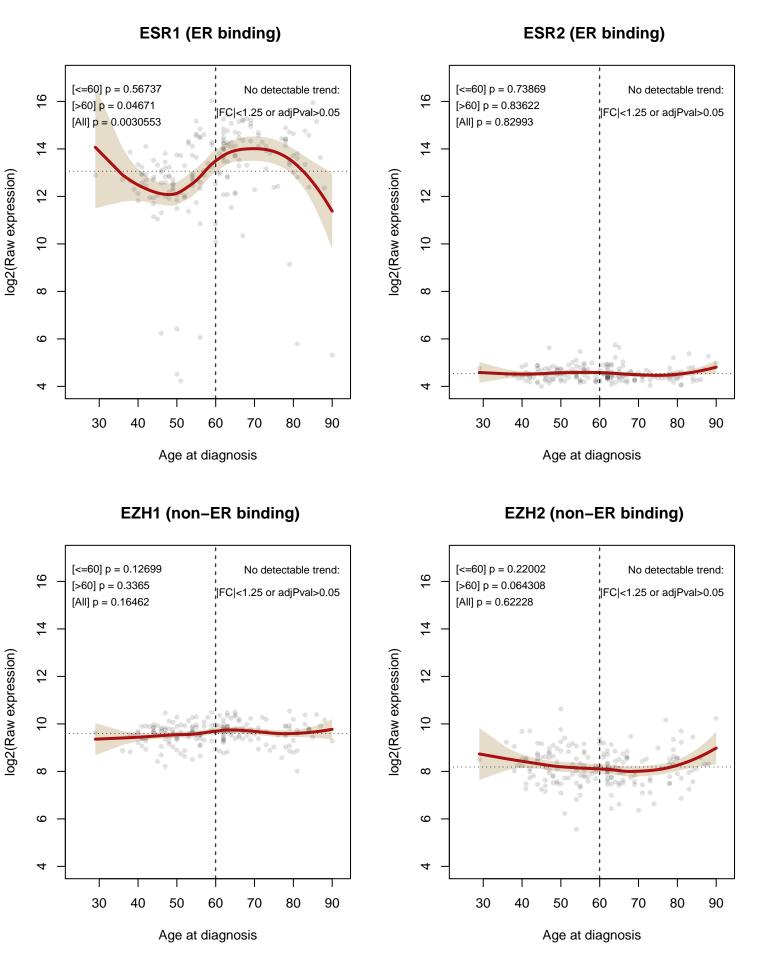


ERBB3 (non-ER binding)

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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [AII] p = 0.7376[All] p = 0.335274 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 **FOXC1 (ER binding)** FOXA1 (ER binding) [<=60] p = 0.85705No detectable trend: [<=60] p = 0.94971No detectable trend: 16 16 [>60] p = 0.42336 [>60] p = 0.24138 |FC|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.032303[All] p = 0.0146124 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω

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Age at diagnosis

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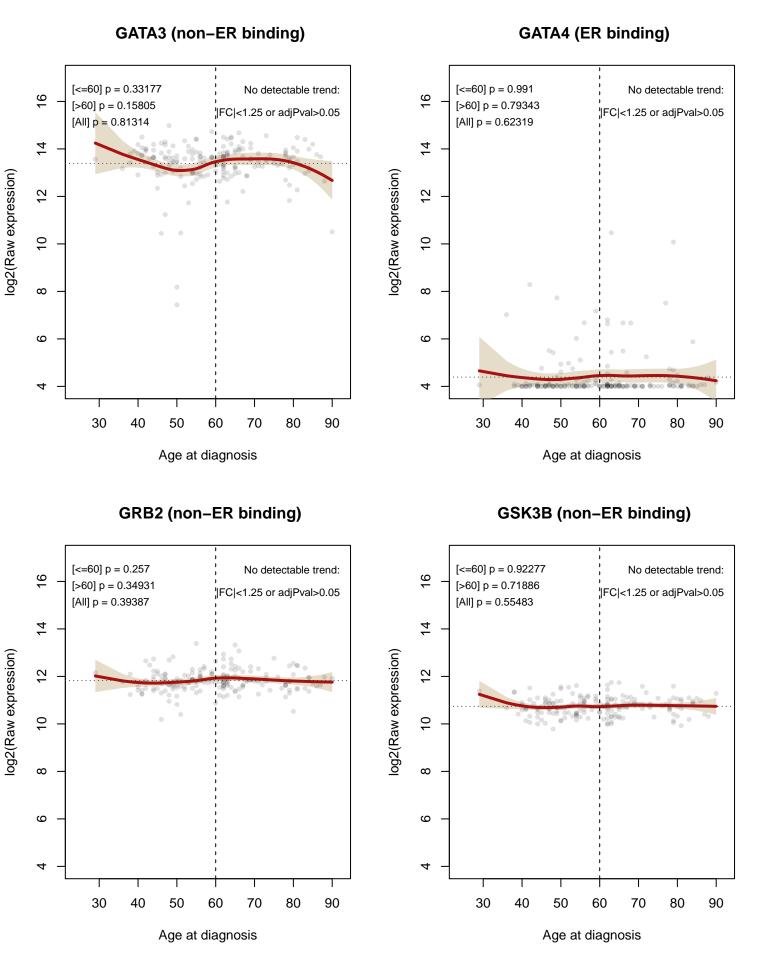
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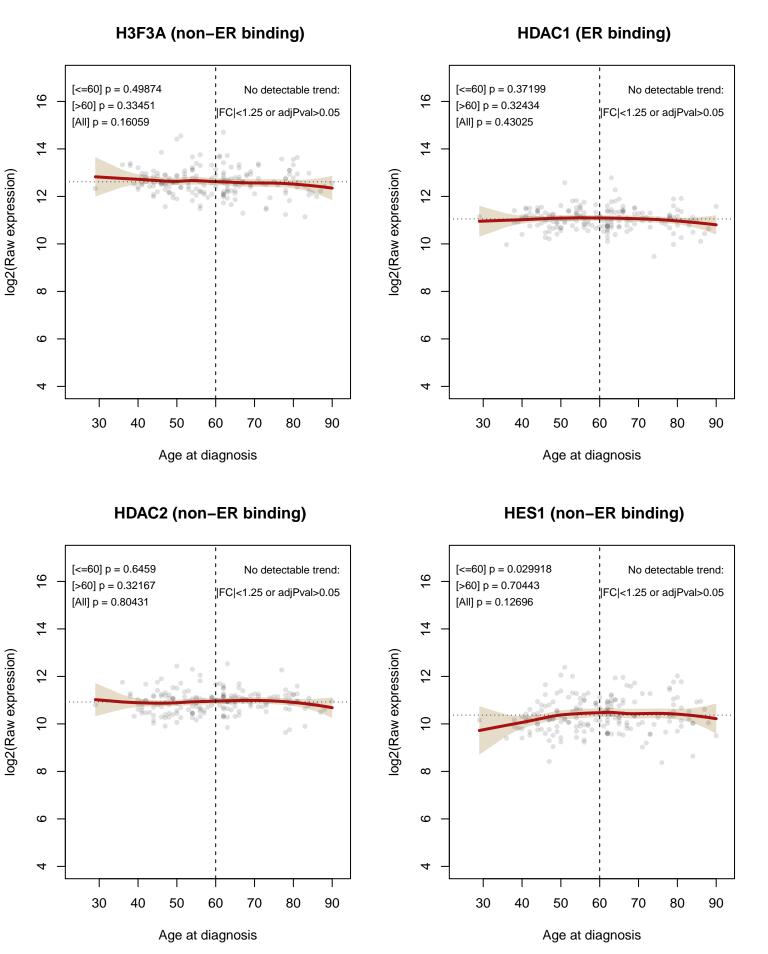
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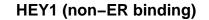
Age at diagnosis

70

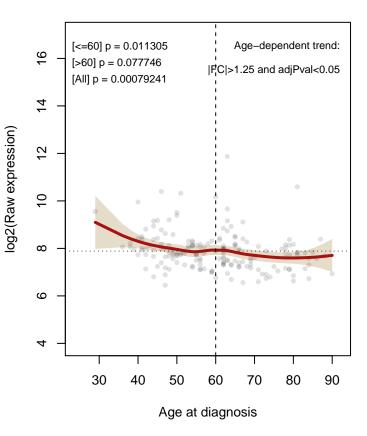
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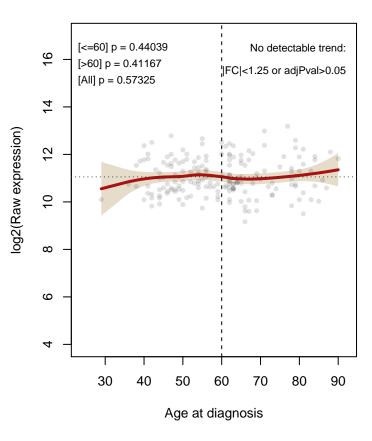






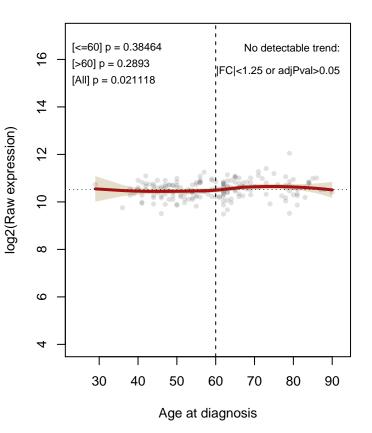
HIF1A (non-ER binding)

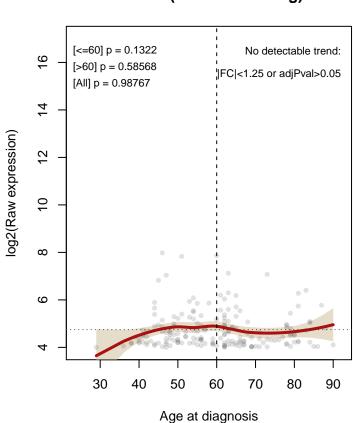




HIF1AN (non-ER binding)

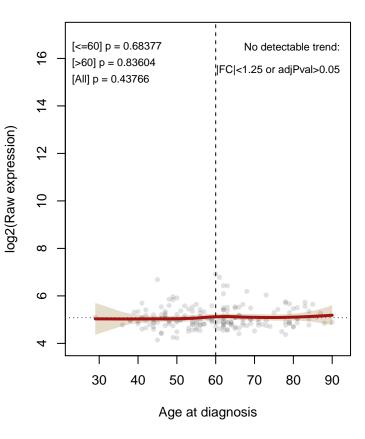
HIF3A (non-ER binding)

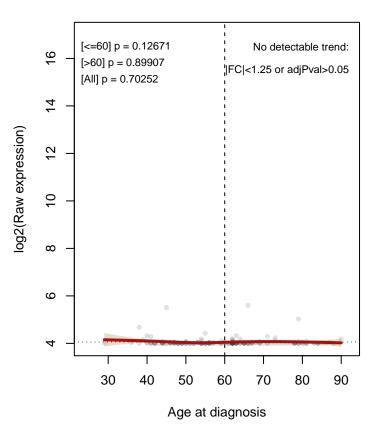






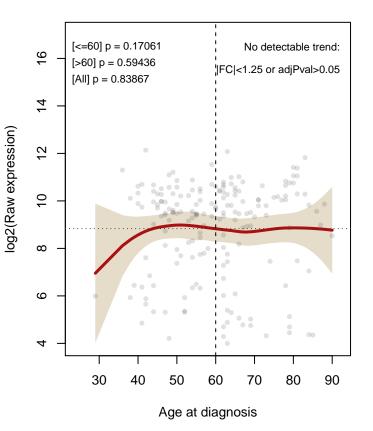
HNF1B (non-ER binding)

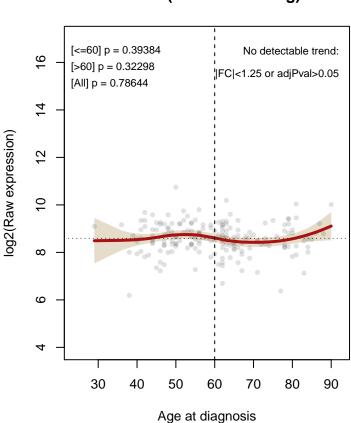




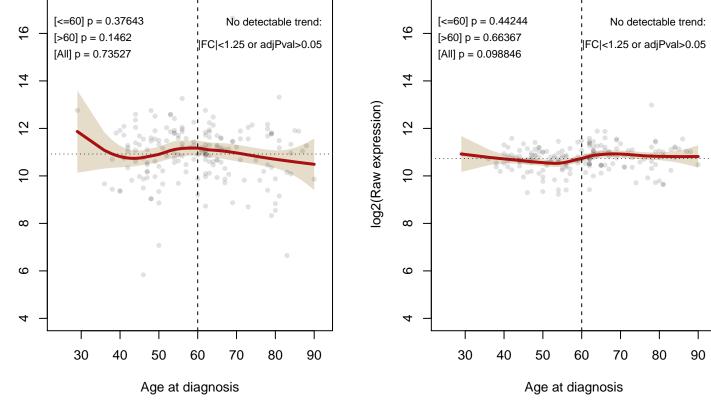
HOXC10 (non-ER binding)

HRAS (non-ER binding)



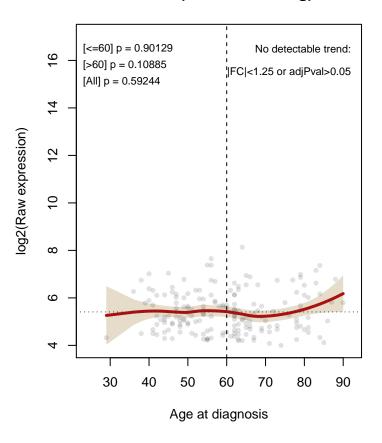


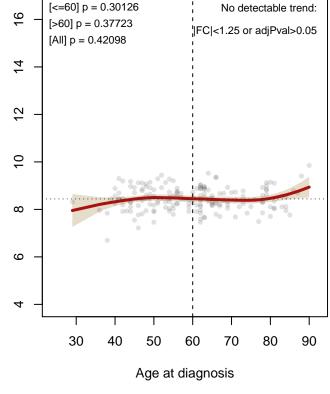
HSPB1 (non-ER binding) IGF1R (ER binding) [<=60] p = 0.010332 No detectable trend: [<=60] p = 0.01595No detectable trend: 16 16 [>60] p = 0.82602 [>60] p = 0.22269 |FC|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.34484[AII] p = 0.28344 4 log2(Raw expression) log2(Raw expression) 12 12 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 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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.73527[AII] p = 0.0988464 4 log2(Raw expression) 12 12 10 10



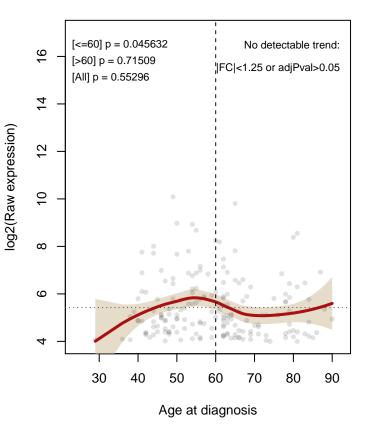
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IL2RA (non-ER binding)

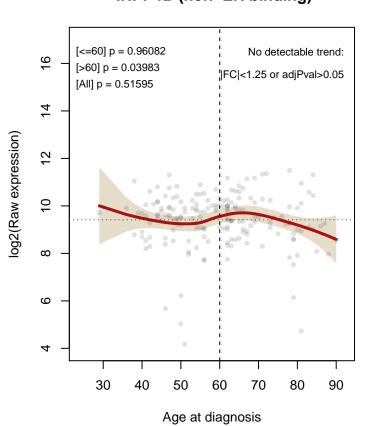


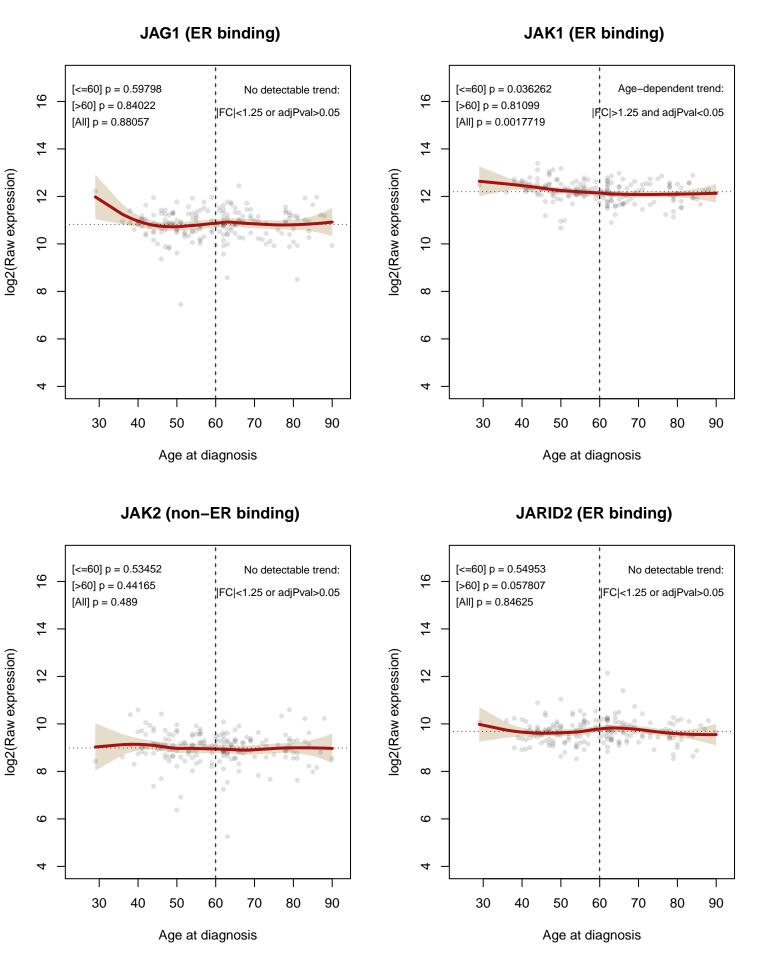


IL6 (non-ER binding)



INPP4B (non-ER binding)





JUN (non-ER binding) [<=60] p = 0.38187No detectable trend: 16 [>60] p = 0.35028 |FC|<1.25 or adjPval>0.05 [All] p = 0.664984 log2(Raw expression) 12

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ω

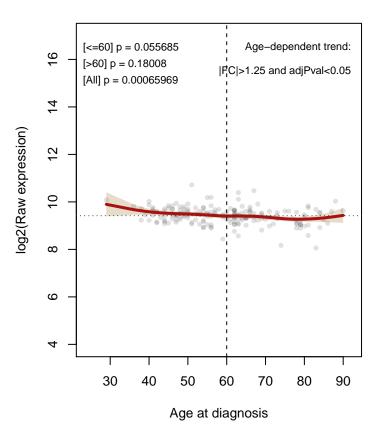
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KDM2B (non-ER binding)



KDM6A (non-ER binding)

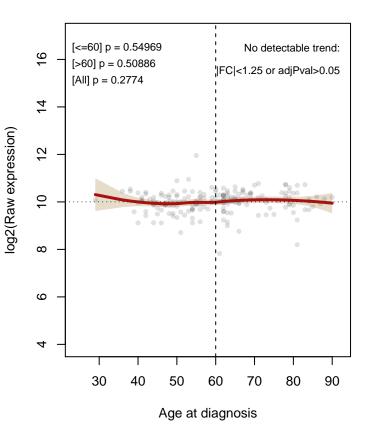
Age at diagnosis

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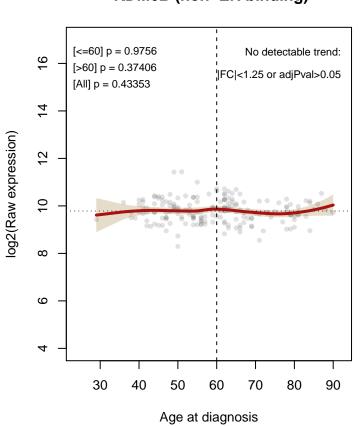
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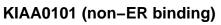
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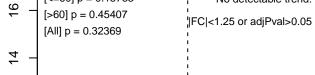


KDM6B (non-ER binding)





[<=60] p = 0.15733No detectable trend: [>60] p = 0.45407



log2(Raw expression)

log2(Raw expression)

12

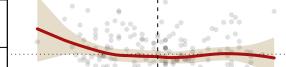
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ω

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Age at diagnosis

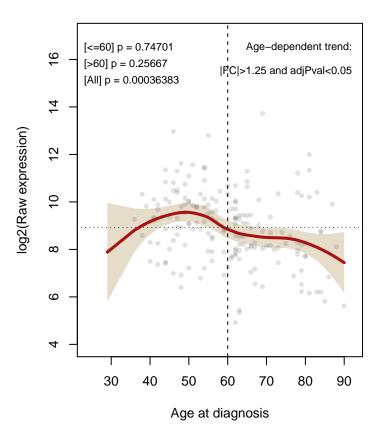
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KIT (non-ER binding)

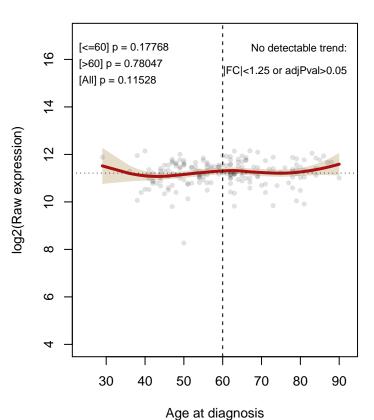


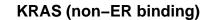
KMT2C (non-ER binding)

[<=60] p = 0.13083No detectable trend: 16 [>60] p = 0.40345 |FC|<1.25 or adjPval>0.05 [All] p = 0.155214 12 10 ω 9 30 40 50 60 70 80 90

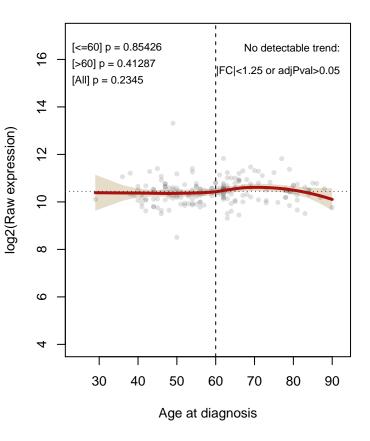
Age at diagnosis

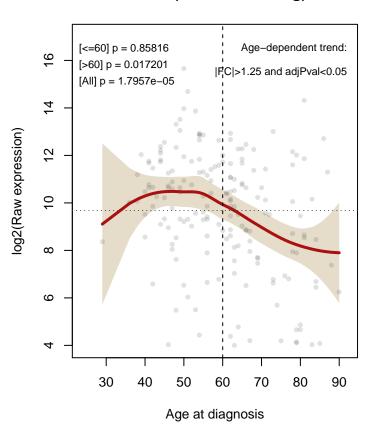
KMT2D (non-ER binding)





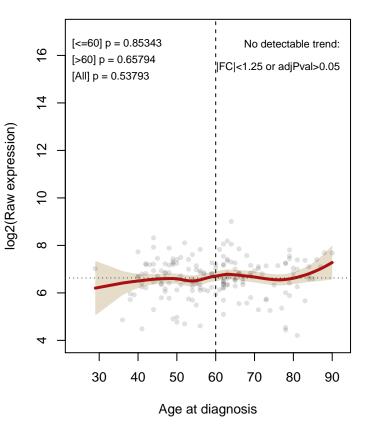
KRT5 (non-ER binding)

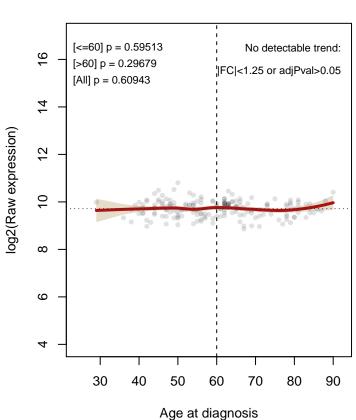




L3MBTL1 (non-ER binding)

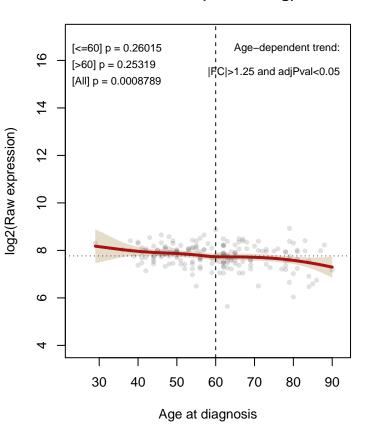
L3MBTL2 (non-ER binding)

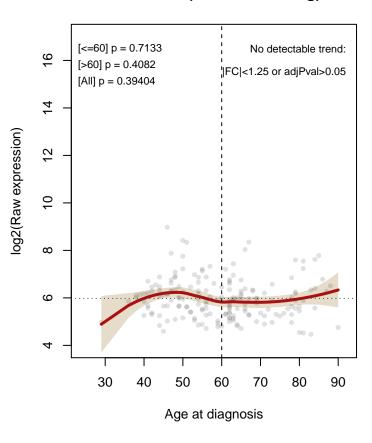




L3MBTL3 (ER binding)

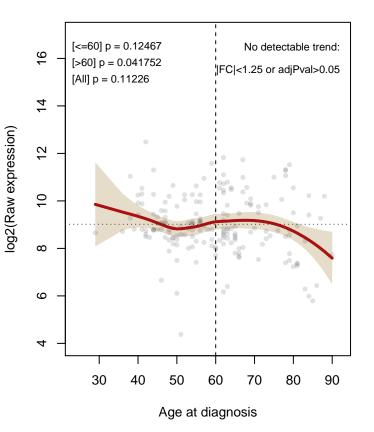
L3MBTL4 (non-ER binding)

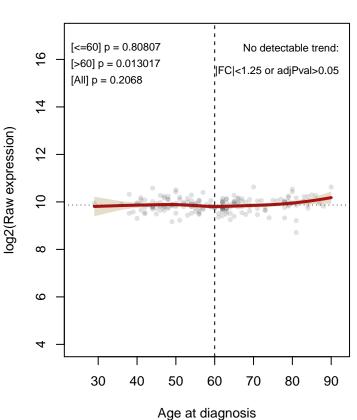


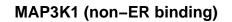


LEF1 (non-ER binding)

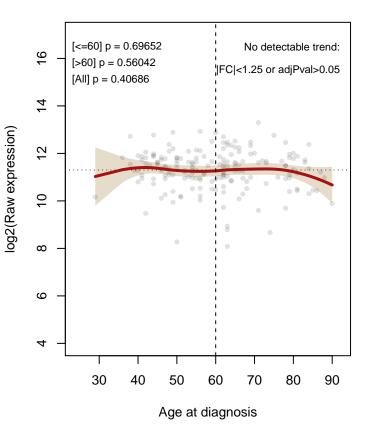
MAP2K1 (non-ER binding)

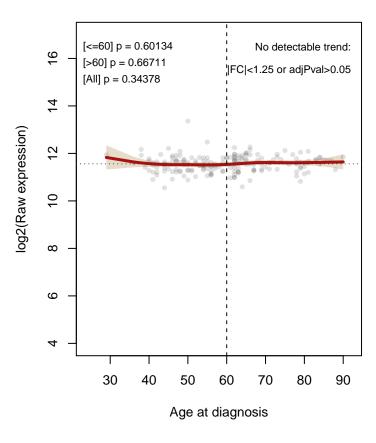






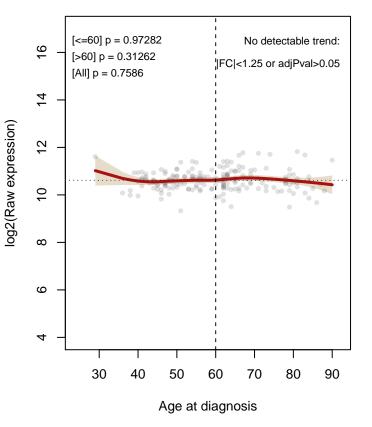
MAPK1 (non-ER binding)

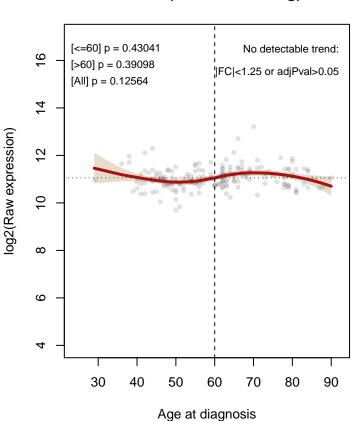


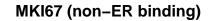


MAPK3 (non-ER binding)

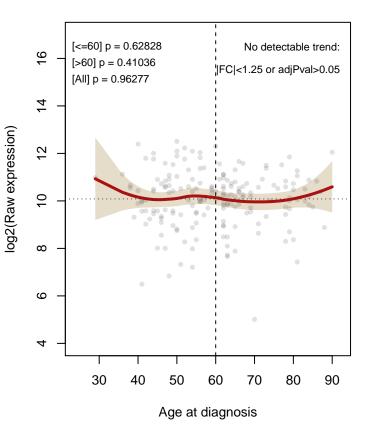
MDM2 (non-ER binding)

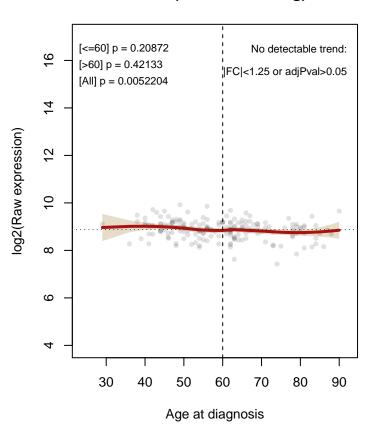






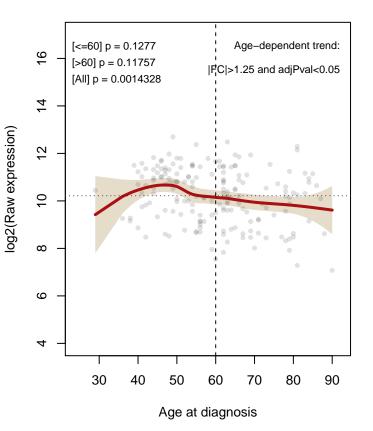
MTF2 (non-ER binding)

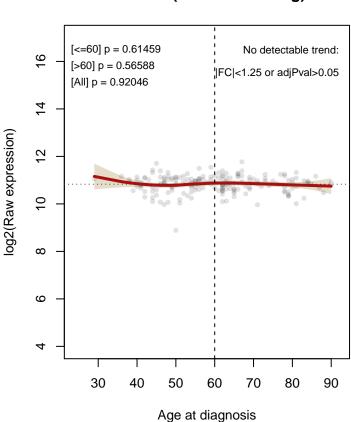




MYC (non-ER binding)

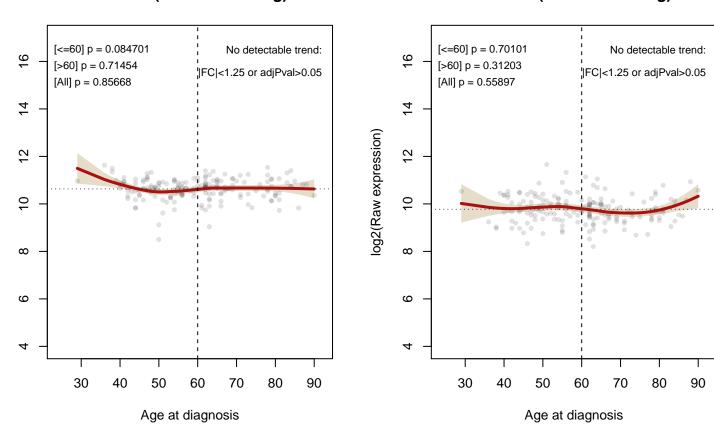
NCOA6 (non-ER binding)





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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [AII] p = 0.48094[AII] p = 0.00494084 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 NFKB1 (non-ER binding) NFKB2 (non-ER binding) [<=60] p = 0.084701No detectable trend: [<=60] p = 0.70101 16 16 [>60] p = 0.31203 [>60] p = 0.71454 |FC|<1.25 or adjPval>0.05 [AII] p = 0.85668[All] p = 0.55897

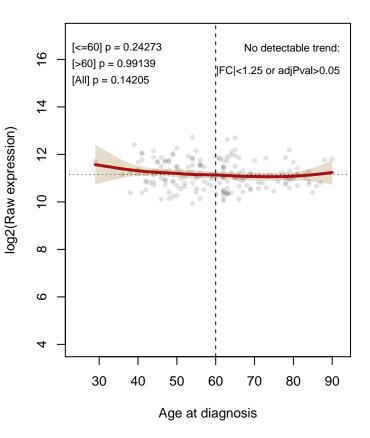
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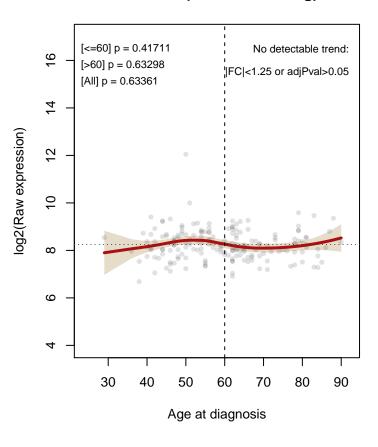


log2(Raw expression)



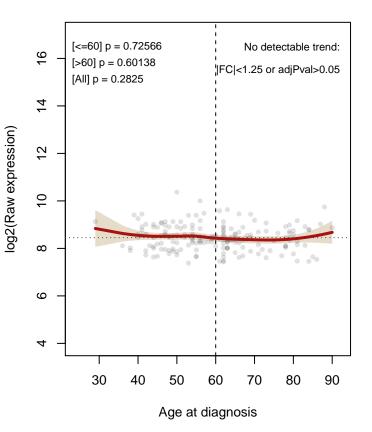
NFKBIB (non-ER binding)

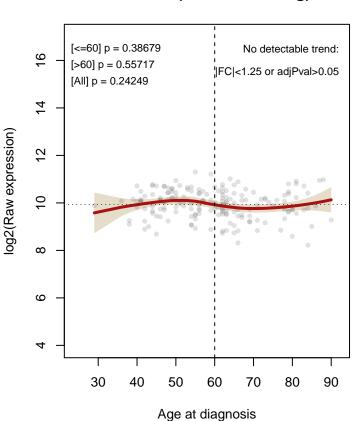




NFKBIE (non-ER binding)

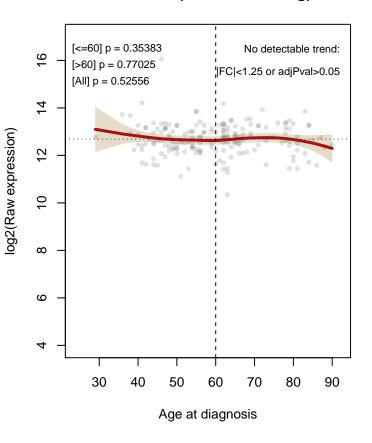
NOTCH1 (non-ER binding)

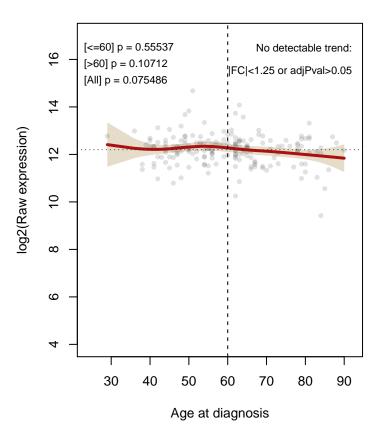




NOTCH2 (non-ER binding)

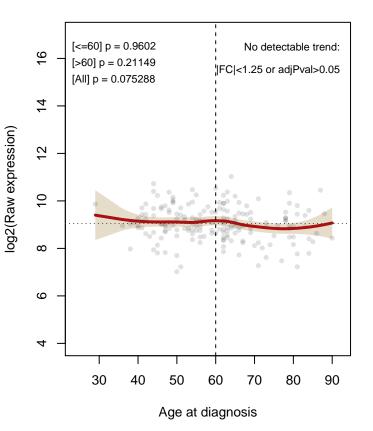
NOTCH3 (non-ER binding)

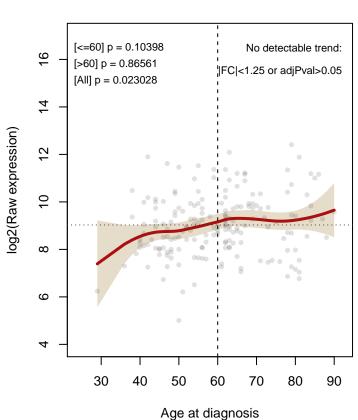




NOTCH4 (non-ER binding)

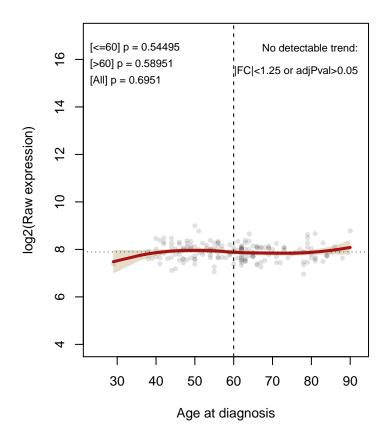
NR4A2 (non-ER binding)

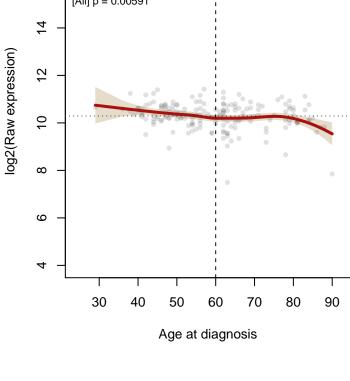




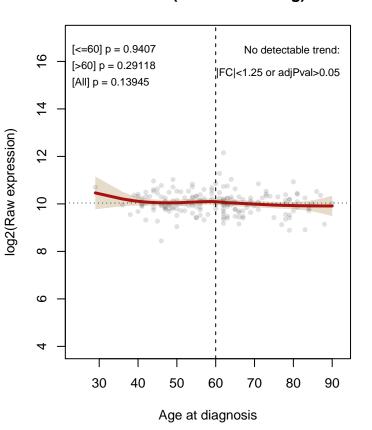
NRAS (non–ER binding) [<=60] p = 0.031704 [>60] p = 0.61163 [All] p = 0.00591 | FC|<1.25 or adjPval>0.05

PCGF1 (non-ER binding)

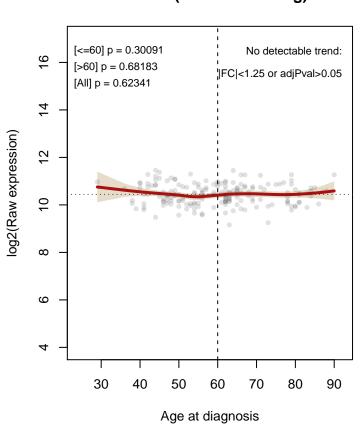




PCGF2 (non-ER binding)

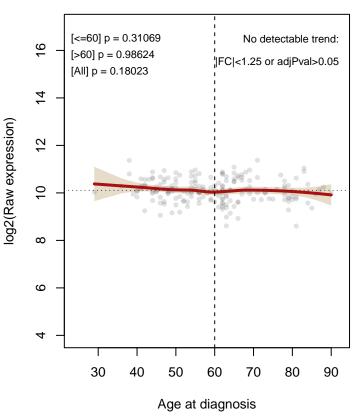


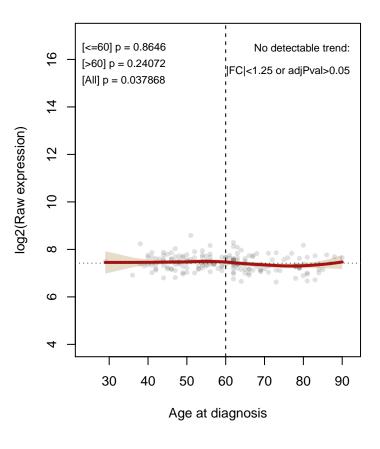
PCGF3 (non-ER binding)





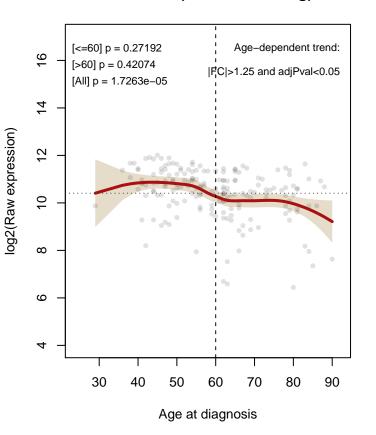
PCGF6 (non-ER binding)

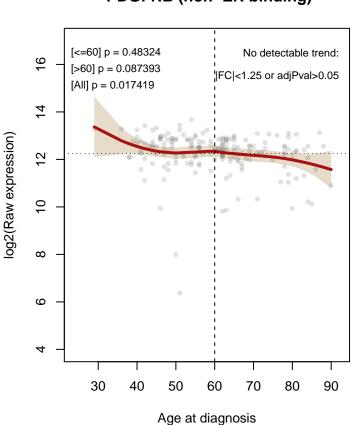




PDGFRA (non-ER binding)

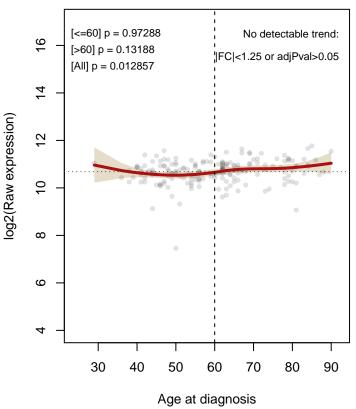
PDGFRB (non-ER binding)

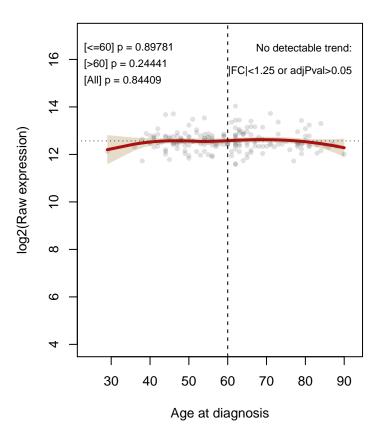






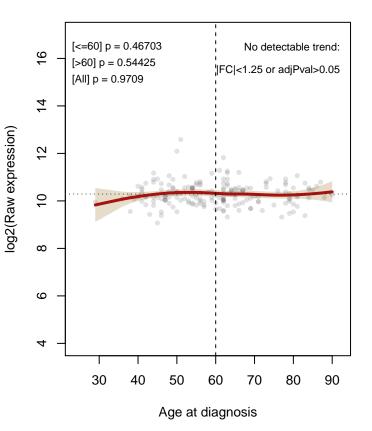
PEBP1 (non-ER binding)

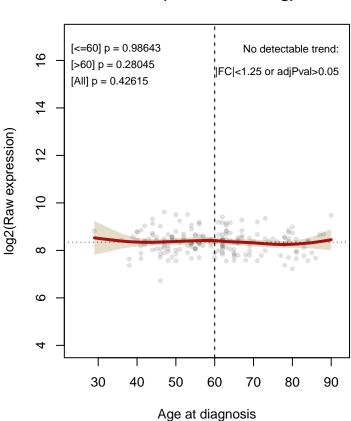


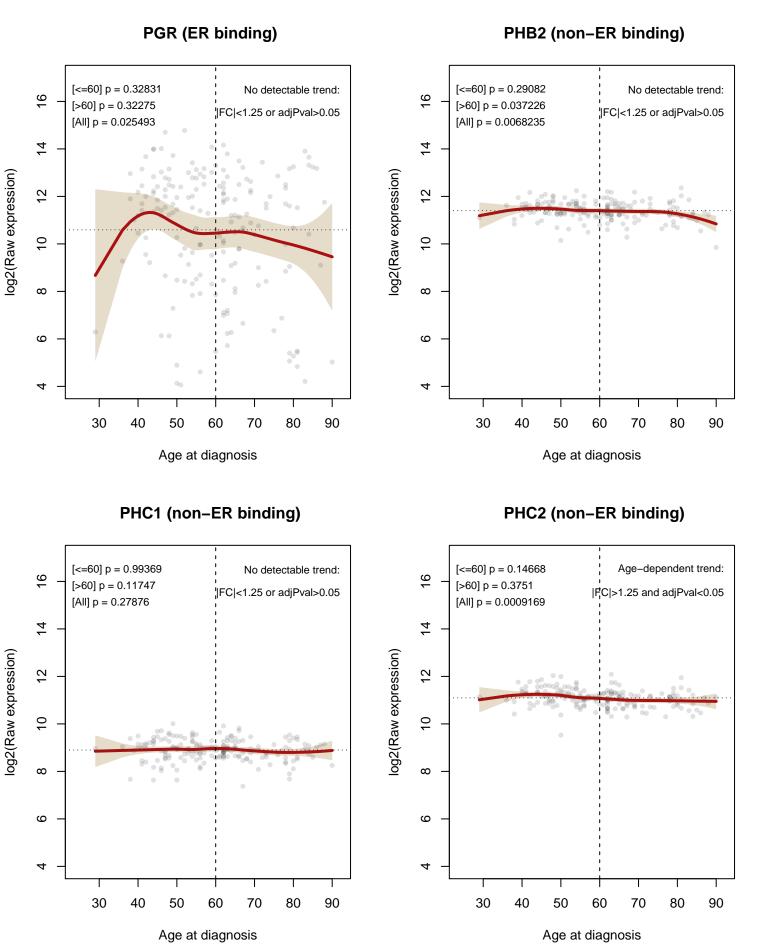


PELP1 (non-ER binding)

PGP (non-ER binding)







PHC3 (non-ER binding) PHF1 (non-ER binding) [<=60] p = 0.72899No detectable trend: [<=60] p = 0.029308 No detectable trend: 16 16 [>60] p = 0.3991 [>60] p = 0.83395 |FC|<1.25 or adjPval>0.05 |FC|<1.25 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 = 0.65548[>60] p = 0.20603 |FC|<1.25 or adjPval>0.05 |FC|<1.25 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

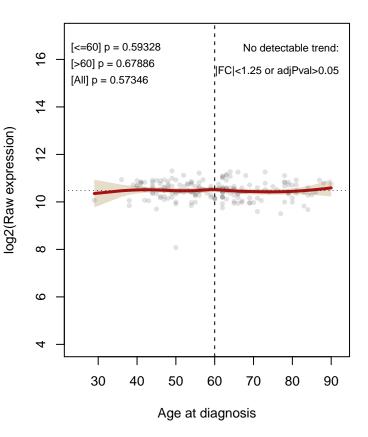
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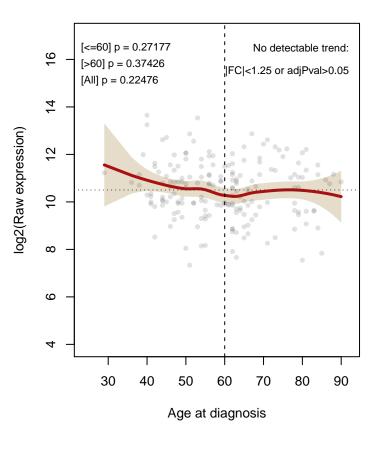
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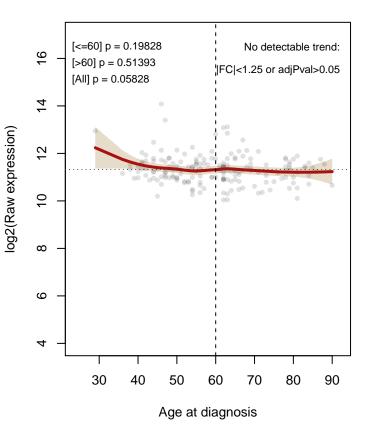
PLAU (non-ER binding)

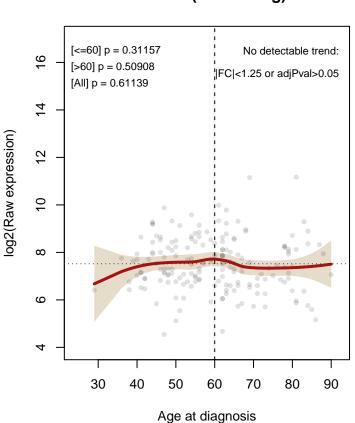




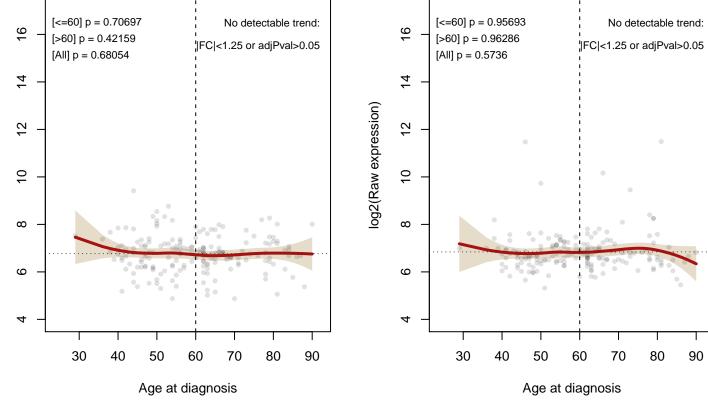
PODXL (non-ER binding)

PPARG (ER binding)



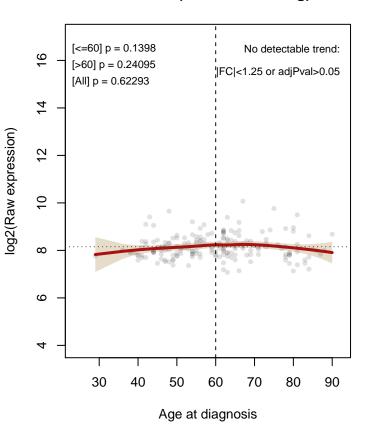


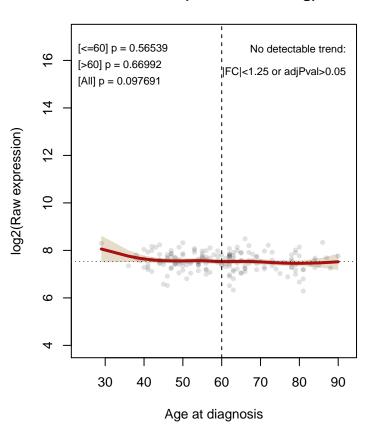
PYDC1 (non-ER binding) PTEN (non-ER binding) [<=60] p = 0.56882No detectable trend: [<=60] p = 0.47923No detectable trend: 16 16 [>60] p = 0.52794 [>60] p = 0.90453 |FC|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.010517[All] p = 0.607244 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 50 60 70 80 90 40 Age at diagnosis Age at diagnosis RAD51 (non-ER binding) RAD51B (ER binding) [<=60] p = 0.70697No detectable trend: [<=60] p = 0.95693No detectable trend: 16 16 [>60] p = 0.42159 [>60] p = 0.96286 |FC|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [All] p = 0.68054[All] p = 0.57364 4 log2(Raw expression) 12 12 10 10



RAD51C (non-ER binding)

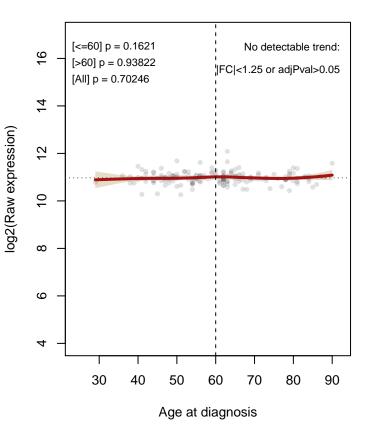
RAD51D (non-ER binding)

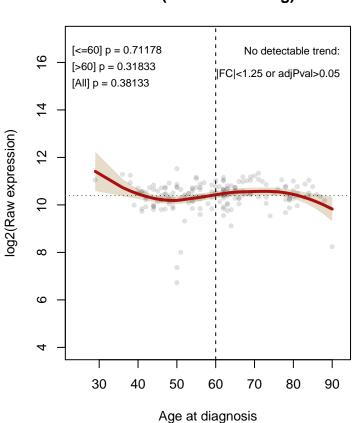




RAF1 (non-ER binding)

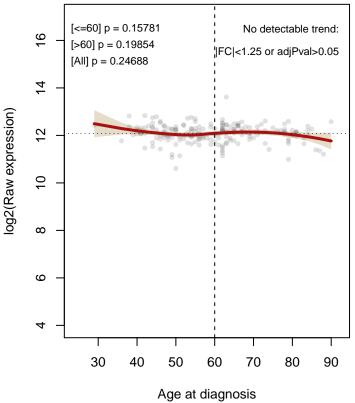
RB1 (non-ER binding)

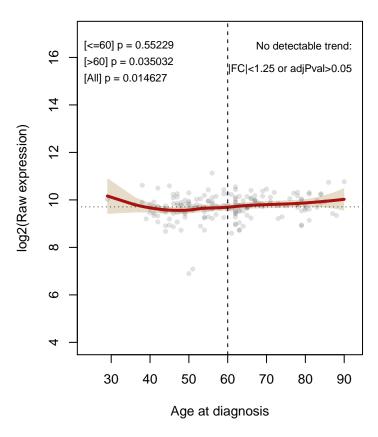




RBBP4 (non–ER binding) [<=60] p = 0.15781 No detectable

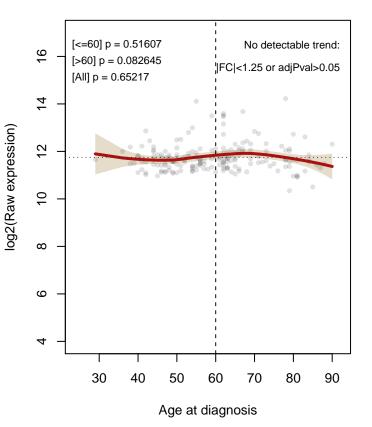
RBBP5 (non-ER binding)

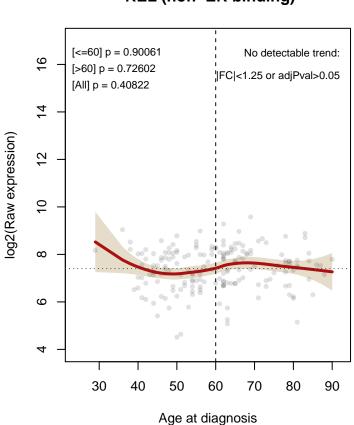


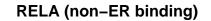


RBBP7 (non-ER binding)

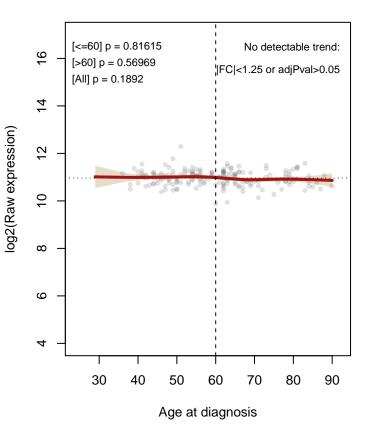
REL (non-ER binding)

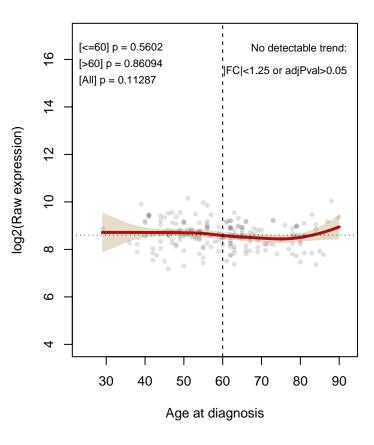






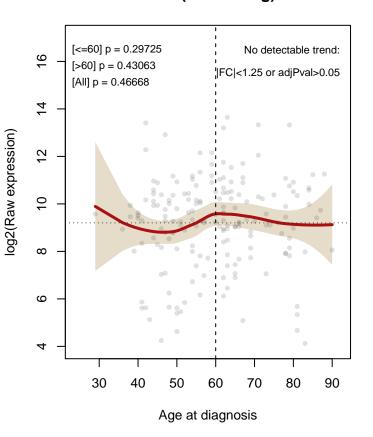
RELB (non-ER binding)

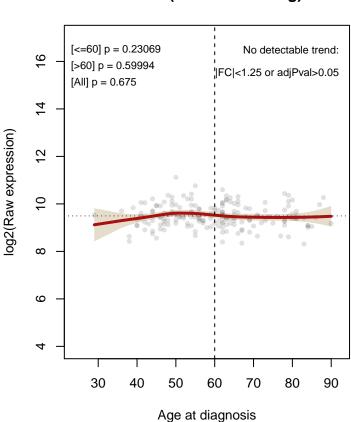


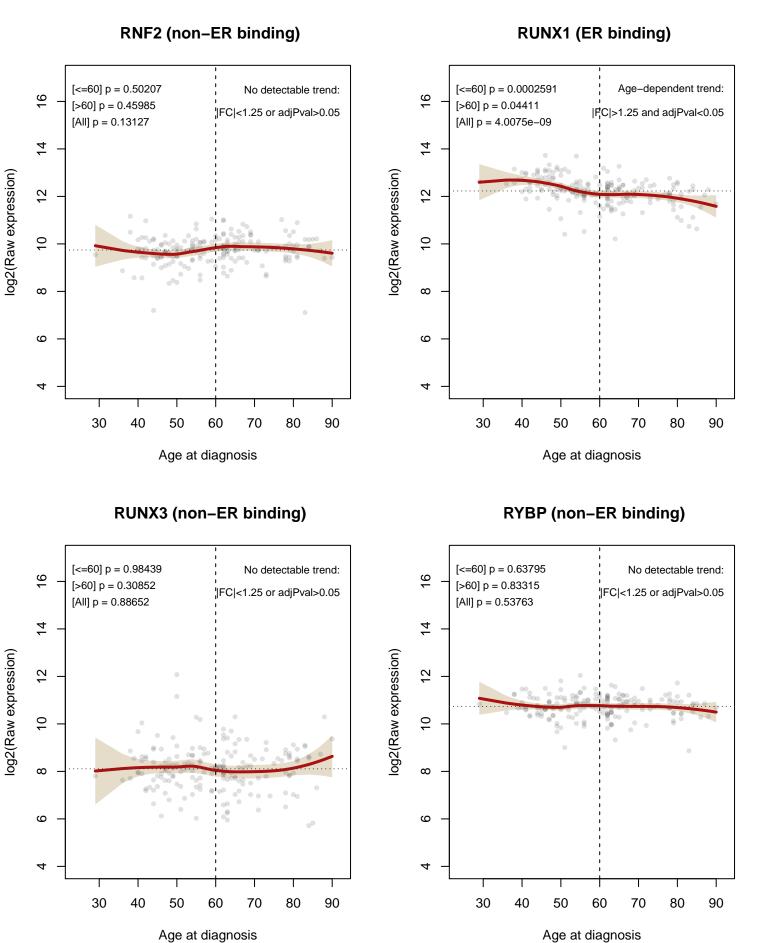


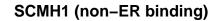
RET (ER binding)

RING1 (non-ER binding)

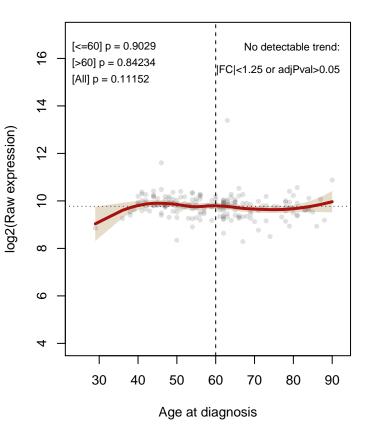


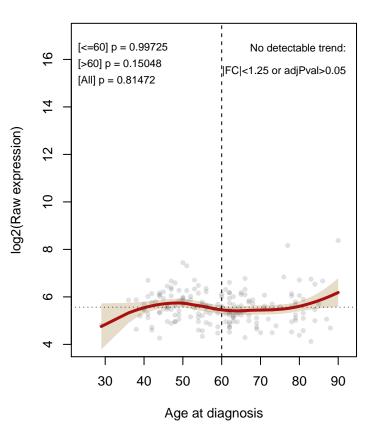






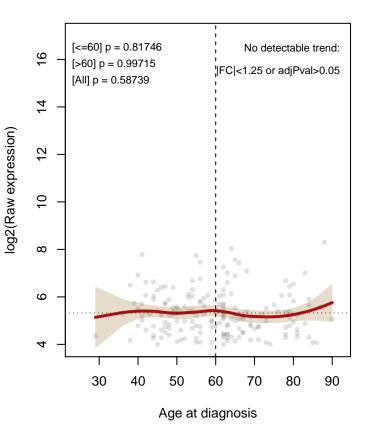
SCML2 (non-ER binding)

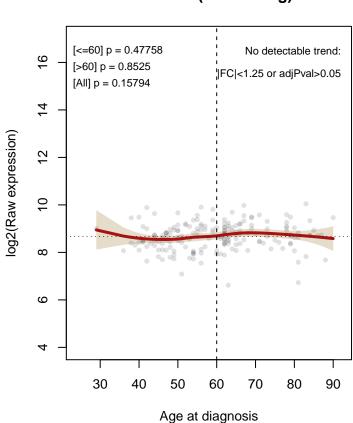




SCML4 (non-ER binding)

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|<1.25 or adjPval>0.05 |FC|<1.25 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 = 0.17351 [>60] p = 0.65493 |FC|<1.25 or adjPval>0.05 |FC|<1.25 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

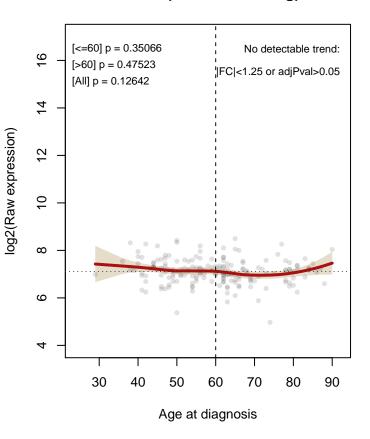
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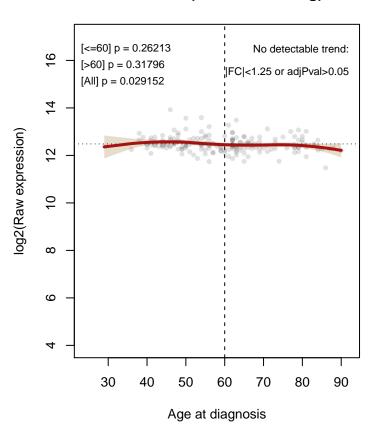
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SKP2 (non-ER binding)

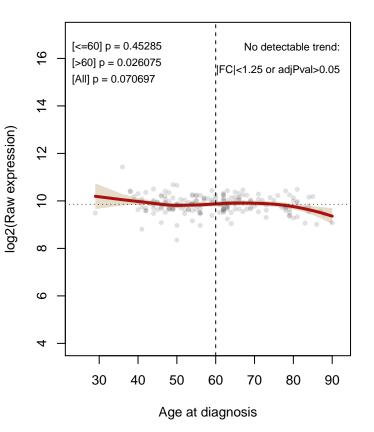
SLC25A3 (non-ER binding)

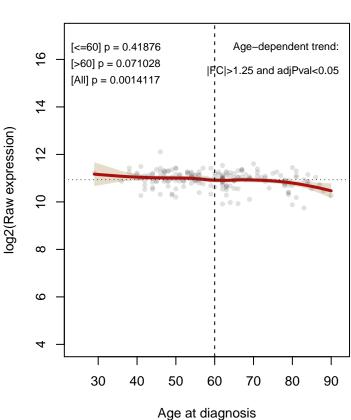




SMAD1 (non-ER binding)

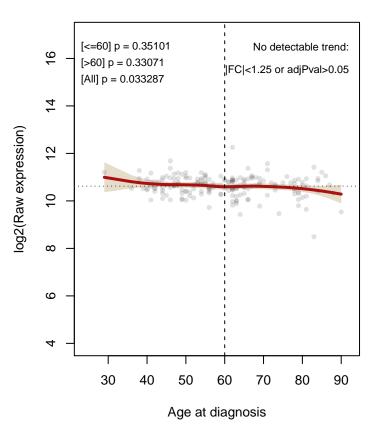
SMAD2 (non-ER binding)

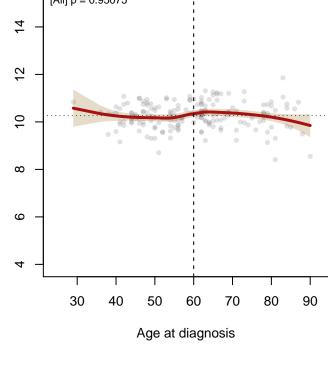




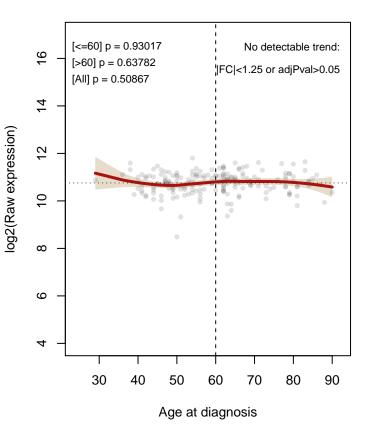
SMAD3 (ER binding) [<=60] p = 0.88345No detectable trend: 16 [>60] p = 0.085243 |FC|<1.25 or adjPval>0.05 [All] p = 0.950754 log2(Raw expression) 12 10

SMAD4 (non-ER binding)

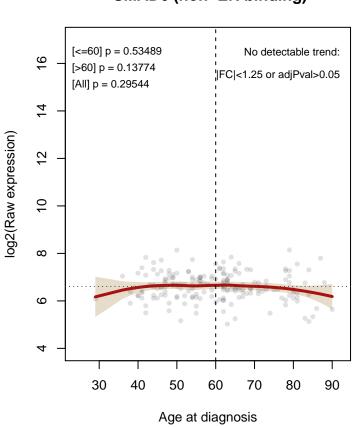




SMAD5 (non-ER binding)



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|<1.25 or adjPval>0.05 |FC|<1.25 or adjPval>0.05 [AII] p = 0.0077356[All] p = 0.0102764 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 = 0.8162 [>60] p = 0.39207 |FC|<1.25 or adjPval>0.05 |FC|<1.25 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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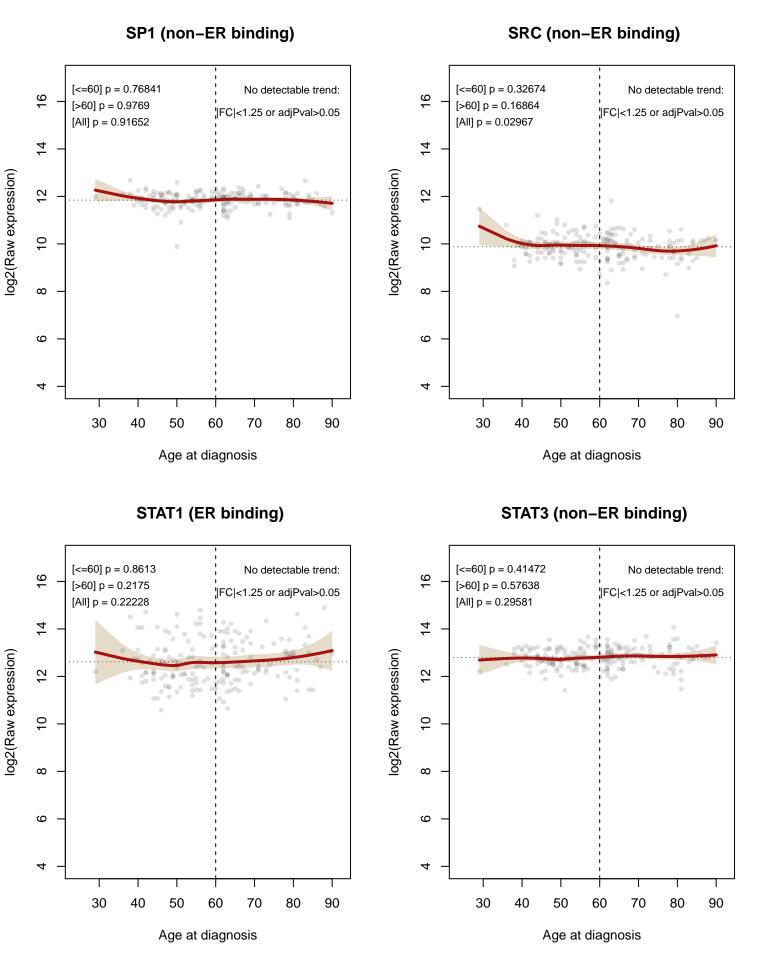
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Age at diagnosis

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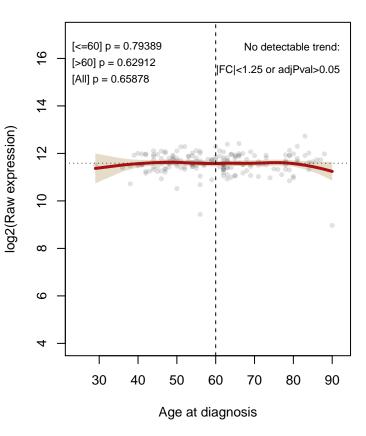
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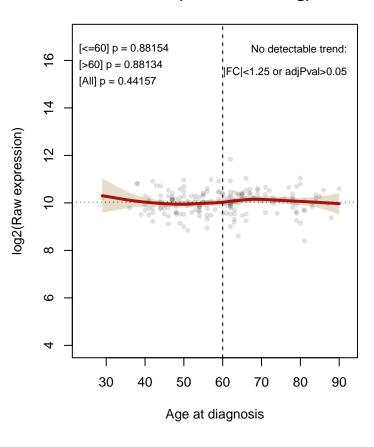
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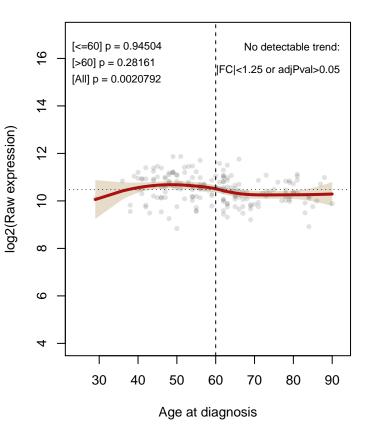
SUZ12 (non-ER binding)

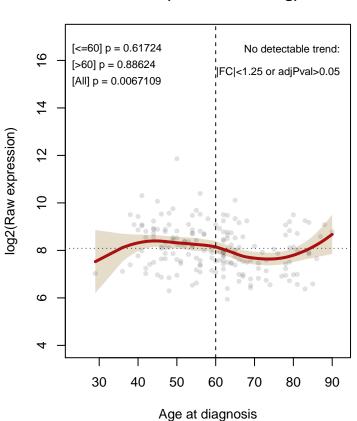




TCF3 (non-ER binding)

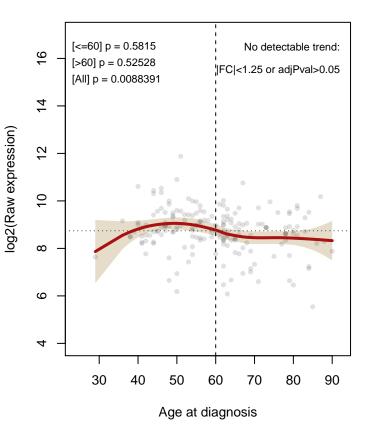
TCF7 (non-ER binding)

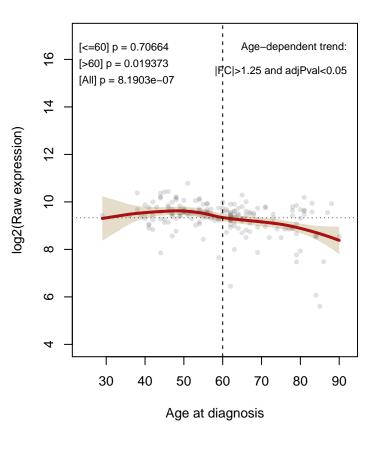






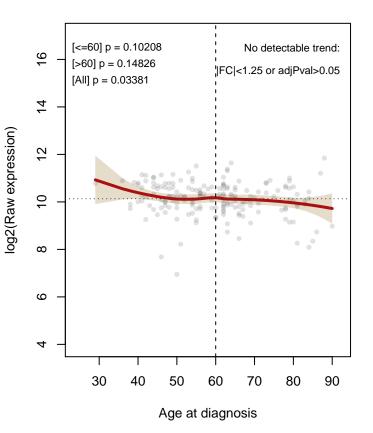
TCF7L2 (non-ER binding)

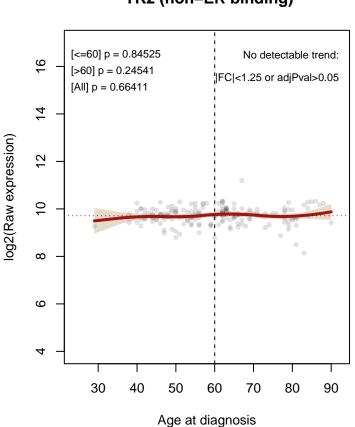


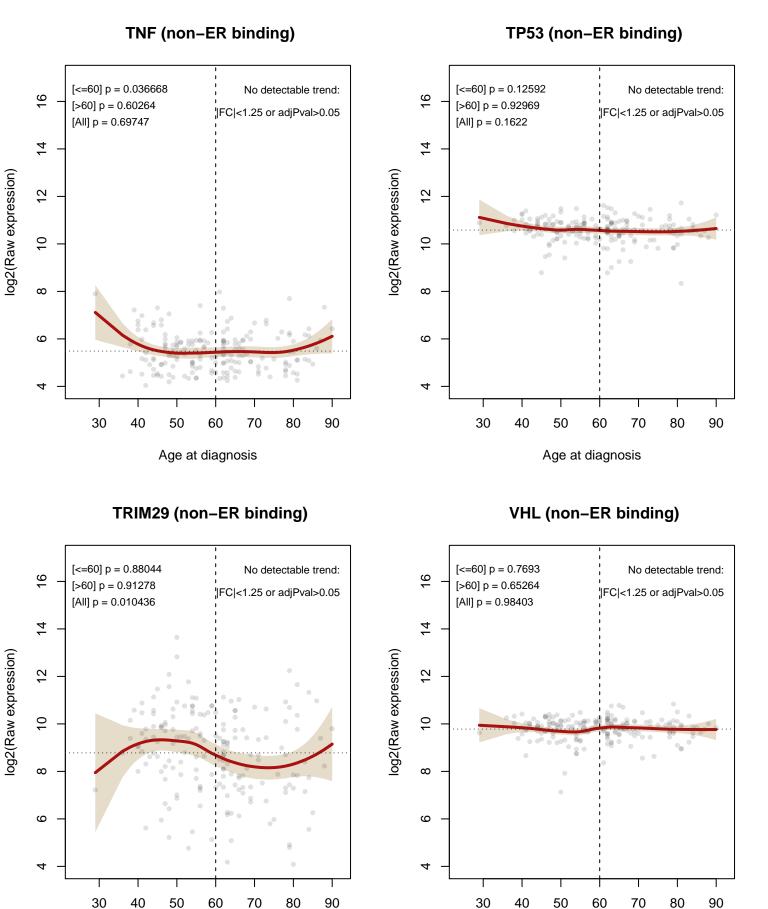


TGFB1 (non-ER binding)

TK2 (non-ER binding)

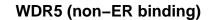




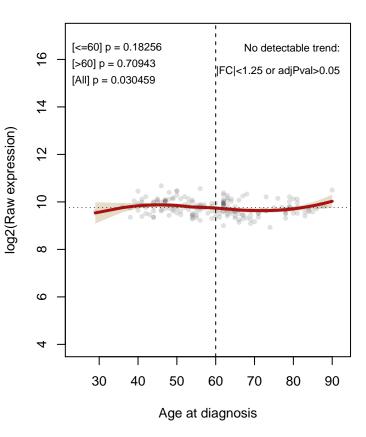


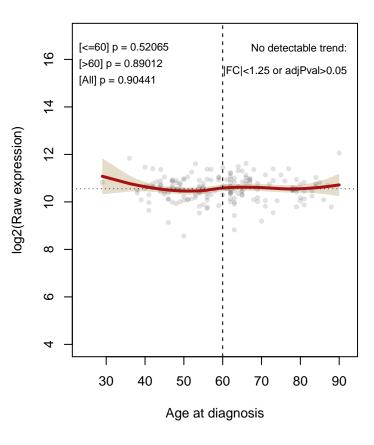
Age at diagnosis

Age at diagnosis



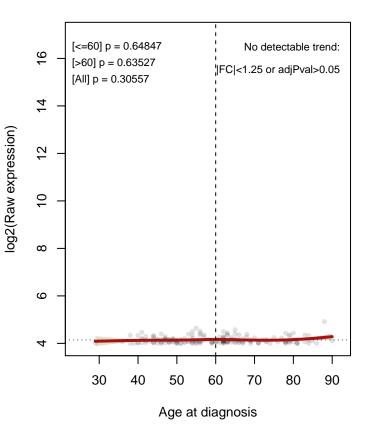
WHSC1 (non-ER binding)

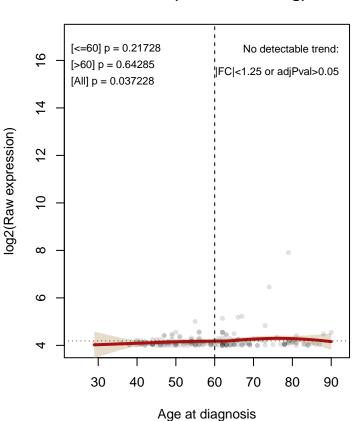




WNT1 (non-ER binding)

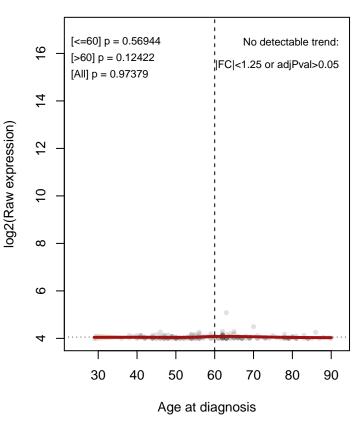
WNT3A (non-ER binding)

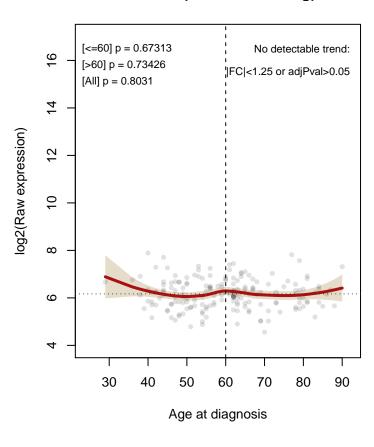






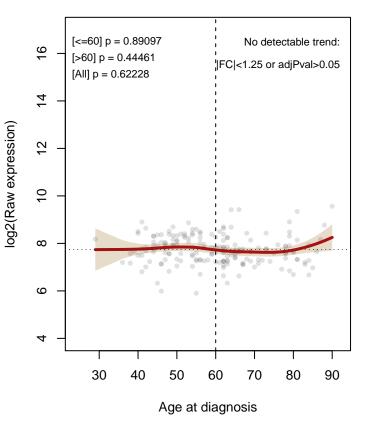
XRCC2 (non-ER binding)

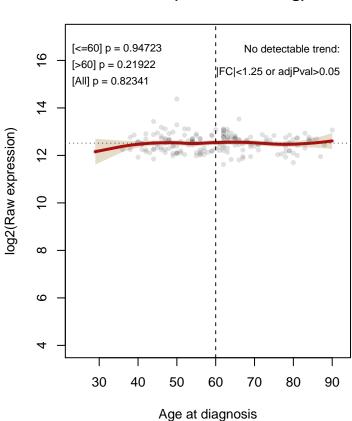




XRCC3 (non-ER binding)

XRCC6 (non-ER binding)





YAF2 (non-ER binding)

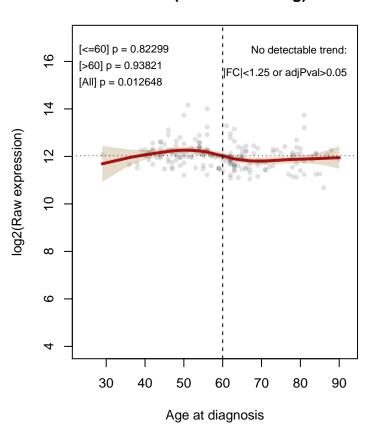
90 - [<=60] p = 0.0034089 | No detectable trend: |FC|<1.25 or adjPval>0.05 | No detectable trend: |FC|<1.25 | No det

30

40

50

YBX1 (non-ER binding)



YY1 (non-ER binding)

Age at diagnosis

60

70

80

90

