

#### ASXL3 (non-ER binding) ATM (non-ER binding) [<=60] p = 0.95059No detectable trend: [<=60] p = 0.081327No detectable trend: 16 16 [>60] p = 0.23858 [>60] p = 0.020754 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.34684[All] p = 0.224864 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ $\infty$ 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 = 0.32116No detectable trend: [<=60] p = 0.027876 No detectable trend: 16 16 [>60] p = 0.031628 [>60] p = 0.13071 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.22121[All] p = 0.737734 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 $\infty$ $\infty$ 9 9

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Age at diagnosis

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Age at diagnosis

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#### **BCL3 (non-ER binding) BCL2 (non-ER binding)** [<=60] p = 0.51222No detectable trend: [<=60] p = 0.48765No detectable trend: 16 16 [>60] p = 0.68609[>60] p = 0.1984 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.044317[All] p = 0.258734 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ $\infty$ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis BIRC5 (non-ER binding) **BMI1 (non-ER binding)** [<=60] p = 0.8668No detectable trend: [<=60] p = 0.9306No detectable trend: 16 16 [>60] p = 0.10699 [>60] p = 0.16157 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.64612[All] p = 0.988574 4 log2(Raw expression) log2(Raw expression) 12 12 19 10

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Age at diagnosis

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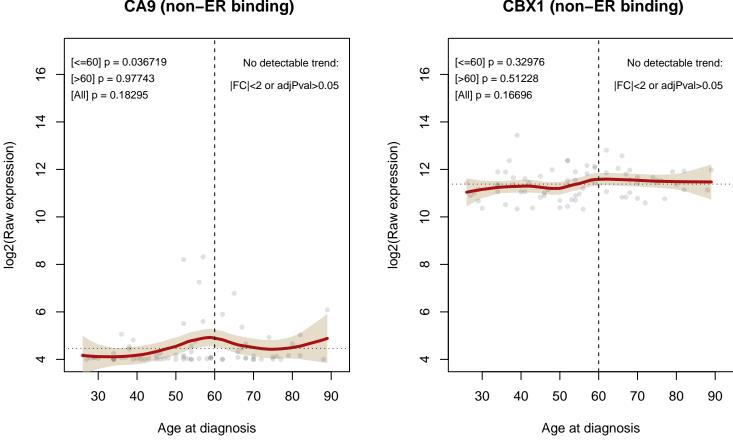
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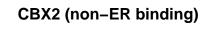
Age at diagnosis

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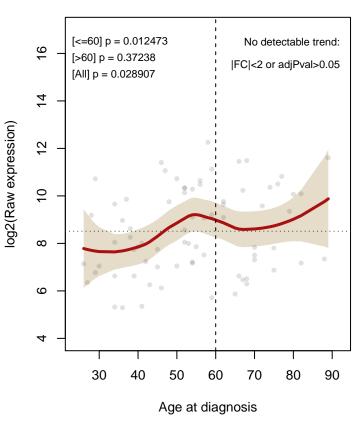
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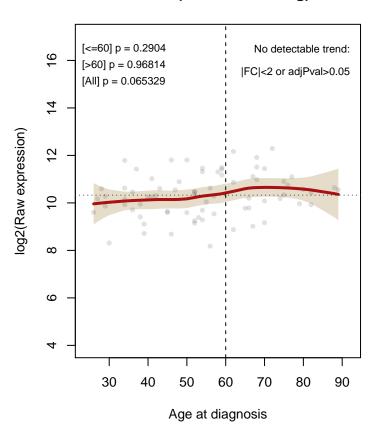
#### BMX (non-ER binding) **BRCA1** (non-ER binding) [<=60] p = 0.004424No detectable trend: [<=60] p = 0.6606No detectable trend: 16 16 [>60] p = 0.51832 [>60] p = 0.4014 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.0015649[All] p = 0.472584 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 Age at diagnosis Age at diagnosis CA9 (non-ER binding) **CBX1** (non-ER binding) [<=60] p = 0.036719No detectable trend: [<=60] p = 0.3297616 16 [>60] p = 0.97743 [>60] p = 0.51228 |FC|<2 or adjPval>0.05 [All] p = 0.18295[All] p = 0.166964 4





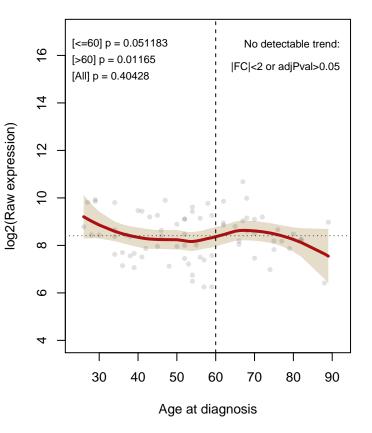
#### CBX4 (non-ER binding)

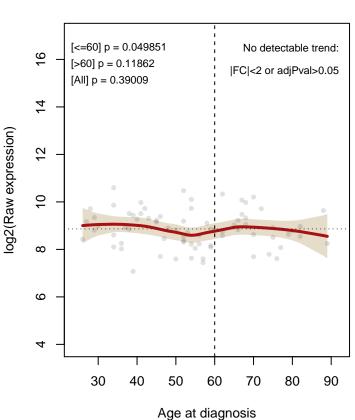




#### CBX6 (non-ER binding)

#### CBX7 (non-ER binding)







[<=60] p = 0.012273

[>60] p = 0.6559

[AII] p = 0.0086537

16

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ω

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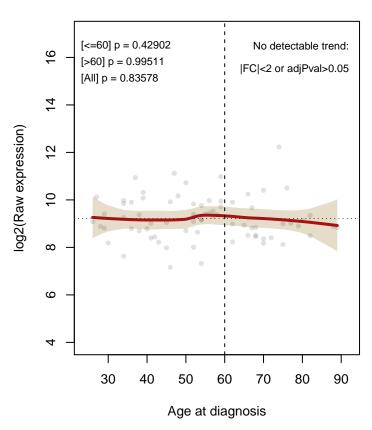
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log2(Raw expression)

No detectable trend:

|FC|<2 or adjPval>0.05

#### CCNA2 (non-ER binding)



#### **CCNB1** (non-ER binding)

Age at diagnosis

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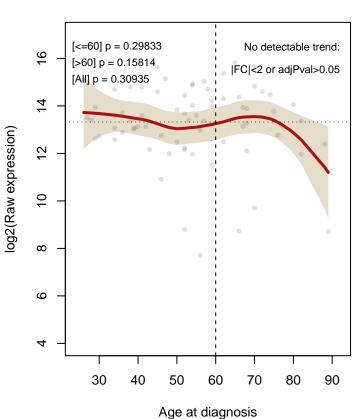
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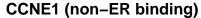
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#### [<=60] p = 0.54908 No detectable trend: 16 [>60] p = 0.66401 |FC|<2 or adjPval>0.05 [All] p = 0.934424 log2(Raw expression) 12 19 ω 9 30 40 50 60 70 80 90

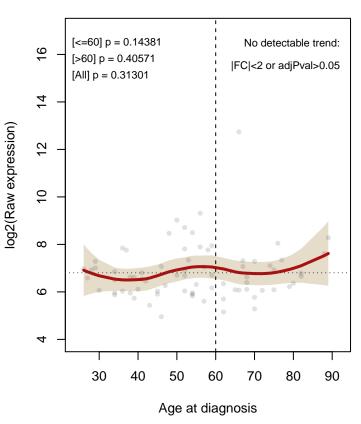
Age at diagnosis

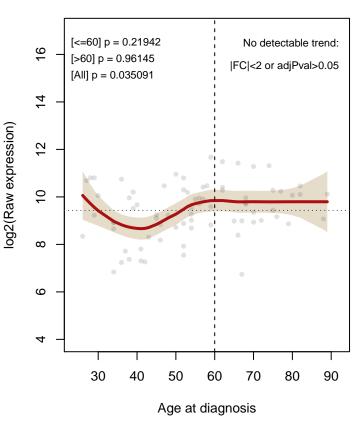
#### **CCND1 (ER binding)**





## CD163 (non-ER binding)



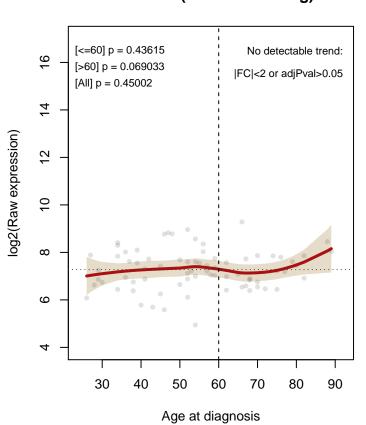


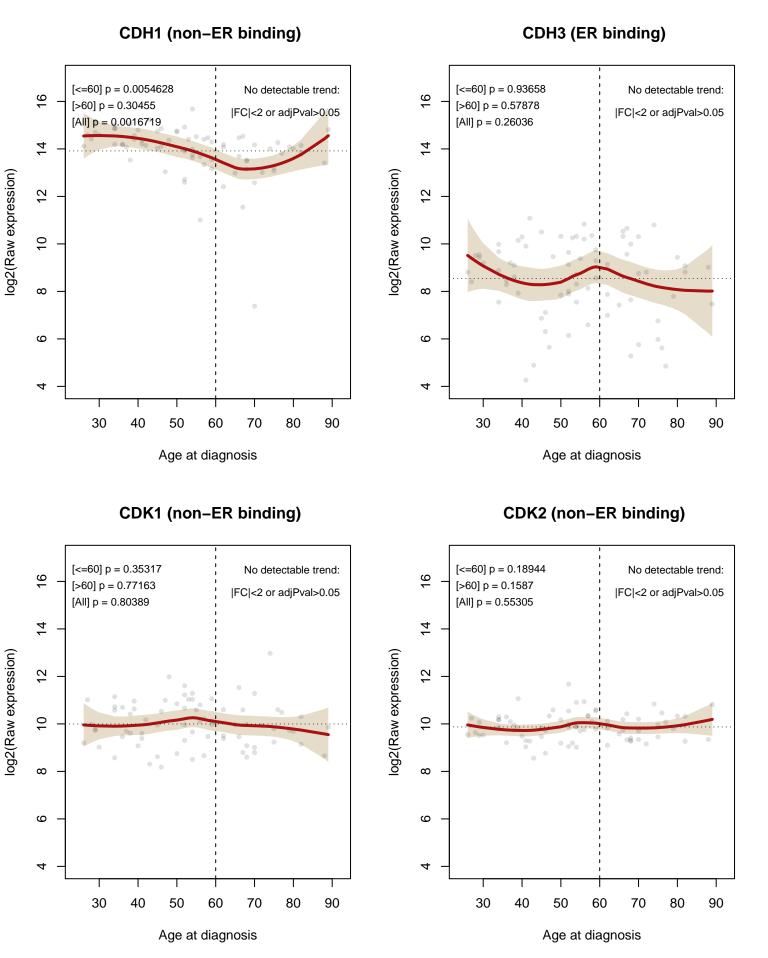
#### CD44 (non-ER binding)

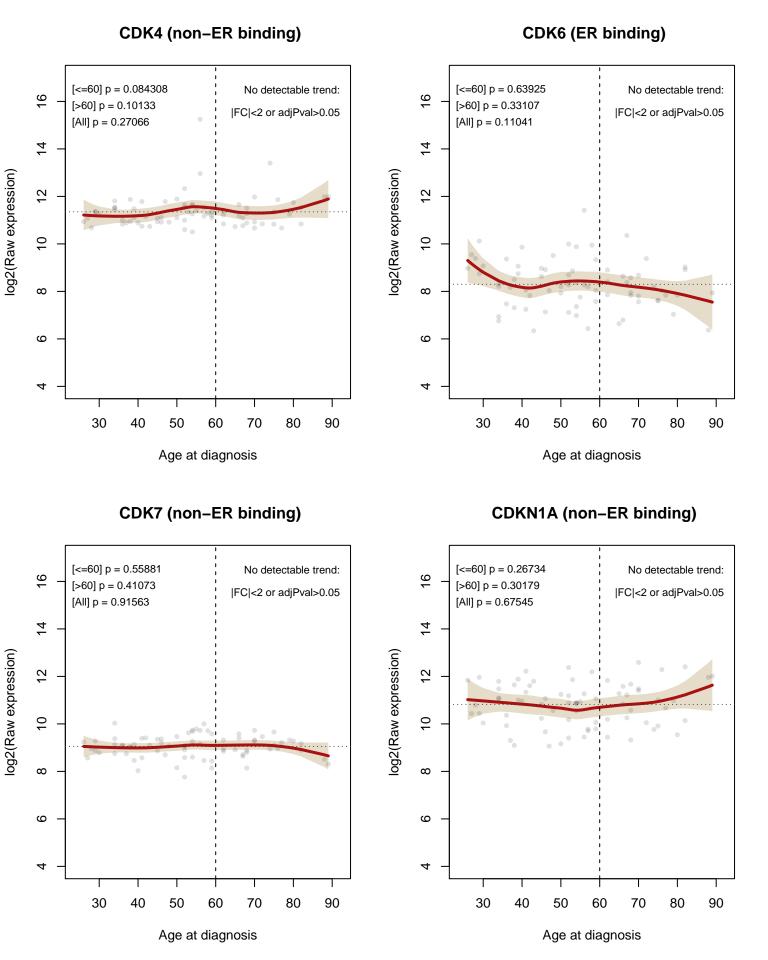
#### [<=60] p = 0.35311No detectable trend: 16 [>60] p = 0.9998 |FC|<2 or adjPval>0.05 [AII] p = 0.365554 log2(Raw expression) 12 19 ω 9 30 40 50 60 70 80 90

Age at diagnosis

#### CDC25C (non-ER binding)







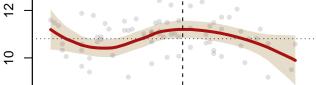
#### CDKN1B (non-ER binding)





16

log2(Raw expression)





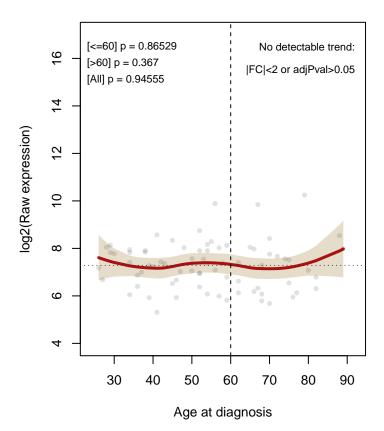
Age at diagnosis

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#### CDKN1C (non-ER binding)



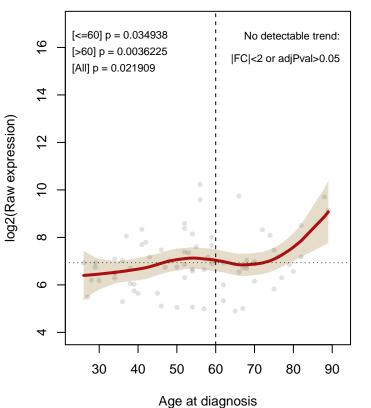
#### CDKN2A (non-ER binding)

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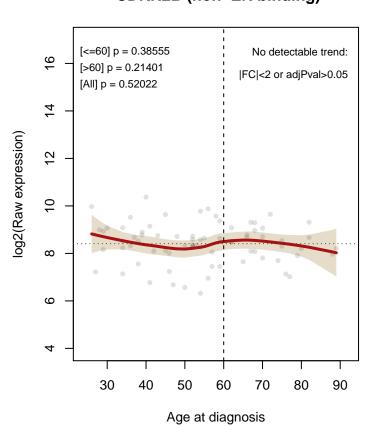
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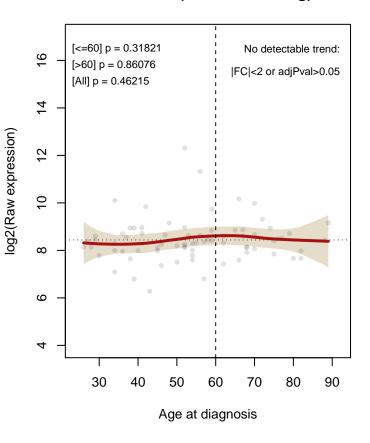


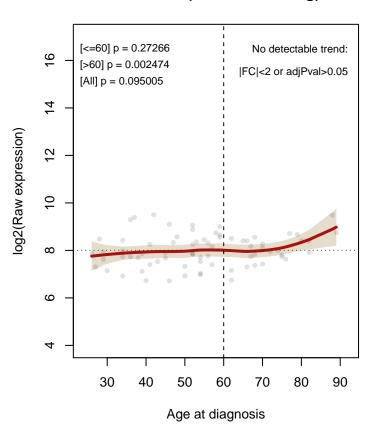
#### CDKN2B (non-ER binding)



#### CDKN2C (non-ER binding)

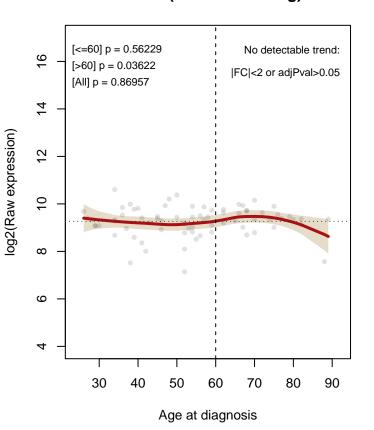
#### CDKN2D (non-ER binding)

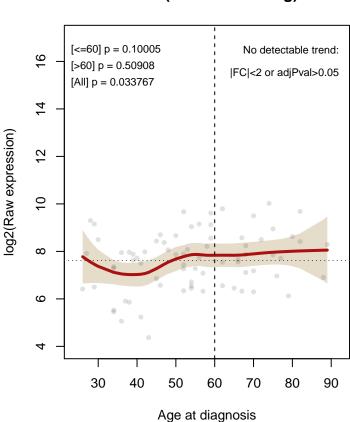




#### CHUK (non-ER binding)

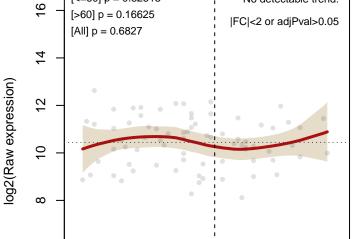
CIITA (non-ER binding)





#### CLDN3 (non-ER binding)

## [<=60] p = 0.82513 No detectable trend:



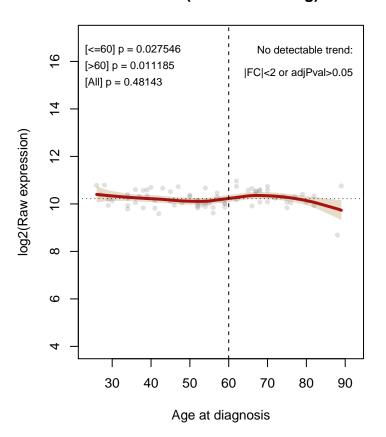
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#### CREB1 (non-ER binding)



## **CRYAB** (non-ER binding)

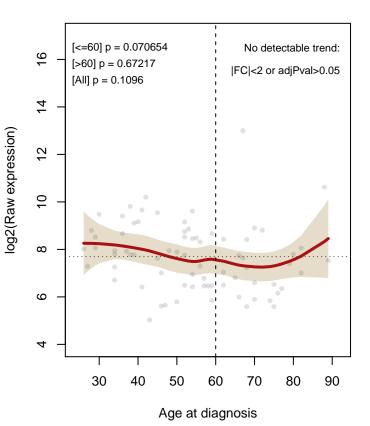
Age at diagnosis

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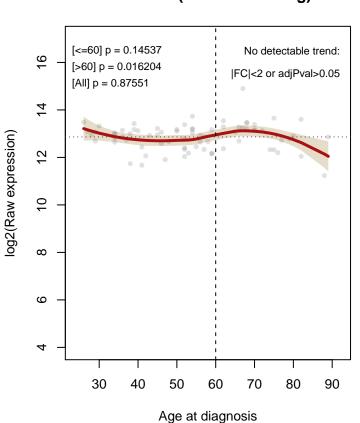
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#### CTNNB1 (non-ER binding)



#### **DLC1 (ER binding)** DMAP1 (non-ER binding) [<=60] p = 0.003966No detectable trend: [<=60] p = 0.062038 No detectable trend: 16 16 [>60] p = 0.92683 [>60] p = 0.36405 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.00059346[All] p = 0.282554 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 = 0.24559No detectable trend: [<=60] p = 0.71314No detectable trend: 16 16 [>60] p = 0.85072[>60] p = 0.62636 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.70899[All] p = 0.464364 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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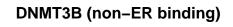
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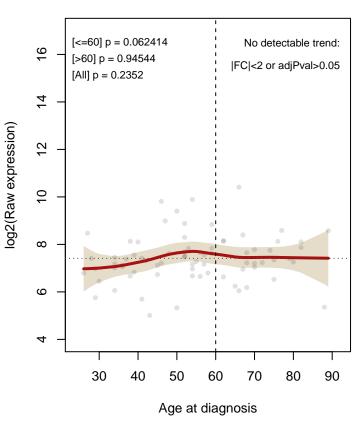
Age at diagnosis

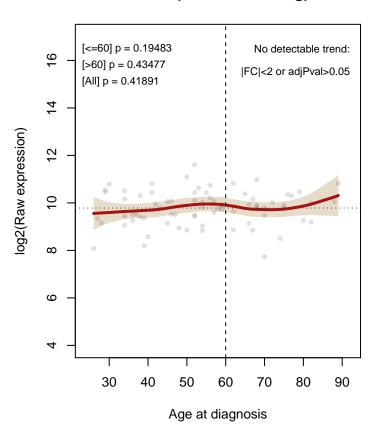
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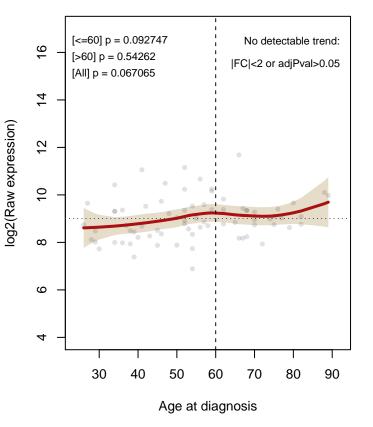
#### DVL1 (non-ER binding)

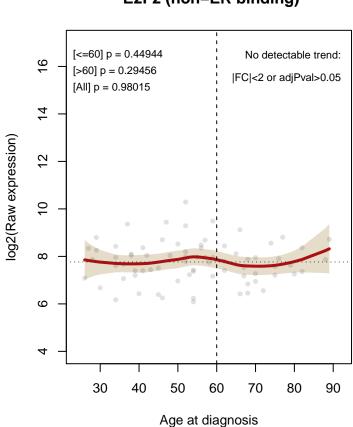


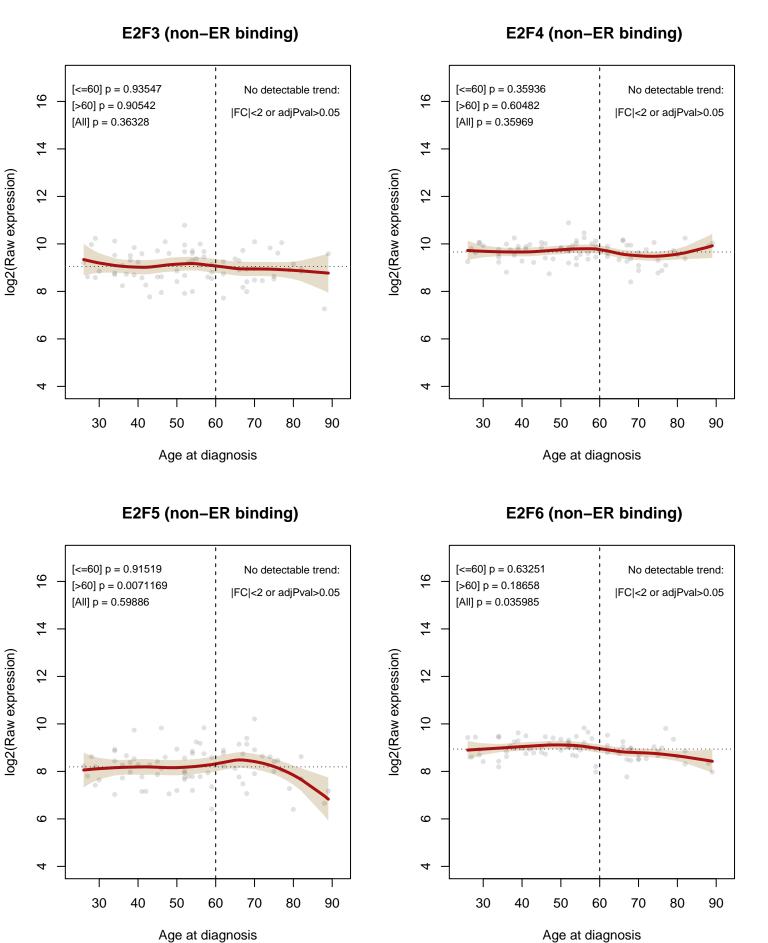


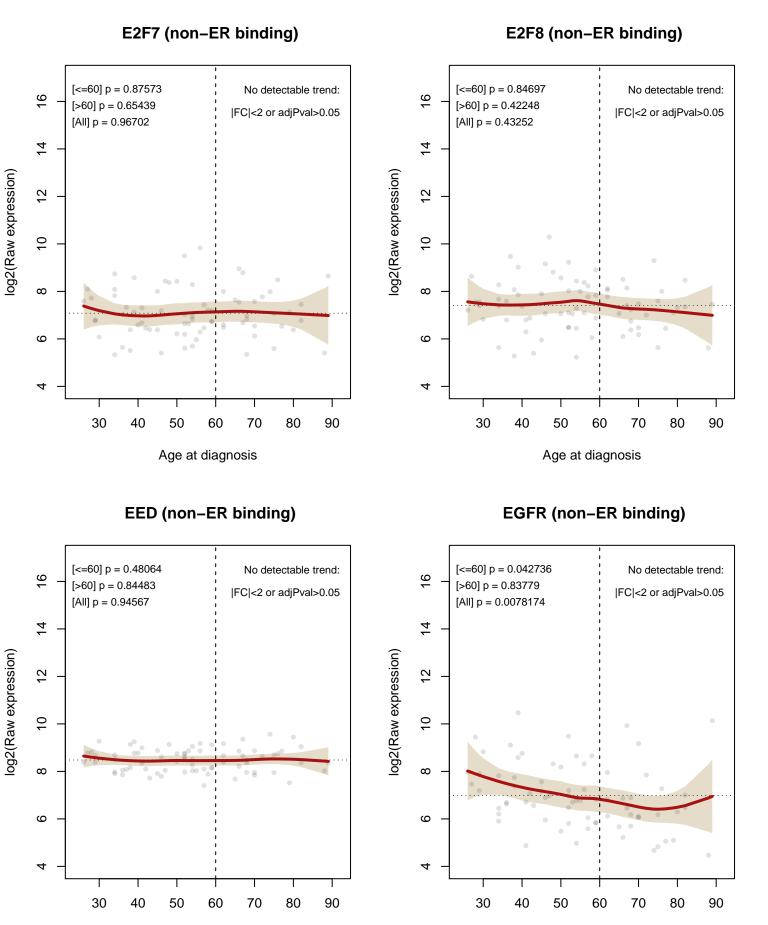
E2F1 (non-ER binding)

E2F2 (non-ER binding)







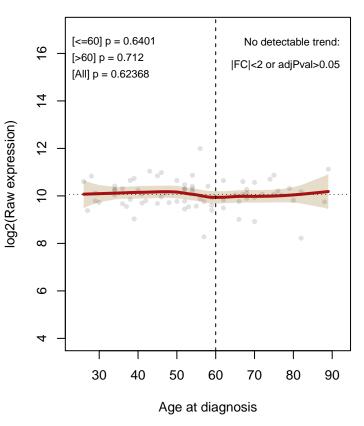


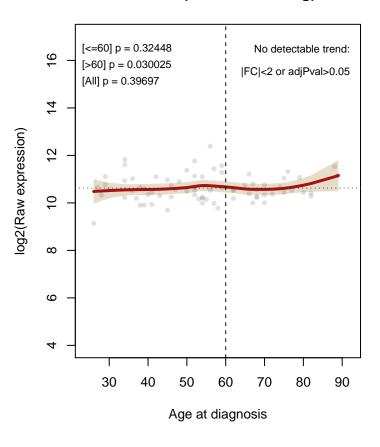
Age at diagnosis

Age at diagnosis



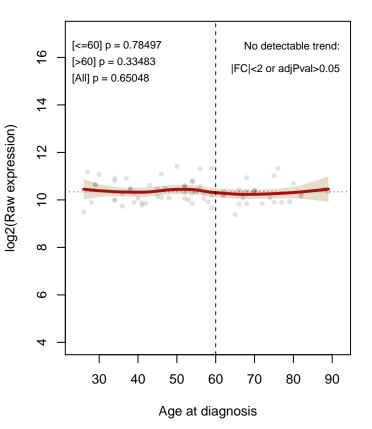
#### **EHMT2** (non-ER binding)

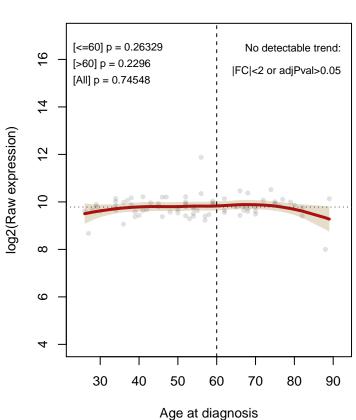




#### **ELAC2 (non-ER binding)**

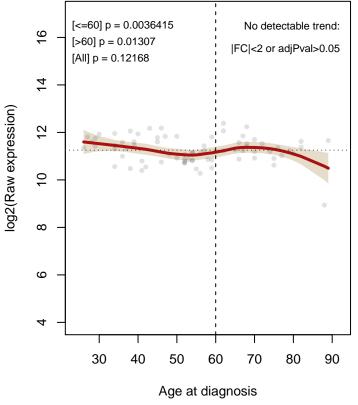
**ELK1 (non-ER binding)** 

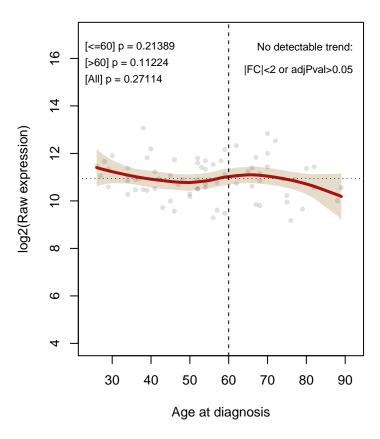




# EP300 (non-ER binding)

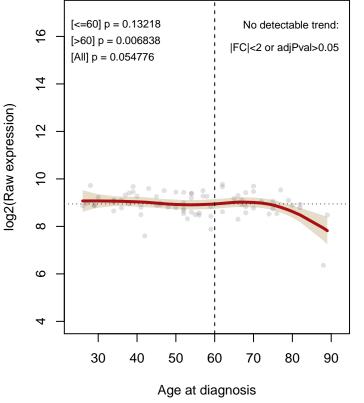
#### **EPAS1** (non-ER binding)



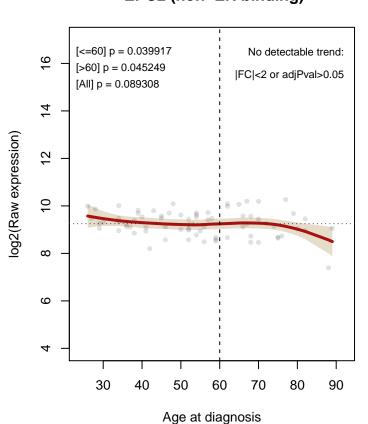


**EPC1 (non-ER binding)** 

EPCT (HOH-ER billding)

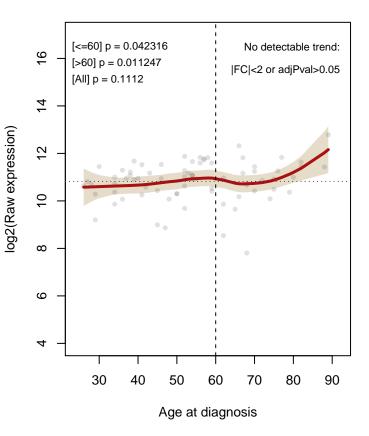


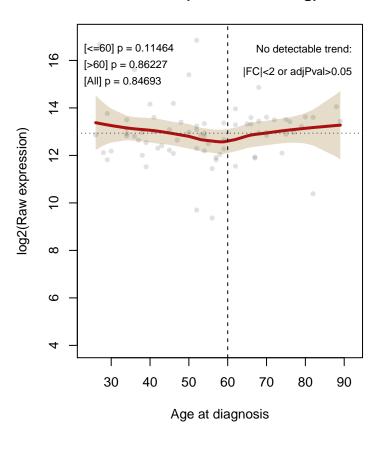
#### **EPC2** (non-ER binding)





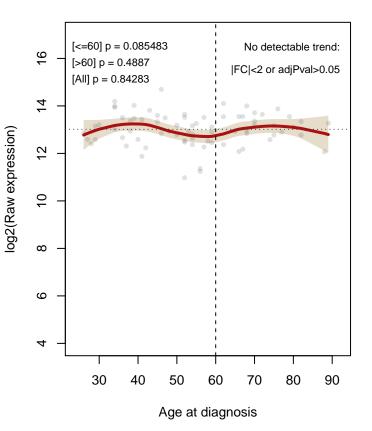
#### **ERBB2** (non-ER binding)

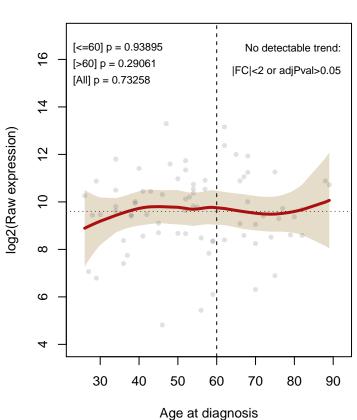


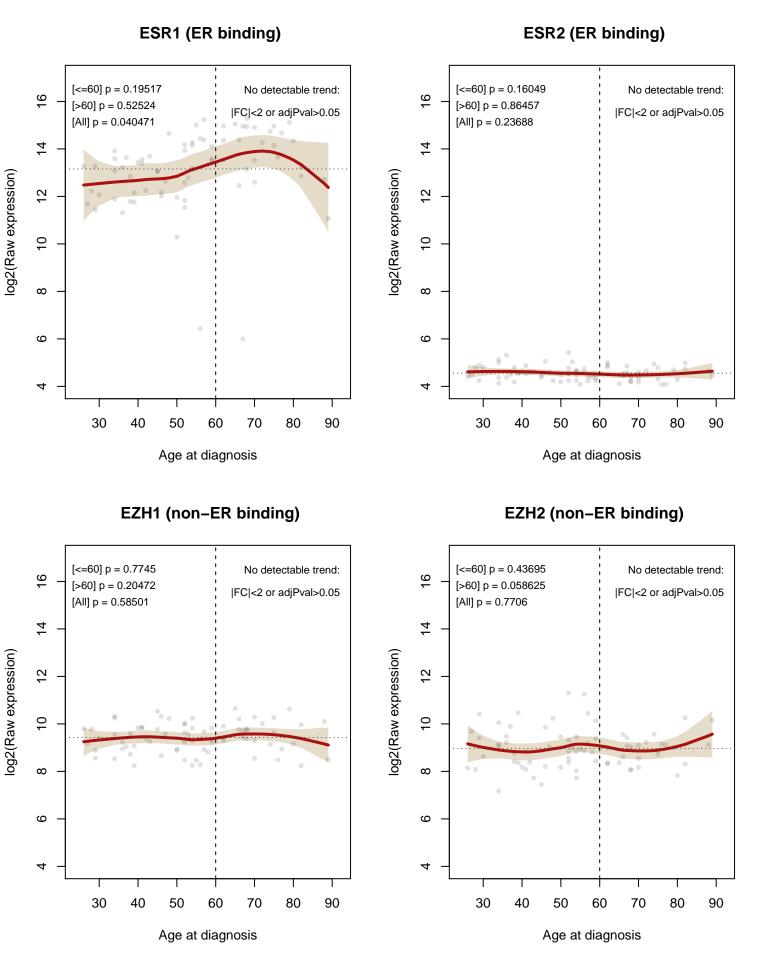


#### **ERBB3** (non-ER binding)

#### **ERBB4 (ER binding)**







#### FOSL1 (non-ER binding) FOS (non-ER binding) [<=60] p = 0.22977 No detectable trend: [<=60] p = 0.3075No detectable trend: 16 16 [>60] p = 0.65141 [>60] p = 0.39686|FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.6791[All] p = 0.116594 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω $\infty$ 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 = 0.28041No detectable trend: [<=60] p = 0.69275No detectable trend: 16 16 [>60] p = 0.80722 [>60] p = 0.51244 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.59884[All] p = 0.218494 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω $\infty$ 9 9

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Age at diagnosis

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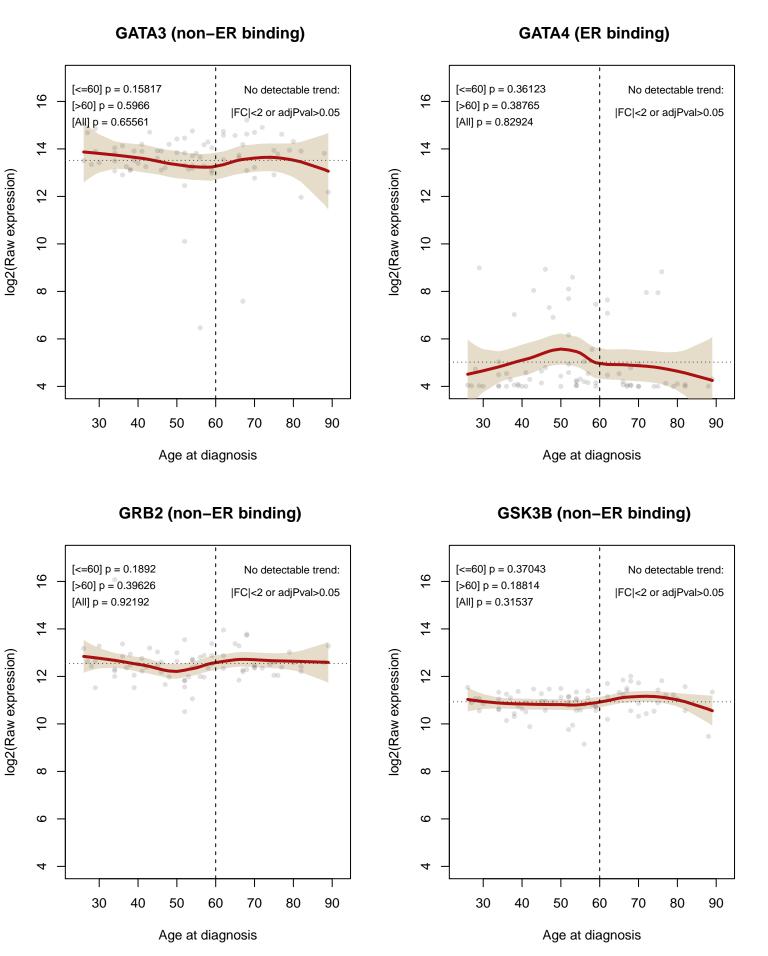
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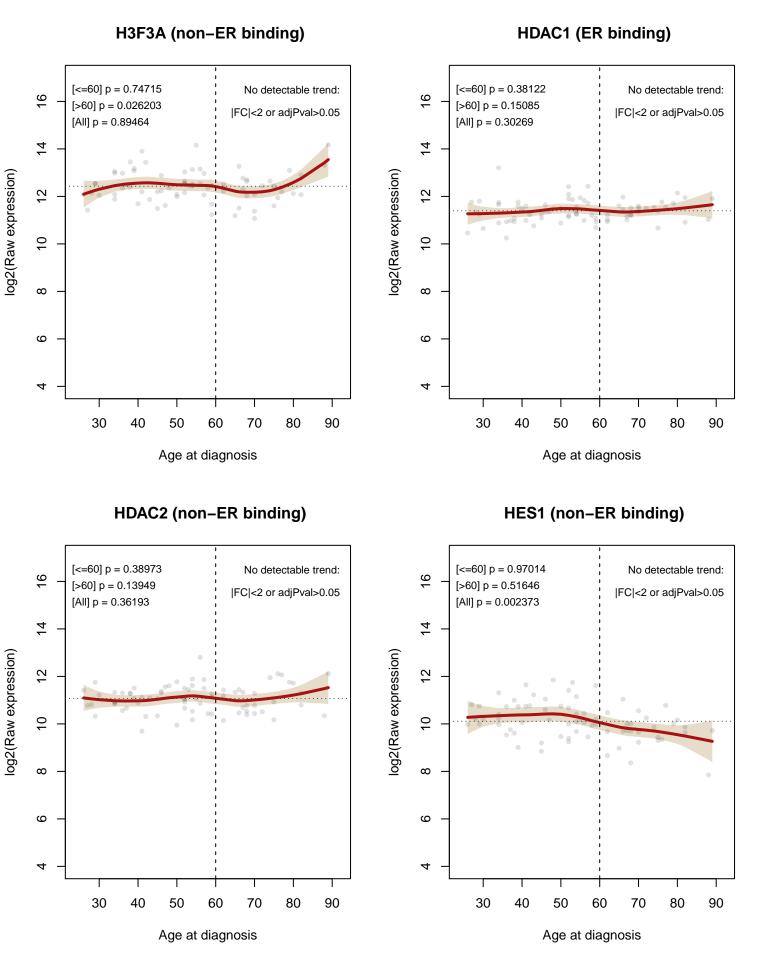
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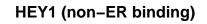
Age at diagnosis

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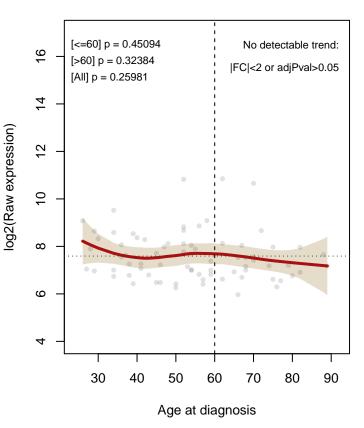
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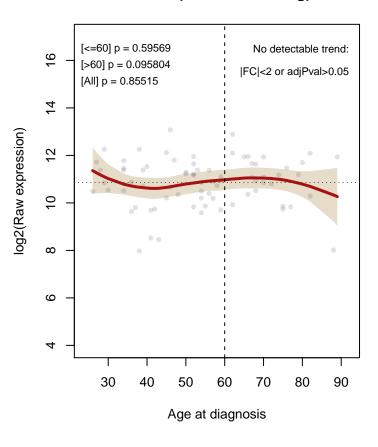






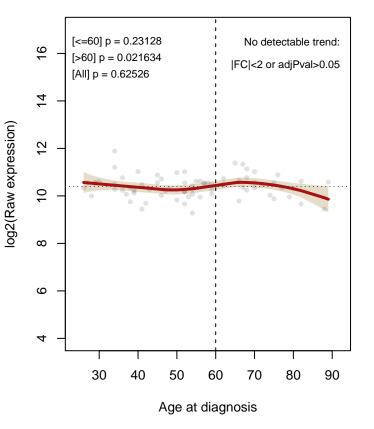
#### HIF1A (non-ER binding)

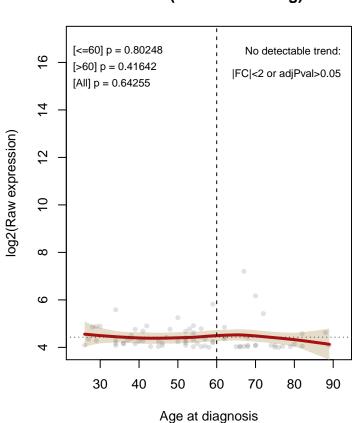




#### HIF1AN (non-ER binding)

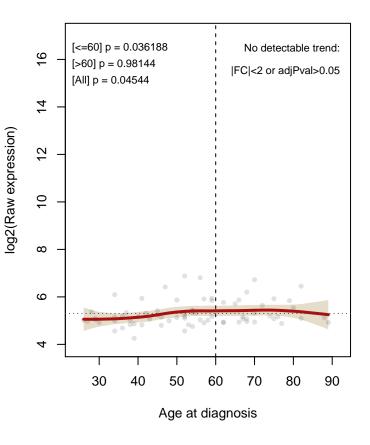
HIF3A (non-ER binding)

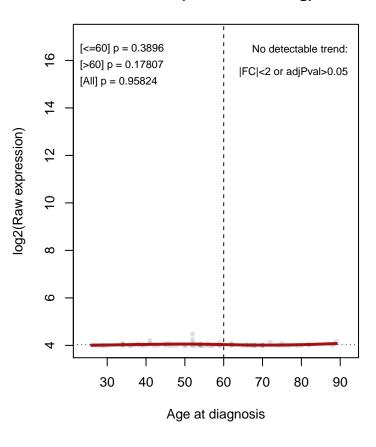




#### **HNF1A** (non-ER binding)

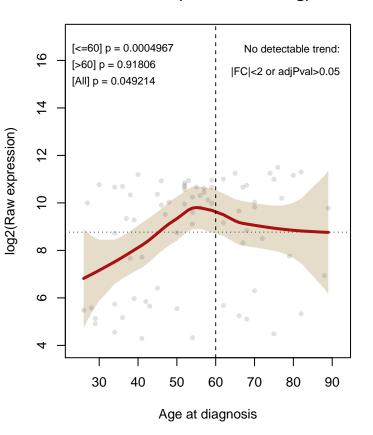
#### HNF1B (non-ER binding)

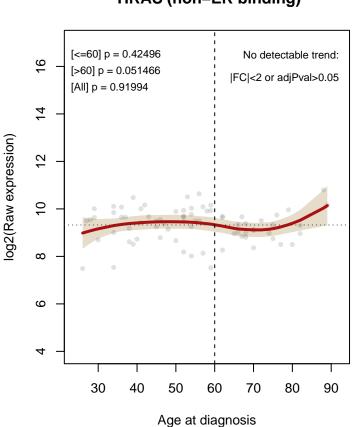




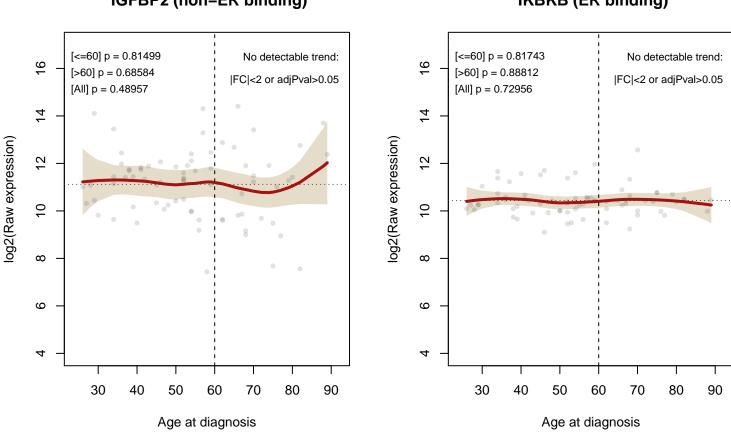
#### **HOXC10 (non-ER binding)**

HRAS (non-ER binding)



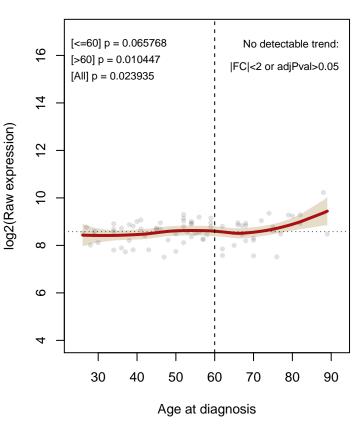


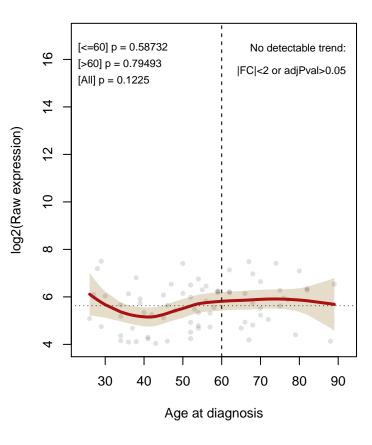
#### **HSPB1** (non-ER binding) IGF1R (ER binding) [<=60] p = 0.12231 No detectable trend: [<=60] p = 0.60543No detectable trend: 16 16 [>60] p = 0.016117 [>60] p = 0.12102 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [AII] p = 0.377[All] p = 0.817754 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω $\infty$ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis IGFBP2 (non-ER binding) **IKBKB (ER binding)** [<=60] p = 0.81499No detectable trend: [<=60] p = 0.81743No detectable trend: 16 16 [>60] p = 0.68584 [>60] p = 0.88812 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.48957[All] p = 0.729564 4





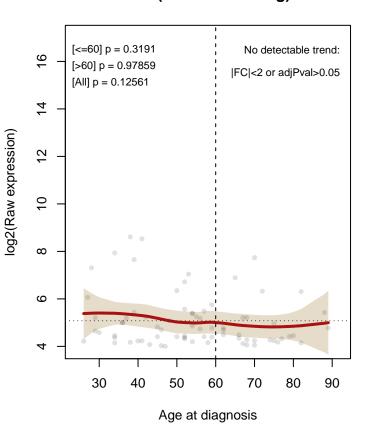
#### IL2RA (non-ER binding)

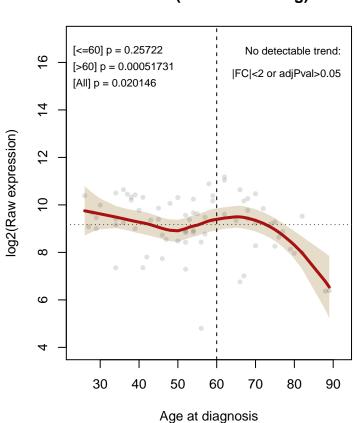


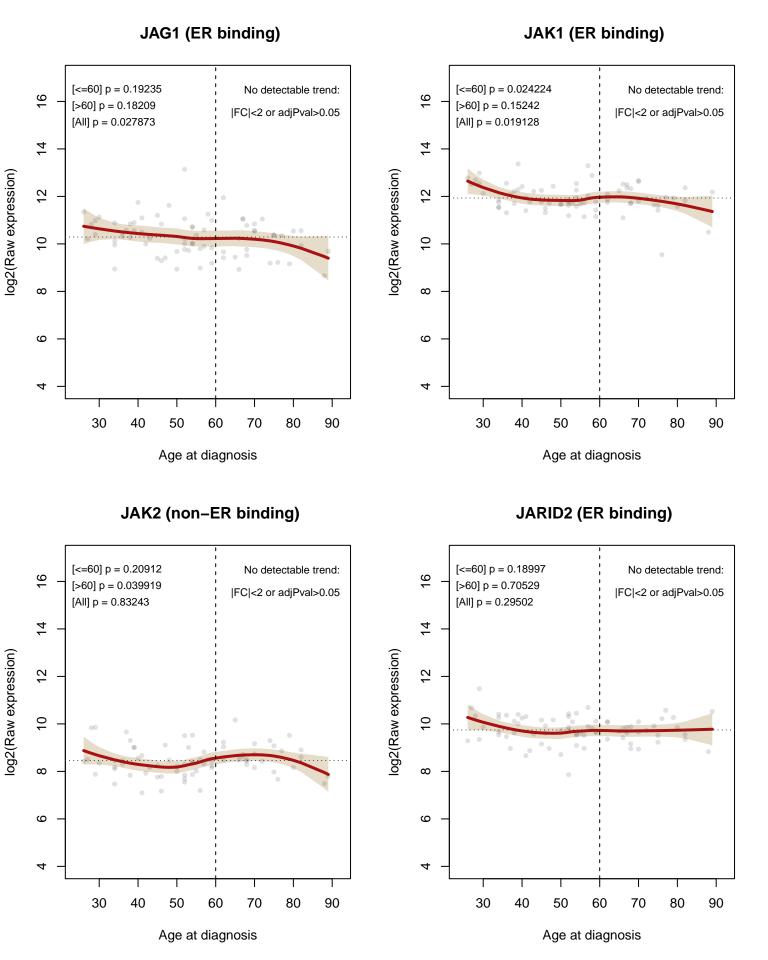


#### IL6 (non-ER binding)

**INPP4B** (non-ER binding)

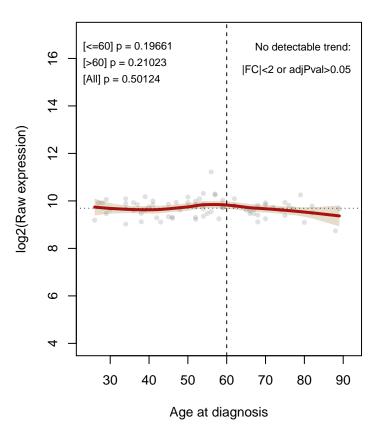






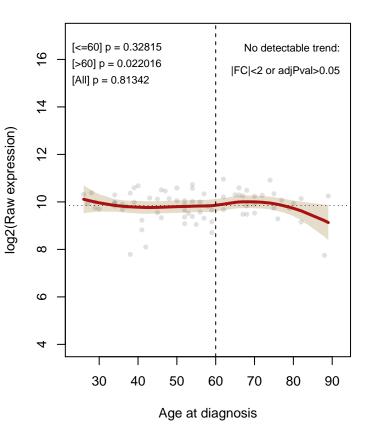
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#### KDM2B (non-ER binding)

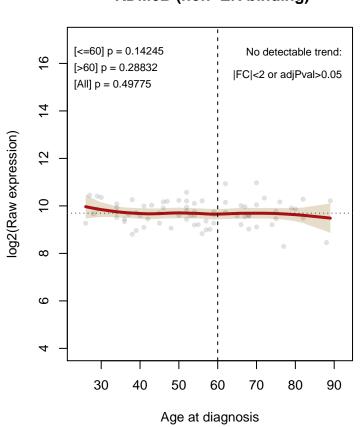


KDM6A (non-ER binding)

Age at diagnosis

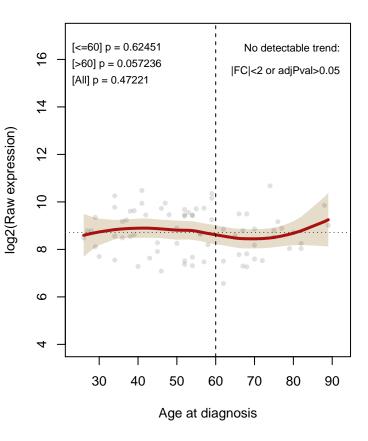


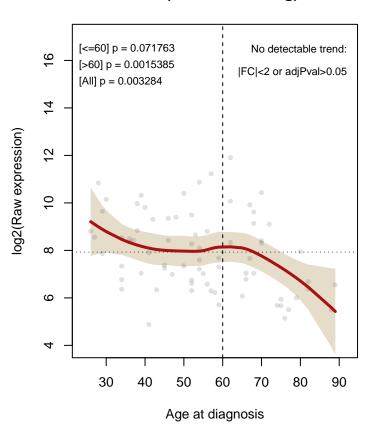
#### **KDM6B** (non-ER binding)





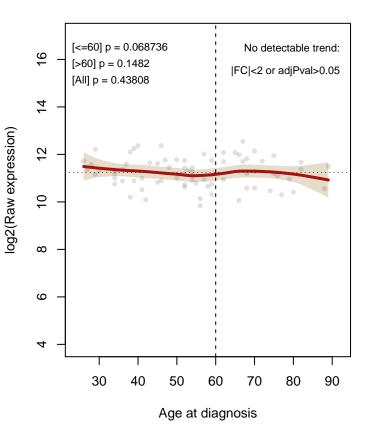
#### KIT (non-ER binding)

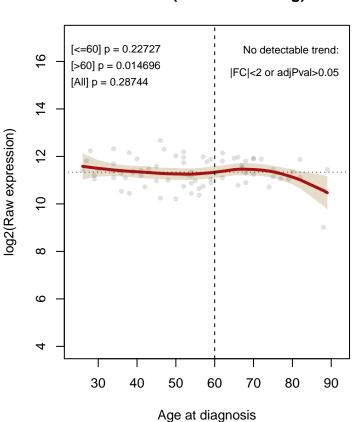




#### KMT2C (non-ER binding)

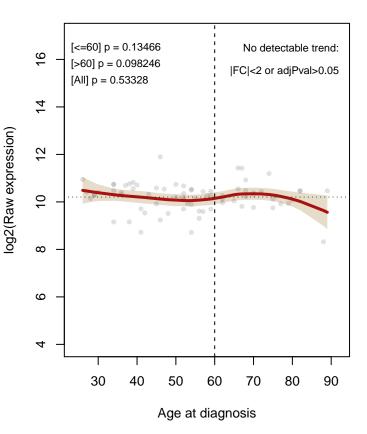
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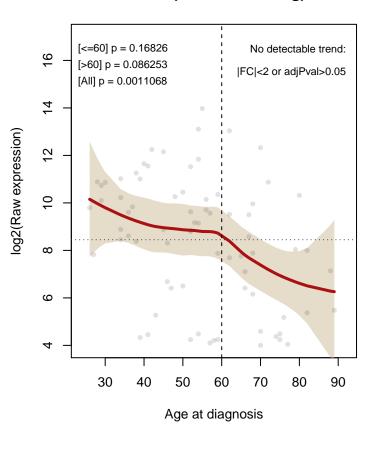






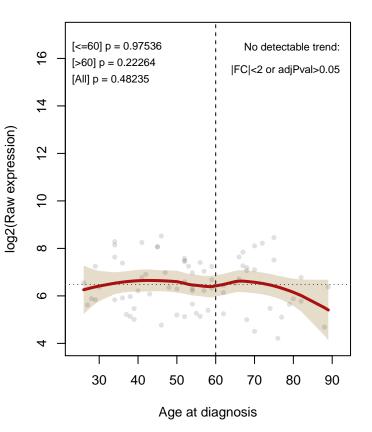
#### KRT5 (non-ER binding)

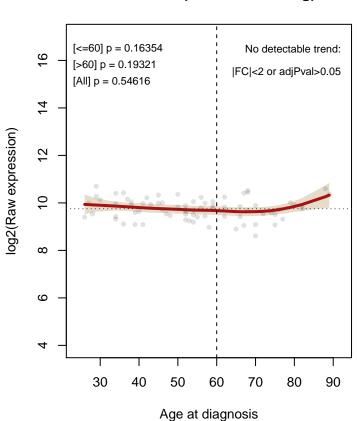




#### L3MBTL1 (non-ER binding)

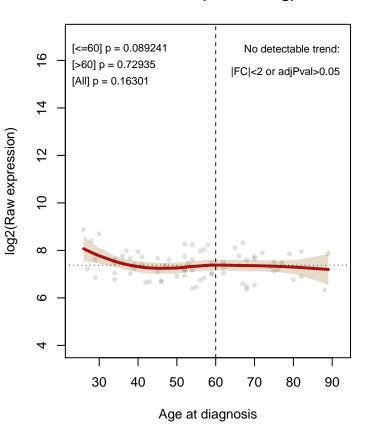
#### L3MBTL2 (non-ER binding)

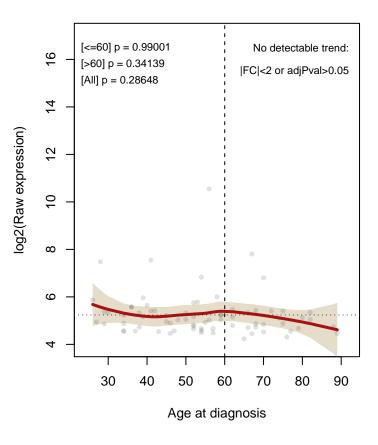




#### L3MBTL3 (ER binding)

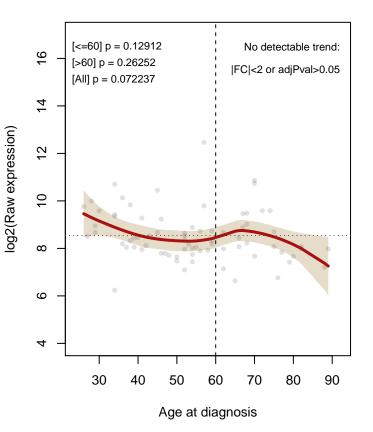
## L3MBTL4 (non-ER binding)

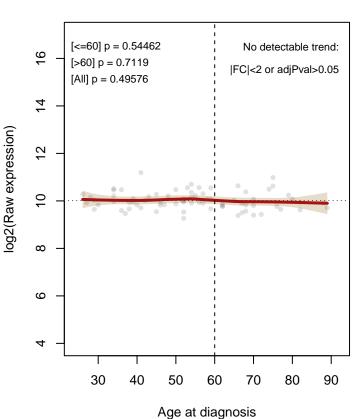




LEF1 (non-ER binding)

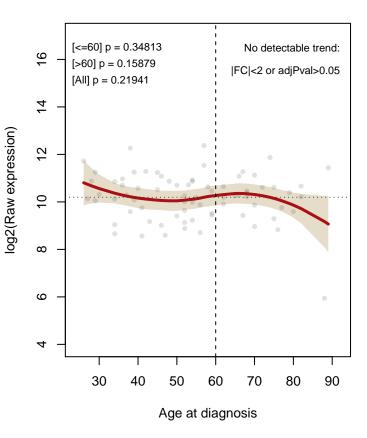
MAP2K1 (non-ER binding)

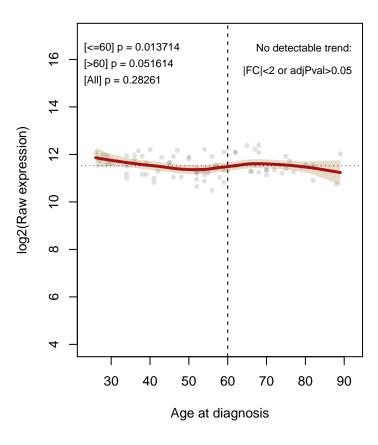






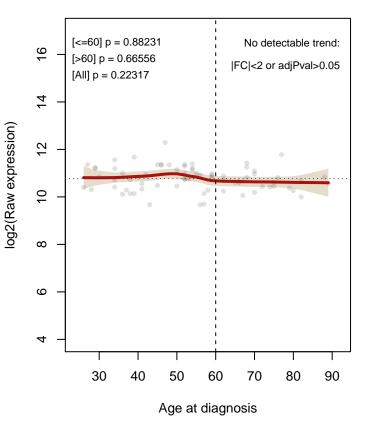
#### MAPK1 (non-ER binding)

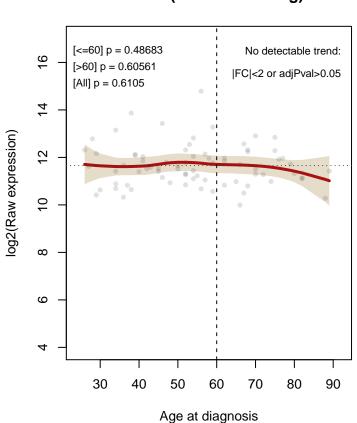




#### MAPK3 (non-ER binding)

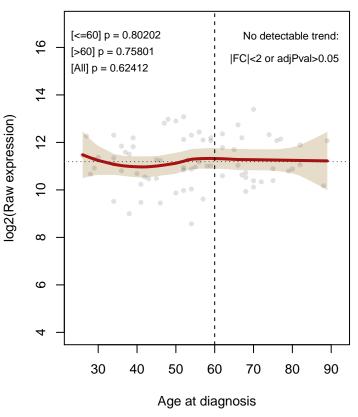
MDM2 (non-ER binding)

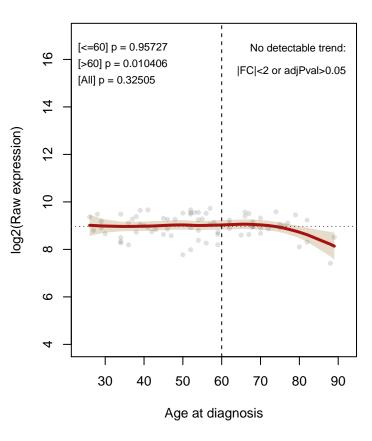






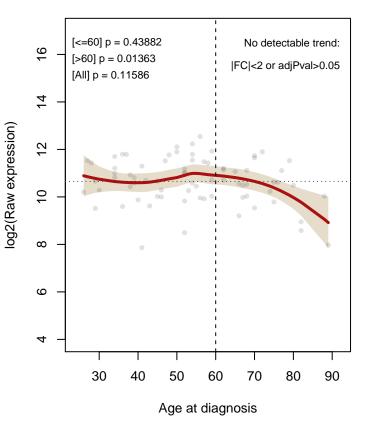
#### MTF2 (non-ER binding)

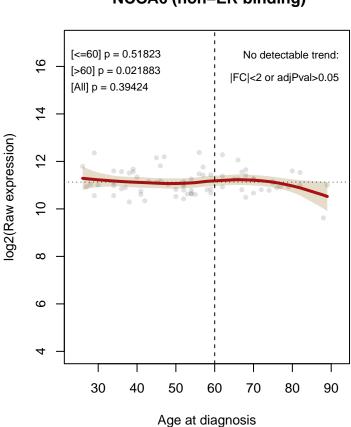




## MYC (non-ER binding)

#### NCOA6 (non-ER binding)





# NCOR1 (non-ER binding) [<=60] p = 0.01504No detectable trend: 16 [>60] p = 0.012485 |FC|<2 or adjPval>0.05 [All] p = 0.0855854 log2(Raw expression) 12 10

 $\infty$ 

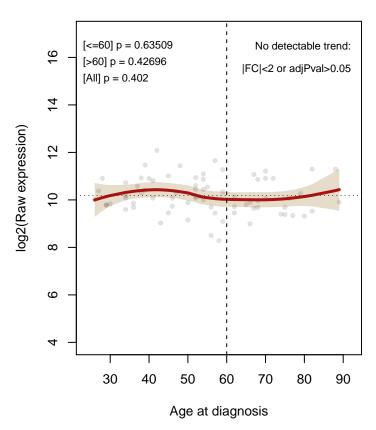
9

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#### **NES (non-ER binding)**



NFKB1 (non-ER binding)

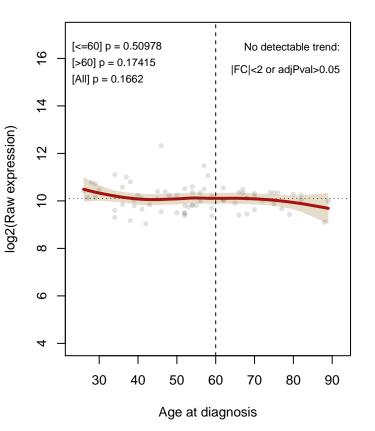
Age at diagnosis

60

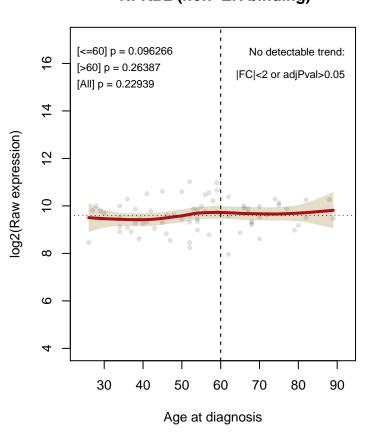
70

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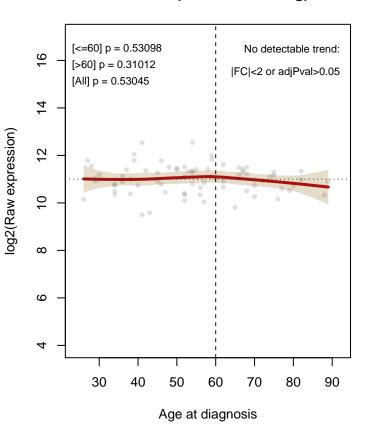


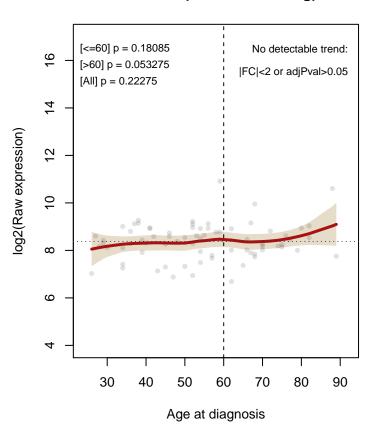
#### NFKB2 (non-ER binding)



#### NFKBIA (non-ER binding)

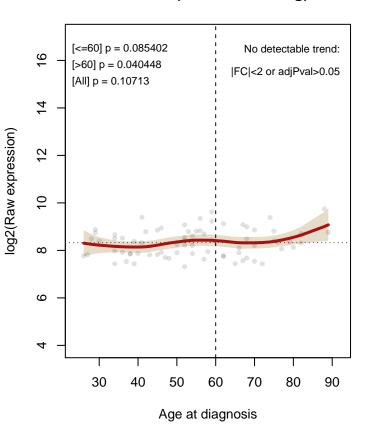
#### NFKBIB (non-ER binding)

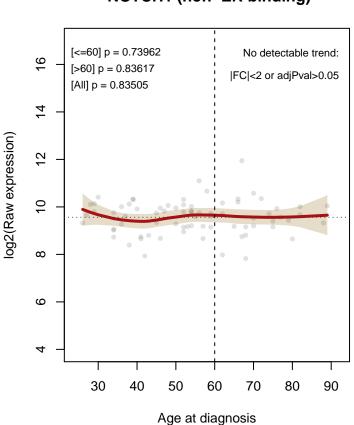




### **NFKBIE** (non-ER binding)

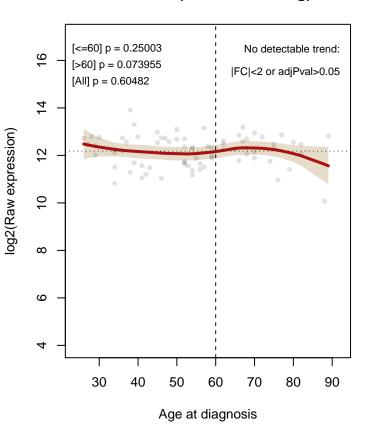
#### NOTCH1 (non-ER binding)

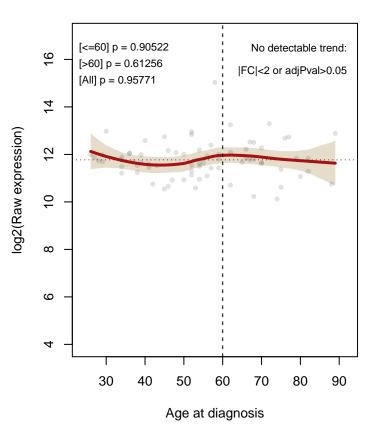




#### NOTCH2 (non-ER binding)

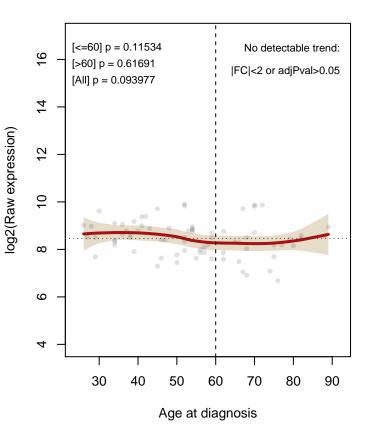
#### NOTCH3 (non-ER binding)

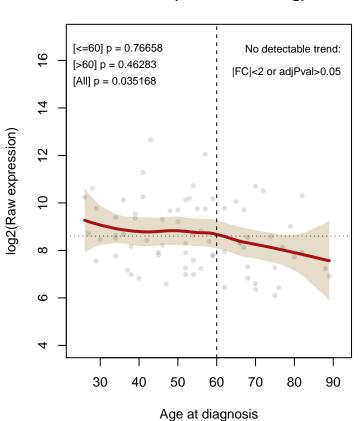


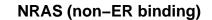


### NOTCH4 (non-ER binding)

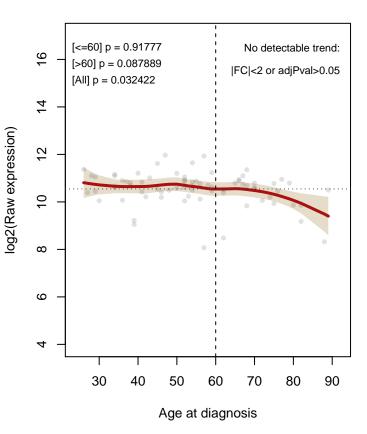
#### NR4A2 (non-ER binding)

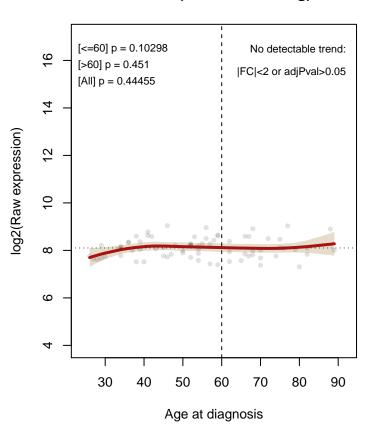






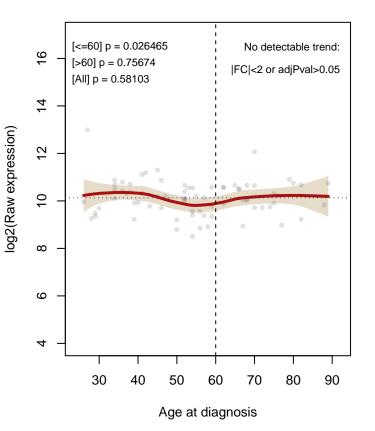
#### PCGF1 (non-ER binding)

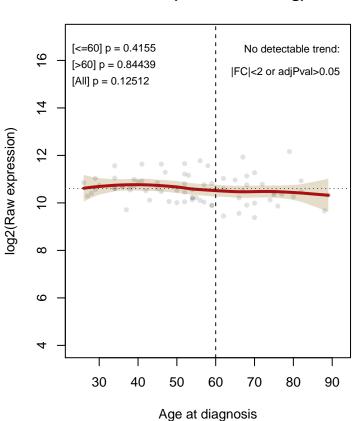




#### PCGF2 (non-ER binding)

PCGF3 (non-ER binding)







[<=60] p = 0.019803

[>60] p = 0.014391

[AII] p = 0.026776

16

4

12

10

 $\infty$ 

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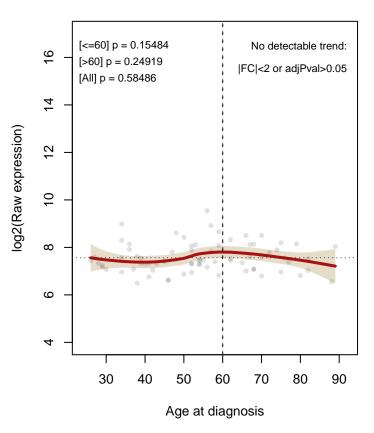
log2(Raw expression)

log2(Raw expression)

No detectable trend:

|FC|<2 or adjPval>0.05

## PCGF6 (non-ER binding)



#### PDGFRA (non-ER binding)

Age at diagnosis

60

70

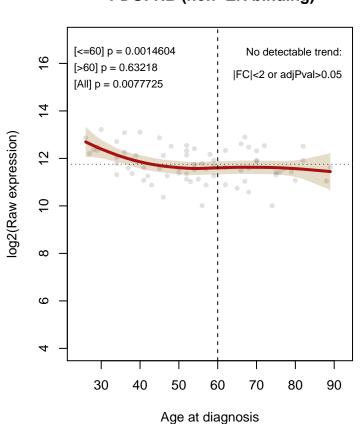
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## [<=60] p = 0.062453No detectable trend: 16 [>60] p = 0.43864 |FC|<2 or adjPval>0.05 [All] p = 0.0584684 12 10 ω 9 30 40 50 60 70 80 90

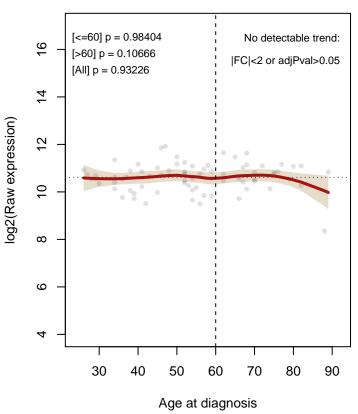
Age at diagnosis

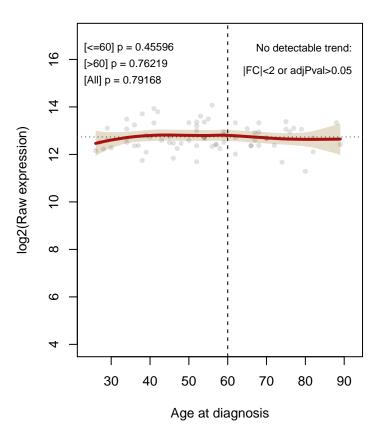
#### PDGFRB (non-ER binding)





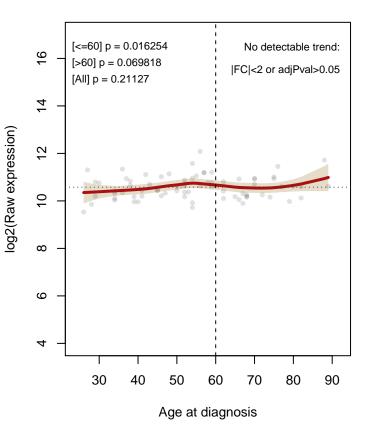
#### PEBP1 (non-ER binding)

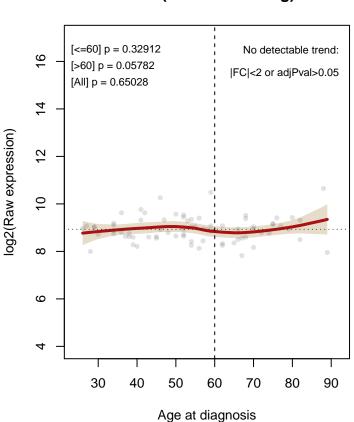


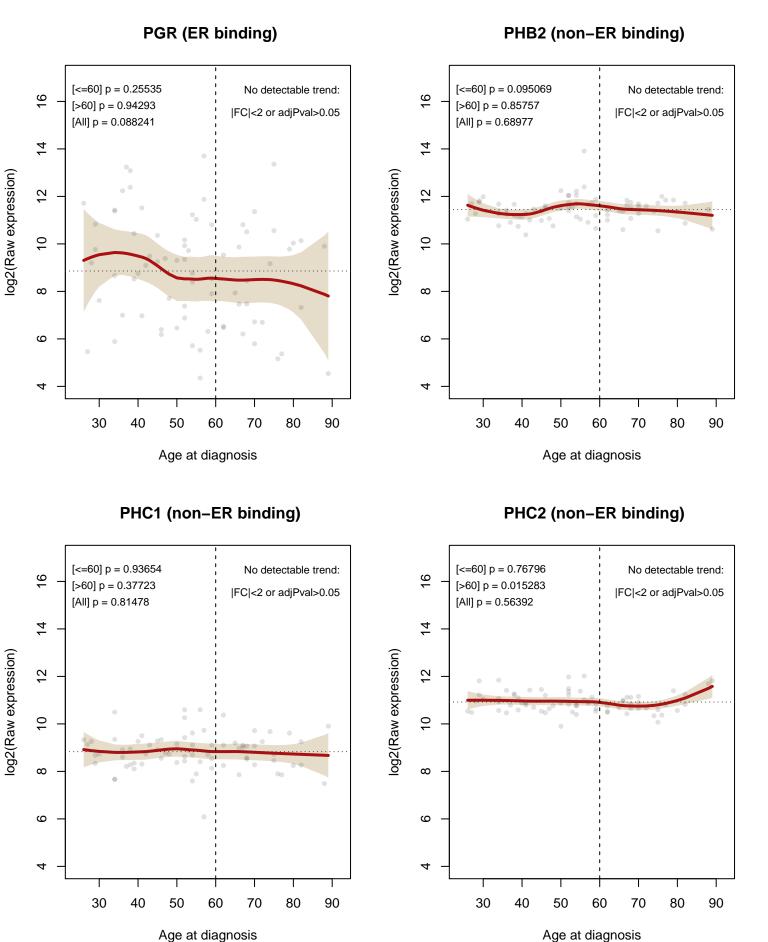


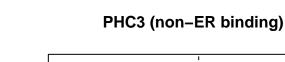
#### PELP1 (non-ER binding)

PGP (non-ER binding)

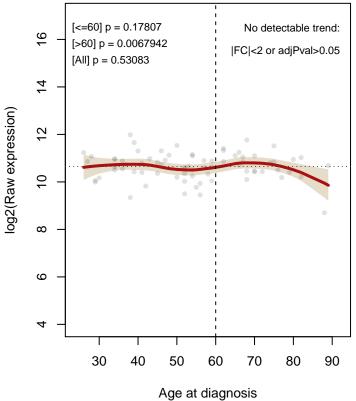


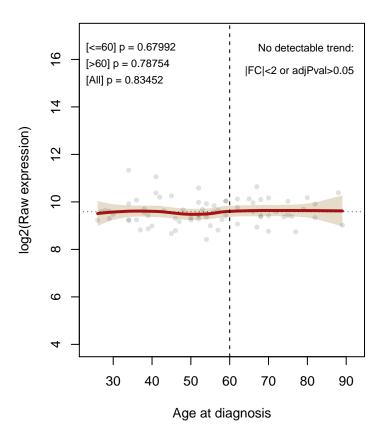






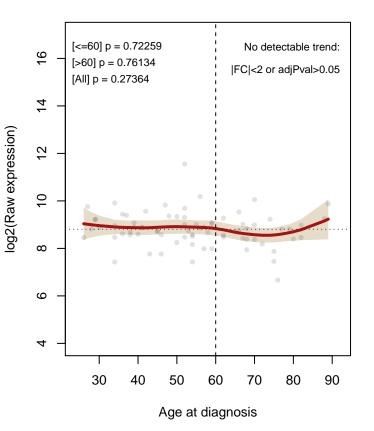
#### PHF1 (non-ER binding)

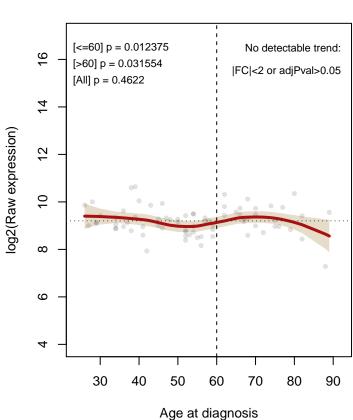




PHF19 (non-ER binding)

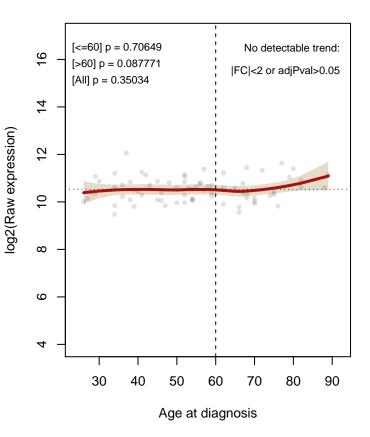
PIK3CA (non-ER binding)

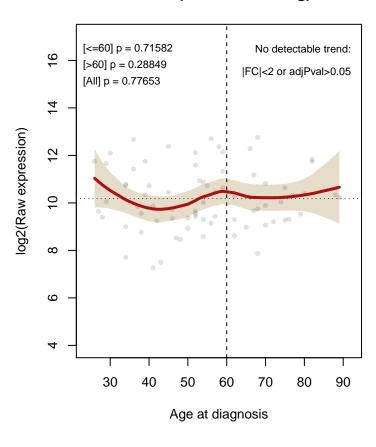






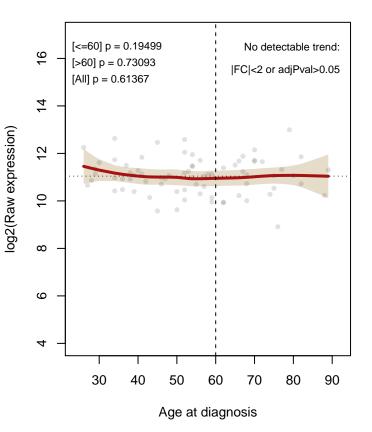
#### PLAU (non-ER binding)

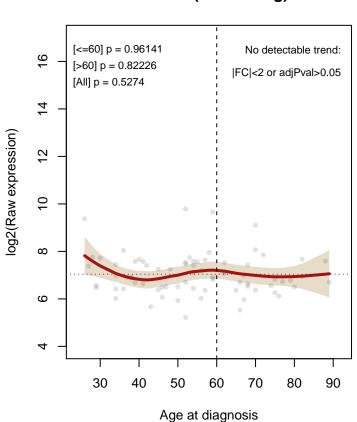


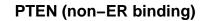


#### PODXL (non-ER binding)

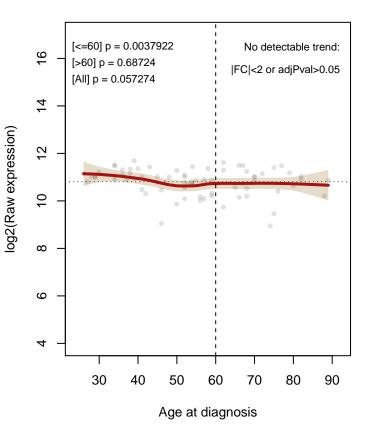
#### **PPARG (ER binding)**

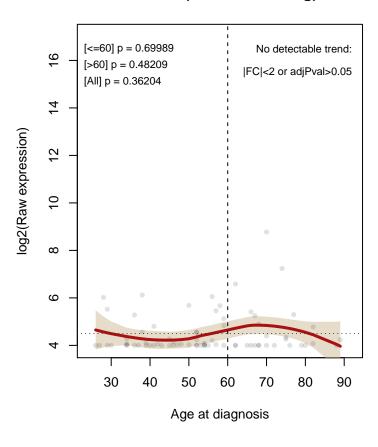






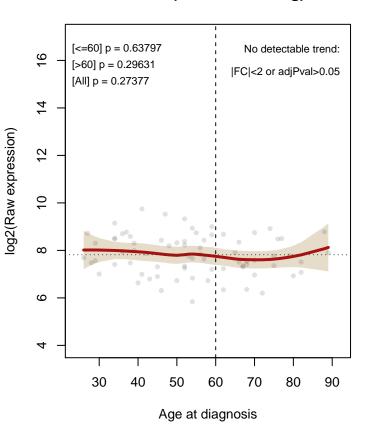
#### **PYDC1** (non-ER binding)

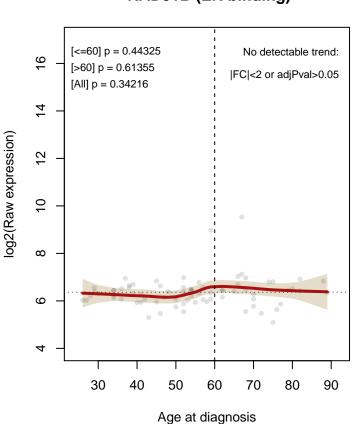




### RAD51 (non-ER binding)

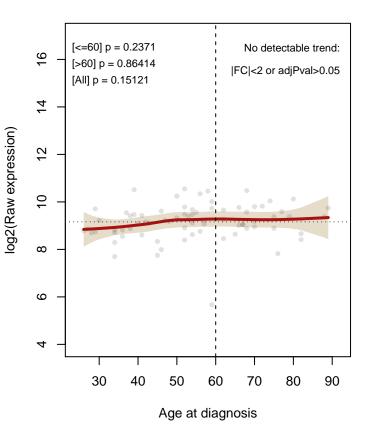
#### **RAD51B (ER binding)**

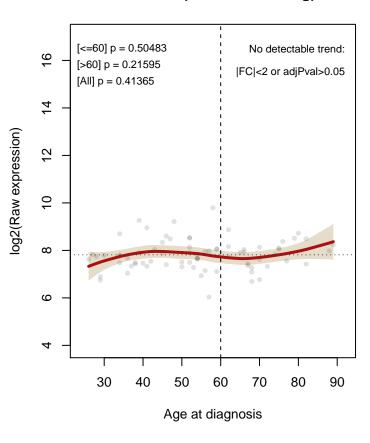




#### RAD51C (non-ER binding)

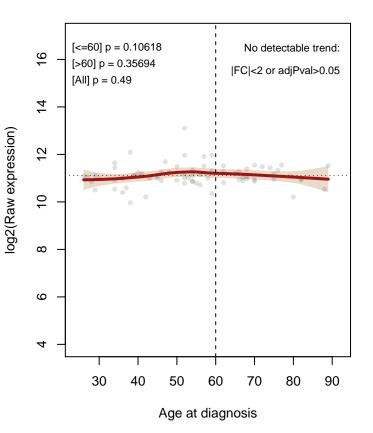
#### RAD51D (non-ER binding)

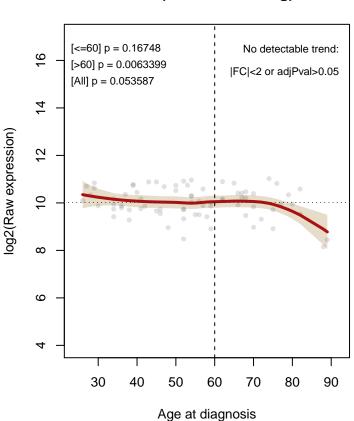




RAF1 (non-ER binding)

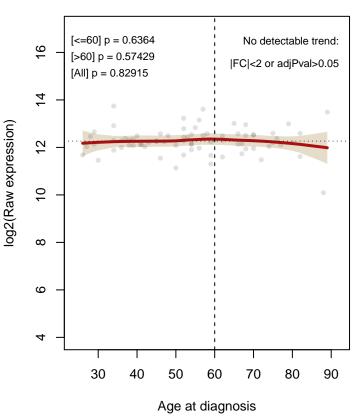
**RB1 (non-ER binding)** 

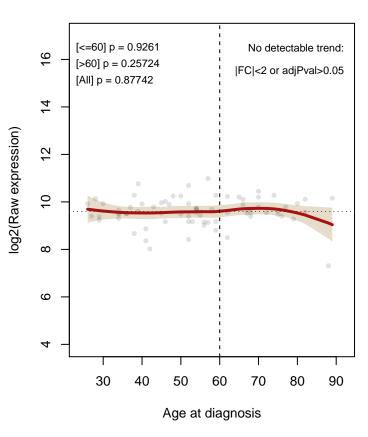






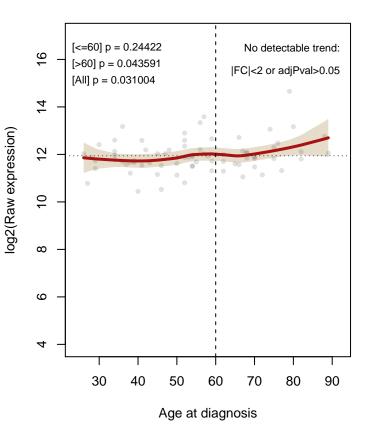
#### RBBP5 (non-ER binding)

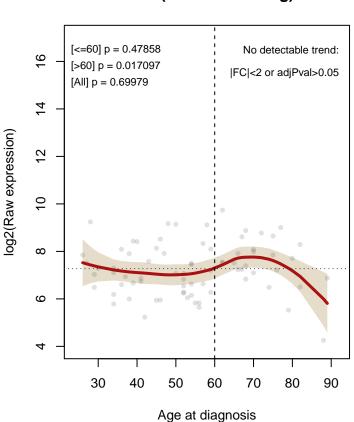


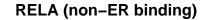


### RBBP7 (non-ER binding)

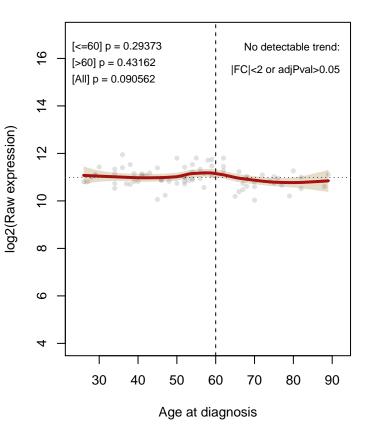
**REL** (non-ER binding)

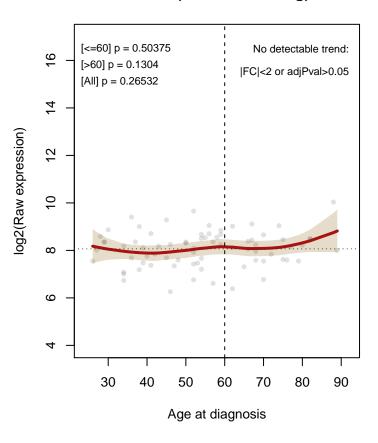






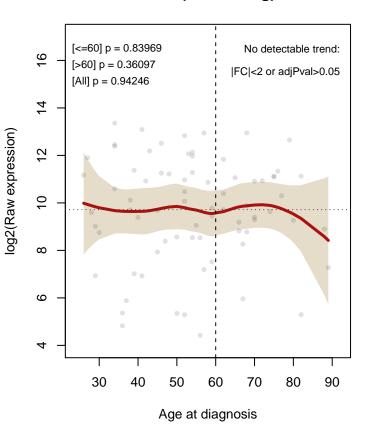
#### **RELB** (non-ER binding)

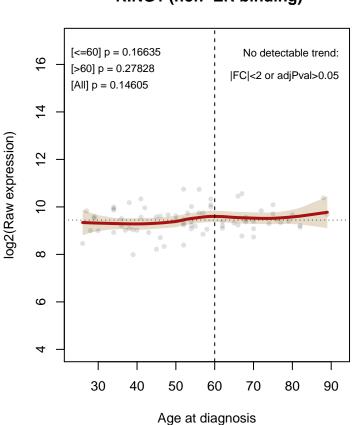


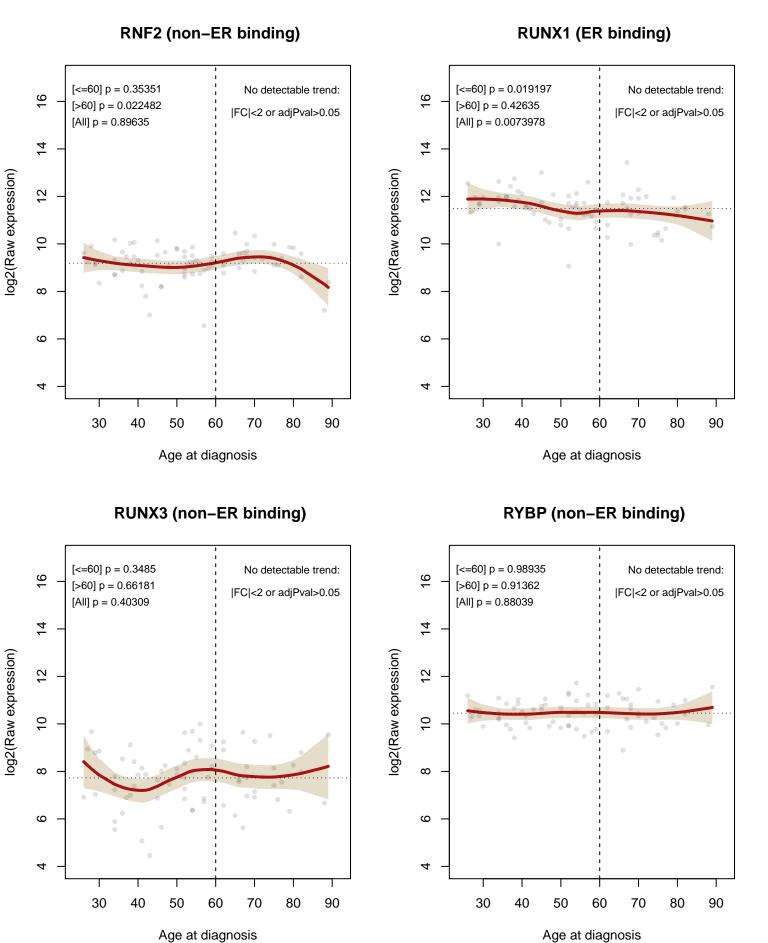


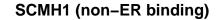
## **RET (ER binding)**

RING1 (non-ER binding)

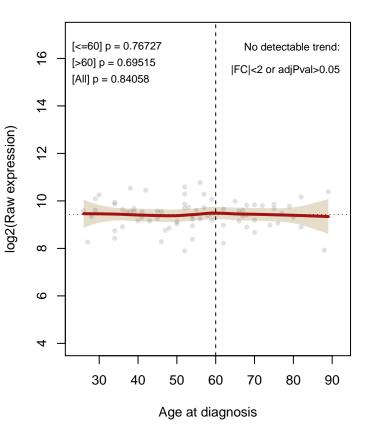


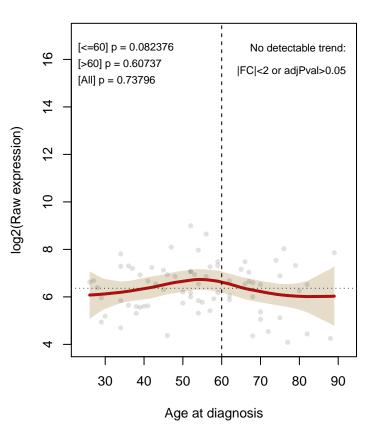






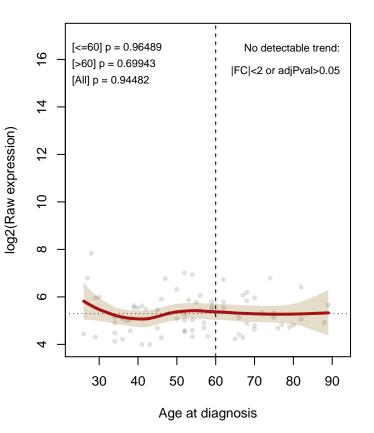
#### SCML2 (non-ER binding)

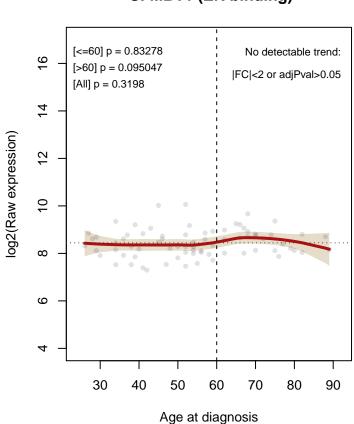




### SCML4 (non-ER binding)

SFMBT1 (ER binding)





#### SFMBT2 (ER binding) SFPQ (non-ER binding) [<=60] p = 0.67951No detectable trend: [<=60] p = 0.6005No detectable trend: 16 16 [>60] p = 0.2316 [>60] p = 0.81314 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.67567[All] p = 0.461124 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ $\infty$ 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 = 0.086661No detectable trend: [<=60] p = 0.42473No detectable trend: 16 16 [>60] p = 0.676[>60] p = 0.017039 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.062834[All] p = 0.197934 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ $\infty$ 9 9

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Age at diagnosis

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Age at diagnosis

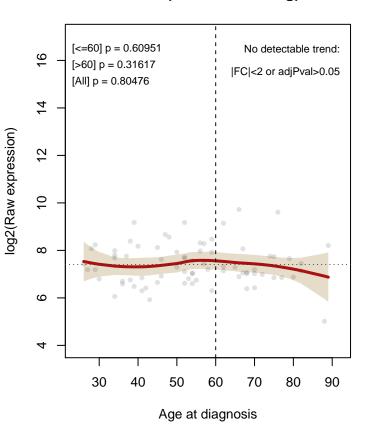
70

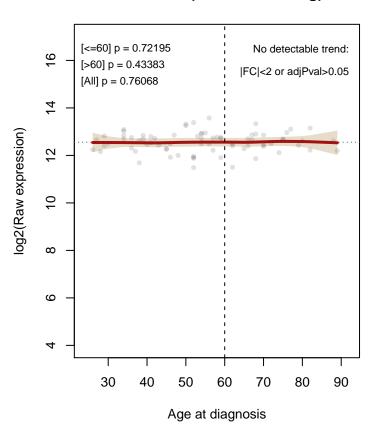
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#### SKP2 (non-ER binding)

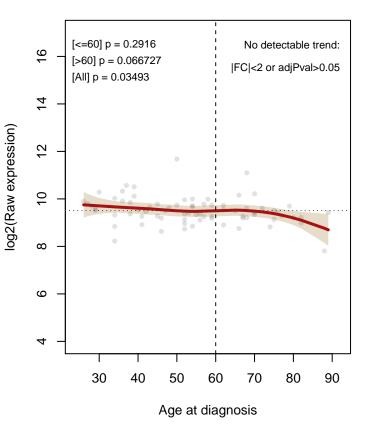
#### SLC25A3 (non-ER binding)

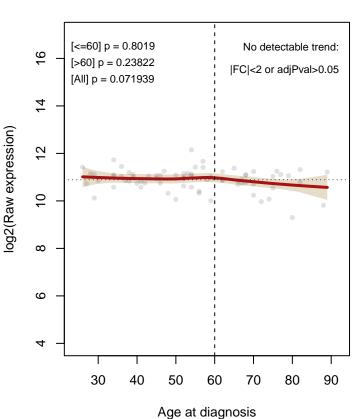




#### SMAD1 (non-ER binding)

#### SMAD2 (non-ER binding)





#### **SMAD3 (ER binding)** SMAD4 (non-ER binding) [<=60] p = 0.38696No detectable trend: [<=60] p = 0.57532No detectable trend: 16 16 [>60] p = 0.12864 [>60] p = 0.39473 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.31652[All] p = 0.282534 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ $\infty$ 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis SMAD5 (non-ER binding) SMAD6 (non-ER binding) [<=60] p = 0.097709No detectable trend: [<=60] p = 0.42969No detectable trend: 16 16 [>60] p = 0.49831 [>60] p = 0.24126 |FC|<2 or adjPval>0.05 |FC|<2 or adjPval>0.05 [All] p = 0.76047[AII] p = 0.790074 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ $\infty$

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Age at diagnosis

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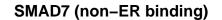
60

Age at diagnosis

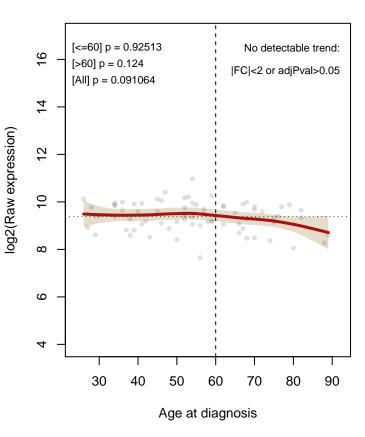
70

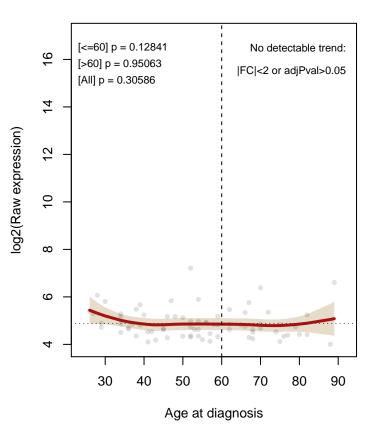
80

90



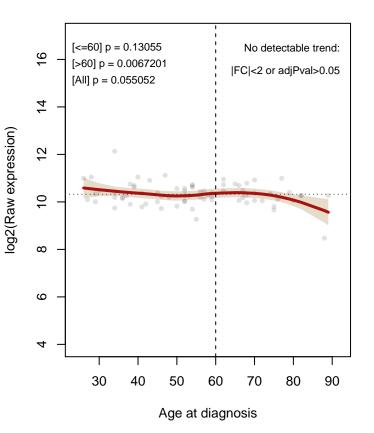
#### SMAD9 (non-ER binding)

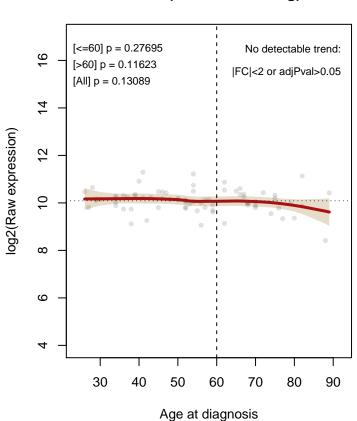


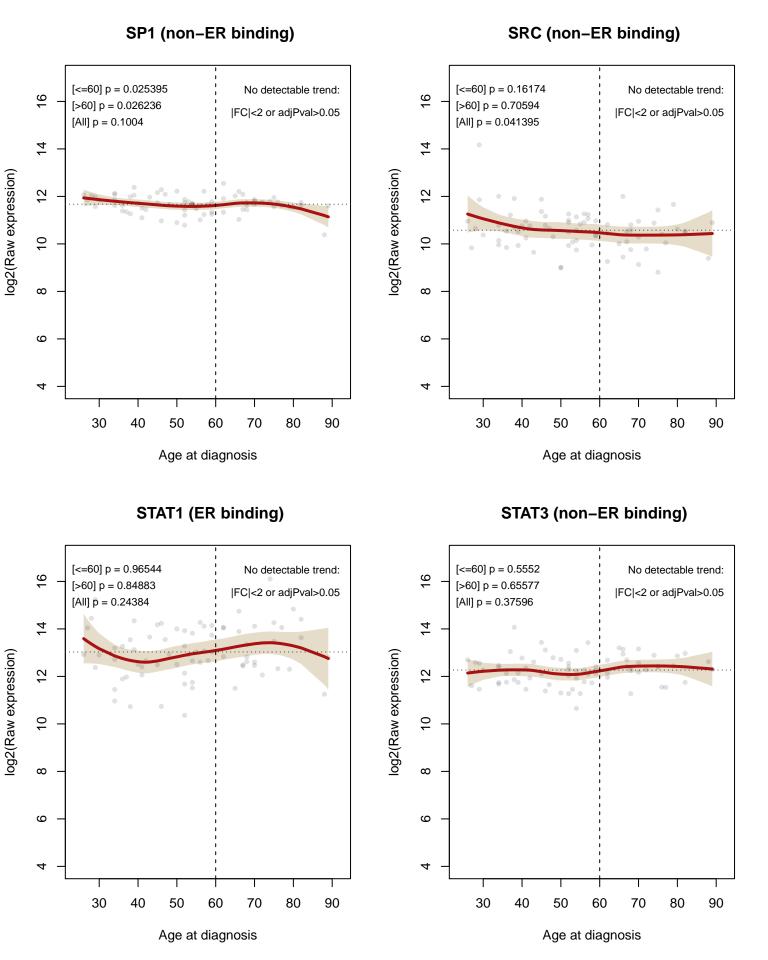


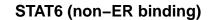
### SOS1 (non-ER binding)

SOS2 (non-ER binding)

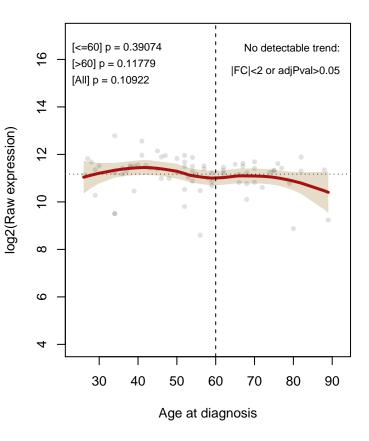


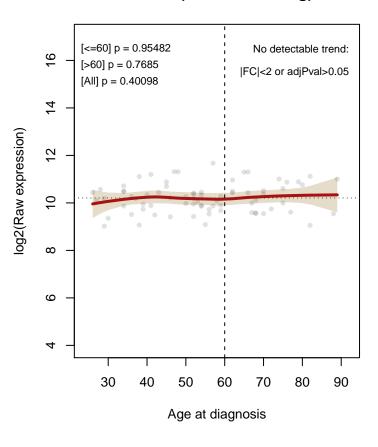






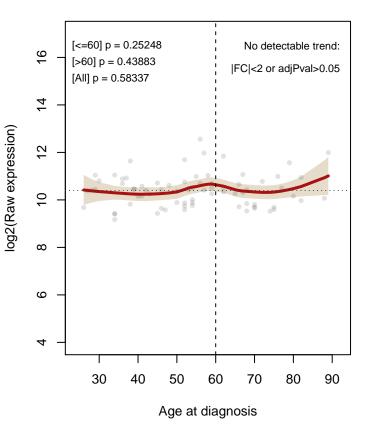
#### SUZ12 (non-ER binding)

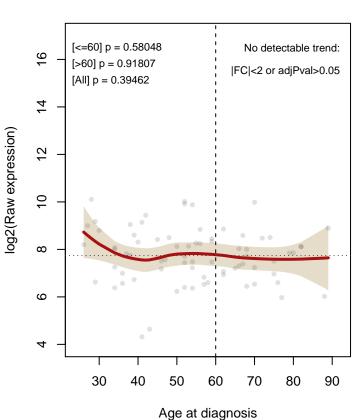




TCF3 (non-ER binding)

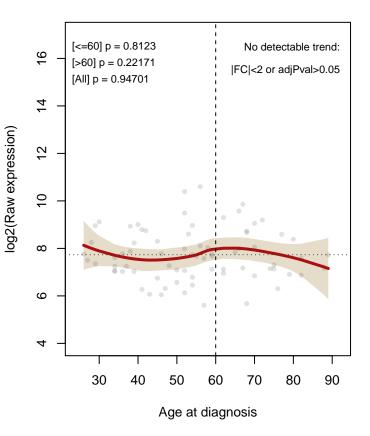
TCF7 (non-ER binding)

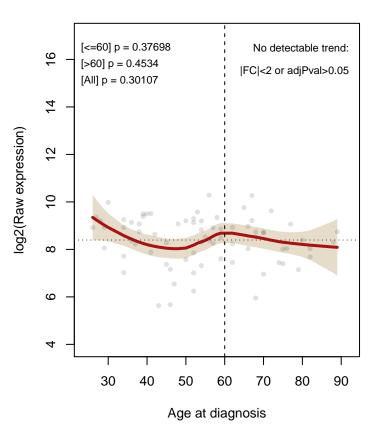






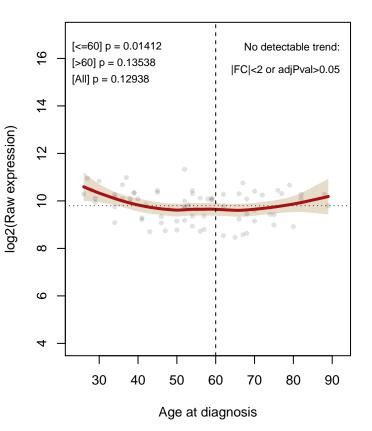
#### TCF7L2 (non-ER binding)

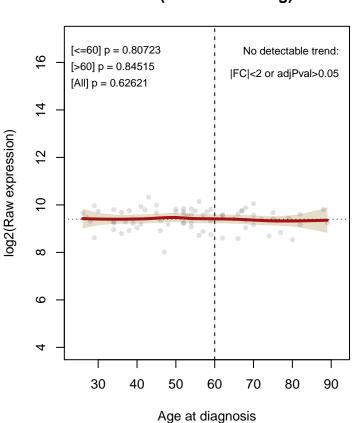


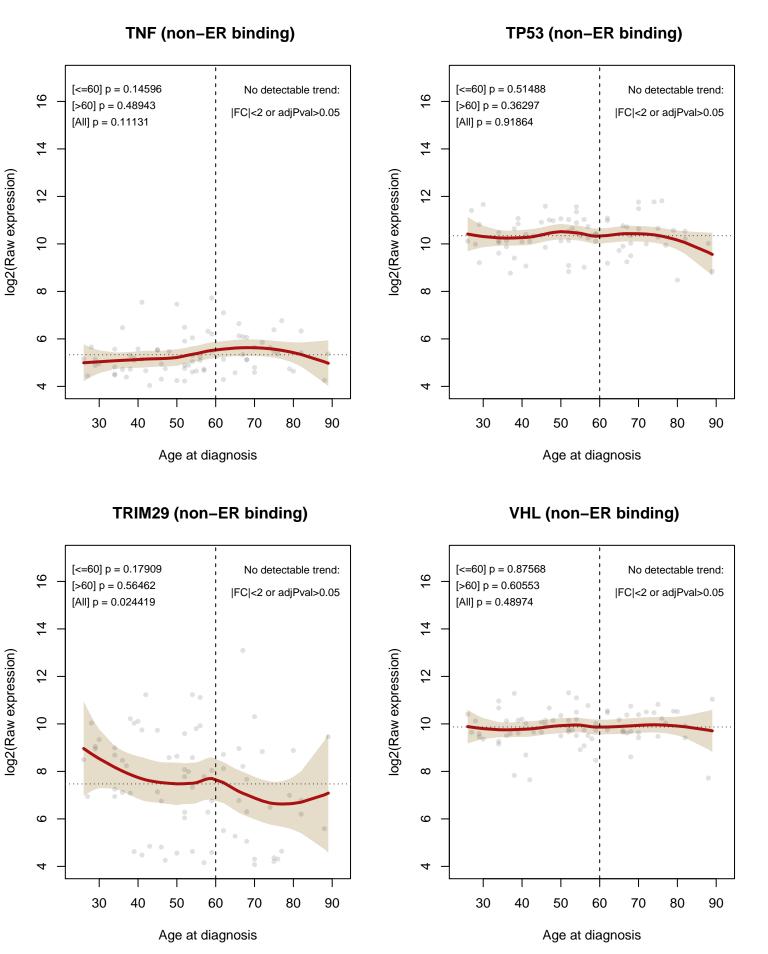


### TGFB1 (non-ER binding)

TK2 (non-ER binding)





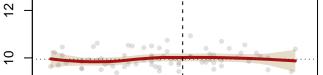








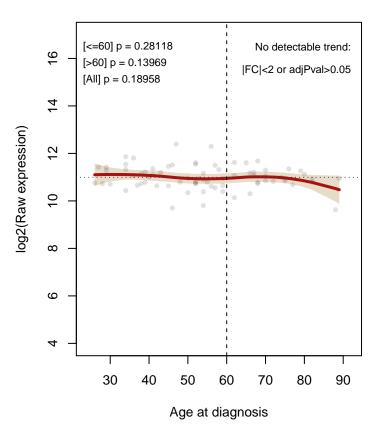
log2(Raw expression)



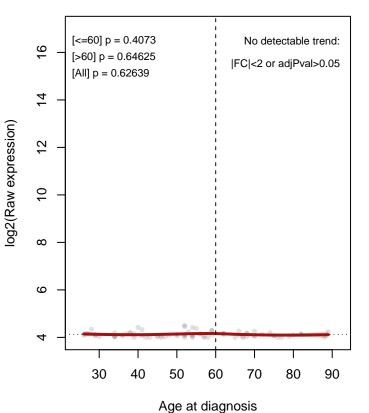


Age at diagnosis

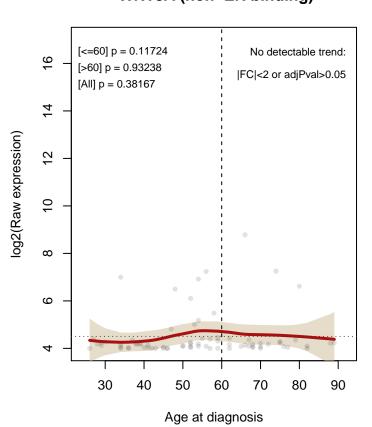
#### WHSC1 (non-ER binding)

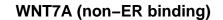


## WNT1 (non-ER binding)

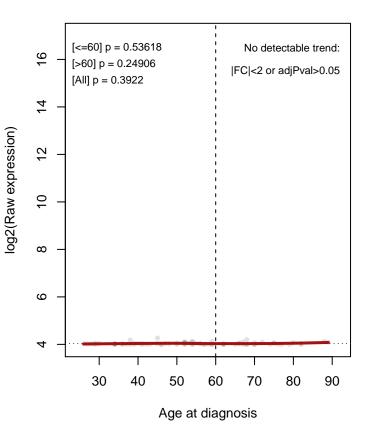


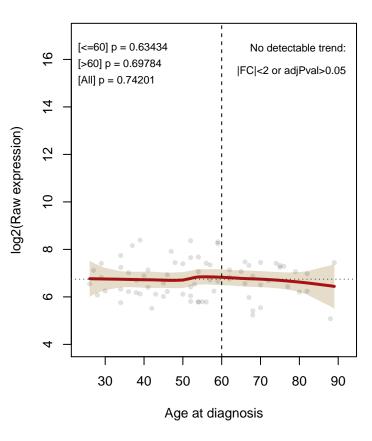
#### WNT3A (non-ER binding)





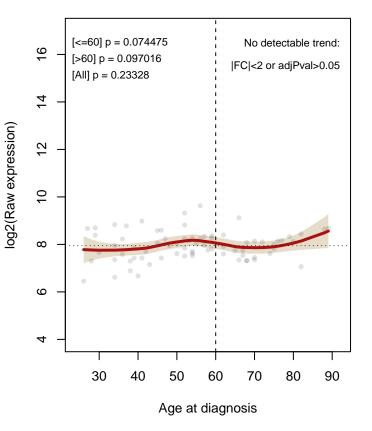
#### XRCC2 (non-ER binding)

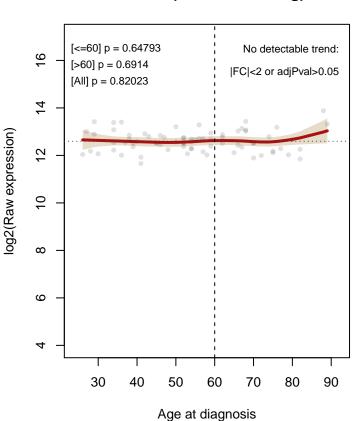




#### XRCC3 (non-ER binding)

#### XRCC6 (non-ER binding)

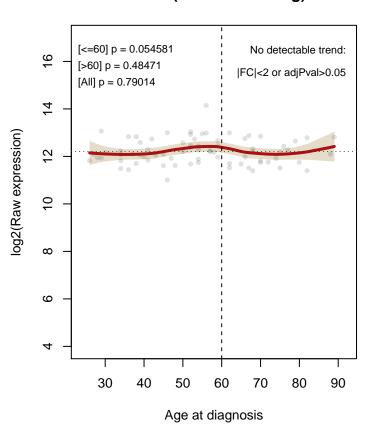




#### YAF2 (non-ER binding)

# 

## YBX1 (non-ER binding)



#### YY1 (non-ER binding)

Age at diagnosis

