

ASXL3 (non-ER binding) ATM (non-ER binding) [<=60] p = 0.6431 No detectable trend: [<=60] p = 0.48641No detectable trend: 16 16 [>60] p = 0.16994 [>60] p = 0.0030197 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.57801[All] p = 0.0300134 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 = 0.13554No detectable trend: [<=60] p = 0.8665No detectable trend: 16 16 [>60] p = 0.010819 [>60] p = 0.42729 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.10085[All] p = 0.598124 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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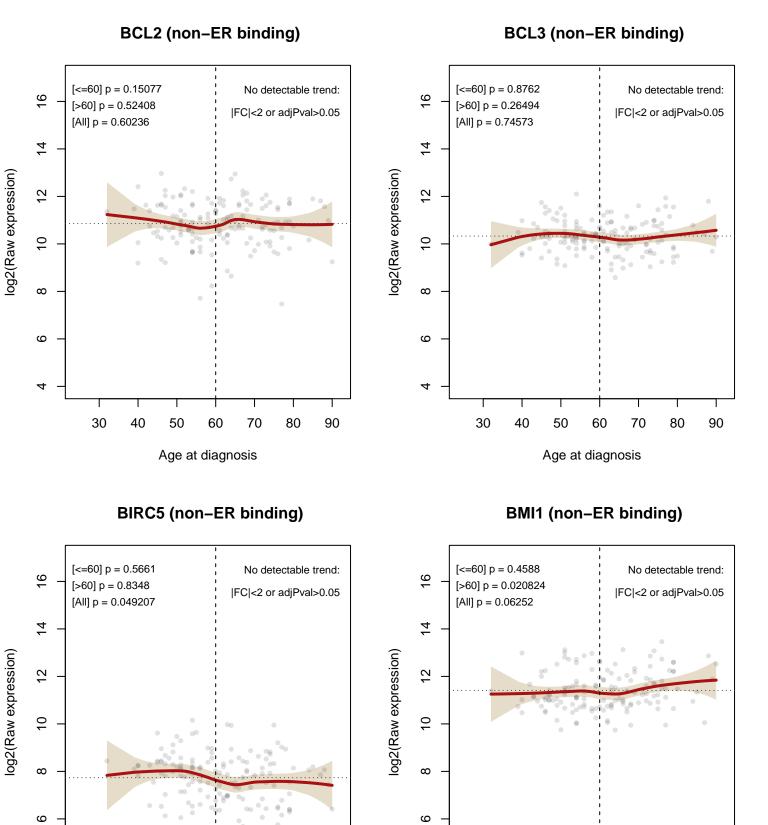
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Age at diagnosis

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Age at diagnosis

Age at diagnosis

BMX (non-ER binding) **BRCA1** (non-ER binding) [<=60] p = 0.58034No detectable trend: [<=60] p = 0.93144No detectable trend: 16 16 [>60] p = 0.12793 [>60] p = 0.43545 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.22031[All] p = 0.0162424 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 9 9 30 40 50 70 80 90 30 40 50 60 70 80 90 60 Age at diagnosis Age at diagnosis CA9 (non-ER binding) **CBX1** (non-ER binding) [<=60] p = 0.81018No detectable trend: [<=60] p = 0.40096No detectable trend: 16 16 [>60] p = 0.55393 [>60] p = 0.26043 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.039462[All] p = 0.982614 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ∞ ∞ 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 = 0.14365No detectable trend: [<=60] p = 0.29164No detectable trend: 16 16 [>60] p = 0.031621 [>60] p = 0.36516 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.21942[AII] p = 0.00647084 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 = 0.10087No detectable trend: [<=60] p = 0.31814 No detectable trend: 16 16 [>60] p = 0.072072 [>60] p = 0.64894|FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.37546[All] p = 0.153854 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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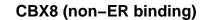
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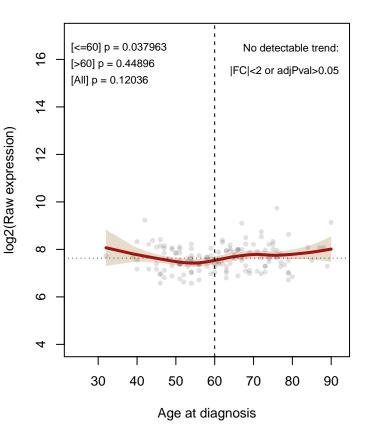
Age at diagnosis

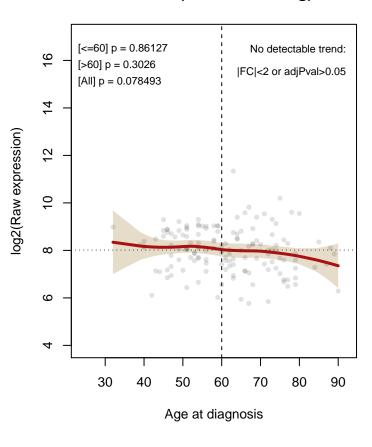
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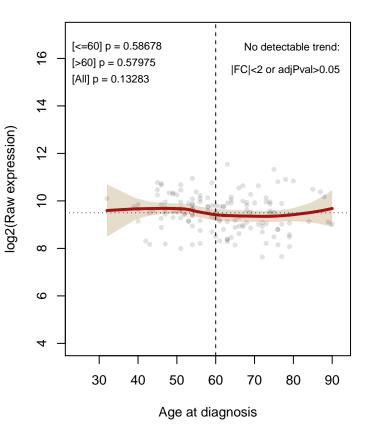
CCNA2 (non-ER binding)

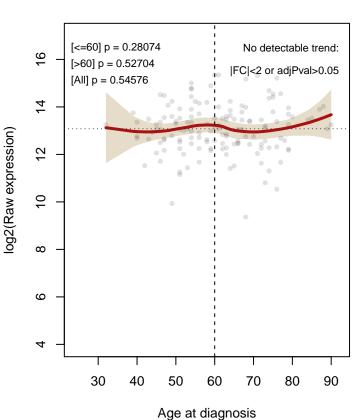




CCNB1 (non-ER binding)

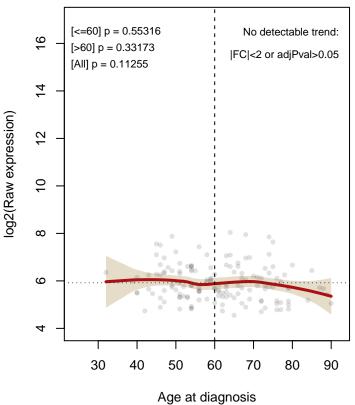
CCND1 (ER binding)

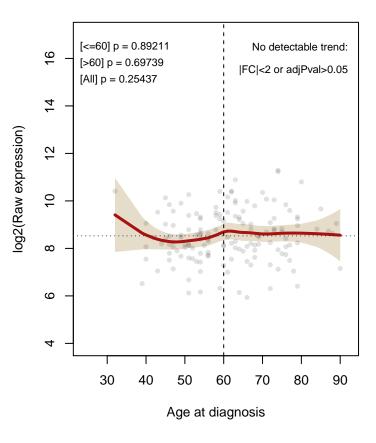




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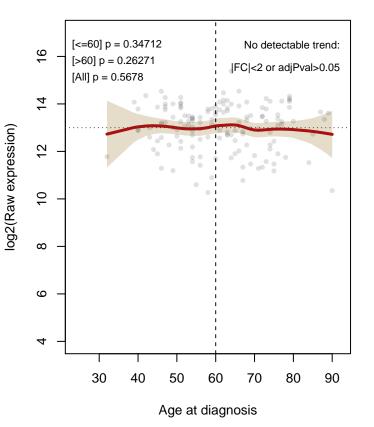
CD163 (non-ER binding)

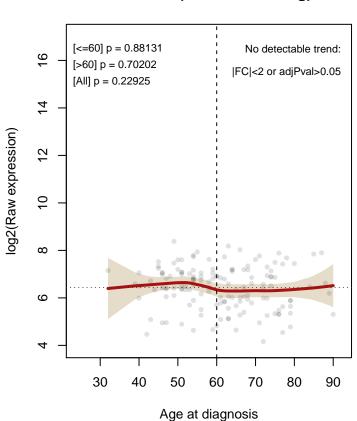


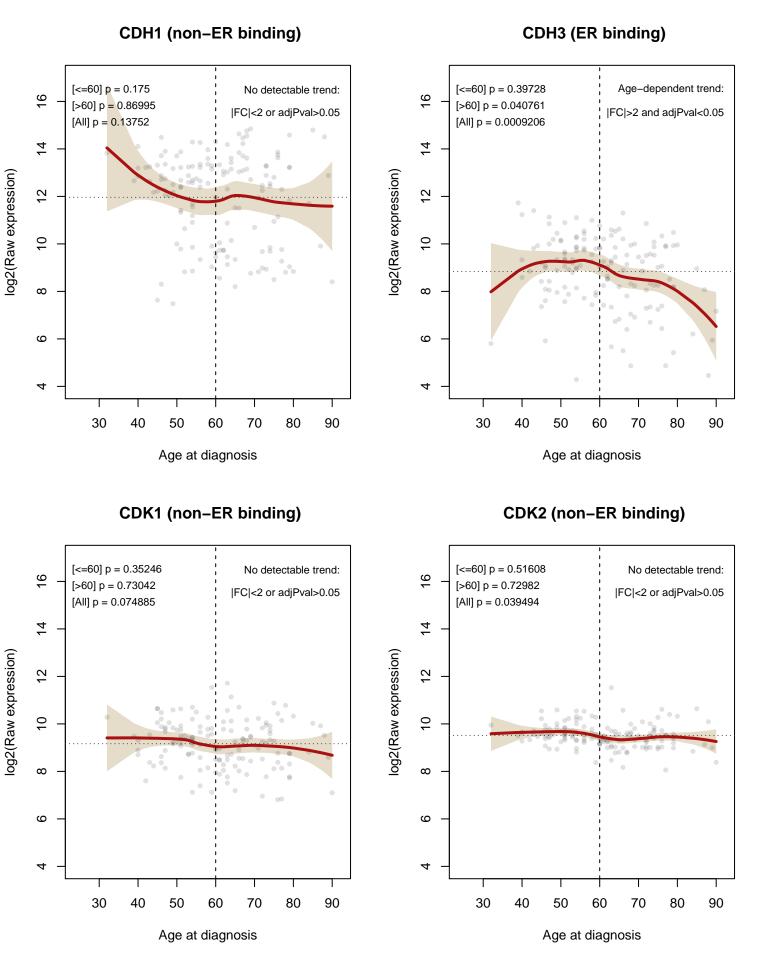


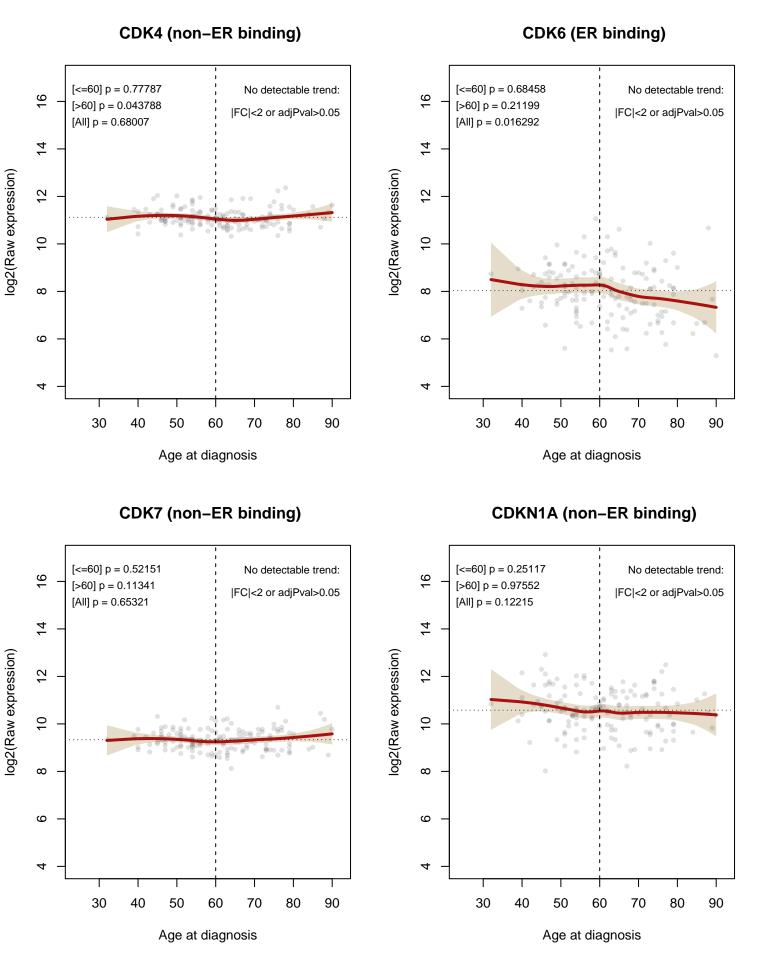
CD44 (non-ER binding)

CDC25C (non-ER binding)



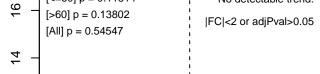


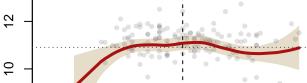




CDKN1B (non-ER binding)

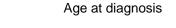
[<=60] p = 0.11814 No detectable trend:





log2(Raw expression)





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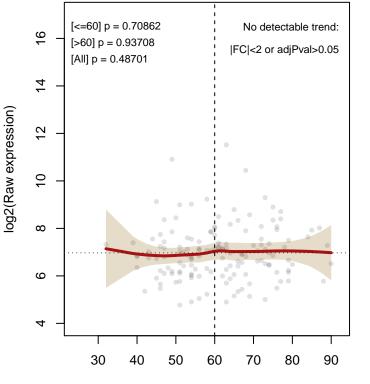
CDKN2A (non-ER binding)

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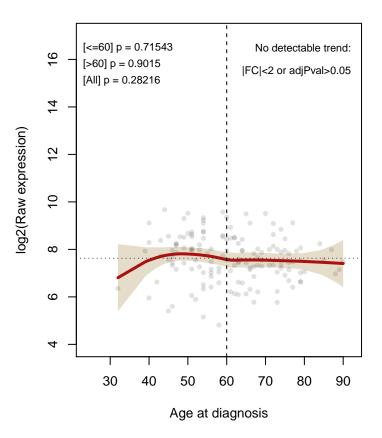
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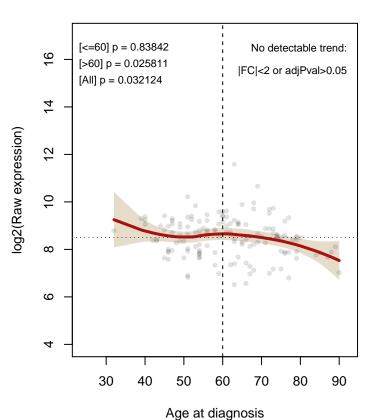


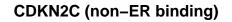
Age at diagnosis

CDKN1C (non-ER binding)

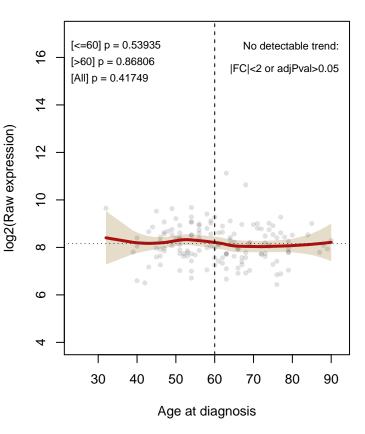


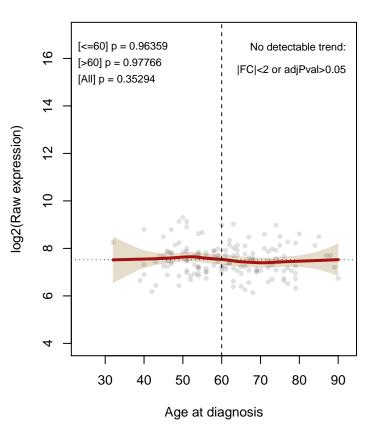
CDKN2B (non-ER binding)





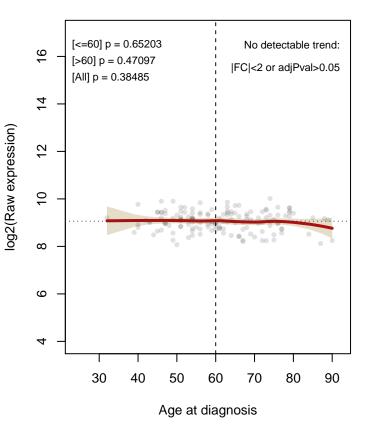
CDKN2D (non-ER binding)

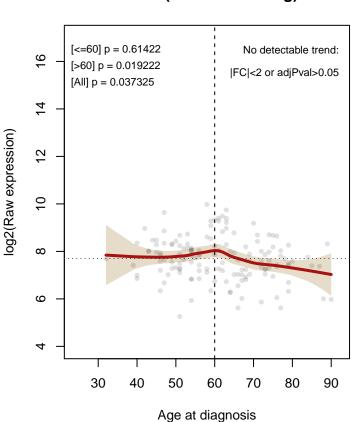




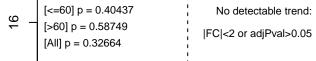
CHUK (non-ER binding)

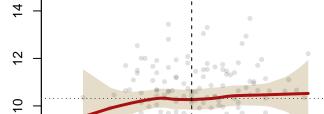
CIITA (non-ER binding)



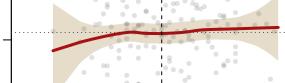


CLDN3 (non-ER binding)





log2(Raw expression)





Age at diagnosis

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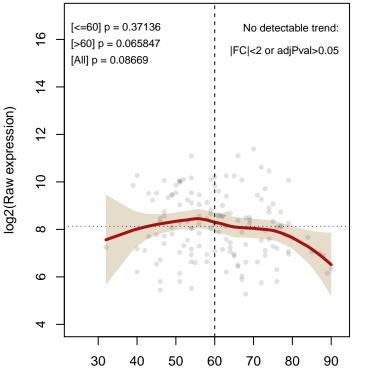
CRYAB (non-ER binding)

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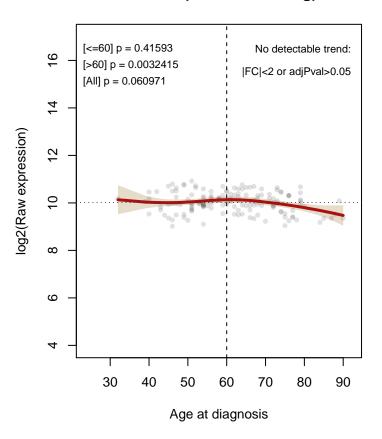
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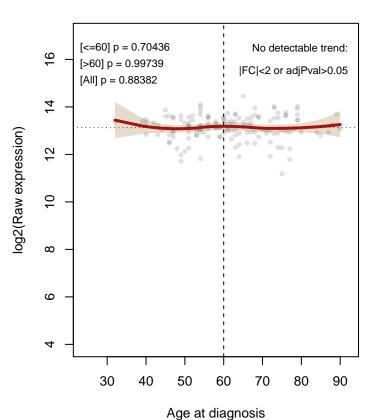


Age at diagnosis

CREB1 (non-ER binding)



CTNNB1 (non-ER binding)



DLC1 (ER binding) DMAP1 (non-ER binding) [<=60] p = 0.027561Age-dependent trend: [<=60] p = 0.71046No detectable trend: 16 16 [>60] p = 0.14033 [>60] p = 0.22018 |FC|>2 and adjPval<0.05 |FC|<2 or adjPval>0.05 [All] p = 6.1615e-06[All] p = 0.269554 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 = 0.2423No detectable trend: [<=60] p = 0.22838No detectable trend: 16 16 [>60] p = 0.19136 [>60] p = 1.6033e-05 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.018079[All] p = 0.0168584 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 = 0.55564No detectable trend: [<=60] p = 0.066995No detectable trend: 16 16 [>60] p = 0.057117 [>60] p = 0.71077 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.46063[All] p = 0.363164 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 E2F1 (non-ER binding) E2F2 (non-ER binding) [<=60] p = 0.43999No detectable trend: [<=60] p = 0.82547Age-dependent trend: 16 16 [>60] p = 0.19084 [>60] p = 0.81839 |FC|<2 or adjPval>0.05 |FC|>2 and adjPval<0.05 [AII] p = 0.6387[All] p = 0.00118344 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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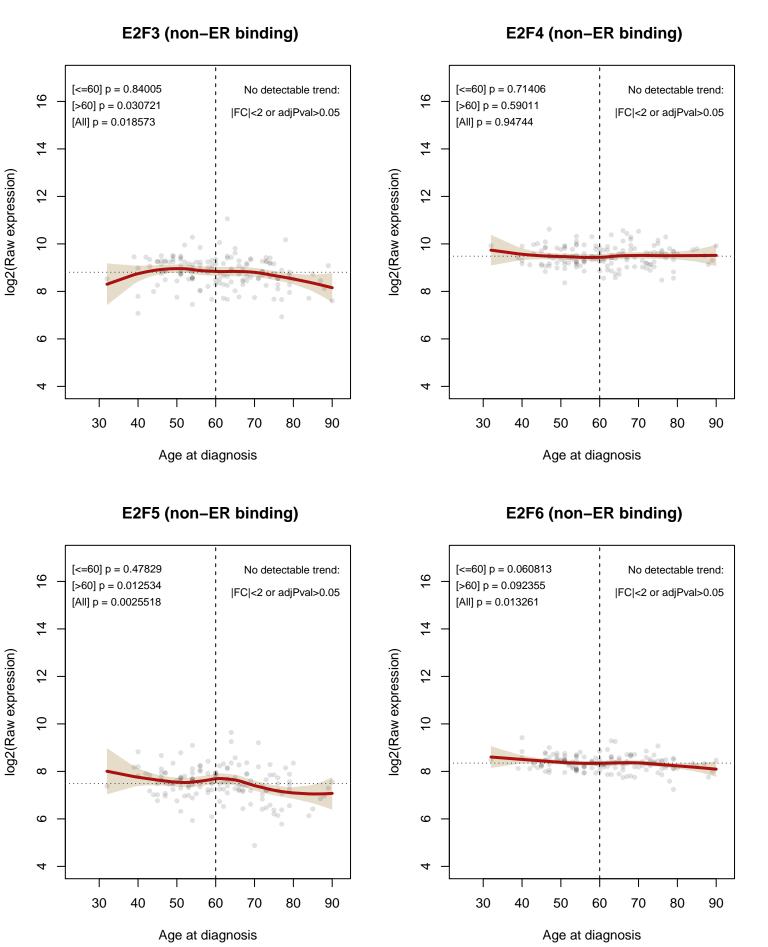
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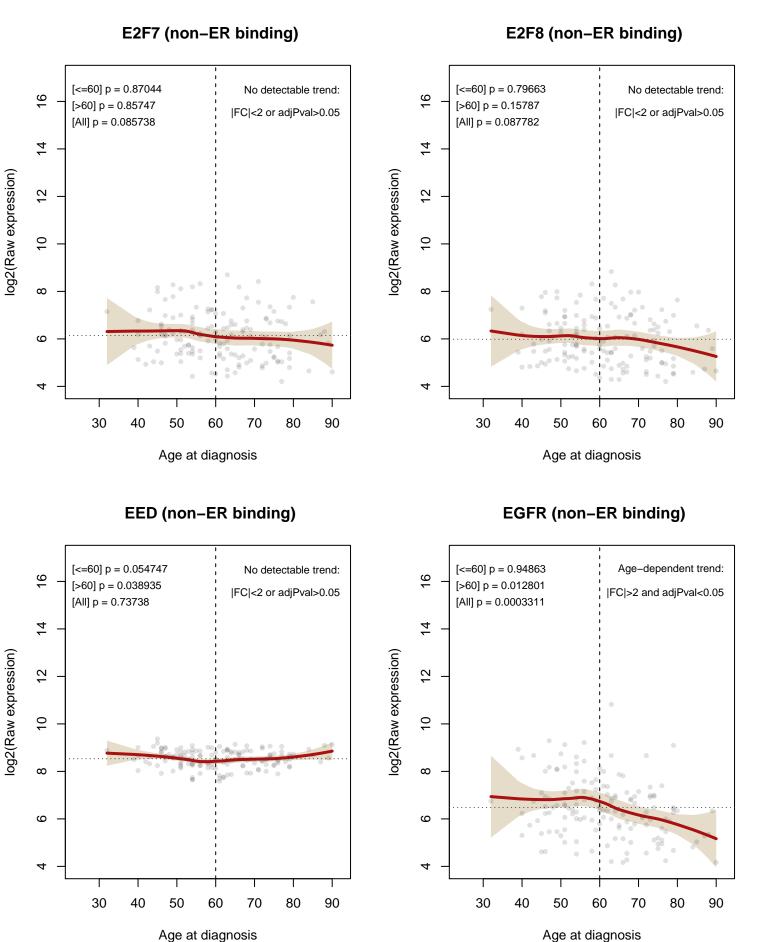
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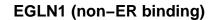
Age at diagnosis

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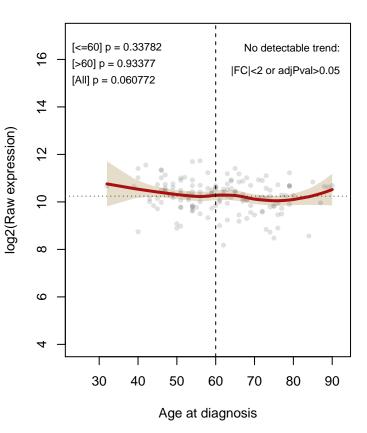
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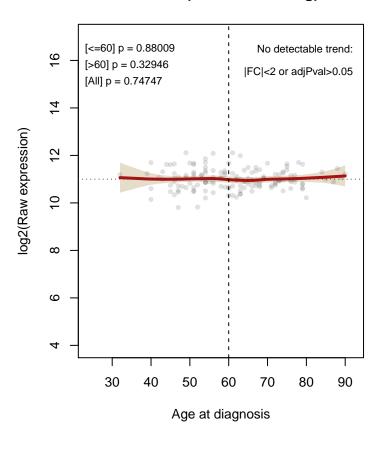






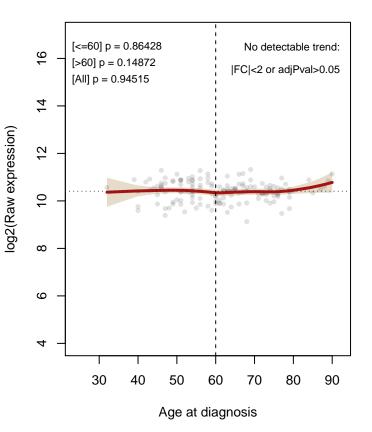
EHMT2 (non-ER binding)

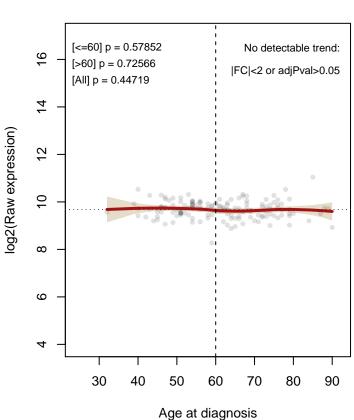




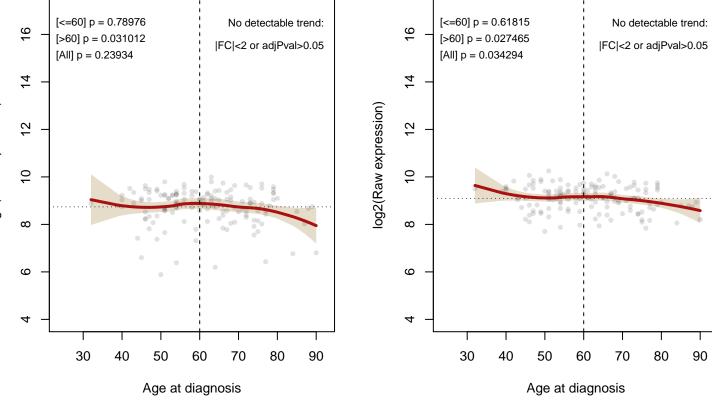
ELAC2 (non-ER binding)

ELK1 (non-ER binding)



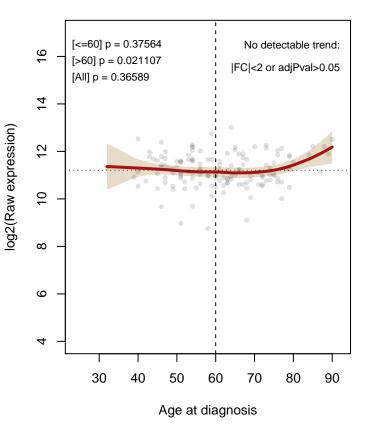


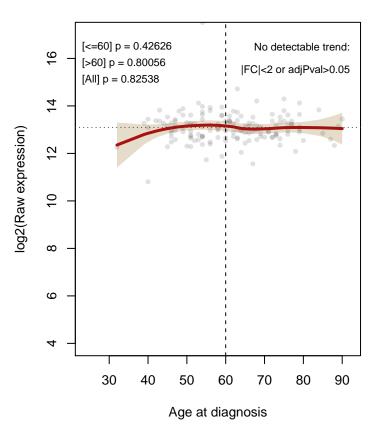
EP300 (non-ER binding) **EPAS1** (non-ER binding) [<=60] p = 0.56862No detectable trend: [<=60] p = 0.3038No detectable trend: 16 16 [>60] p = 0.0089619 [>60] p = 0.04278 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.47904[AII] p = 0.00606924 4 log2(Raw expression) log2(Raw expression) 12 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 **EPC1** (non-ER binding) **EPC2** (non-ER binding) [<=60] p = 0.78976No detectable trend: [<=60] p = 0.61815No detectable trend: 16 16 [>60] p = 0.027465 [>60] p = 0.031012 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.034294[All] p = 0.239344 4 log2(Raw expression) 12 12 10 10





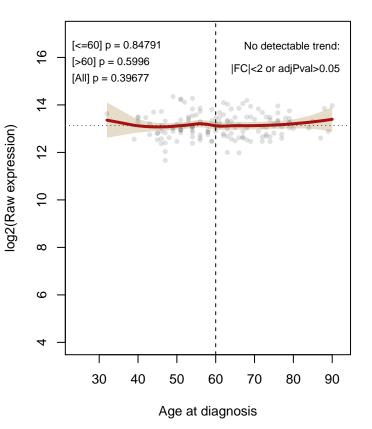
ERBB2 (non-ER binding)

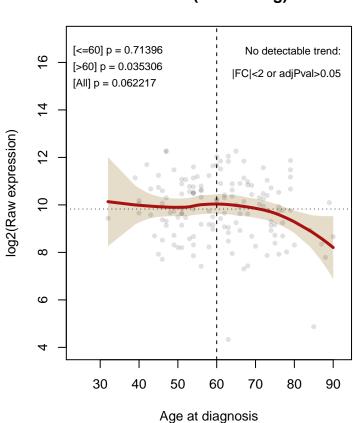


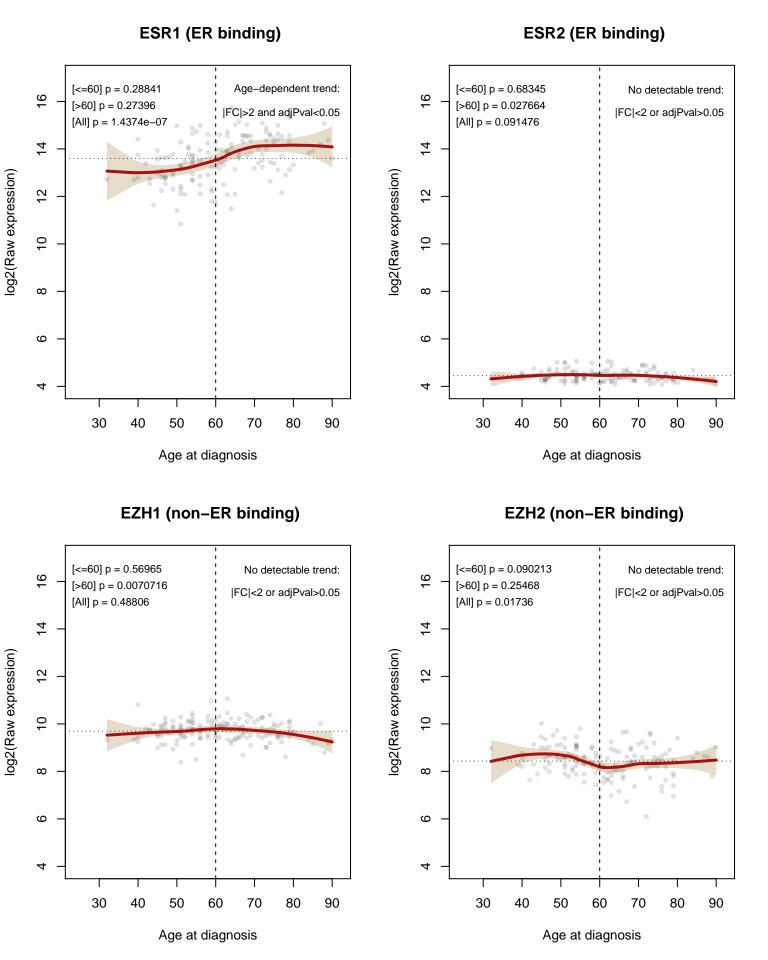


ERBB3 (non-ER binding)

ERBB4 (ER binding)







FOSL1 (non-ER binding) FOS (non-ER binding) [<=60] p = 0.93292 No detectable trend: [<=60] p = 0.84627No detectable trend: 16 16 [>60] p = 0.863[>60] p = 0.75864 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.12587[AII] p = 0.866984 4 log2(Raw expression) log2(Raw expression) 12 12 19 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 = 0.76096No detectable trend: [<=60] p = 0.23536No detectable trend: 16 16 [>60] p = 0.24209 [>60] p = 0.54805 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.1511[All] p = 0.291284 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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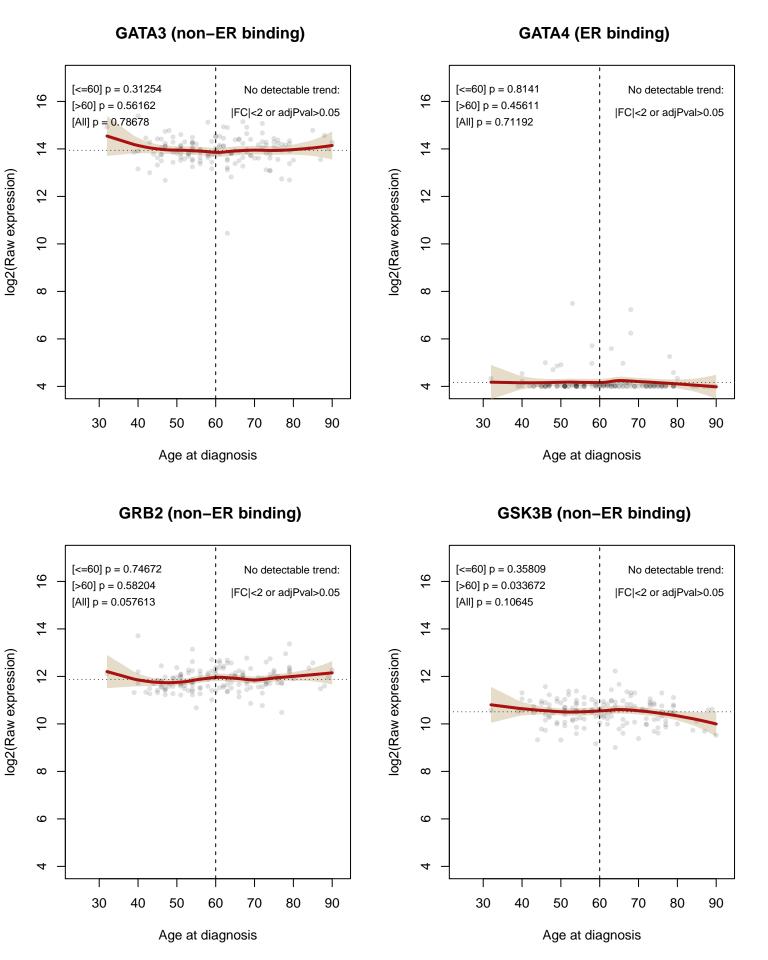
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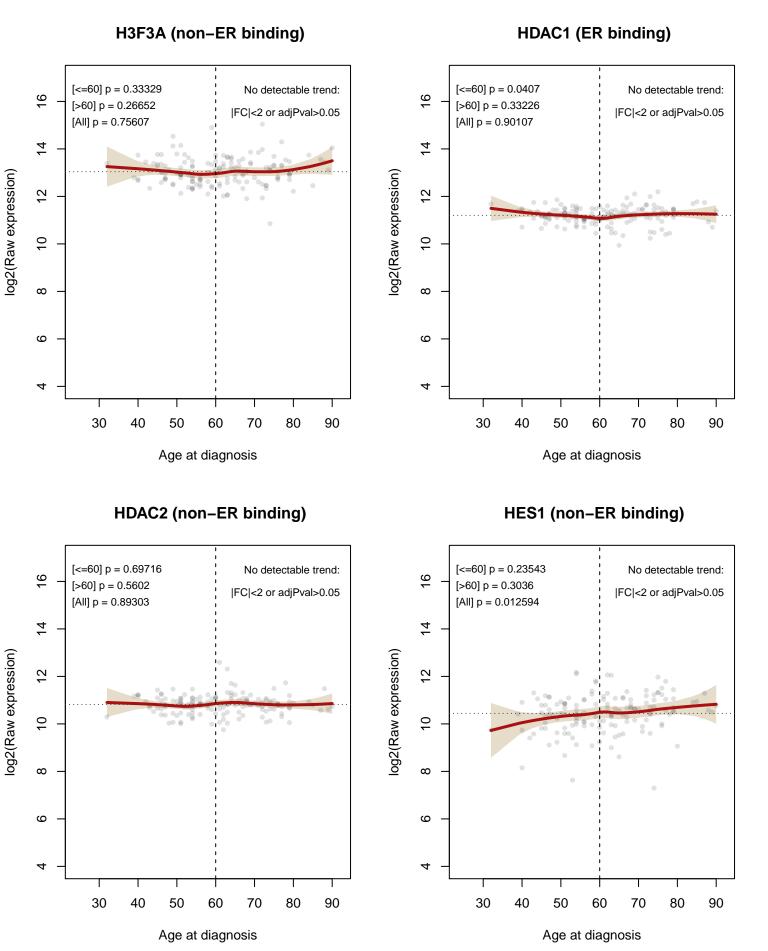
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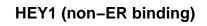
Age at diagnosis

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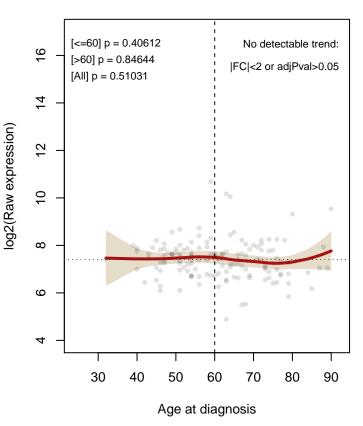
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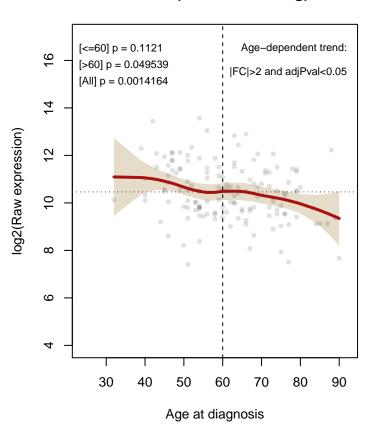






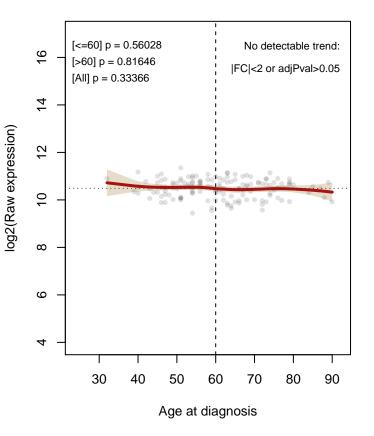
HIF1A (non-ER binding)

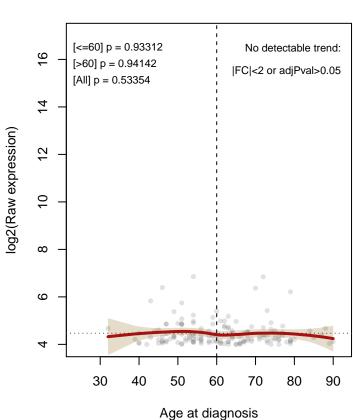


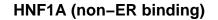


HIF1AN (non-ER binding)

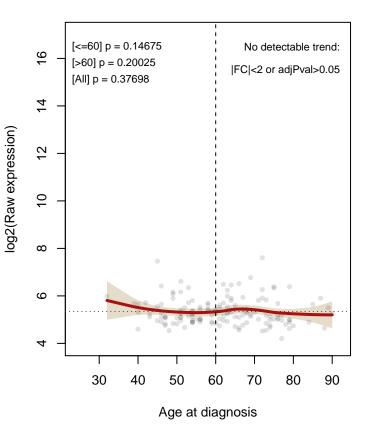
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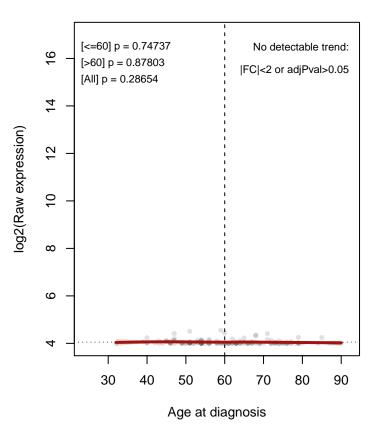






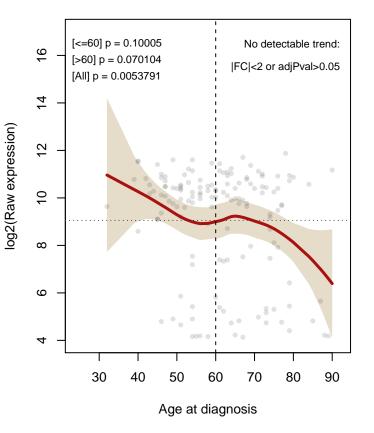
HNF1B (non-ER binding)

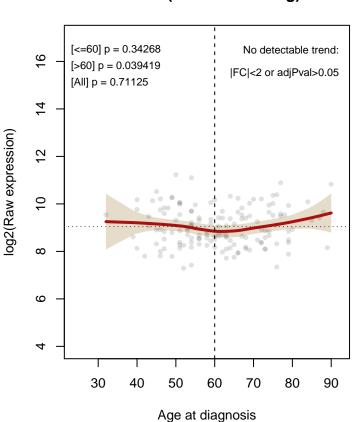


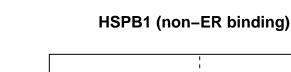


HOXC10 (non-ER binding)

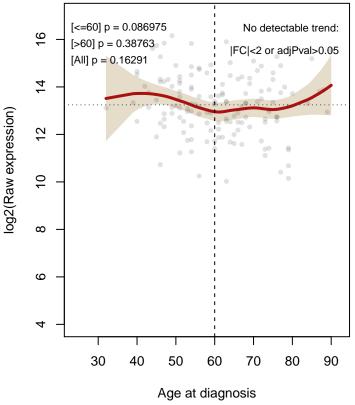
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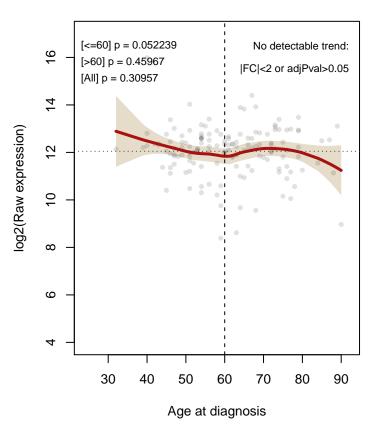






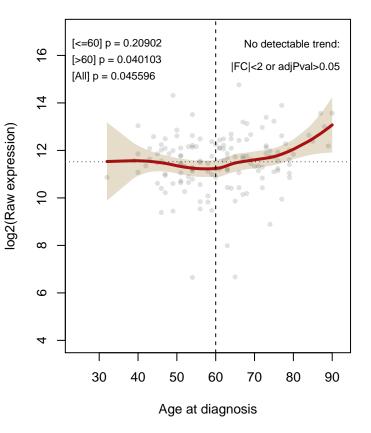


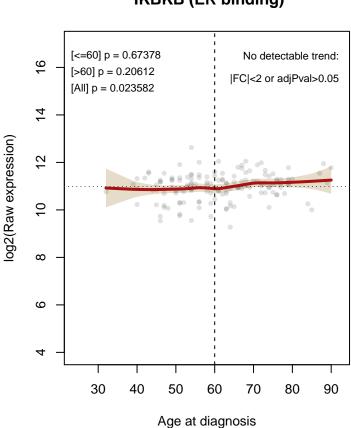




IGFBP2 (non-ER binding)

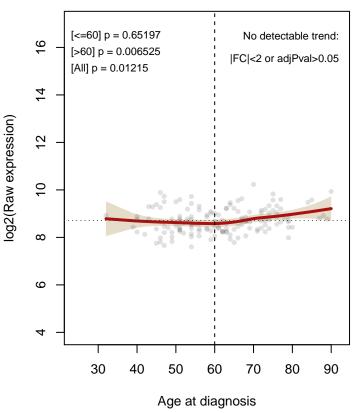
IKBKB (ER binding)

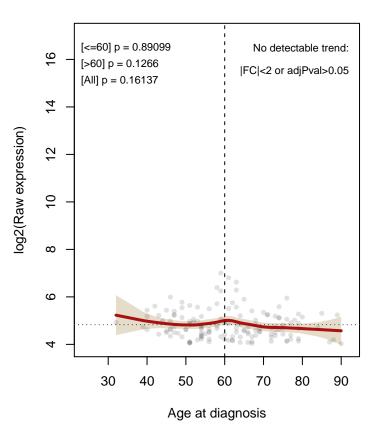






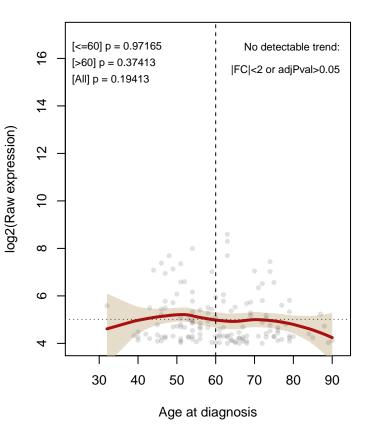
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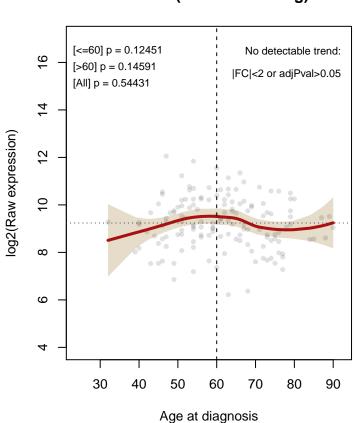


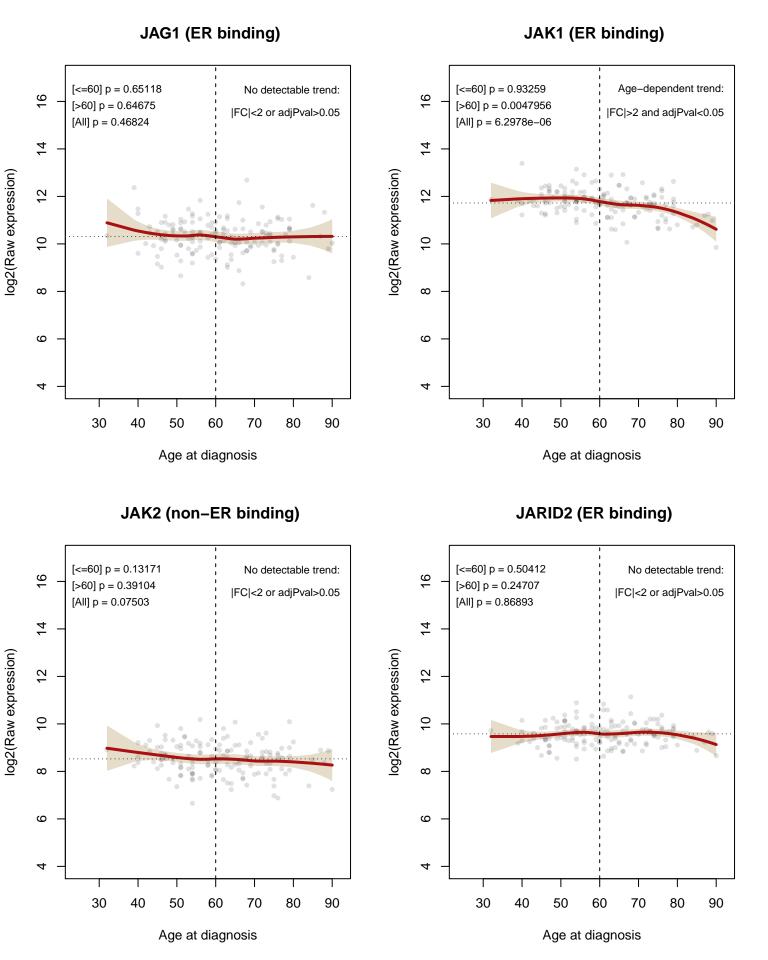


IL6 (non-ER binding)

INPP4B (non-ER binding)

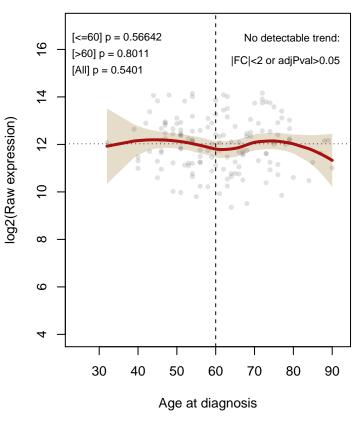


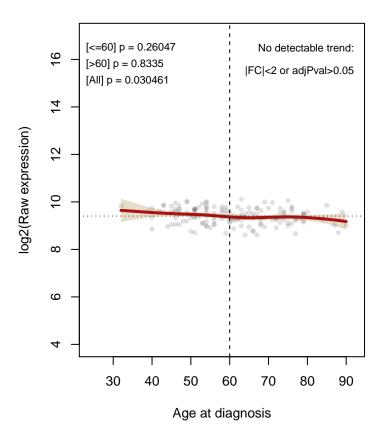






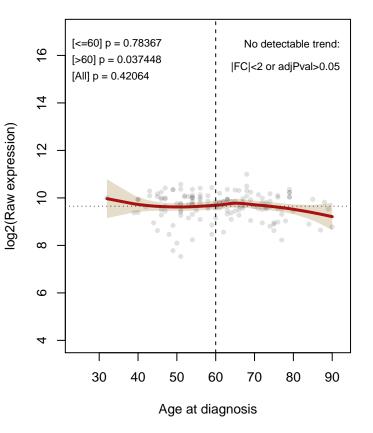
KDM2B (non-ER binding)

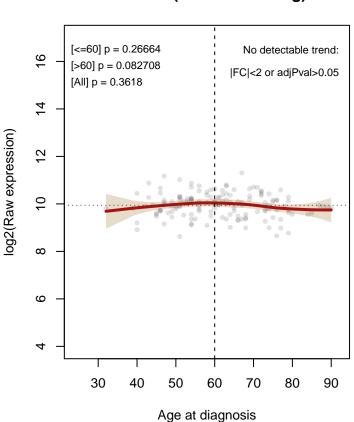




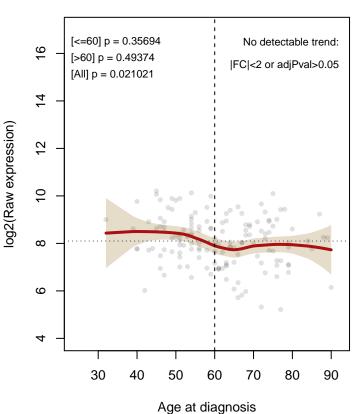
KDM6A (non-ER binding)

KDM6B (non-ER binding)

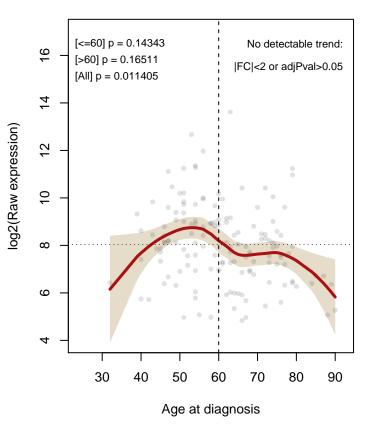




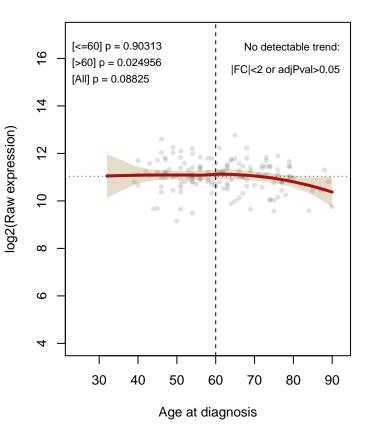




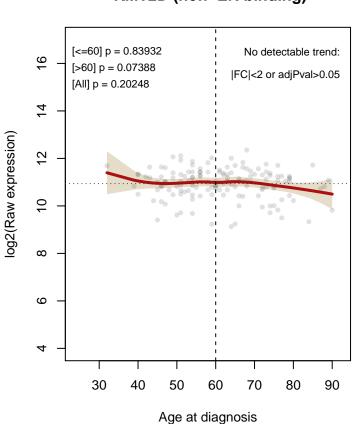
KIT (non-ER binding)



KMT2C (non-ER binding)

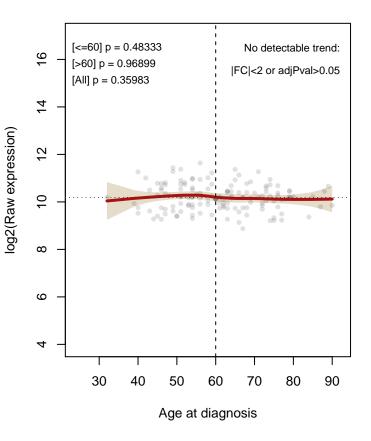


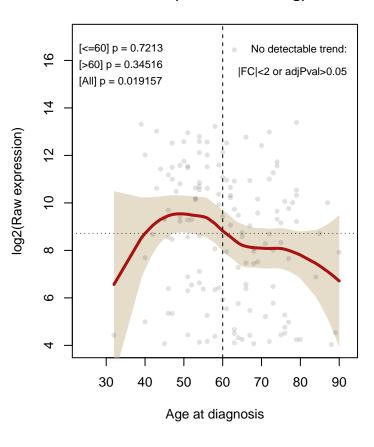
KMT2D (non-ER binding)





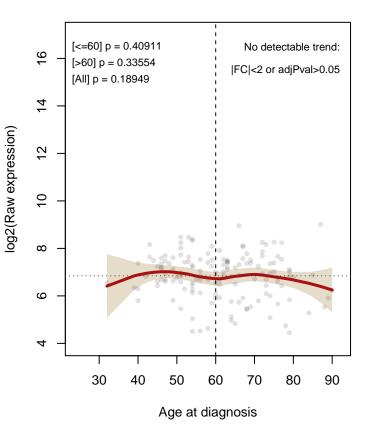
KRT5 (non-ER binding)

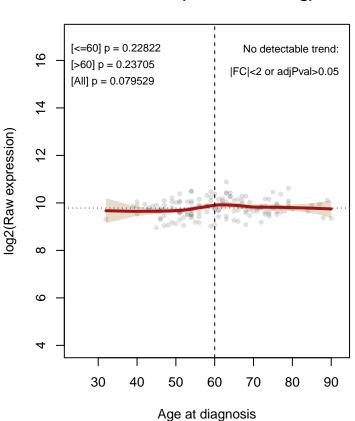




L3MBTL1 (non-ER binding)

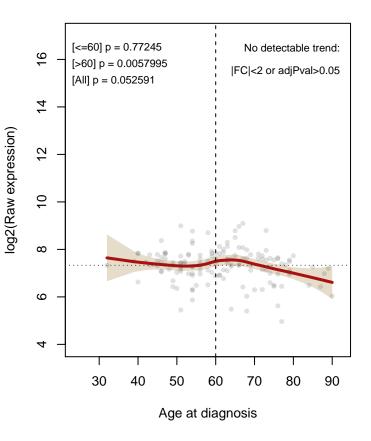
L3MBTL2 (non-ER binding)

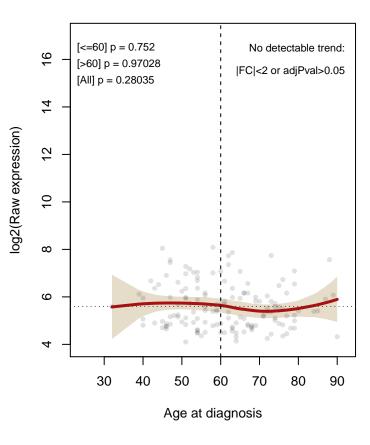




L3MBTL3 (ER binding)

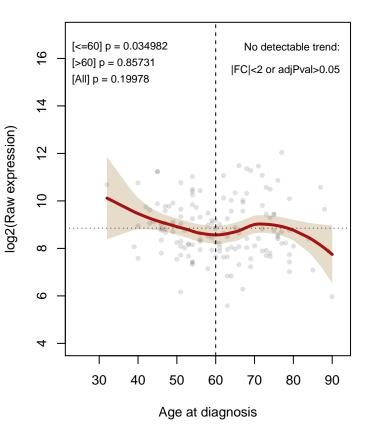
L3MBTL4 (non-ER binding)

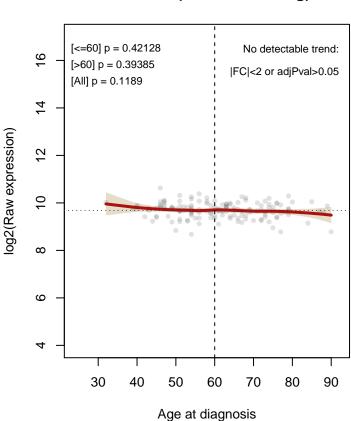


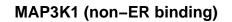


LEF1 (non-ER binding)

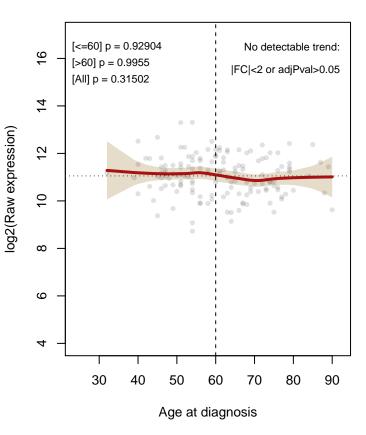
MAP2K1 (non-ER binding)

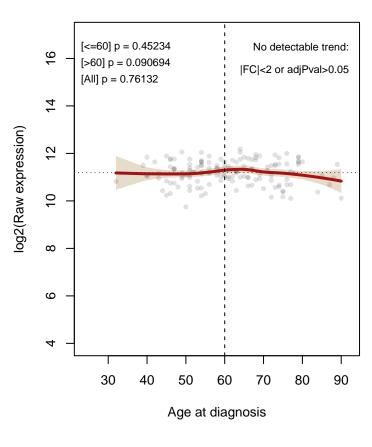






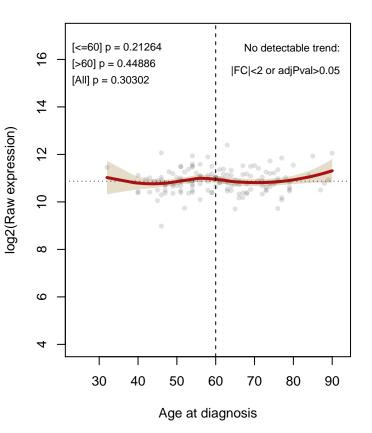
MAPK1 (non-ER binding)

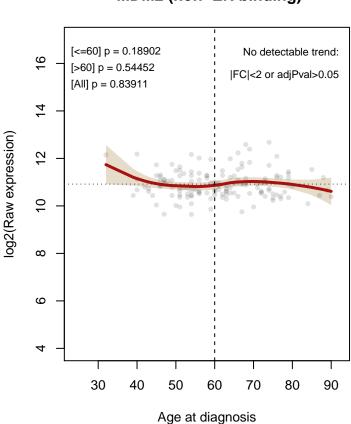




MAPK3 (non-ER binding)

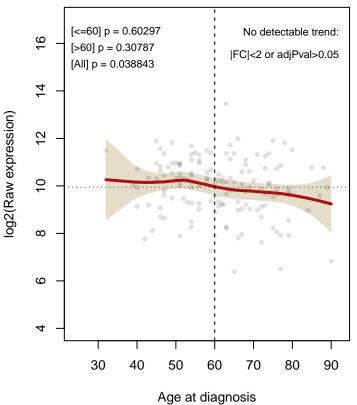
MDM2 (non-ER binding)

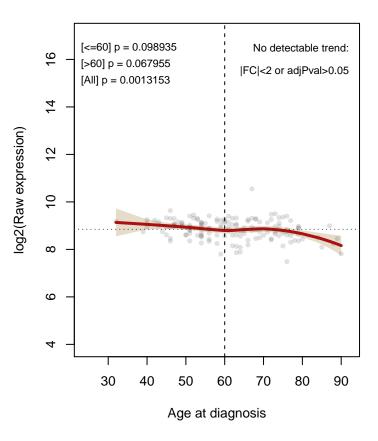






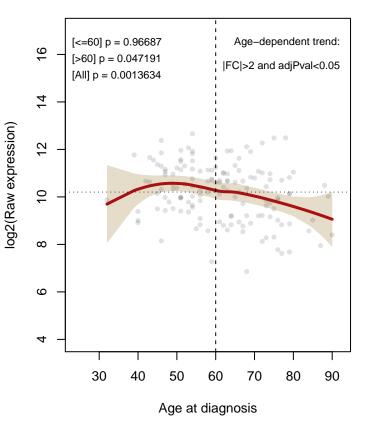
MTF2 (non-ER binding)

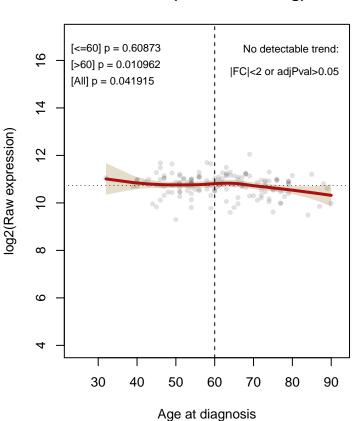




MYC (non-ER binding)

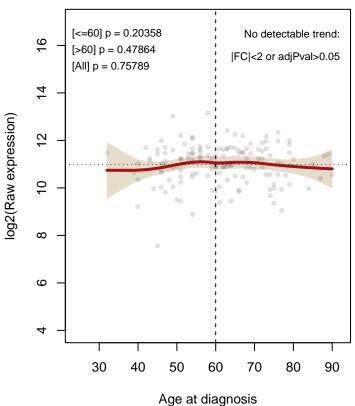
NCOA6 (non-ER binding)

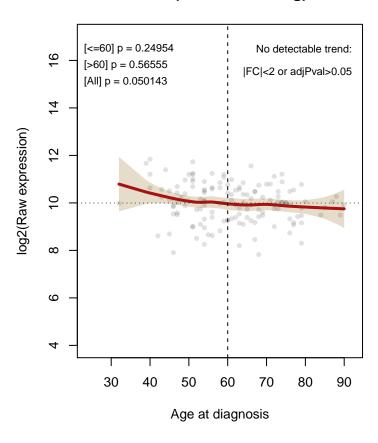






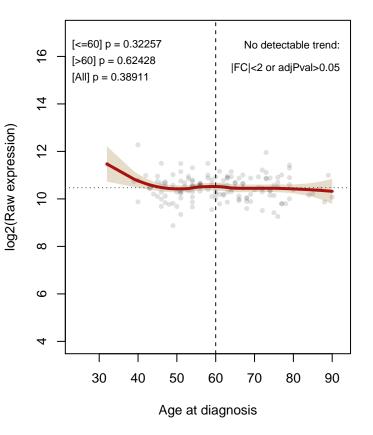
NES (non-ER binding)

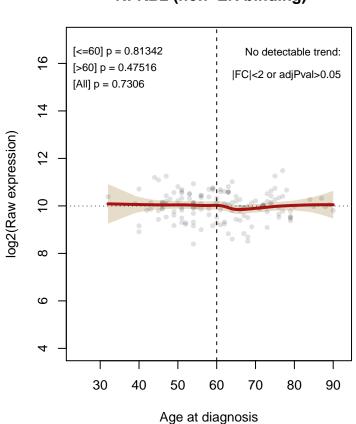




NFKB1 (non-ER binding)

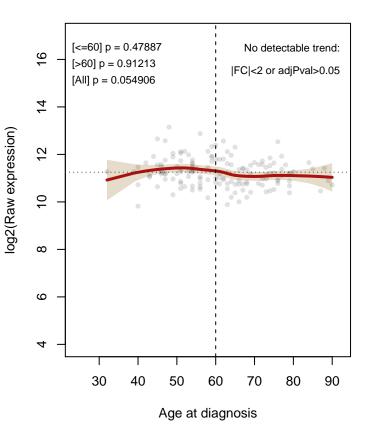
NFKB2 (non-ER binding)

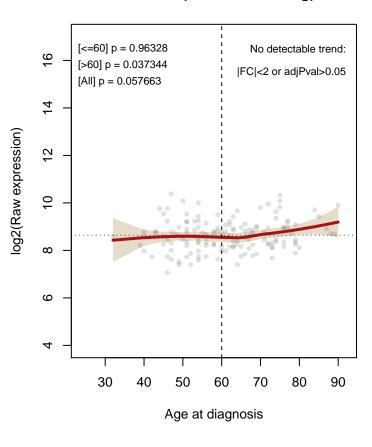






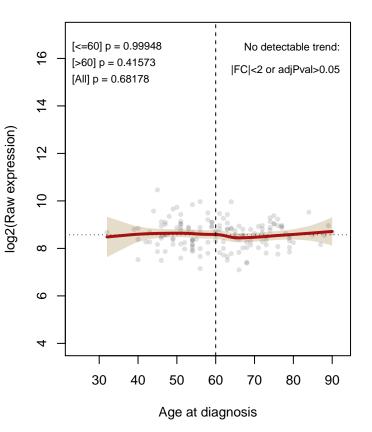
NFKBIB (non-ER binding)

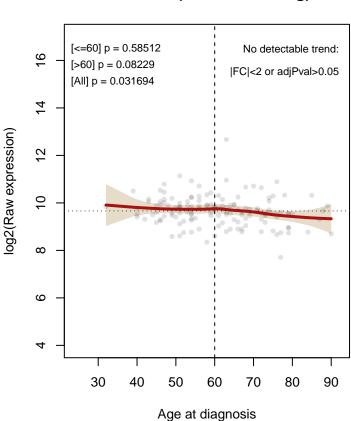




NFKBIE (non-ER binding)

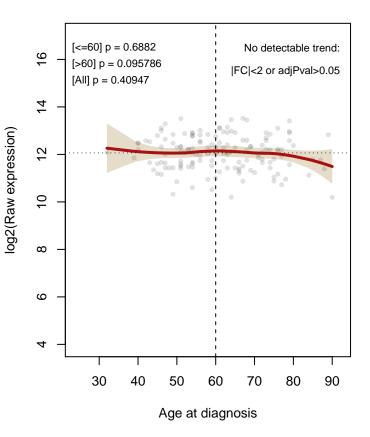
NOTCH1 (non-ER binding)

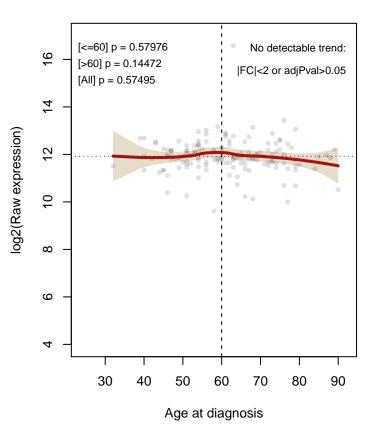




NOTCH2 (non-ER binding)

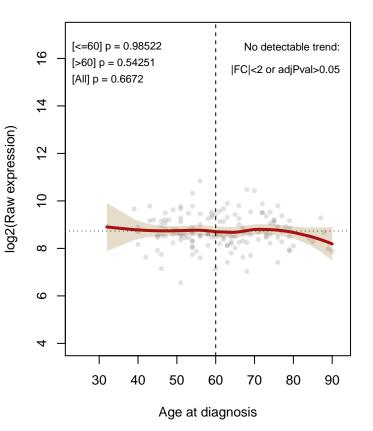
g) NOTCH3 (non-ER binding)

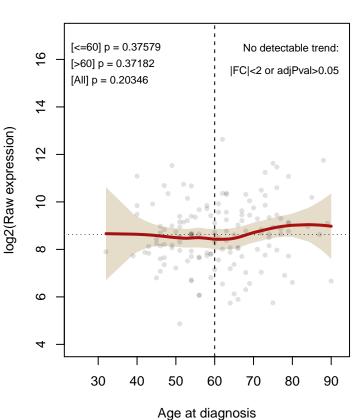




NOTCH4 (non-ER binding)

NR4A2 (non-ER binding)





NRAS (non-ER binding) PCGF1 (non-ER binding) [<=60] p = 0.30071No detectable trend: [<=60] p = 0.96656No detectable trend: 16 16 [>60] p = 0.021953 [>60] p = 0.32053 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.0014537[All] p = 0.719664 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 PCGF2 (non-ER binding) PCGF3 (non-ER binding) [<=60] p = 0.12329No detectable trend: [<=60] p = 0.87042No detectable trend: 16 16 [>60] p = 0.17573 [>60] p = 0.54758 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.64509[All] p = 0.655654 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω

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Age at diagnosis

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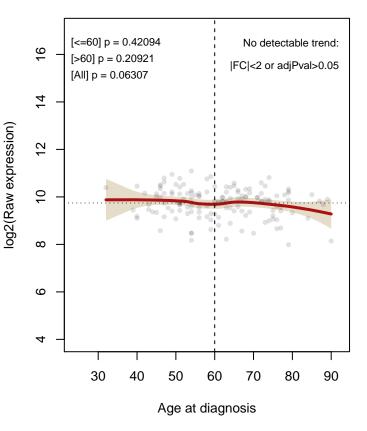
Age at diagnosis

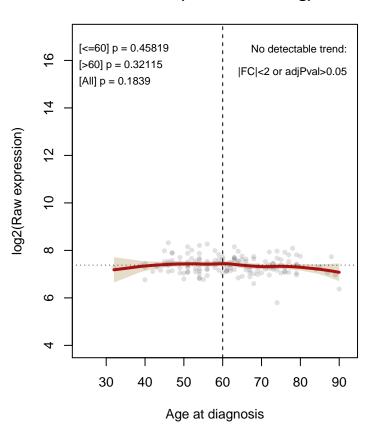
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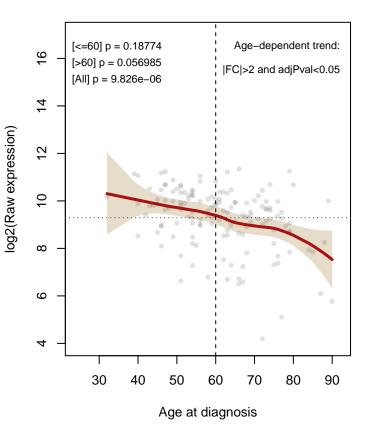
PCGF6 (non-ER binding)

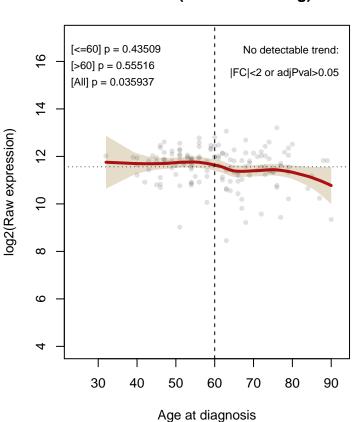




PDGFRA (non-ER binding)

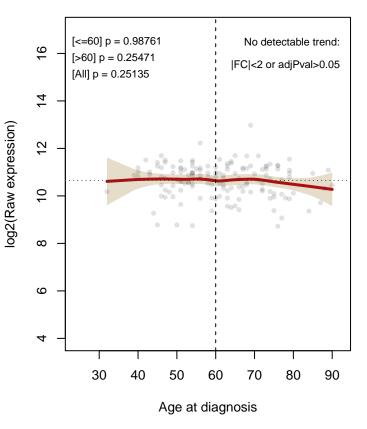
PDGFRB (non-ER binding)

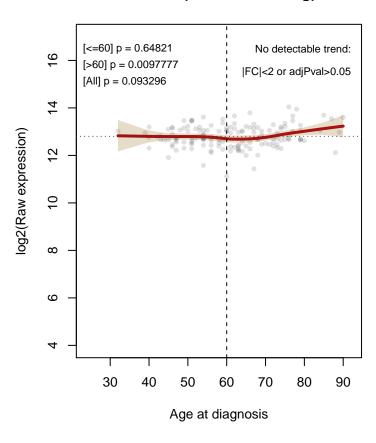






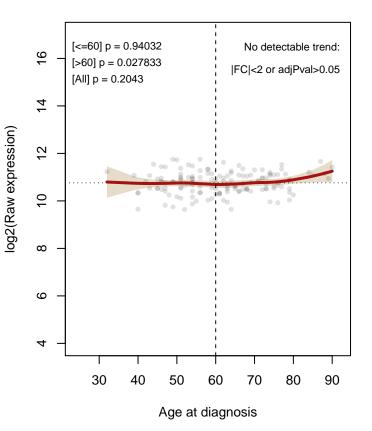
PEBP1 (non-ER binding)

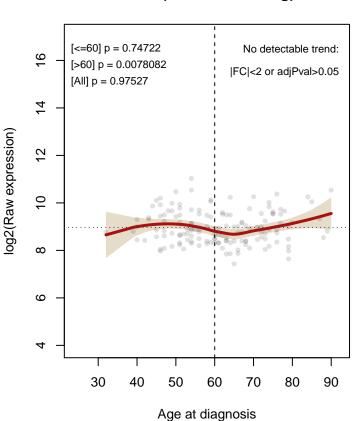


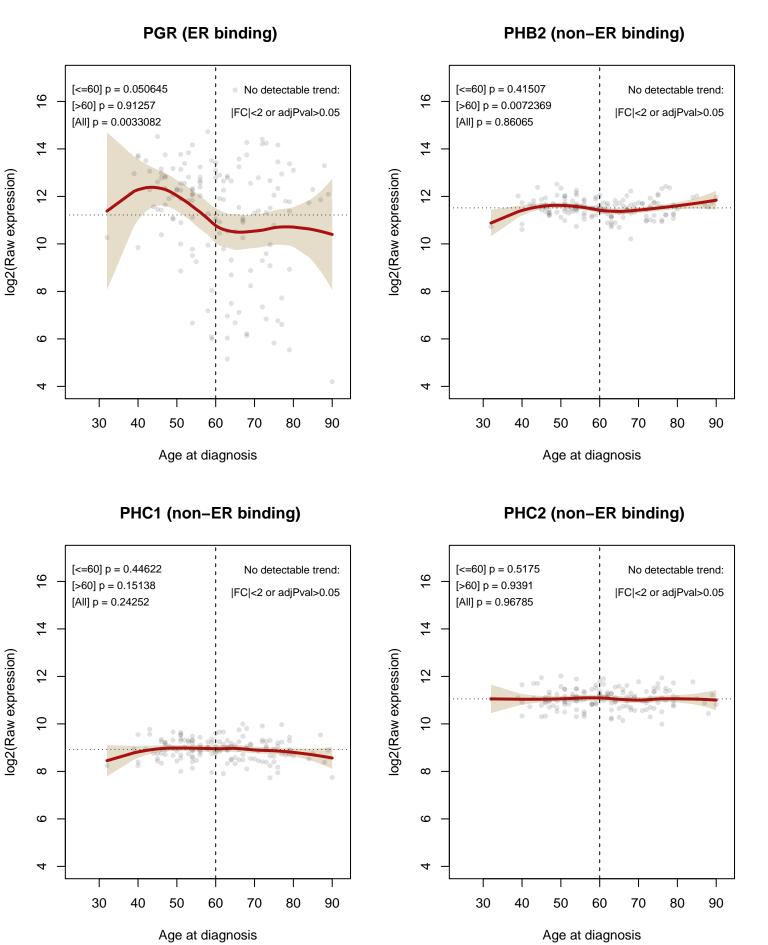


PELP1 (non-ER binding)

PGP (non-ER binding)







PHC3 (non-ER binding) PHF1 (non-ER binding) [<=60] p = 0.7815 No detectable trend: [<=60] p = 0.052505No detectable trend: 16 16 [>60] p = 0.019576 [>60] p = 0.023712 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.768[All] p = 0.0128374 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 = 0.34832No detectable trend: [<=60] p = 0.39047No detectable trend: 16 16 [>60] p = 0.87231 [>60] p = 0.0025831 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.0088636[All] p = 0.0561394 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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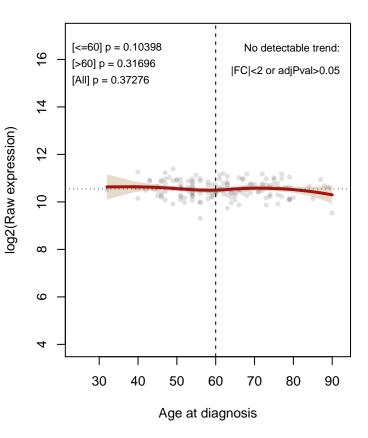
Age at diagnosis

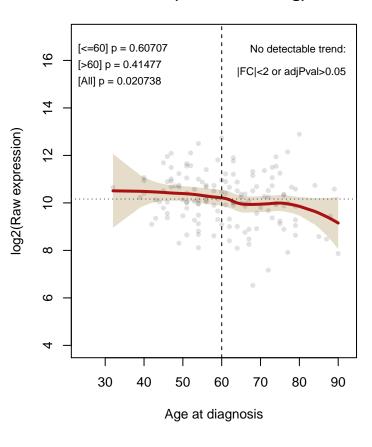
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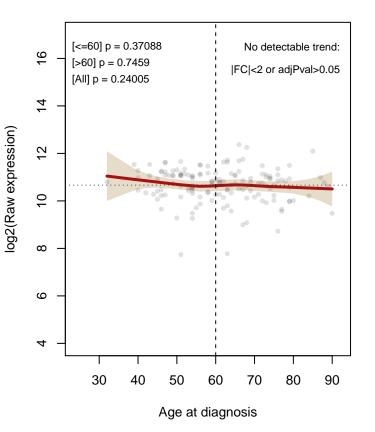
PLAU (non-ER binding)

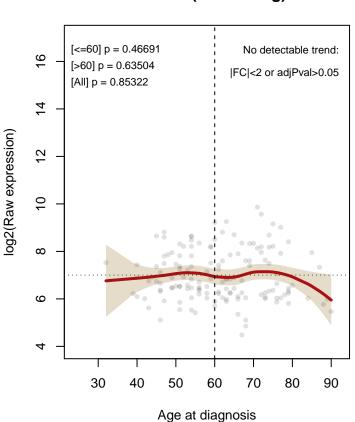




PODXL (non-ER binding)

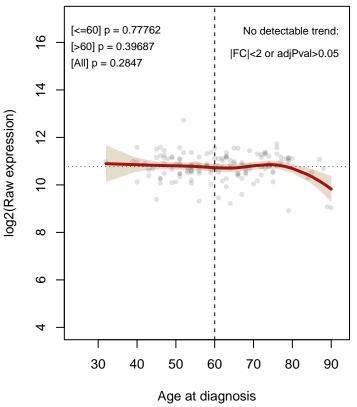
PPARG (ER binding)

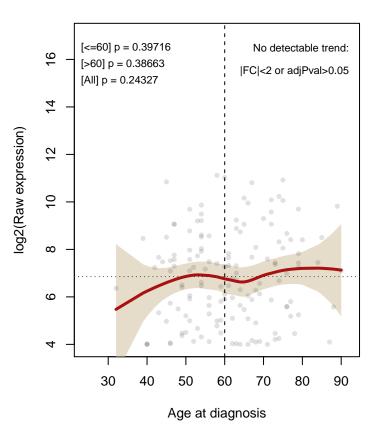






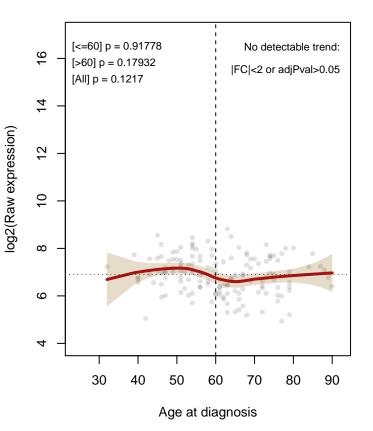
PYDC1 (non-ER binding)

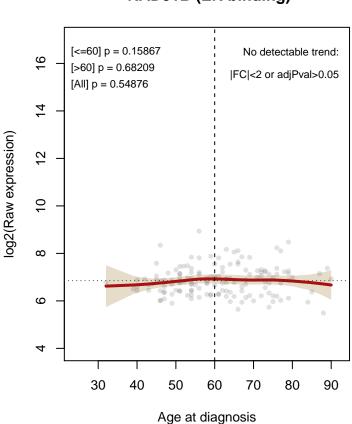




RAD51 (non-ER binding)

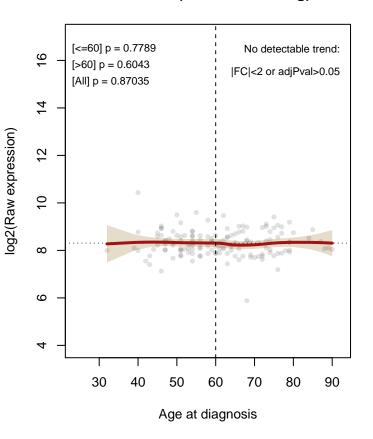
RAD51B (ER binding)

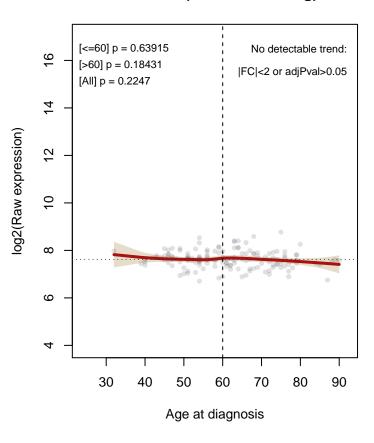




RAD51C (non-ER binding)

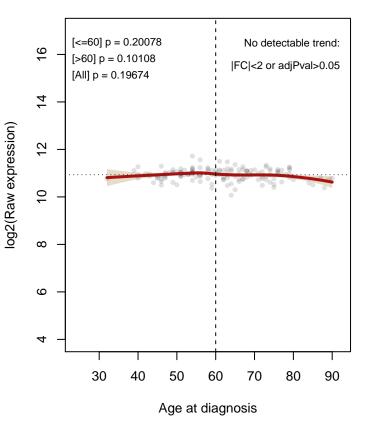
RAD51D (non-ER binding)

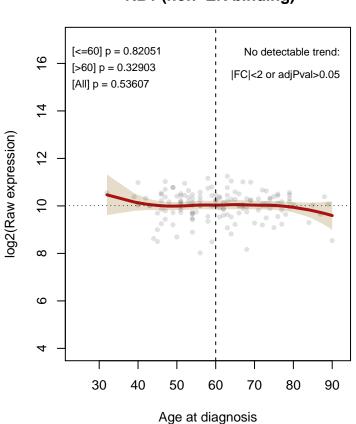


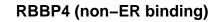


RAF1 (non-ER binding)

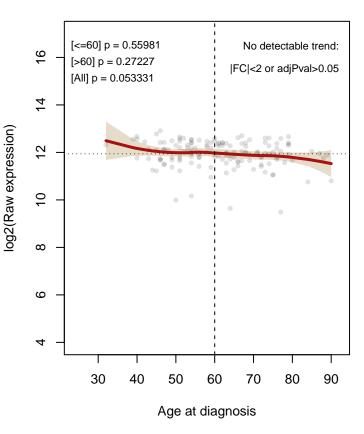
RB1 (non-ER binding)

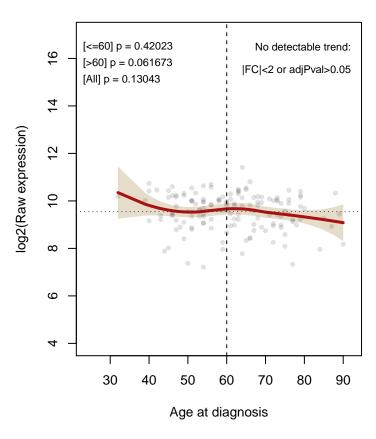






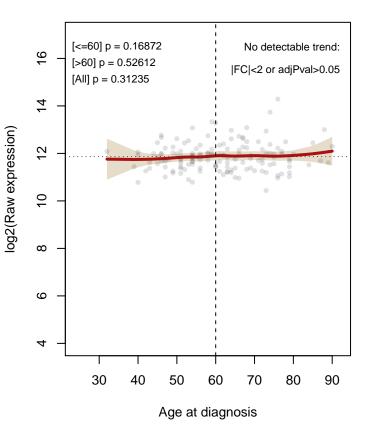
RBBP5 (non-ER binding)

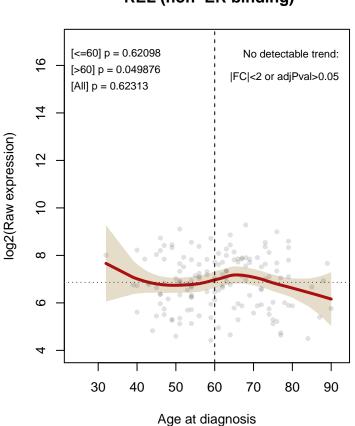




RBBP7 (non-ER binding)

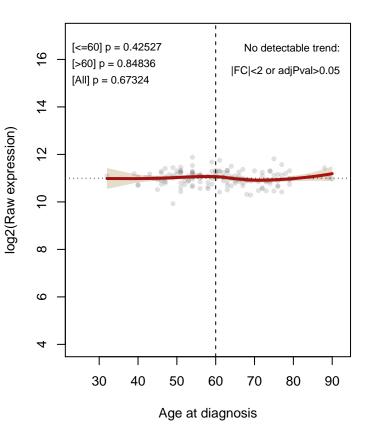
REL (non-ER binding)

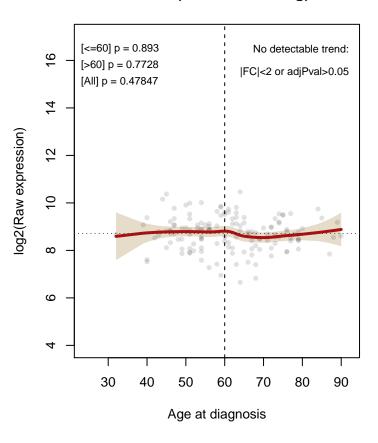






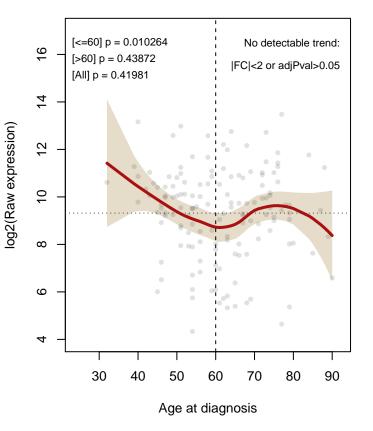
RELB (non-ER binding)

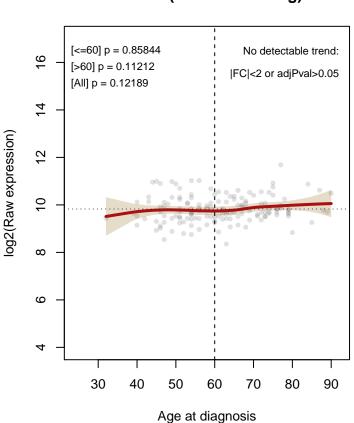




RET (ER binding)

RING1 (non-ER binding)





RNF2 (non-ER binding) **RUNX1 (ER binding)** [<=60] p = 0.59419No detectable trend: [<=60] p = 0.039614Age-dependent trend: 16 16 [>60] p = 0.26151 [>60] p = 0.096972 |FC|<2 or adjPval>0.05 |FC|>2 and adjPval<0.05 [All] p = 0.050172[AII] p = 2.2157e - 054 4 log2(Raw expression) log2(Raw expression) 12 12 19 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 **RUNX3 (non-ER binding)** RYBP (non-ER binding) [<=60] p = 0.38026No detectable trend: [<=60] p = 0.39172No detectable trend: 16 16 [>60] p = 0.55869[>60] p = 0.24744 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.090393[AII] p = 0.399994 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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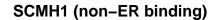
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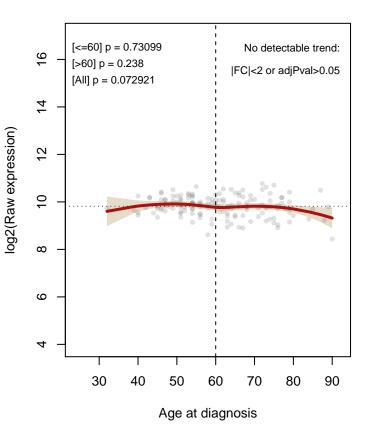
Age at diagnosis

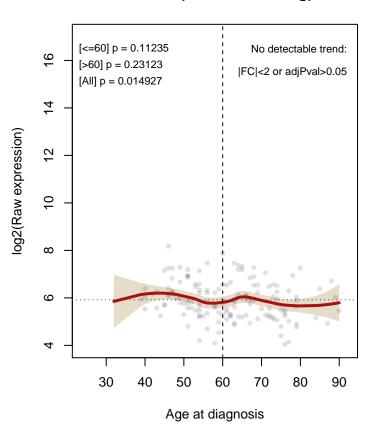
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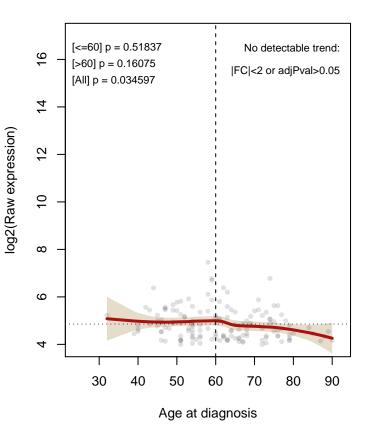
SCML2 (non-ER binding)

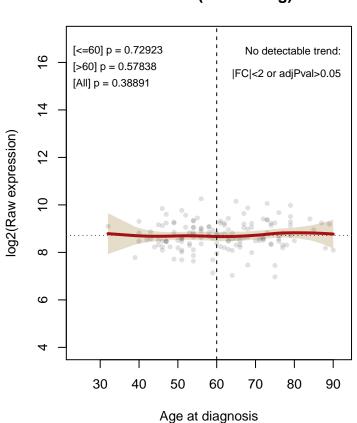




SCML4 (non-ER binding)

SFMBT1 (ER binding)





SFMBT2 (ER binding) SFPQ (non-ER binding) [<=60] p = 0.78283No detectable trend: [<=60] p = 0.013506No detectable trend: 16 16 [>60] p = 0.67691 [>60] p = 0.22485 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 1.488e - 05[All] p = 0.125614 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis SHC1 (non-ER binding) SIRT1 (non-ER binding) [<=60] p = 0.12545No detectable trend: [<=60] p = 0.58997No detectable trend: 16 16 [>60] p = 0.19349 [>60] p = 0.85615 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.61885[All] p = 0.398434 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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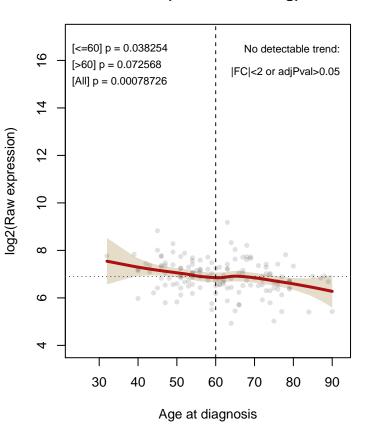
Age at diagnosis

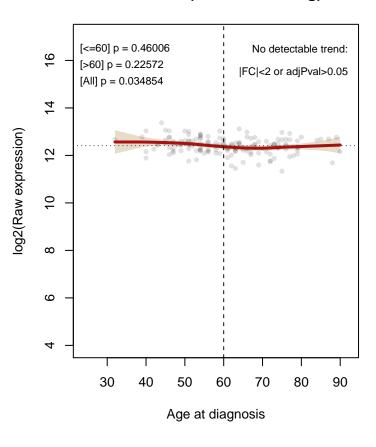
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SKP2 (non-ER binding)

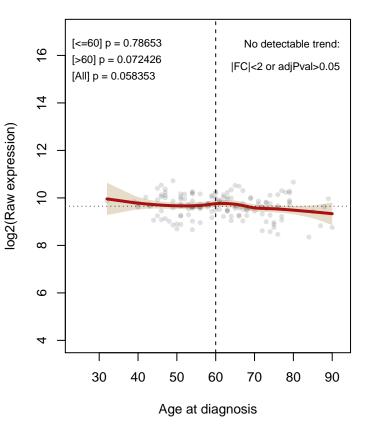
SLC25A3 (non-ER binding)

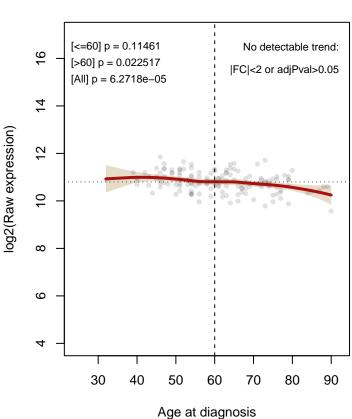




SMAD1 (non-ER binding)

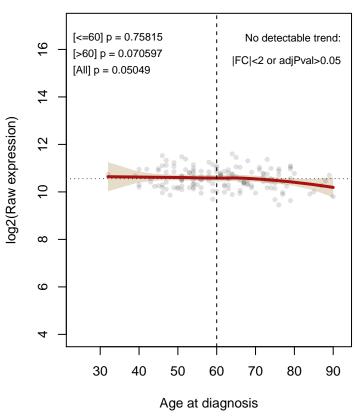
SMAD2 (non-ER binding)



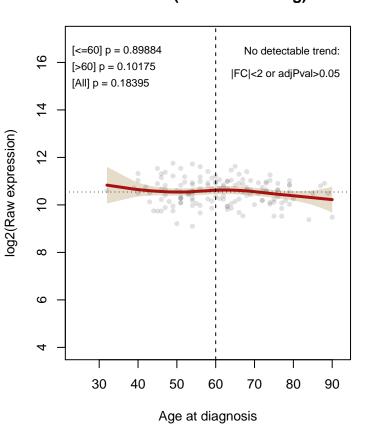


SMAD3 (ER binding) [<=60] p = 0.17616No detectable trend: 16 [>60] p = 0.090746 |FC|<2 or adjPval>0.05 [All] p = 0.719644 log2(Raw expression) 12 19 ω 9 30 40 50 60 70 80 90 Age at diagnosis

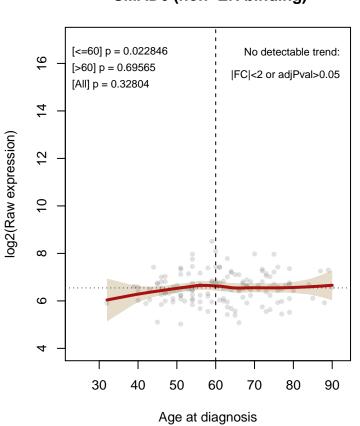
SMAD4 (non-ER binding)



SMAD5 (non-ER binding)

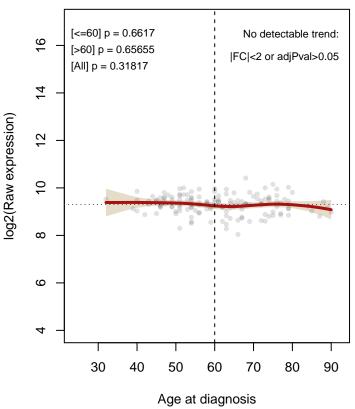


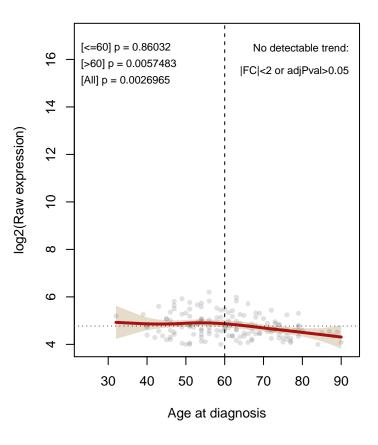
SMAD6 (non-ER binding)



SMAD7 (non-ER binding)

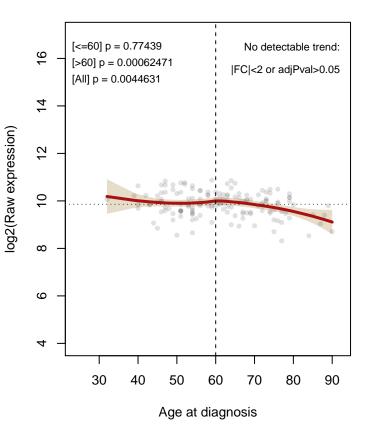
SMAD9 (non-ER binding)

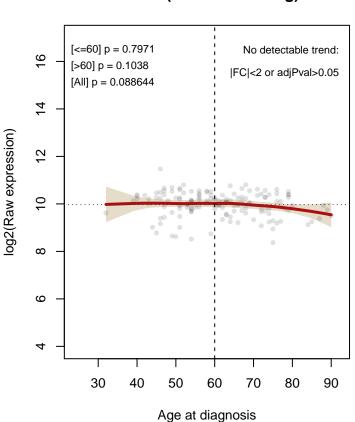


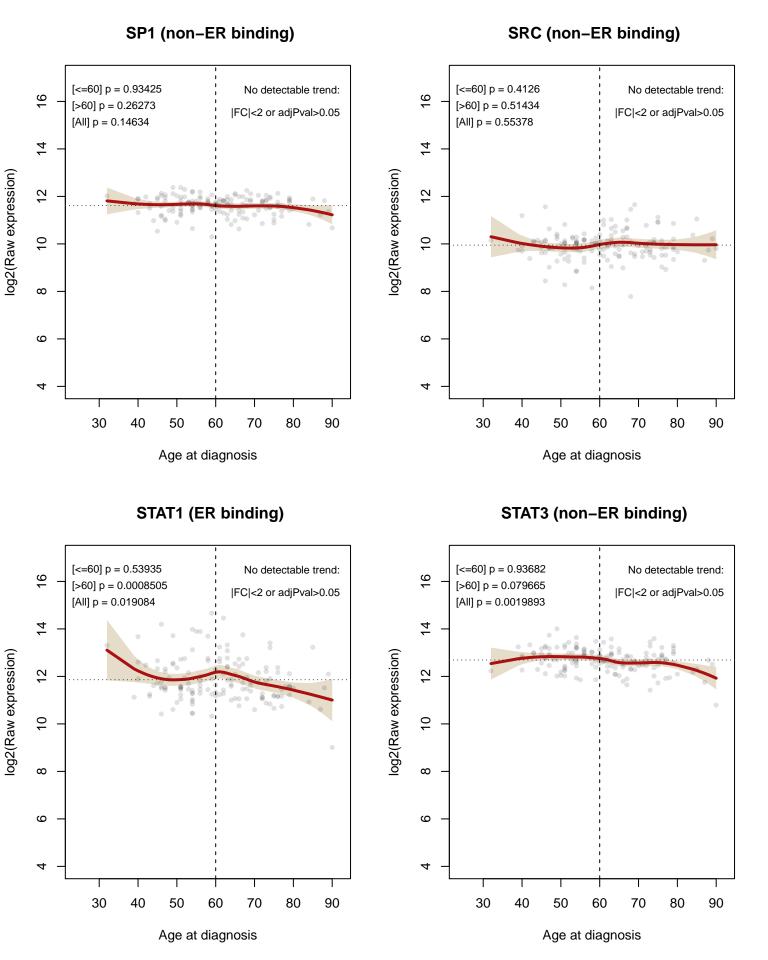


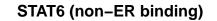
SOS1 (non-ER binding)

SOS2 (non-ER binding)

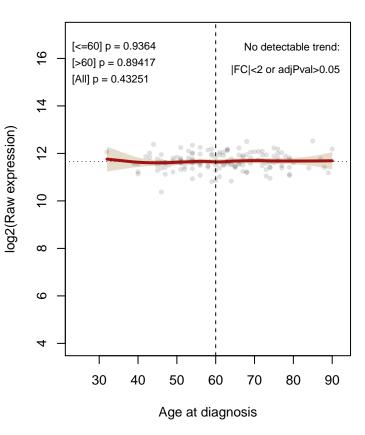


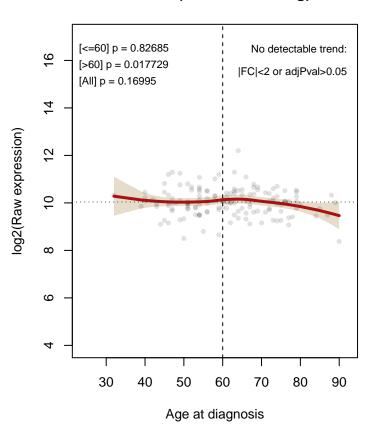






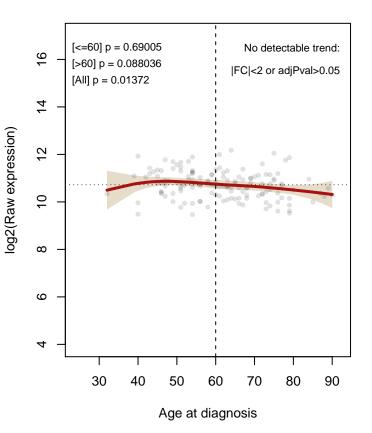
SUZ12 (non-ER binding)

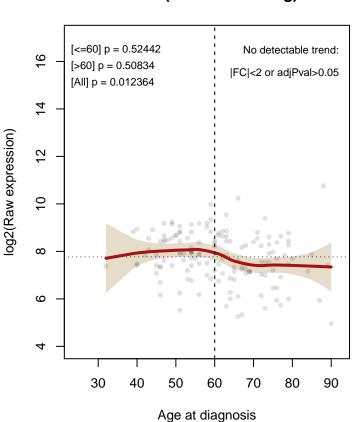




TCF3 (non-ER binding)

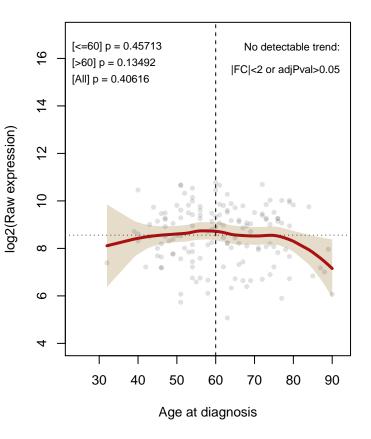
TCF7 (non-ER binding)

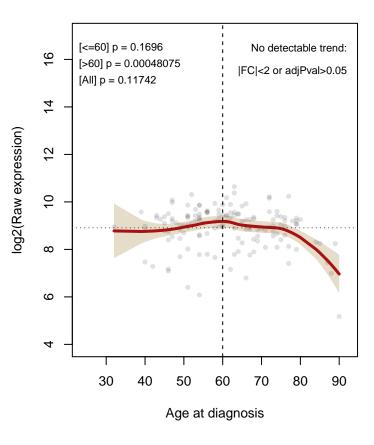






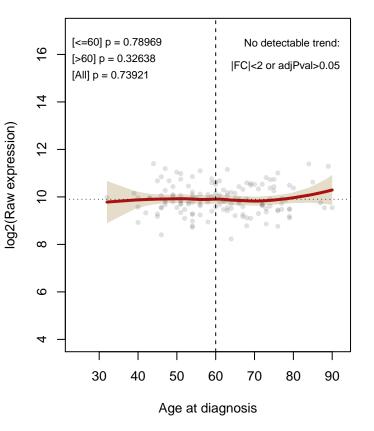
TCF7L2 (non-ER binding)

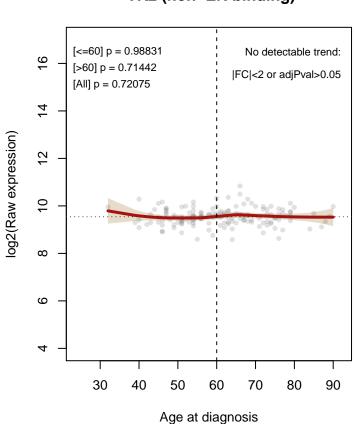


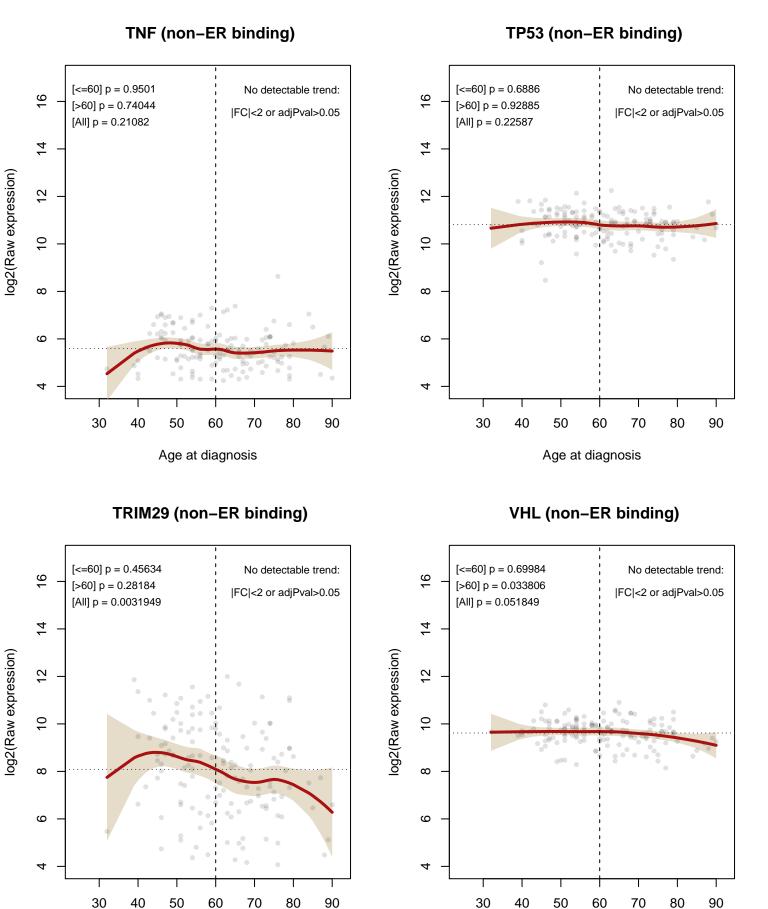


TGFB1 (non-ER binding)

TK2 (non-ER binding)

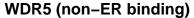




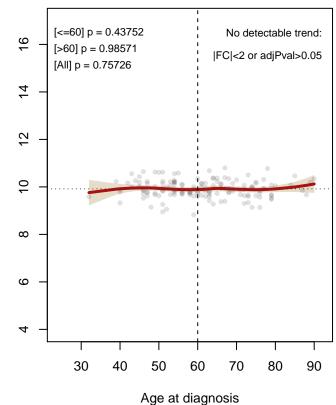


Age at diagnosis

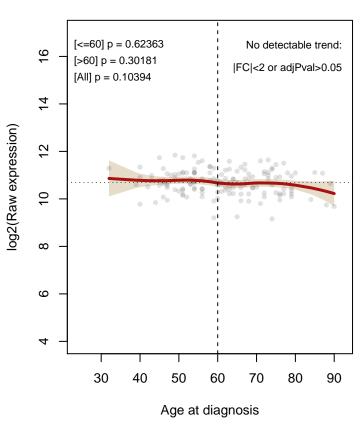
Age at diagnosis



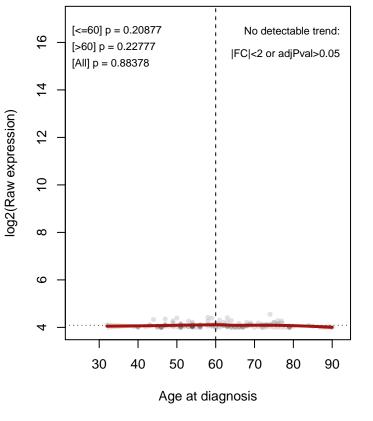
WHSC1 (non-ER binding)



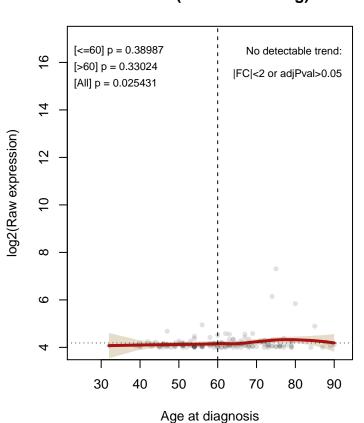
log2(Raw expression)

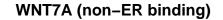


WNT1 (non-ER binding)

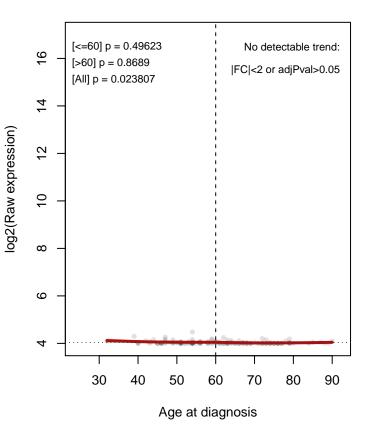


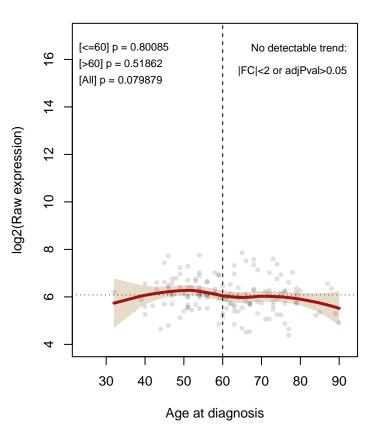
WNT3A (non-ER binding)





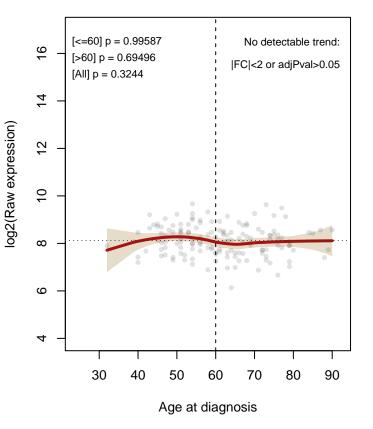
XRCC2 (non-ER binding)

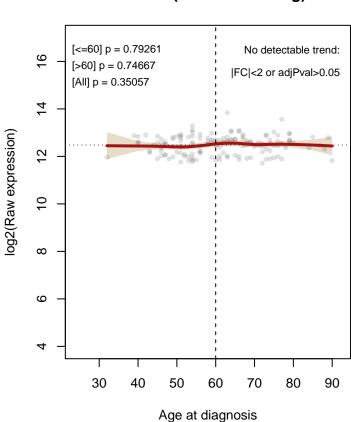




XRCC3 (non-ER binding)

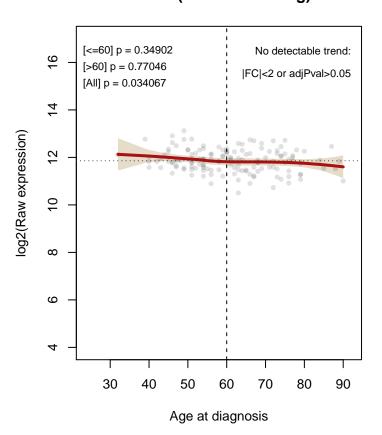
XRCC6 (non-ER binding)





YAF2 (non-ER binding)

YBX1 (non-ER binding)



YY1 (non-ER binding)

Age at diagnosis

