

#### 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>0.01 |FC|<2 or adjPval>0.01 [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>0.01 |FC|<2 or adjPval>0.01 [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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#### **BCL2 (non-ER binding)** [<=60] p = 0.51222No detectable trend: 16 [>60] p = 0.68609|FC|<2 or adjPval>0.01 [All] p = 0.0443174 log2(Raw expression) 12 10

ω

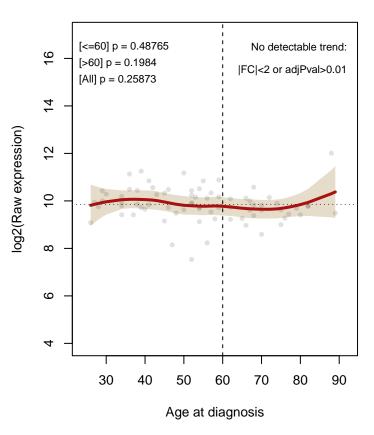
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#### **BCL3 (non-ER binding)**



BIRC5 (non-ER binding)

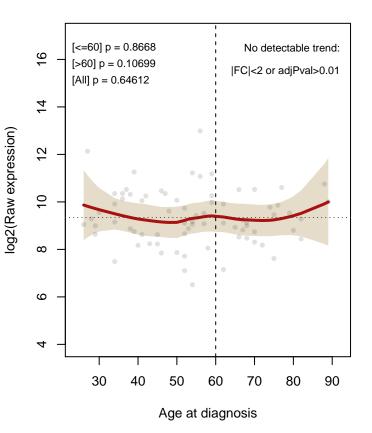
Age at diagnosis

60

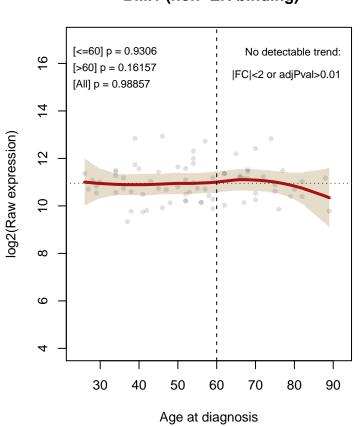
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#### **BMI1 (non-ER binding)**



#### BMX (non-ER binding) [<=60] p = 0.004424No detectable trend: 16 [>60] p = 0.51832 |FC|<2 or adjPval>0.01 [AII] p = 0.00156494 log2(Raw expression) 12 10

ω

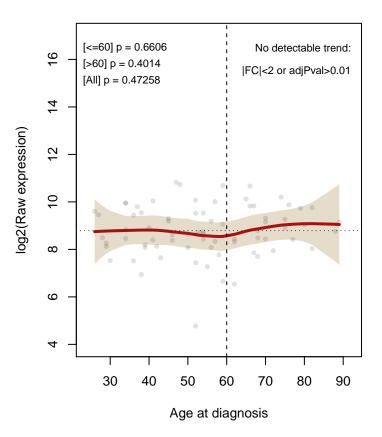
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#### **BRCA1** (non-ER binding)



CA9 (non-ER binding)

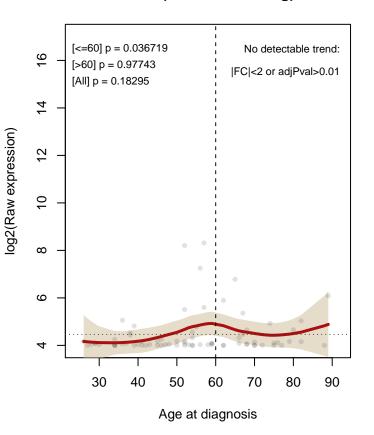
Age at diagnosis

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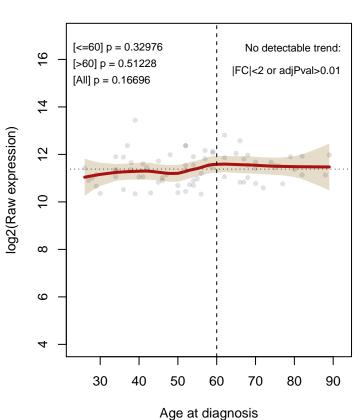
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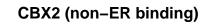
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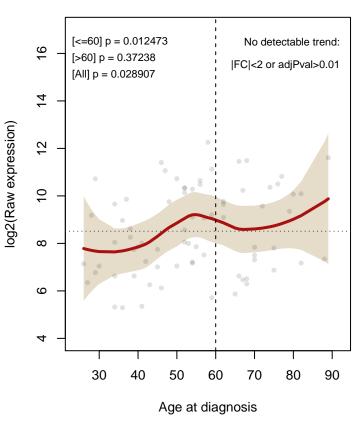


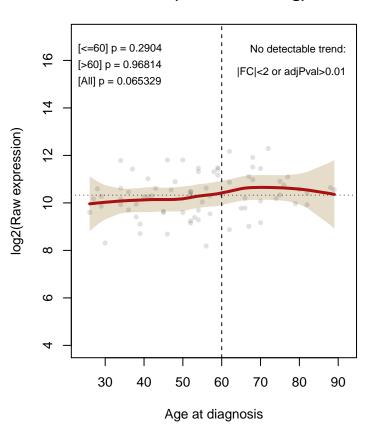
#### **CBX1** (non-ER binding)





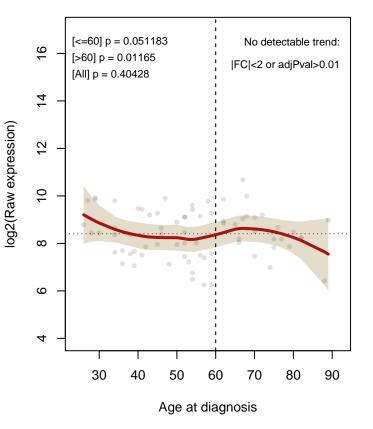
#### CBX4 (non-ER binding)

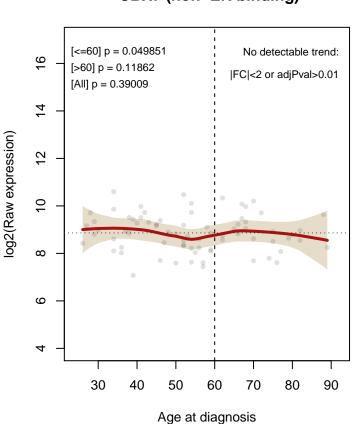




#### **CBX6** (non-ER binding)

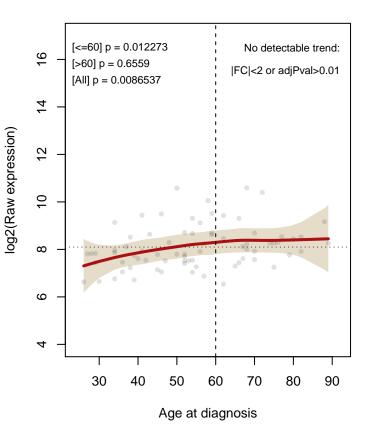
#### **CBX7 (non-ER binding)**

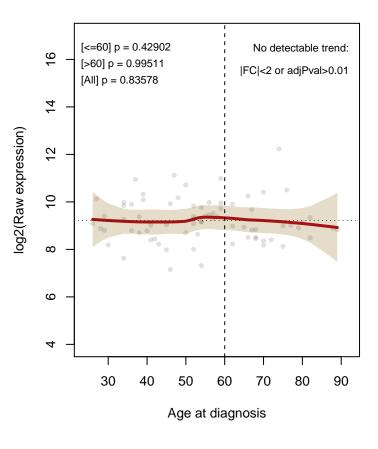






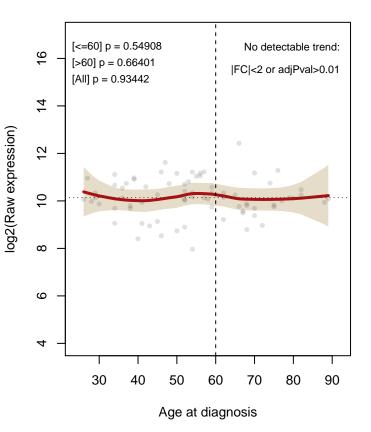
#### CCNA2 (non-ER binding)

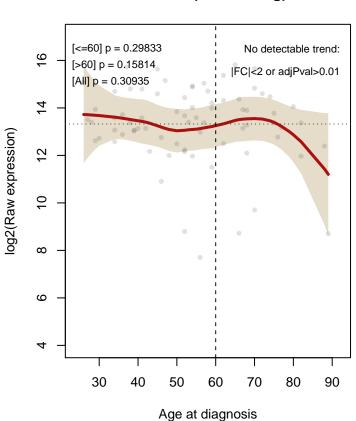


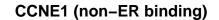


#### CCNB1 (non-ER binding)

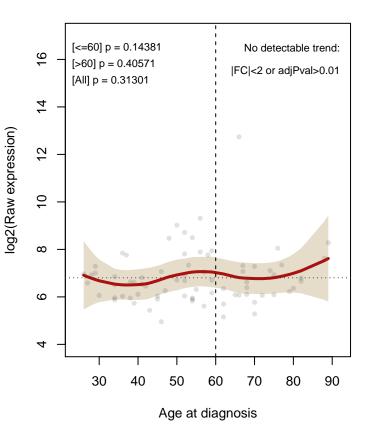
#### **CCND1 (ER binding)**

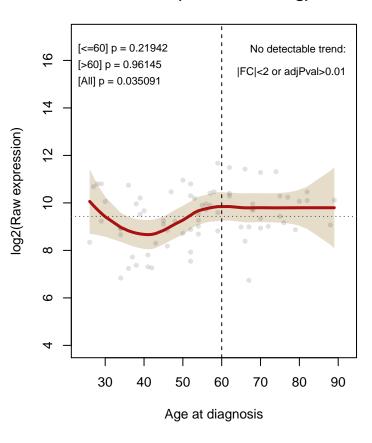






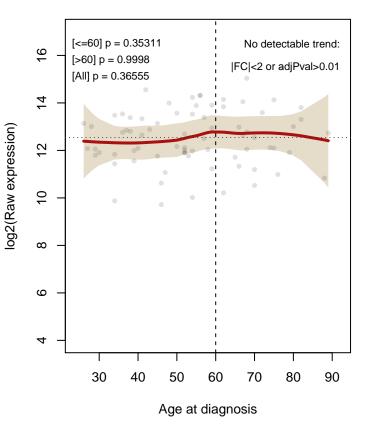
#### CD163 (non-ER binding)

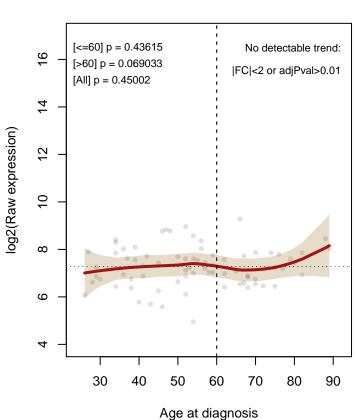


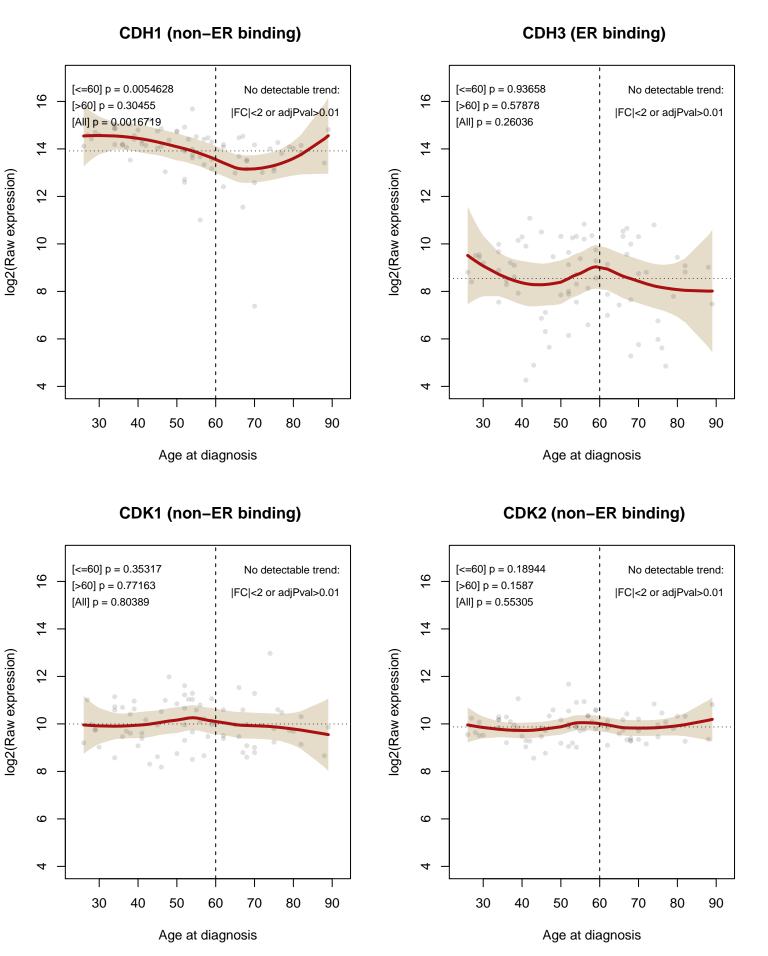


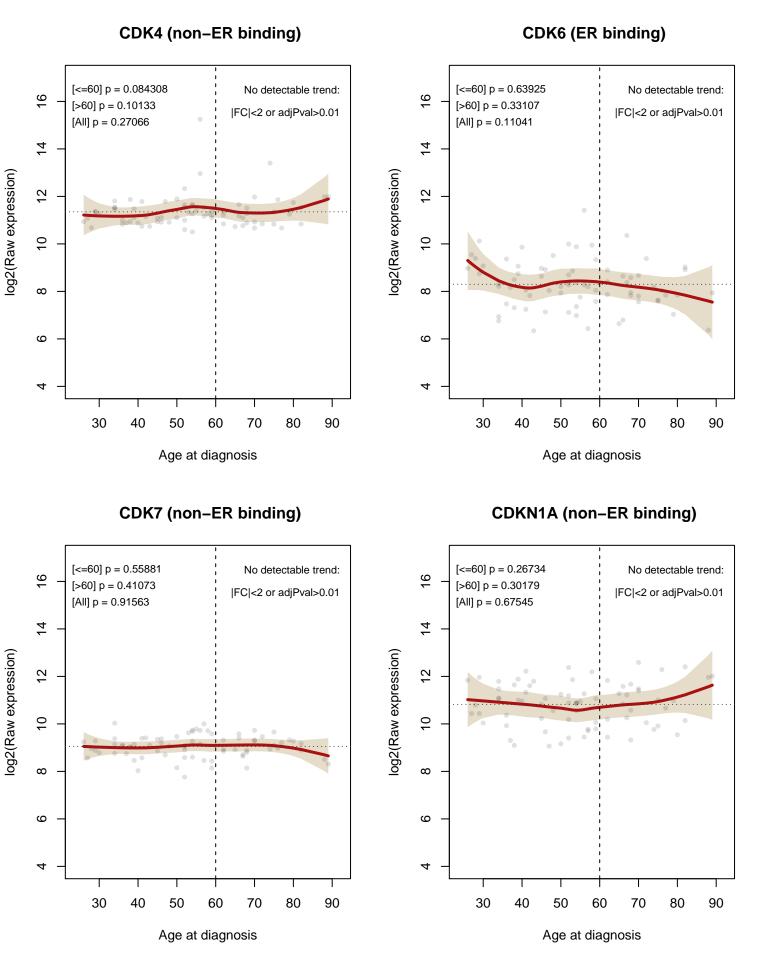
CD44 (non-ER binding)

#### CDC25C (non-ER binding)



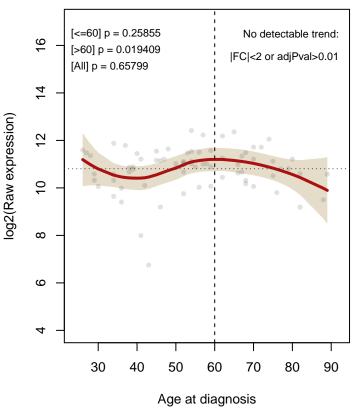


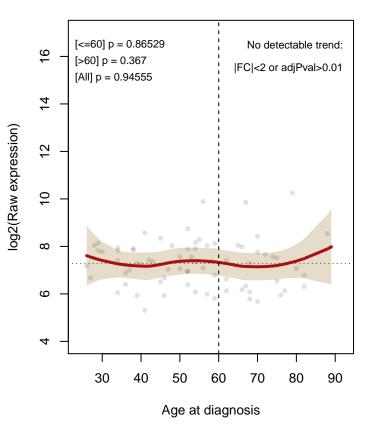




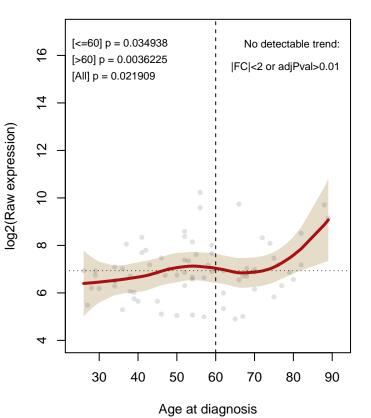
#### CDKN1B (non-ER binding)

#### CDKN1C (non-ER binding)

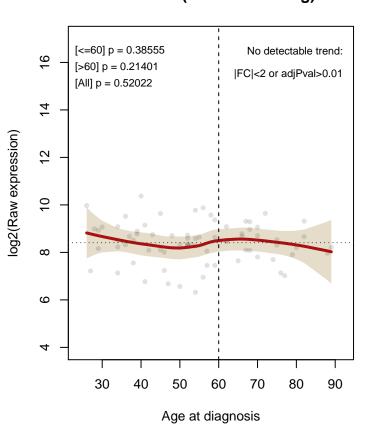




#### CDKN2A (non-ER binding)

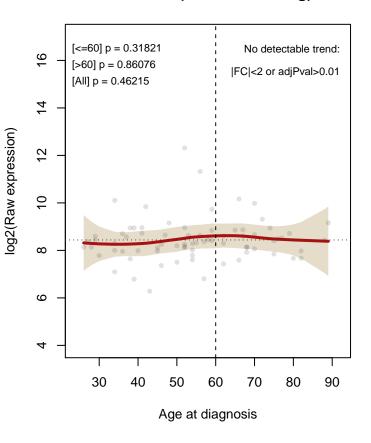


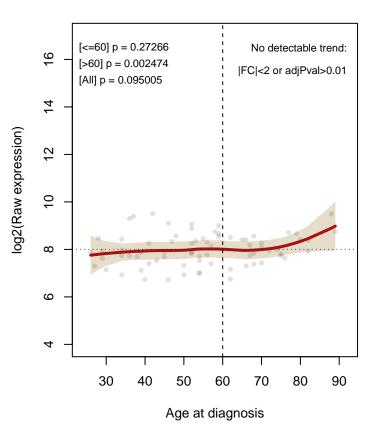
#### CDKN2B (non-ER binding)



#### CDKN2C (non-ER binding)

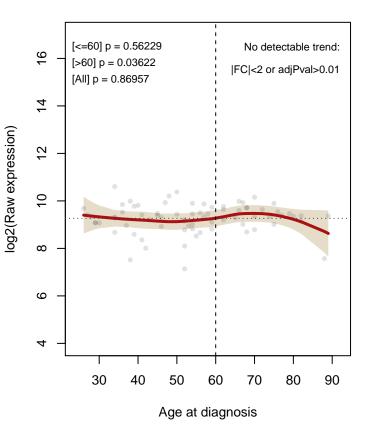
#### CDKN2D (non-ER binding)

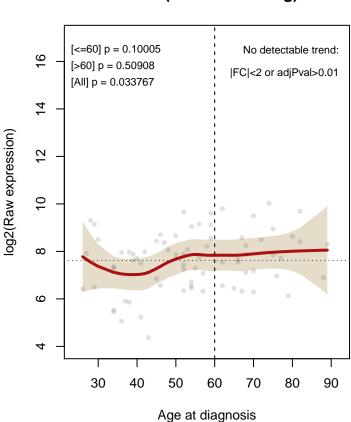




#### CHUK (non-ER binding)

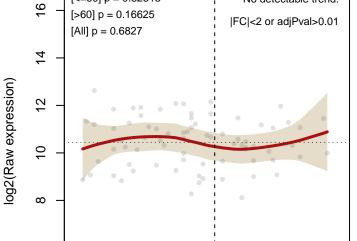
CIITA (non-ER binding)





#### CLDN3 (non-ER binding)

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



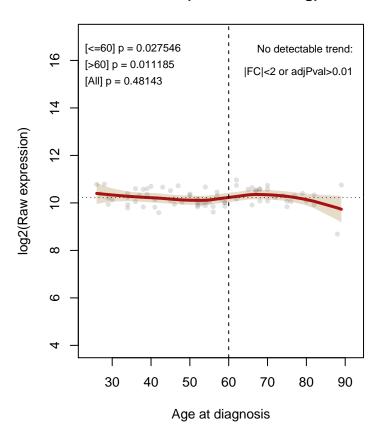
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#### CREB1 (non-ER binding)



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

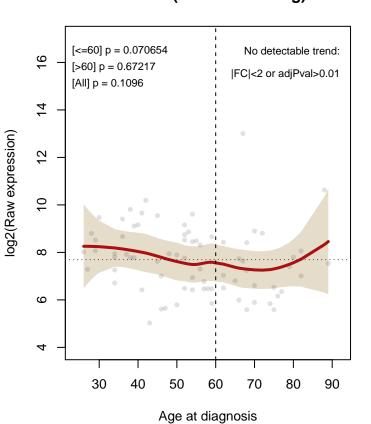
Age at diagnosis

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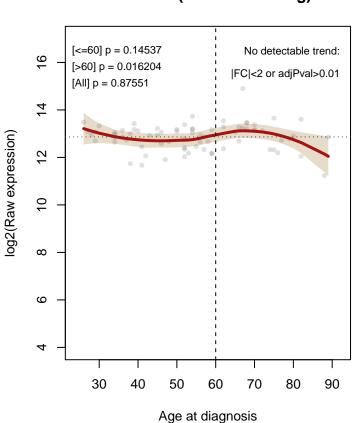
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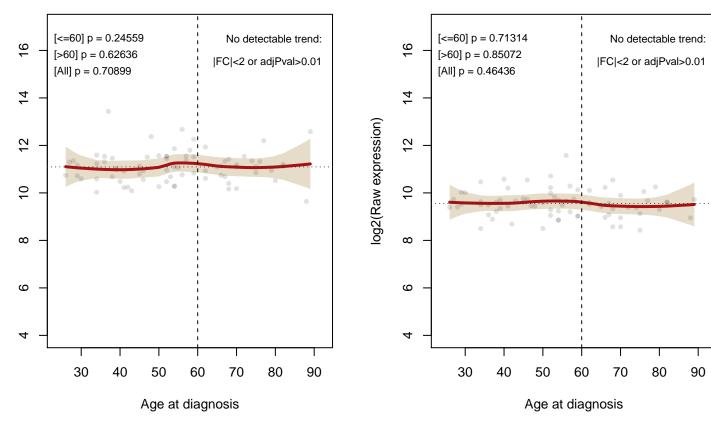
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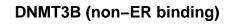


#### CTNNB1 (non-ER binding)

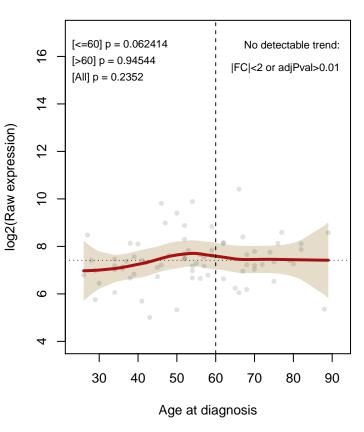


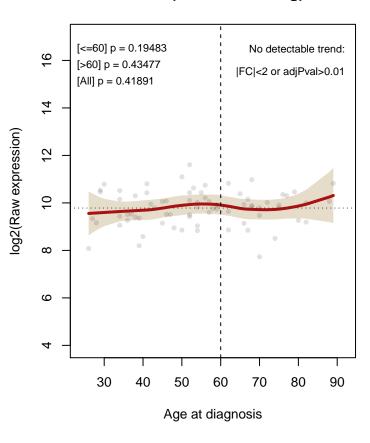
#### **DLC1 (ER binding)** DMAP1 (non-ER binding) [<=60] p = 0.003966No detectable trend: [<=60] p = 0.062038No detectable trend: 16 16 [>60] p = 0.92683 [>60] p = 0.36405 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.00059346[All] p = 0.282554 4 log2(Raw expression) log2(Raw expression) 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 = 0.7131416 16 [>60] p = 0.62636 [>60] p = 0.85072 |FC|<2 or adjPval>0.01 [AII] p = 0.70899[All] p = 0.464364 4 log2(Raw expression) 12 12





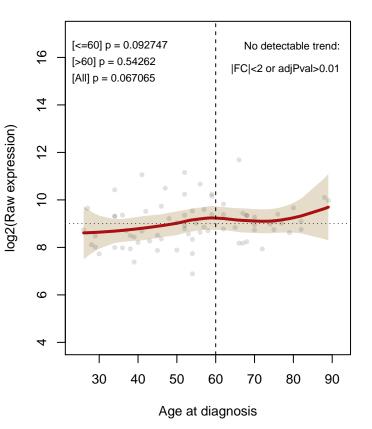
#### **DVL1 (non-ER binding)**

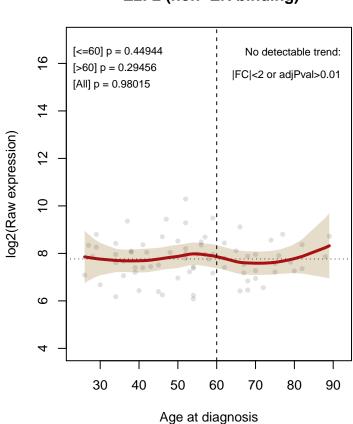


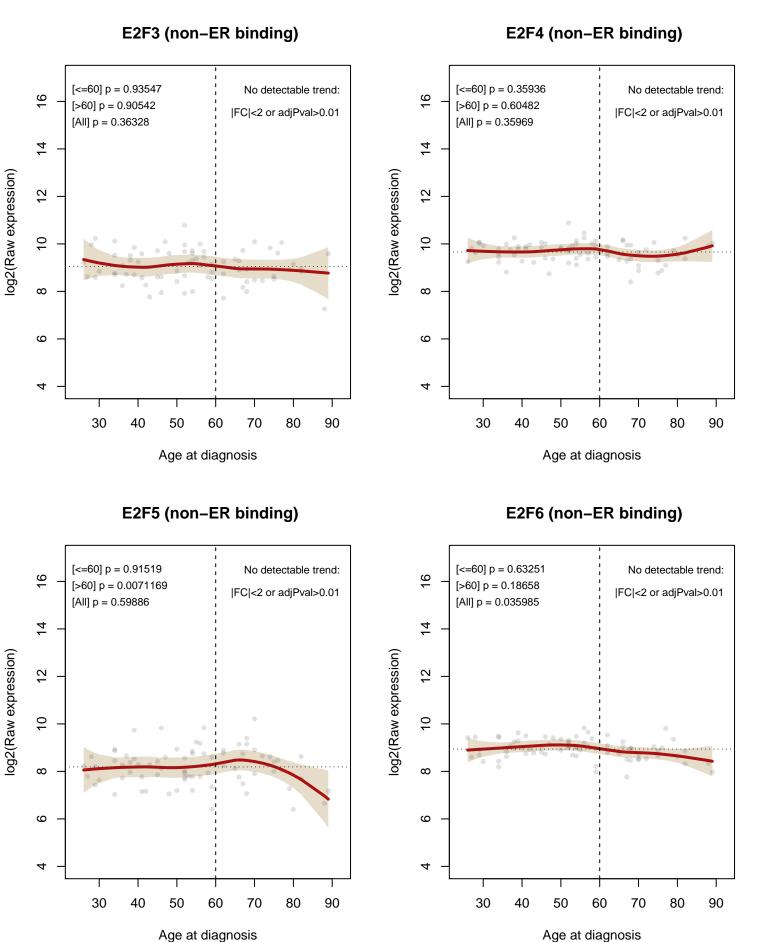


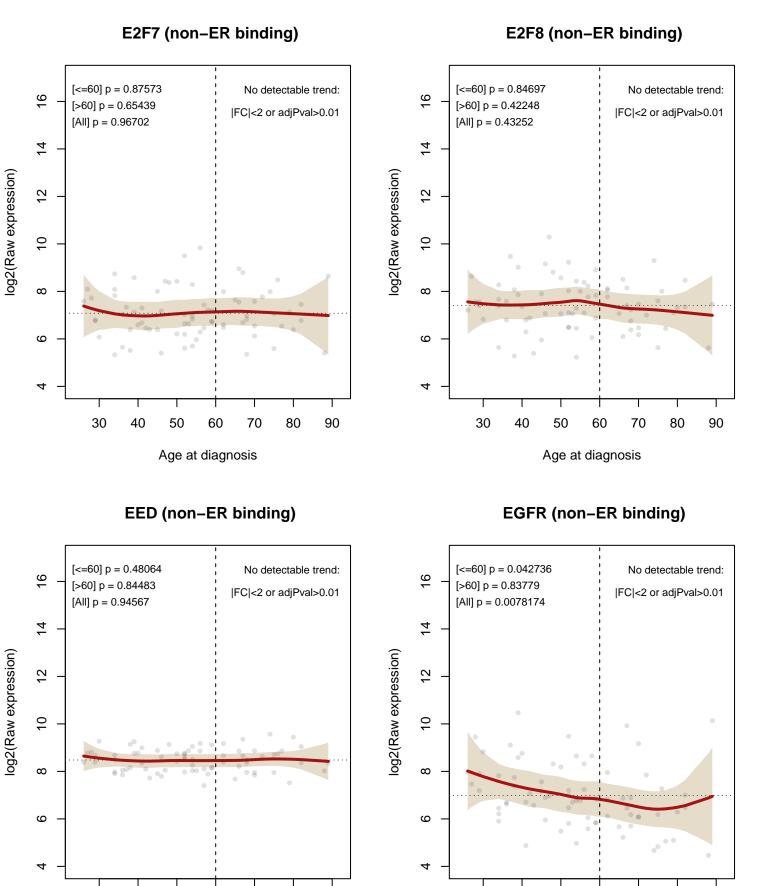
E2F1 (non-ER binding)

E2F2 (non-ER binding)



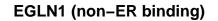




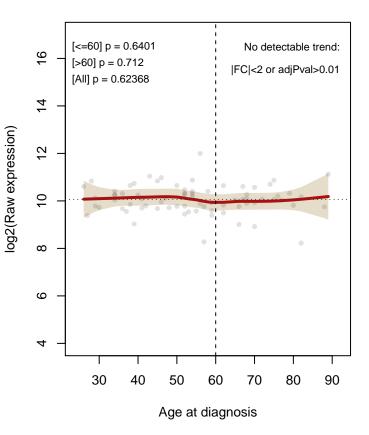


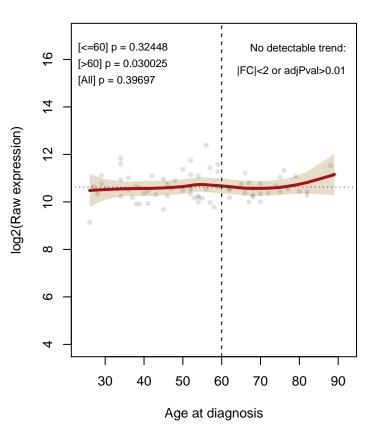
Age at diagnosis

Age at diagnosis



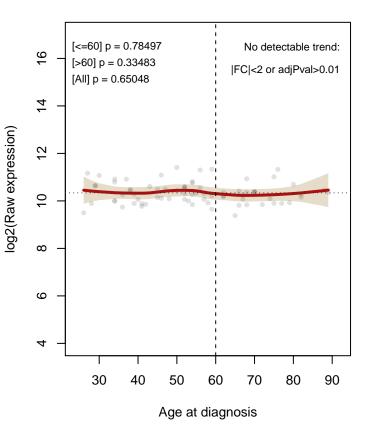
#### EHMT2 (non-ER binding)

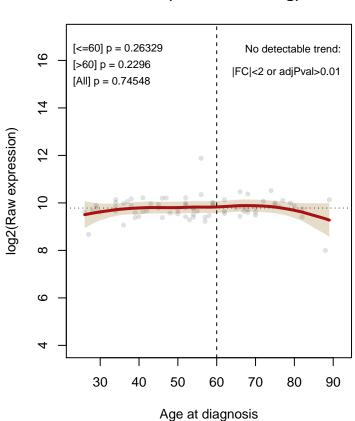




#### **ELAC2 (non-ER binding)**

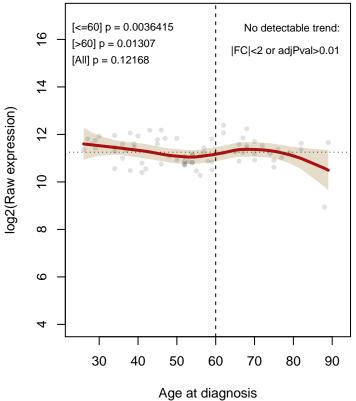
**ELK1 (non-ER binding)** 

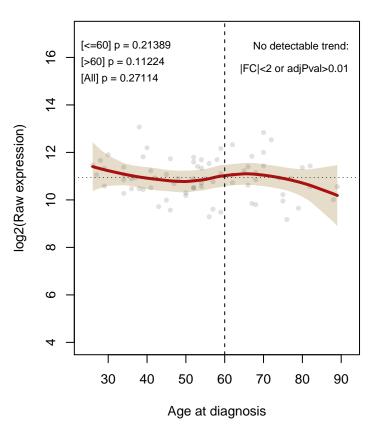




# EP300 (non-ER binding)

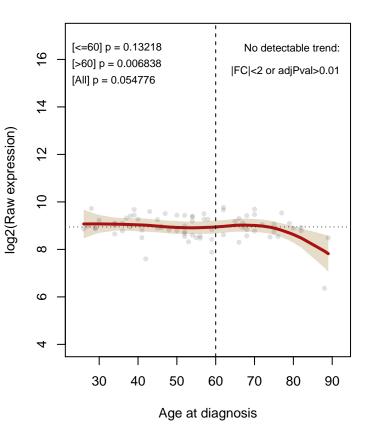
#### EPAS1 (non-ER binding)

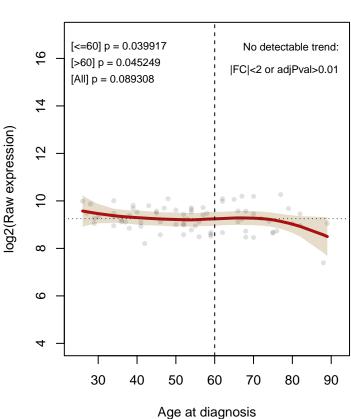




**EPC1 (non-ER binding)** 

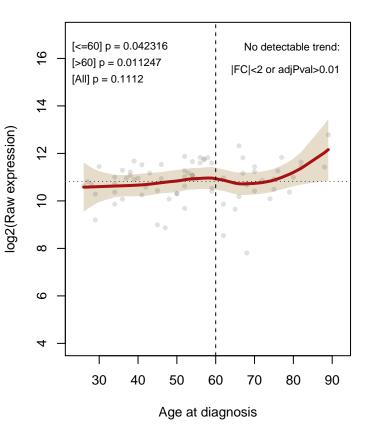
**EPC2** (non-ER binding)

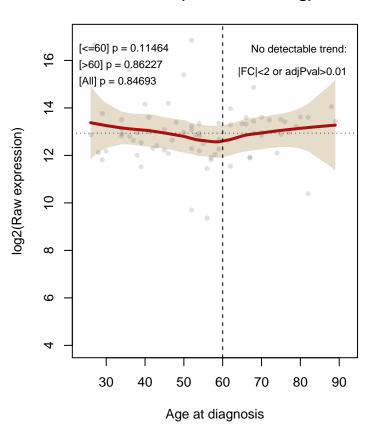






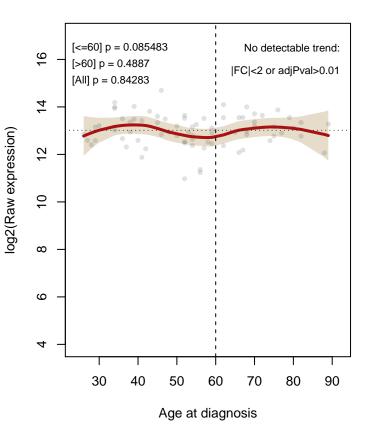
#### **ERBB2** (non-ER binding)

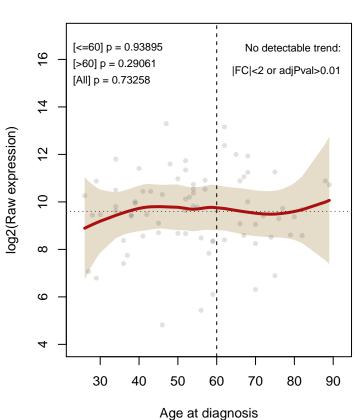


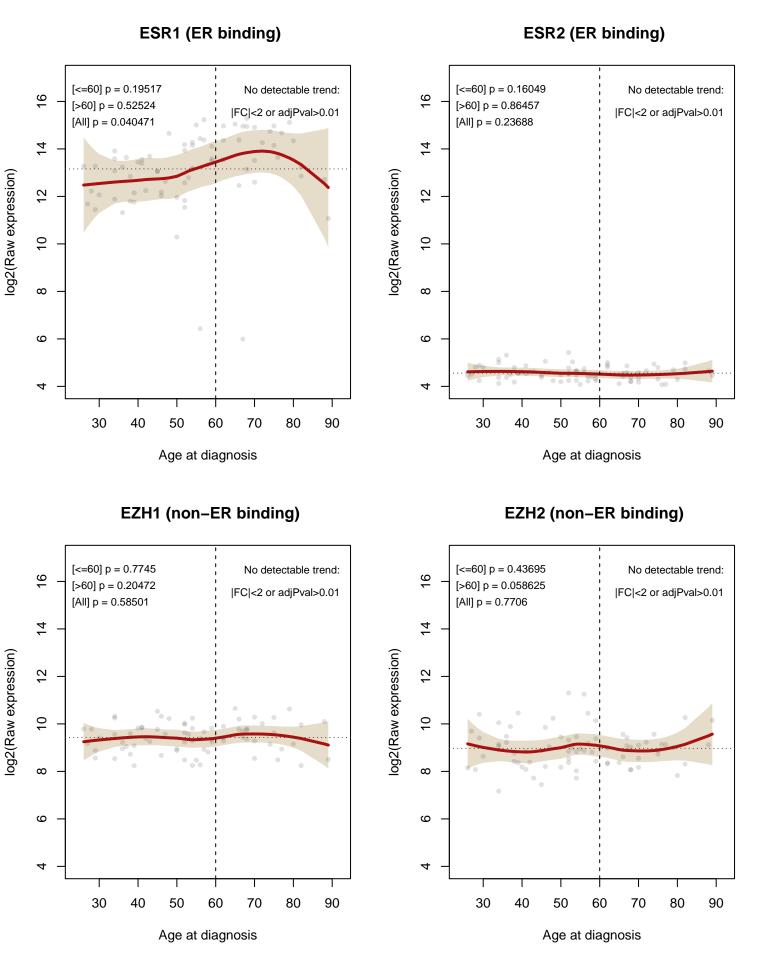


#### **ERBB3** (non-ER binding)

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







#### FOSL1 (non-ER binding) FOS (non-ER binding) [<=60] p = 0.22977No detectable trend: [<=60] p = 0.3075No detectable trend: 16 16 [>60] p = 0.65141 [>60] p = 0.39686|FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.6791[All] p = 0.116594 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis **FOXC1 (ER binding)** FOXA1 (ER binding) [<=60] p = 0.28041No detectable trend: [<=60] p = 0.69275No detectable trend: 16 16 [>60] p = 0.80722 [>60] p = 0.51244 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.59884[All] p = 0.218494 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω 9 9

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Age at diagnosis

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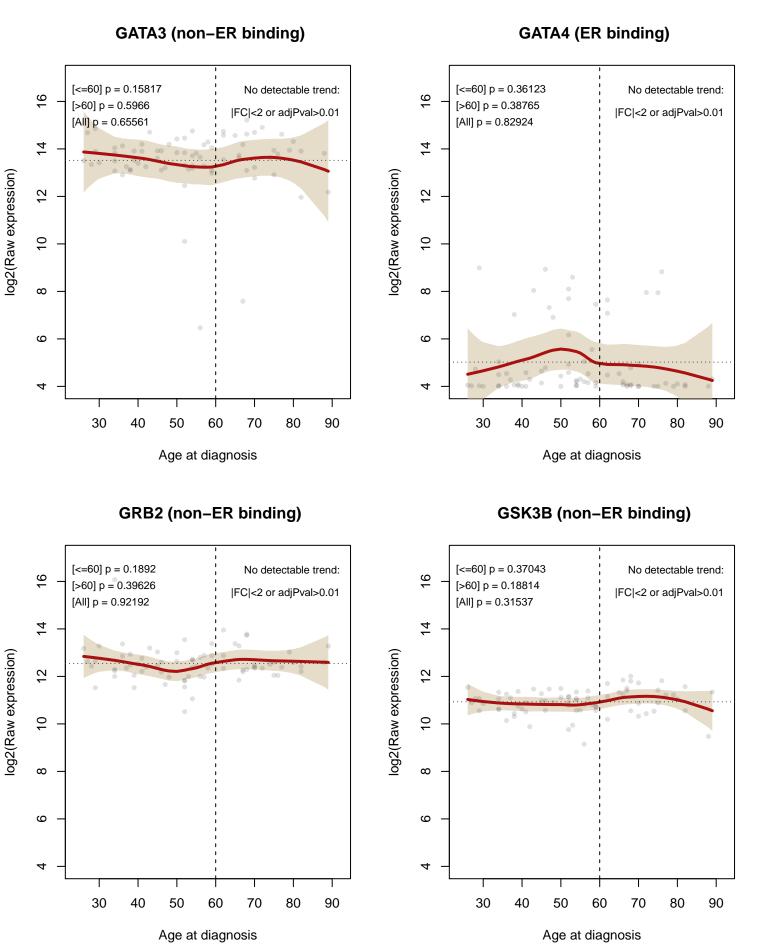
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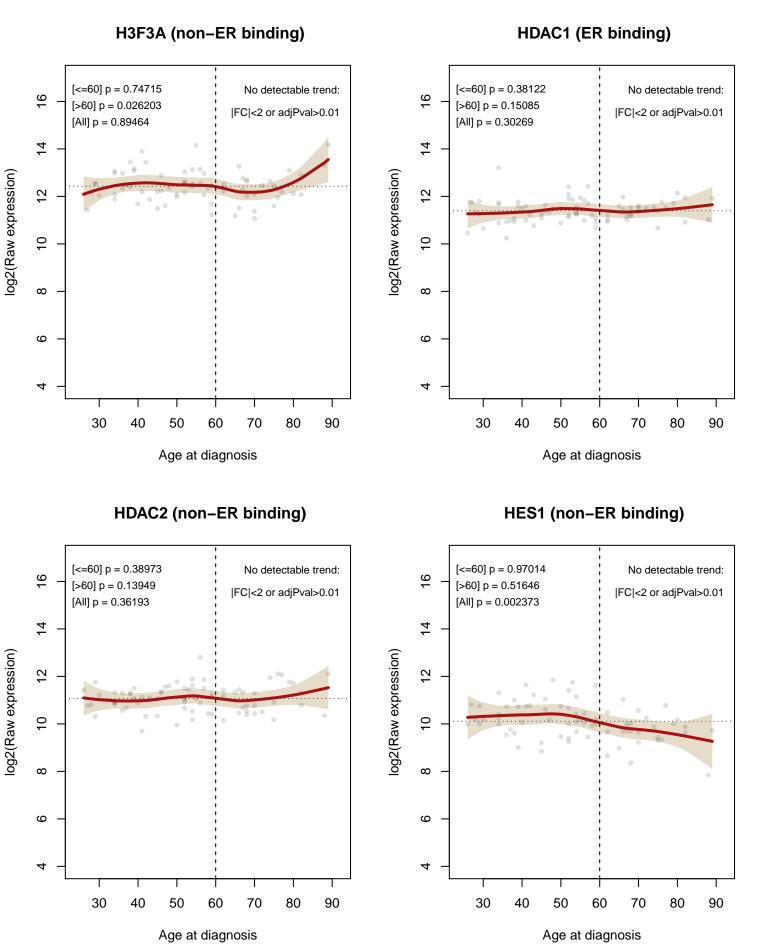
Age at diagnosis

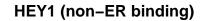
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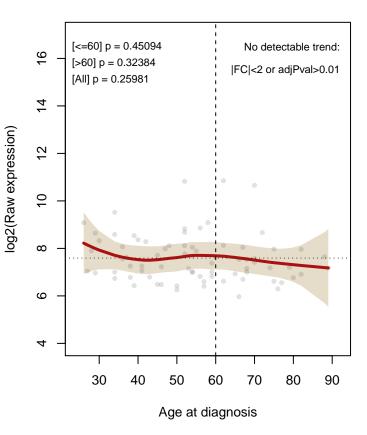
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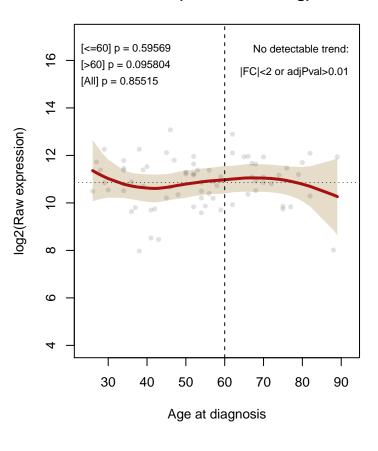






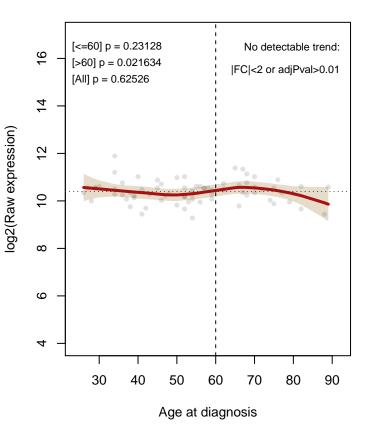
#### HIF1A (non-ER binding)

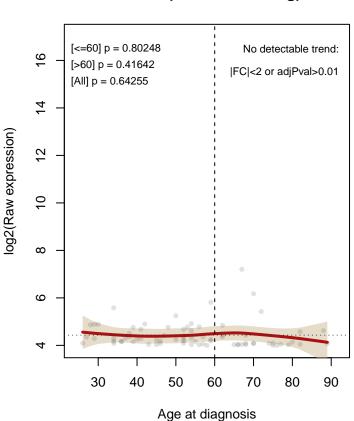




#### HIF1AN (non-ER binding)

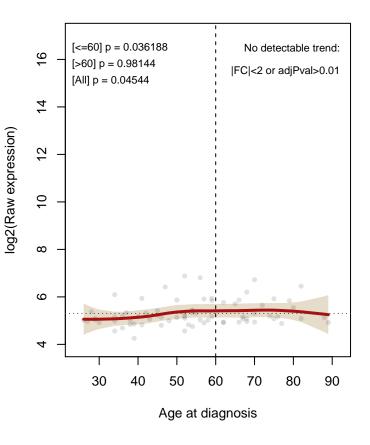
#### HIF3A (non-ER binding)

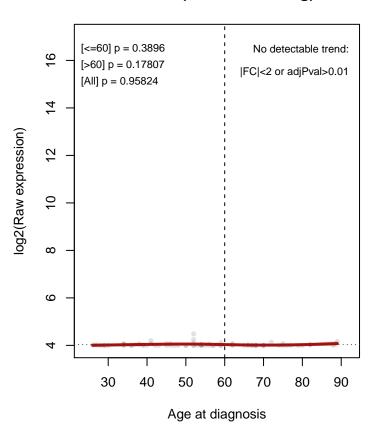




#### HNF1A (non-ER binding)

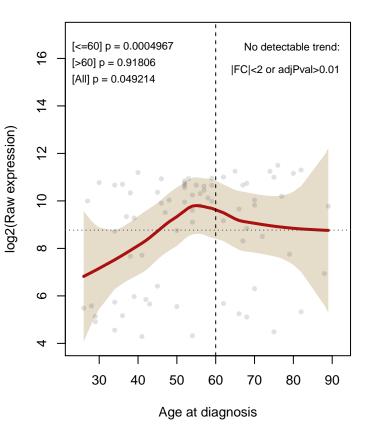
#### HNF1B (non-ER binding)

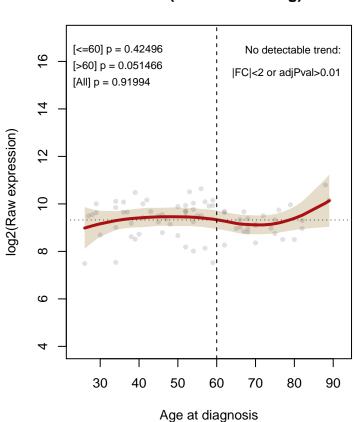




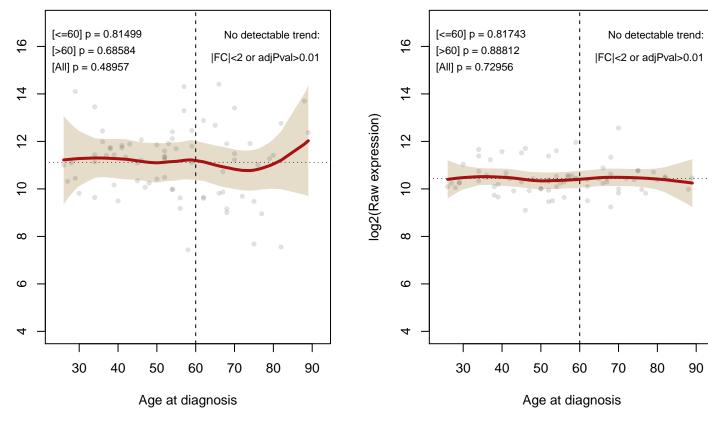
#### **HOXC10 (non-ER binding)**

HRAS (non-ER binding)



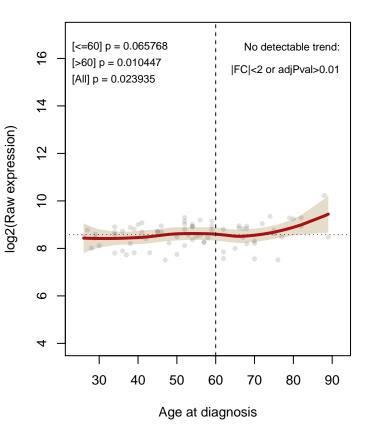


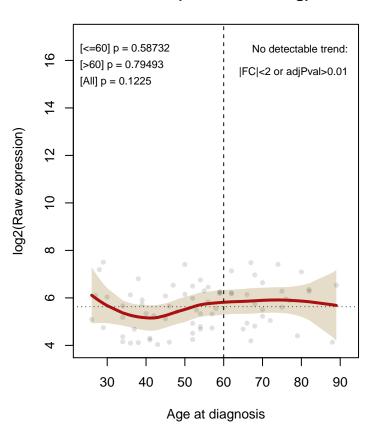
#### **HSPB1** (non-ER binding) IGF1R (ER binding) [<=60] p = 0.12231 No detectable trend: [<=60] p = 0.60543No detectable trend: 16 16 [>60] p = 0.016117 [>60] p = 0.12102|FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.377[All] p = 0.817754 4 log2(Raw expression) log2(Raw expression) 12 12 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 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>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.48957[All] p = 0.729564 4 log2(Raw expression) 12 12





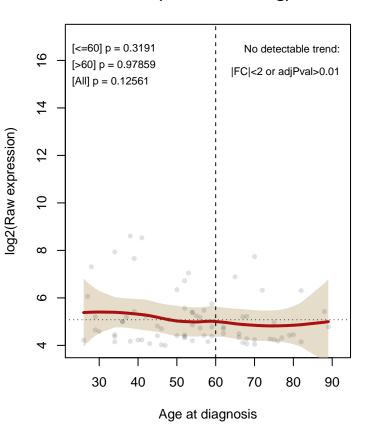
#### IL2RA (non-ER binding)

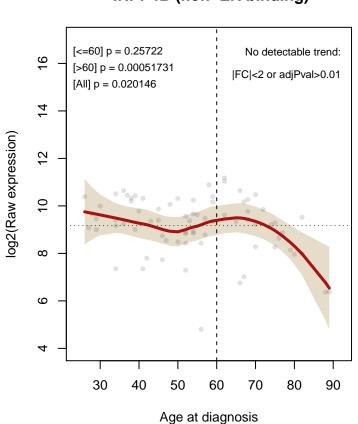


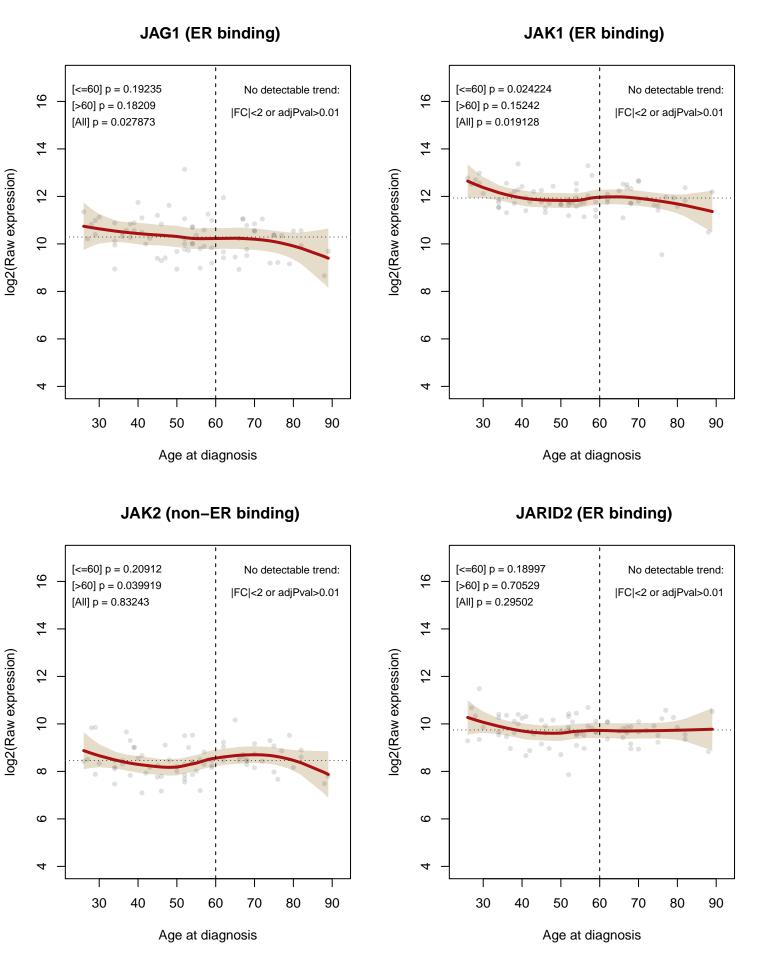


#### IL6 (non-ER binding)

**INPP4B** (non-ER binding)

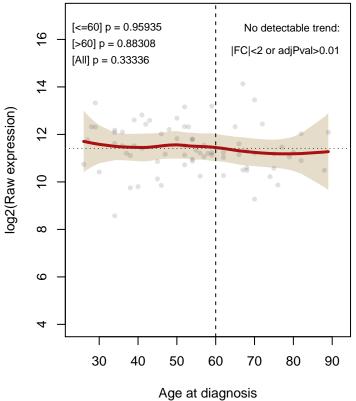


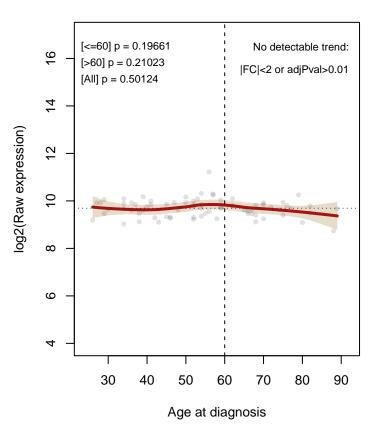




## JUN (non–ER binding)

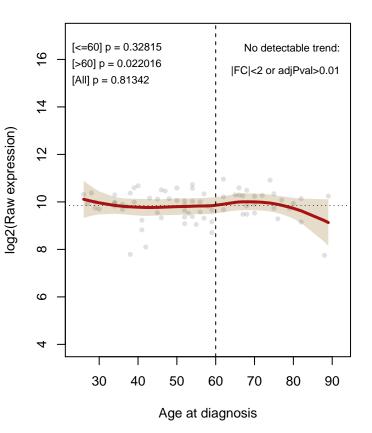
#### KDM2B (non-ER binding)

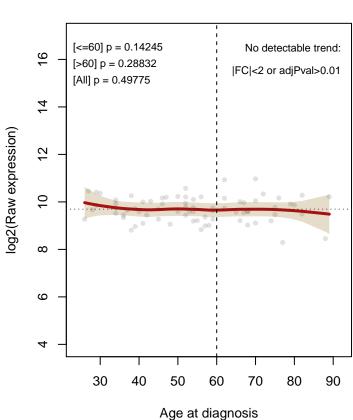




#### KDM6A (non-ER binding)

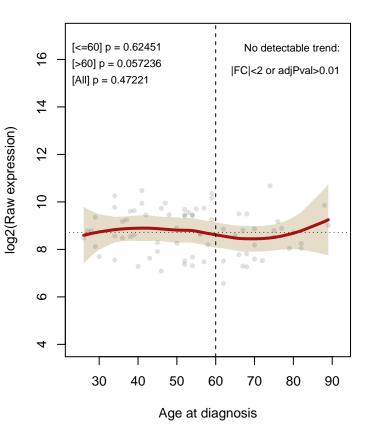
KDM6B (non-ER binding)

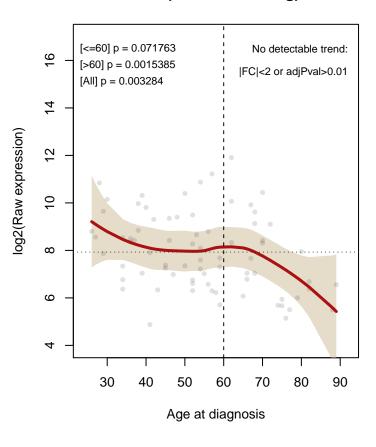






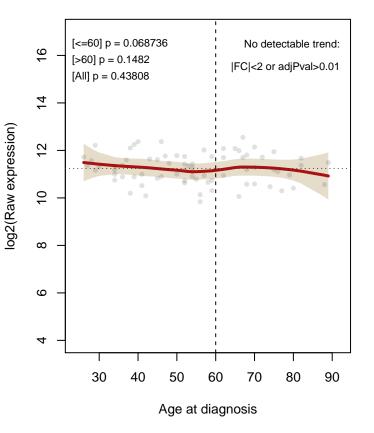
#### KIT (non-ER binding)

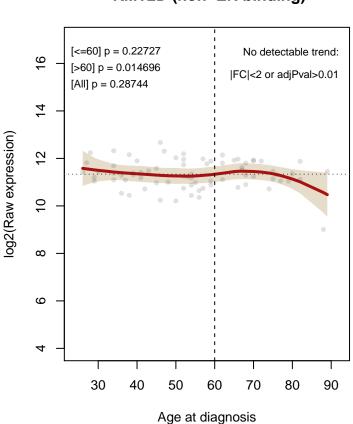


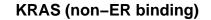


#### KMT2C (non-ER binding)

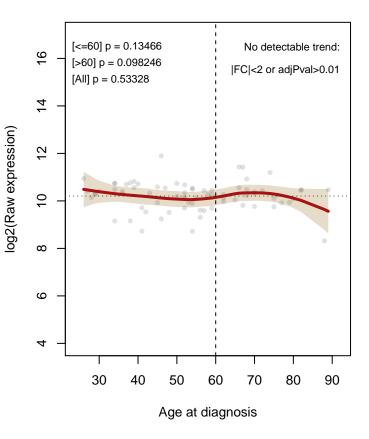
#### KMT2D (non-ER binding)

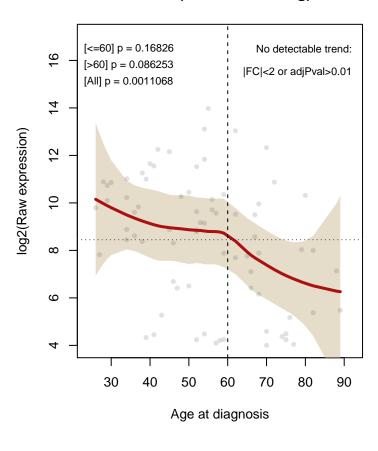






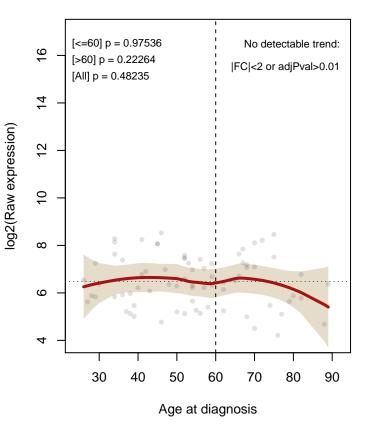
#### KRT5 (non-ER binding)

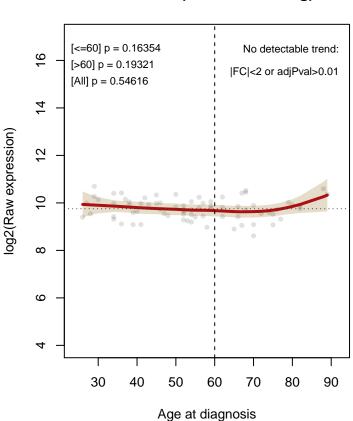




#### L3MBTL1 (non-ER binding)

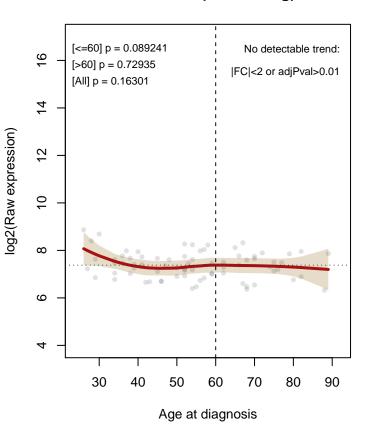
#### L3MBTL2 (non-ER binding)

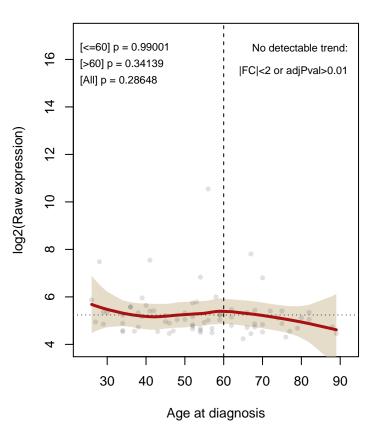




#### L3MBTL3 (ER binding)

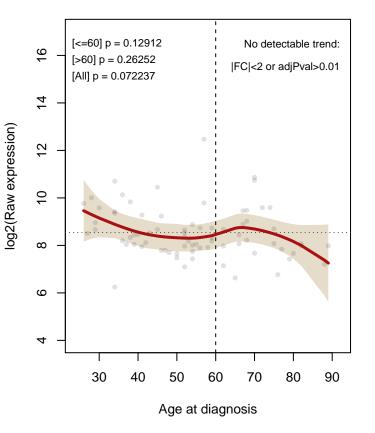
#### L3MBTL4 (non-ER binding)

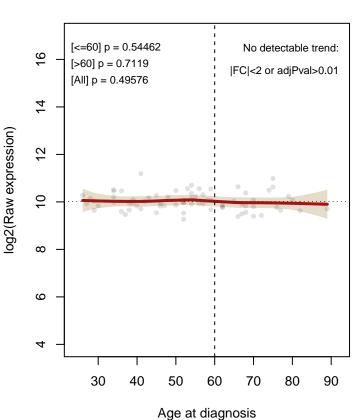




LEF1 (non-ER binding)

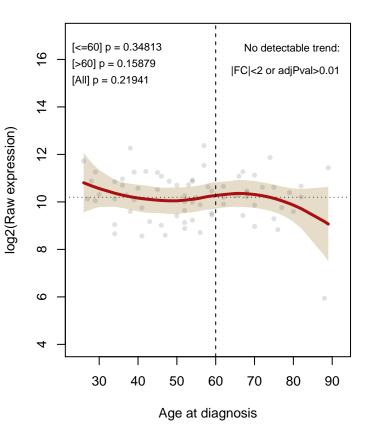
MAP2K1 (non-ER binding)

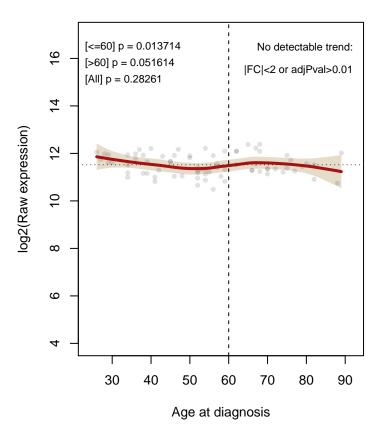






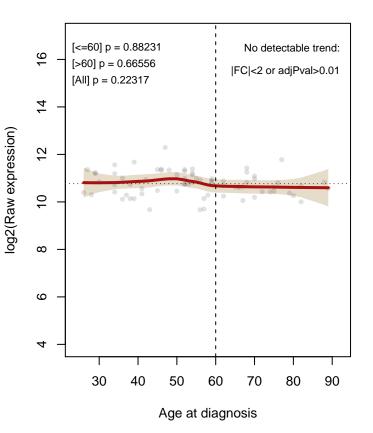
#### MAPK1 (non-ER binding)

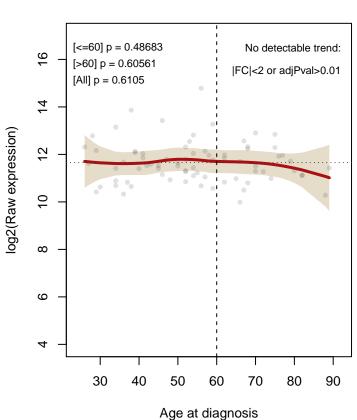


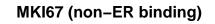


#### MAPK3 (non-ER binding)

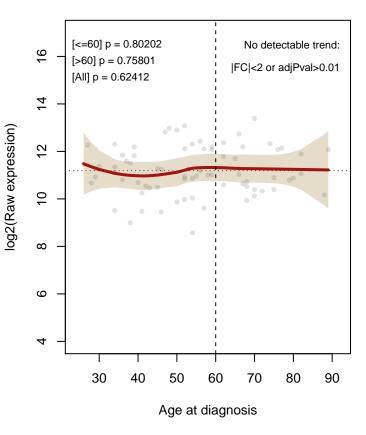
MDM2 (non-ER binding)

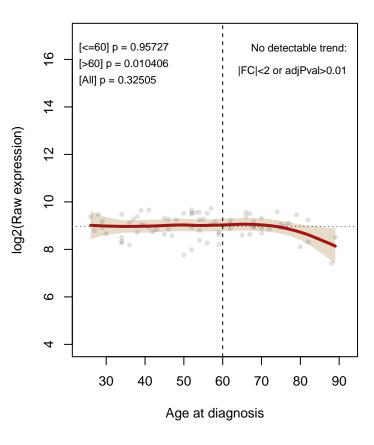






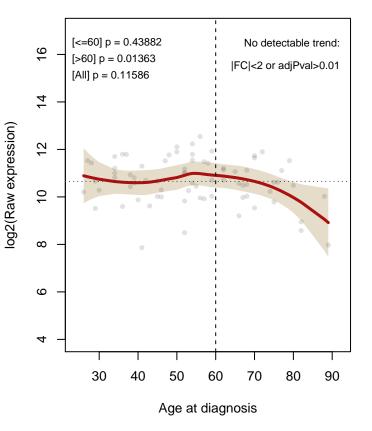
#### MTF2 (non-ER binding)

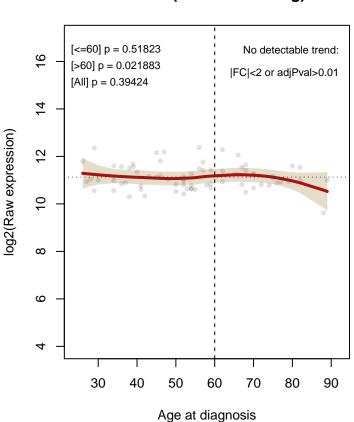




#### MYC (non-ER binding)

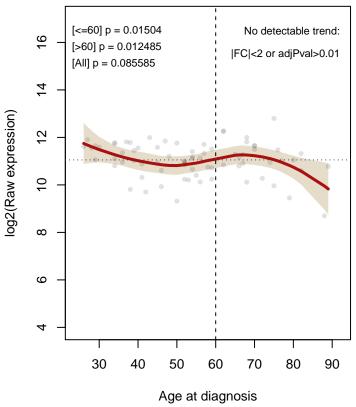
NCOA6 (non-ER binding)

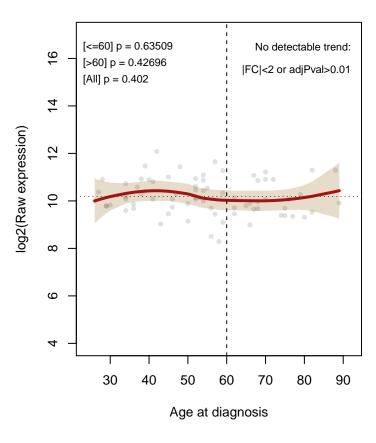




# NCOR1 (non-ER binding)

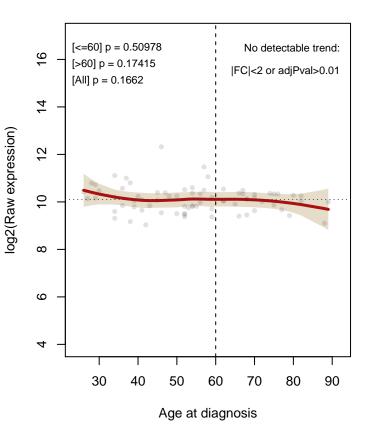
### NES (non-ER binding)

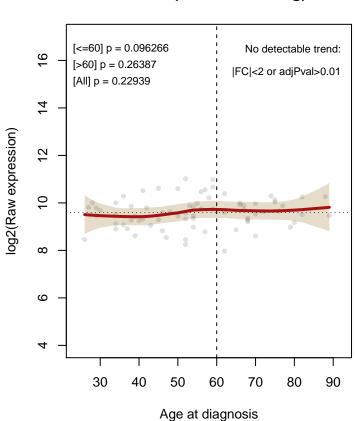




### NFKB1 (non-ER binding)

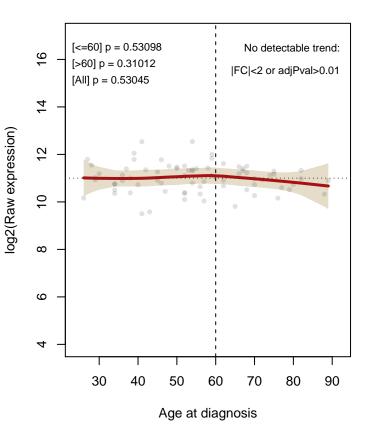
NFKB2 (non-ER binding)

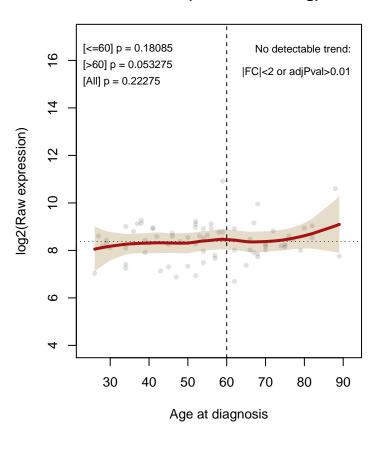




### NFKBIA (non-ER binding)

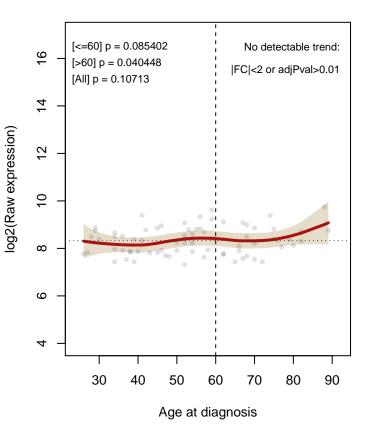
### NFKBIB (non-ER binding)

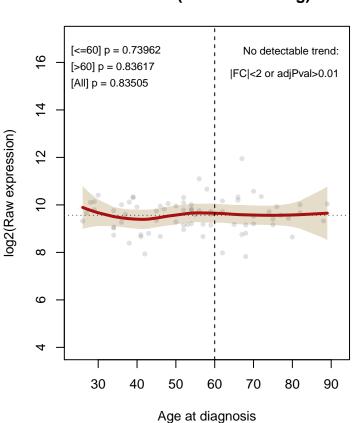




### **NFKBIE** (non-ER binding)

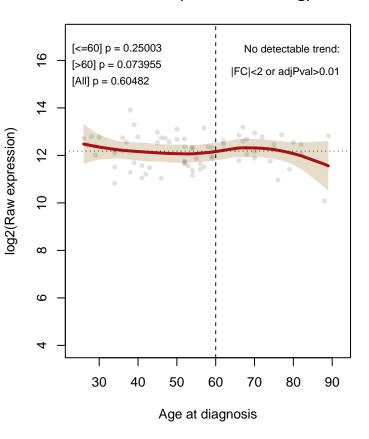
### NOTCH1 (non-ER binding)

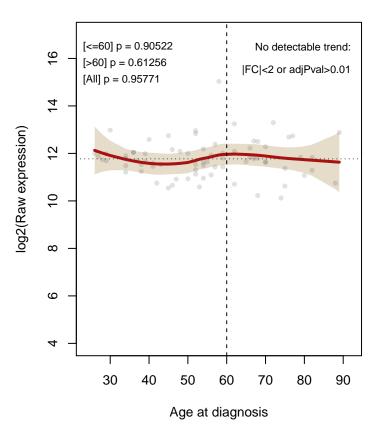




### NOTCH2 (non-ER binding)

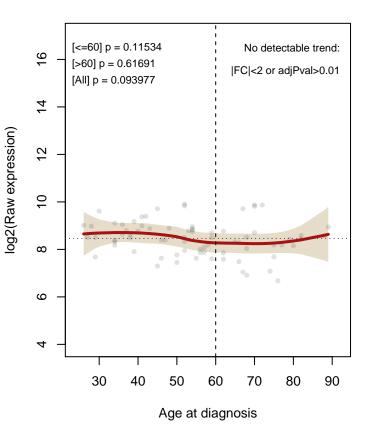
### NOTCH3 (non-ER binding)

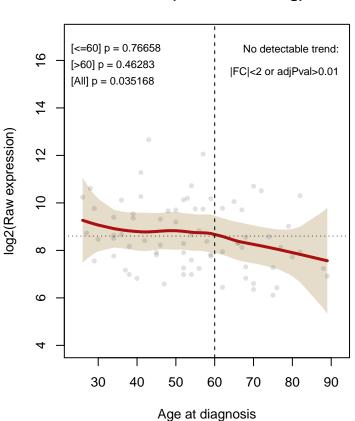


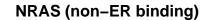


# NOTCH4 (non-ER binding)

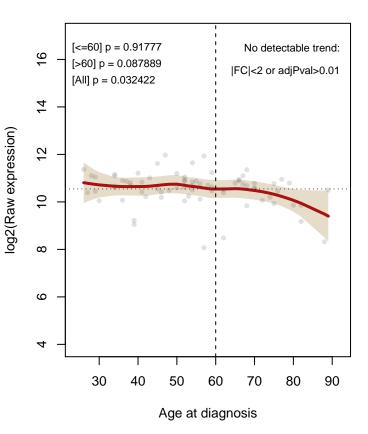
### NR4A2 (non-ER binding)

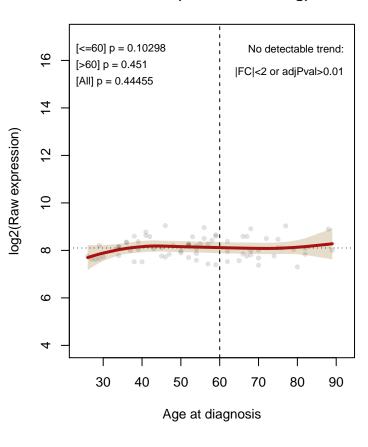






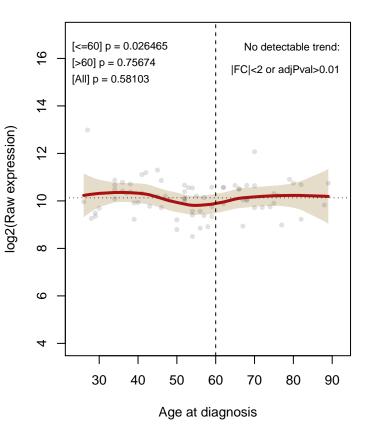
### PCGF1 (non-ER binding)

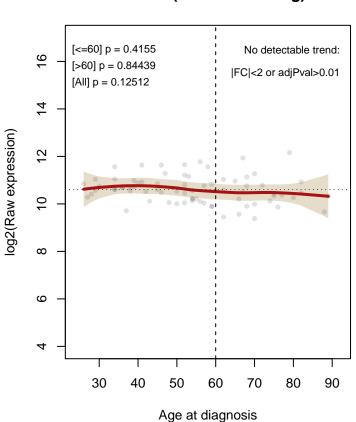




### PCGF2 (non-ER binding)

### PCGF3 (non-ER binding)







### [<=60] p = 0.019803No detectable trend:



16

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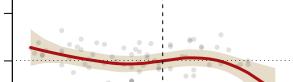
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log2(Raw expression)

log2(Raw expression)



# $\infty$ 9

Age at diagnosis

60

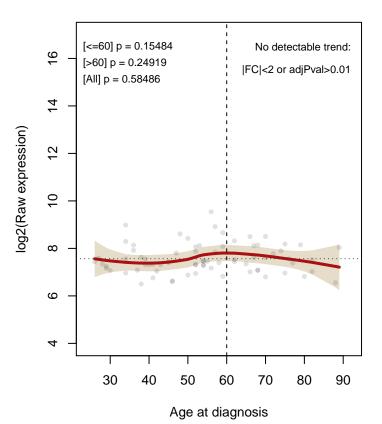
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### PCGF6 (non-ER binding)

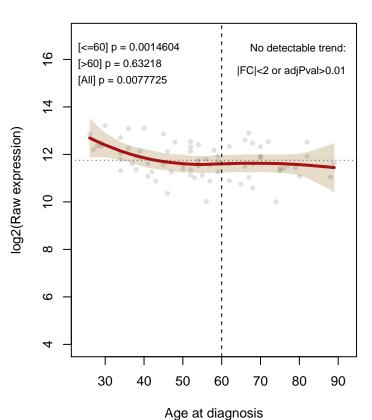


### PDGFRA (non-ER binding)

# [<=60] p = 0.062453No detectable trend: 16 [>60] p = 0.43864 |FC|<2 or adjPval>0.01 [All] p = 0.0584684 12 10 $\infty$ 9 30 40 50 60 70 80 90

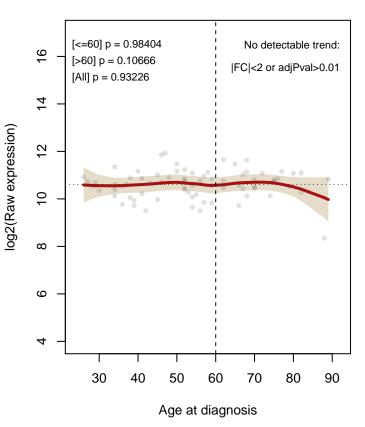
Age at diagnosis

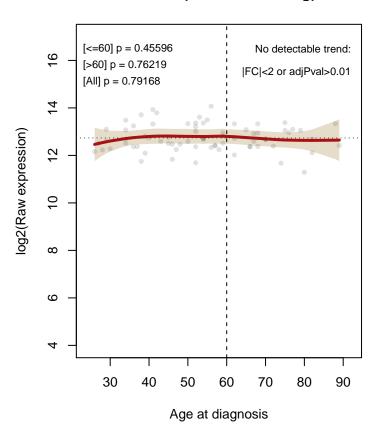
### PDGFRB (non-ER binding)





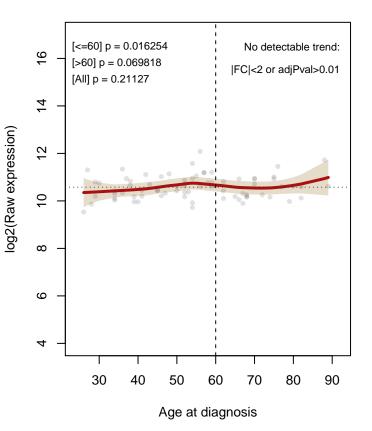
### PEBP1 (non-ER binding)

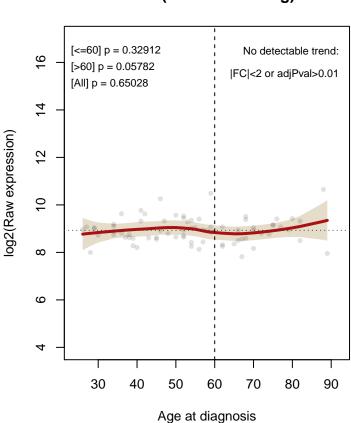


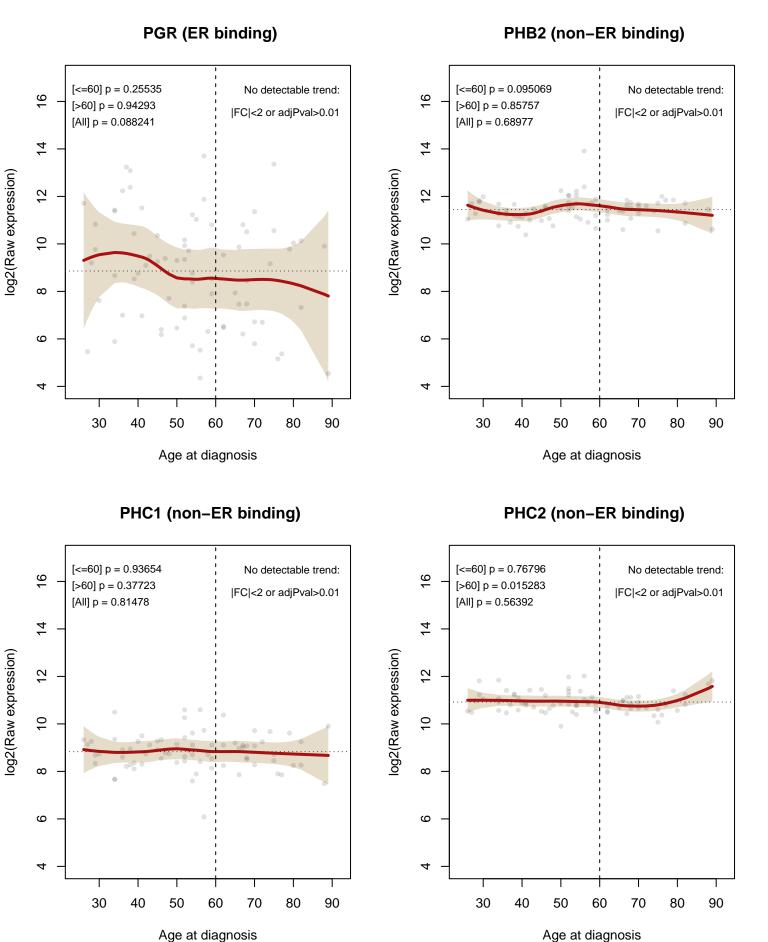


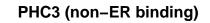
# PELP1 (non-ER binding)

PGP (non-ER binding)

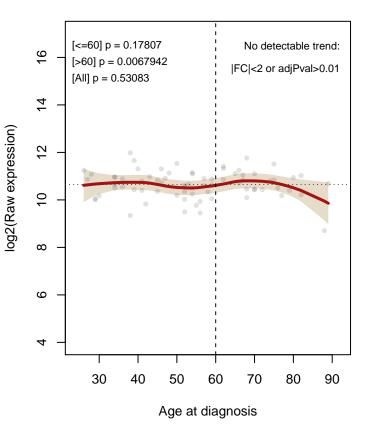


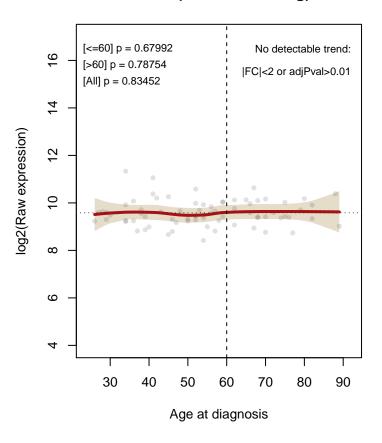






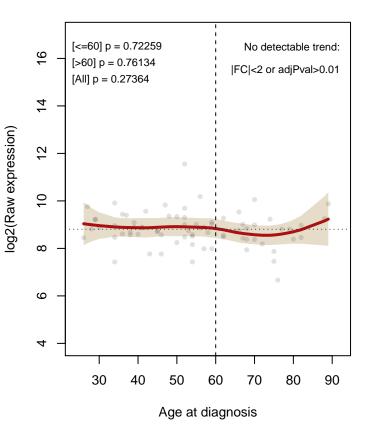
### PHF1 (non-ER binding)

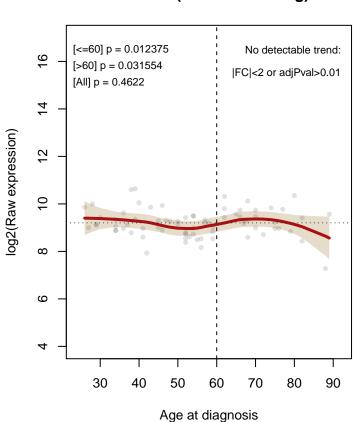




### PHF19 (non-ER binding)

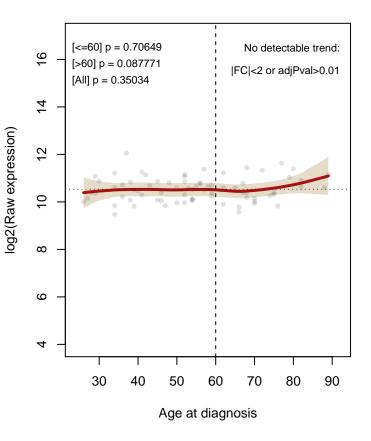
### PIK3CA (non-ER binding)

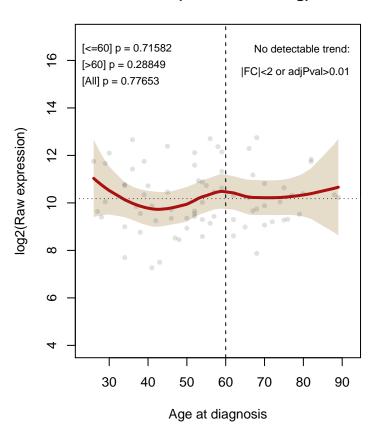






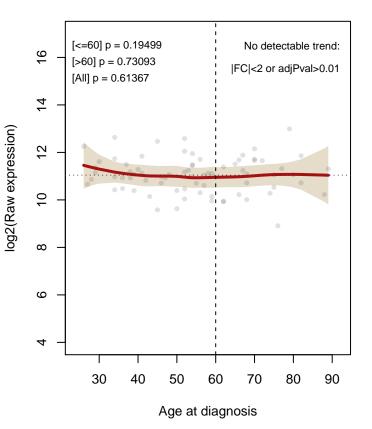
### PLAU (non-ER binding)

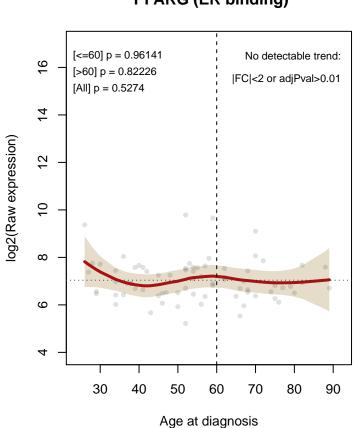


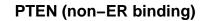


### PODXL (non-ER binding)

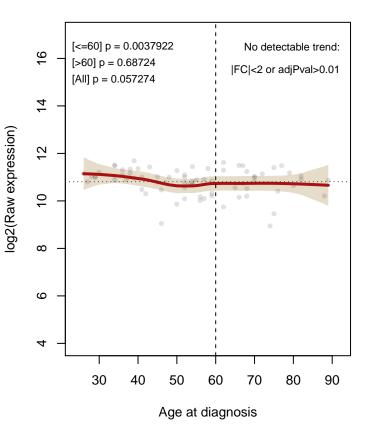
**PPARG (ER binding)** 

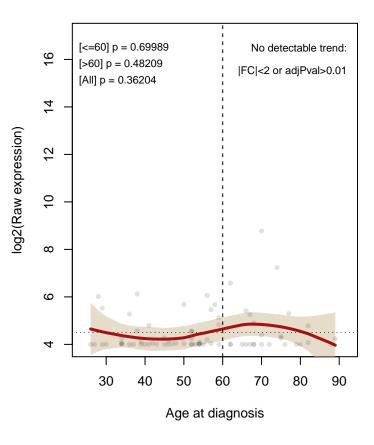






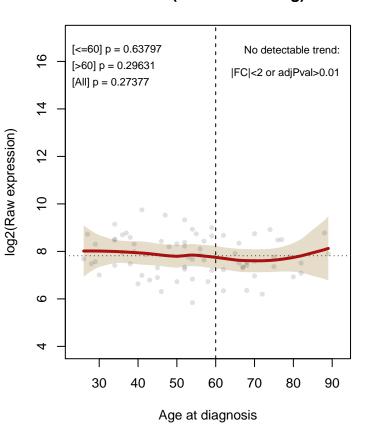
### **PYDC1** (non-ER binding)

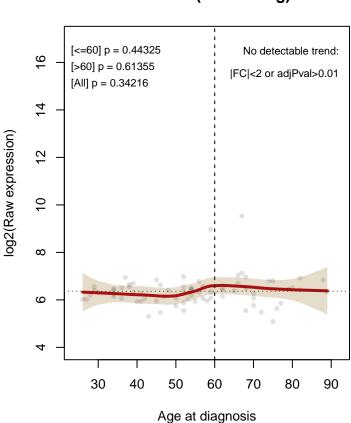




### RAD51 (non-ER binding)

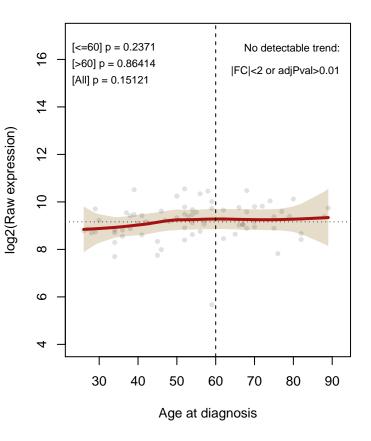
### RAD51B (ER binding)

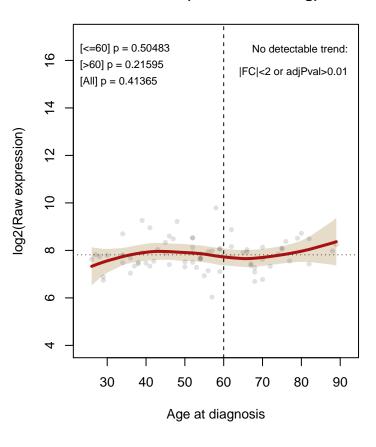




### RAD51C (non-ER binding)

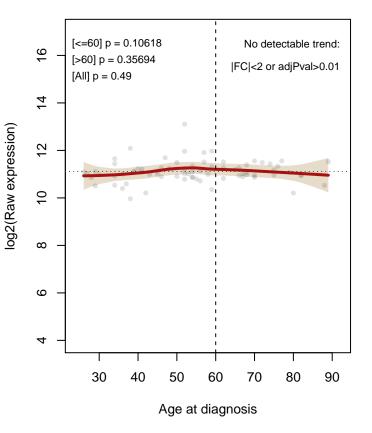
### RAD51D (non-ER binding)

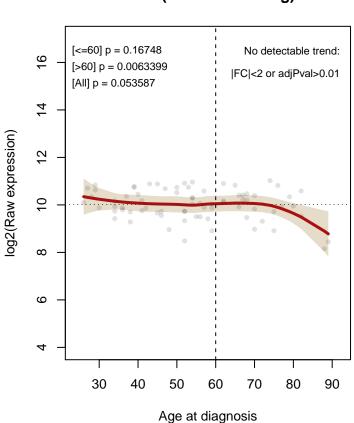


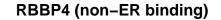


RAF1 (non-ER binding)

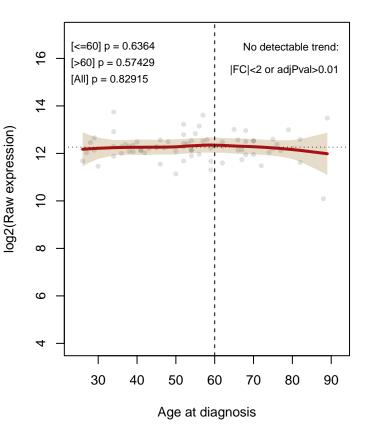
**RB1 (non-ER binding)** 

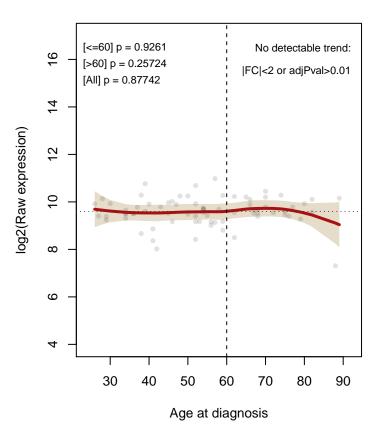






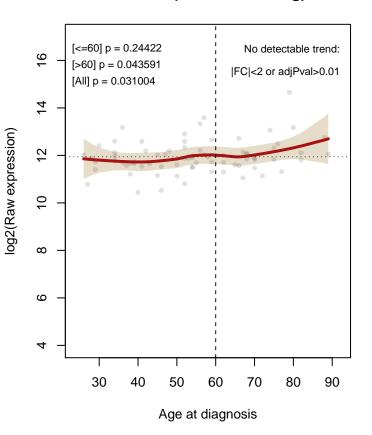
### RBBP5 (non-ER binding)

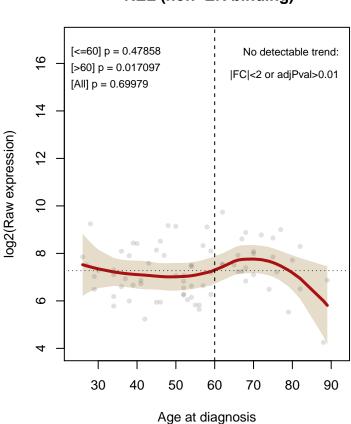


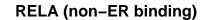


### RBBP7 (non-ER binding)

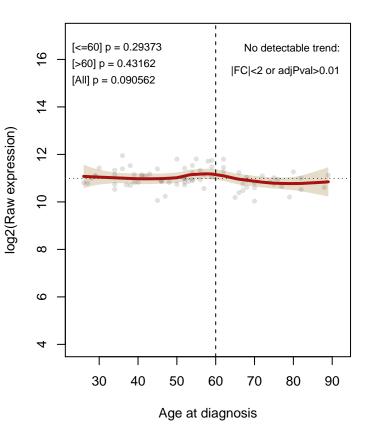
**REL** (non-ER binding)

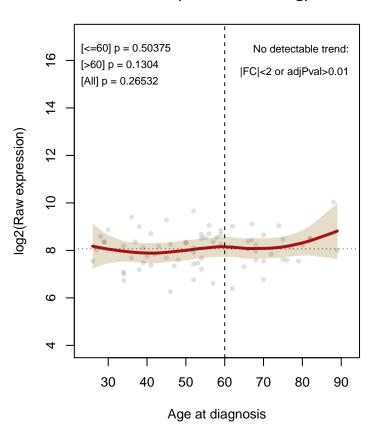






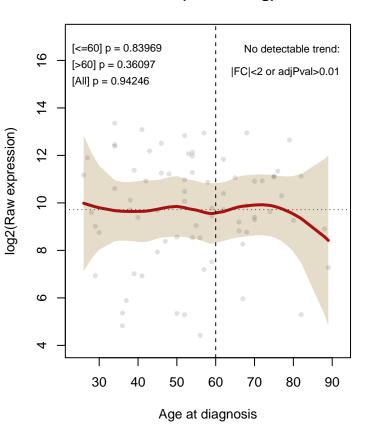
### **RELB** (non-ER binding)

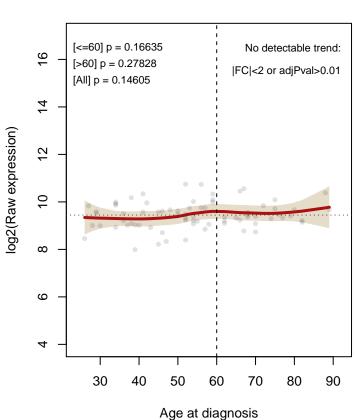




**RET (ER binding)** 

RING1 (non-ER binding)





### RNF2 (non-ER binding) **RUNX1 (ER binding)** [<=60] p = 0.35351No detectable trend: [<=60] p = 0.019197 No detectable trend: 16 16 [>60] p = 0.022482 [>60] p = 0.42635 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.89635[AII] p = 0.00739784 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 **RUNX3 (non-ER binding)** RYBP (non-ER binding) [<=60] p = 0.3485No detectable trend: [<=60] p = 0.98935No detectable trend: 16 16 [>60] p = 0.66181 [>60] p = 0.91362 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.40309[All] p = 0.880394 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

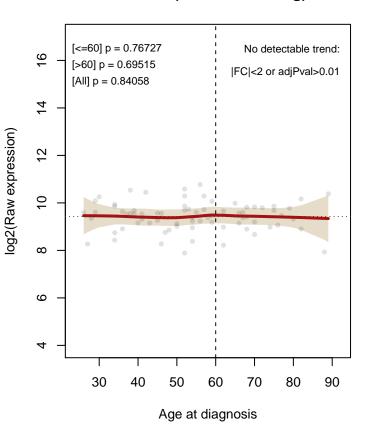
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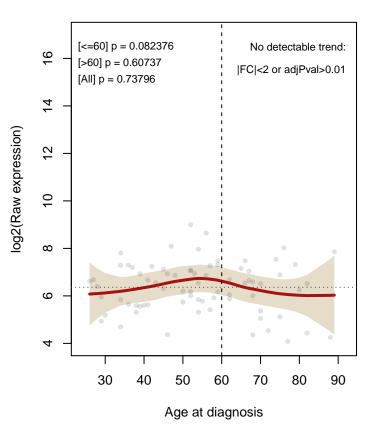
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### **SCMH1** (non-ER binding)

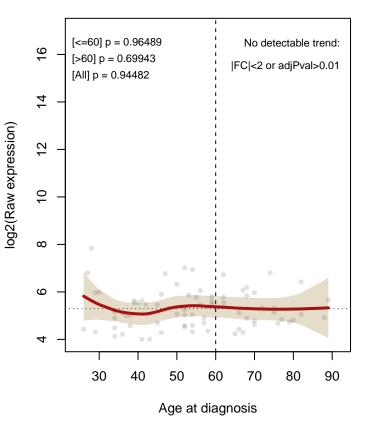
### SCML2 (non-ER binding)

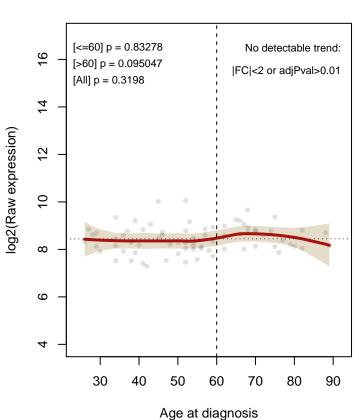




SCML4 (non-ER binding)

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>0.01 |FC|<2 or adjPval>0.01 [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>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.062834[All] p = 0.197934 4 log2(Raw expression) log2(Raw expression) 12 12 10 10

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Age at diagnosis

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Age at diagnosis

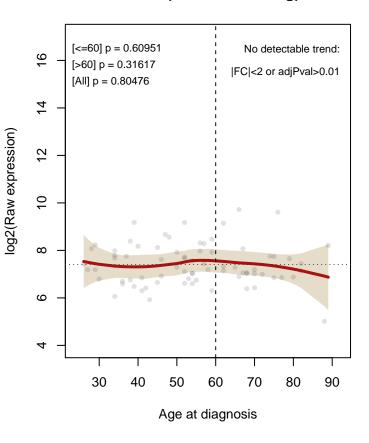
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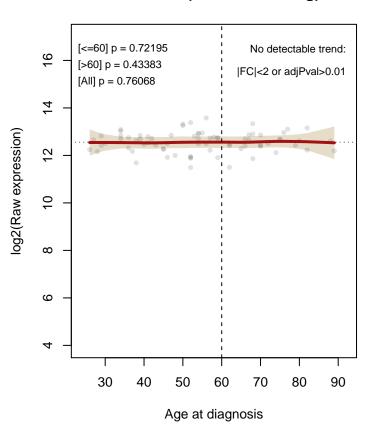
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### SKP2 (non-ER binding)

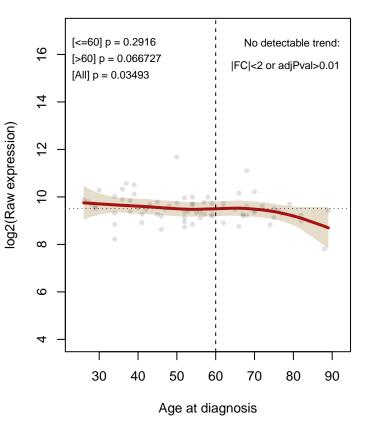
### SLC25A3 (non-ER binding)

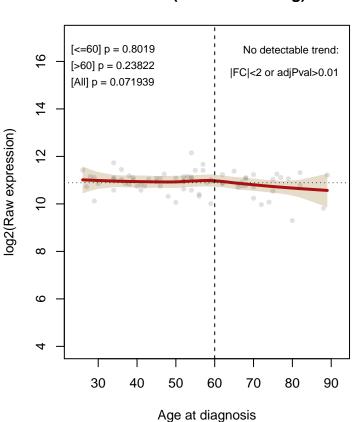




### **SMAD1** (non-ER binding)

SMAD2 (non-ER binding)





# **SMAD3 (ER binding)** [<=60] p = 0.38696No detectable trend: 16 [>60] p = 0.12864 |FC|<2 or adjPval>0.01 [All] p = 0.316524 log2(Raw expression) 12 10

 $\infty$ 

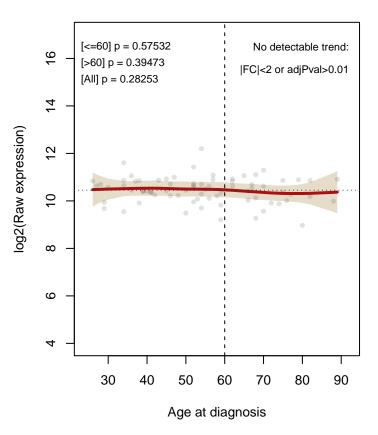
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### SMAD4 (non-ER binding)



SMAD5 (non-ER binding)

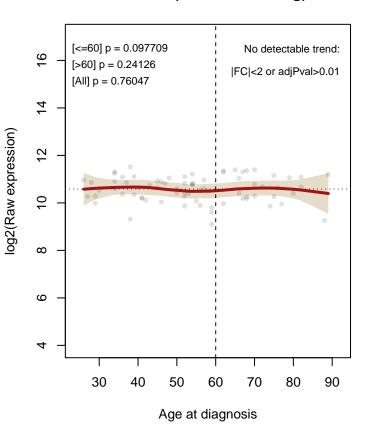
Age at diagnosis

60

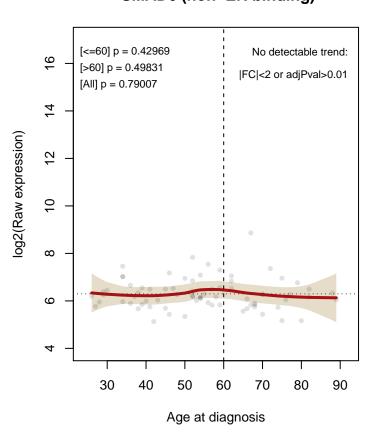
70

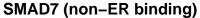
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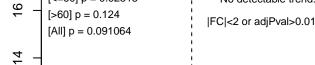


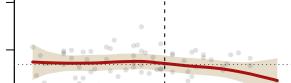
### SMAD6 (non-ER binding)





# [<=60] p = 0.92513No detectable trend:





log2(Raw expression)

12

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Age at diagnosis

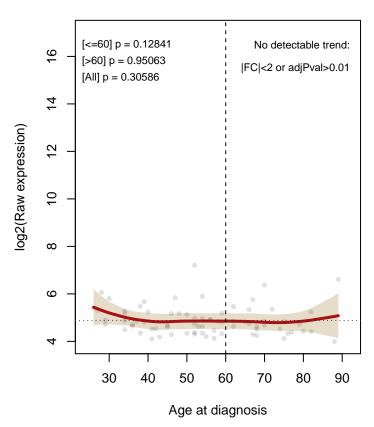
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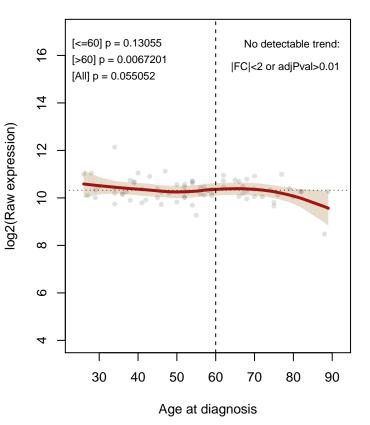
80

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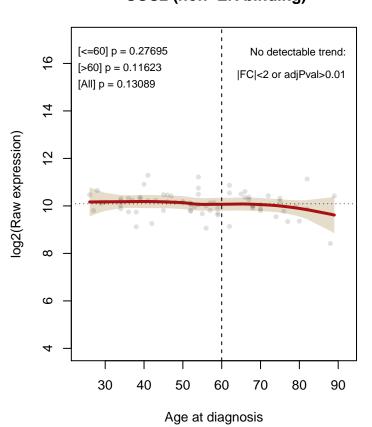
# SMAD9 (non-ER binding)

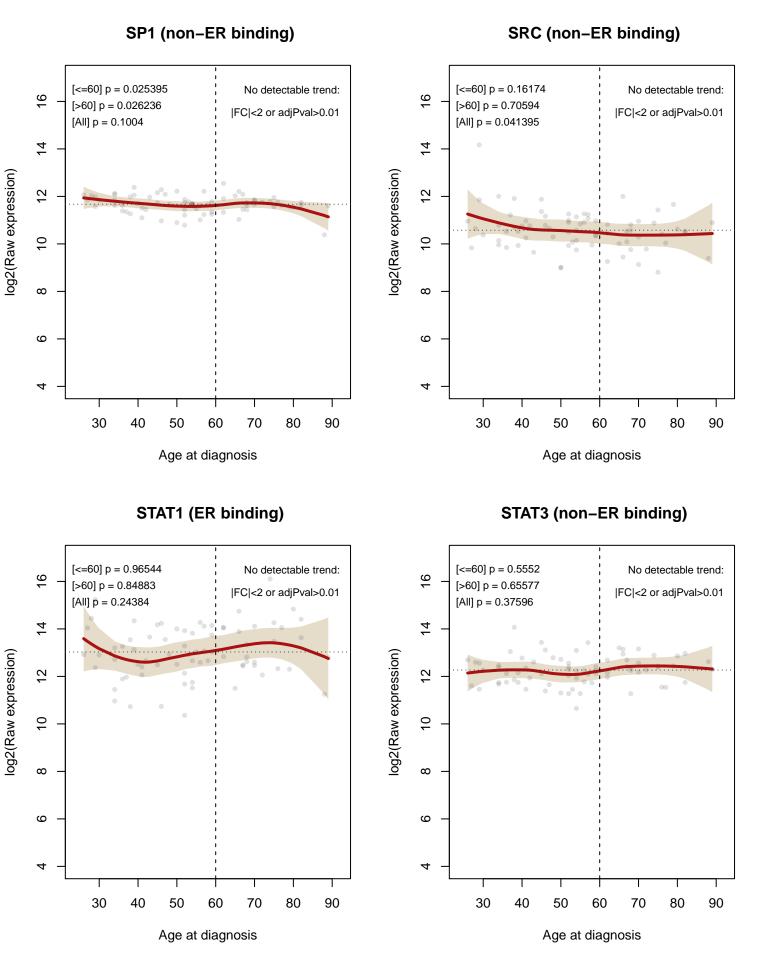


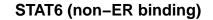
### SOS1 (non-ER binding)



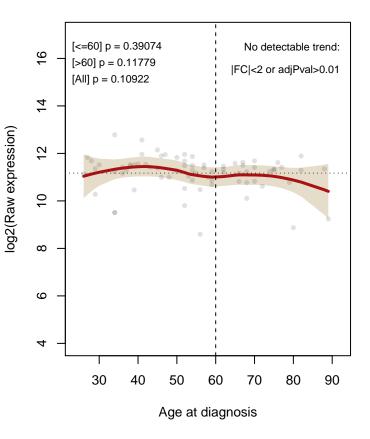
SOS2 (non-ER binding)

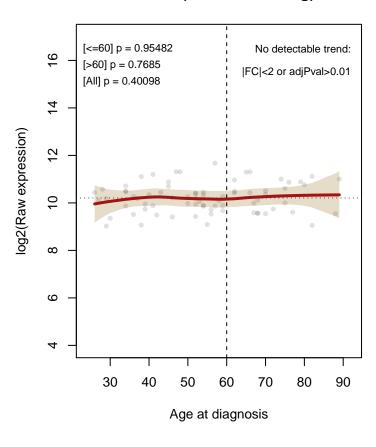






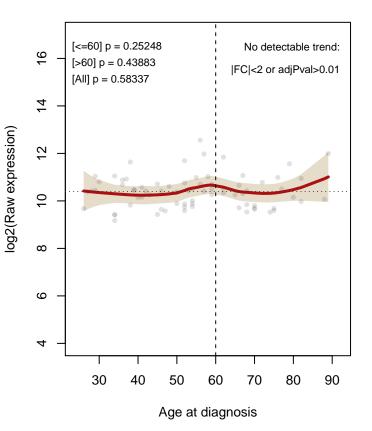
### SUZ12 (non-ER binding)

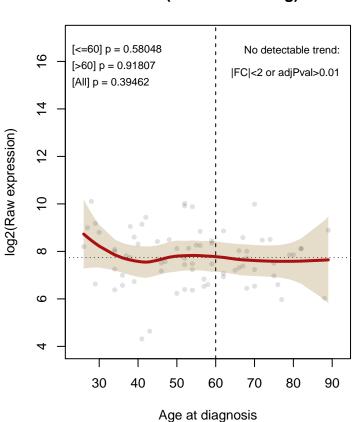




### TCF3 (non-ER binding)

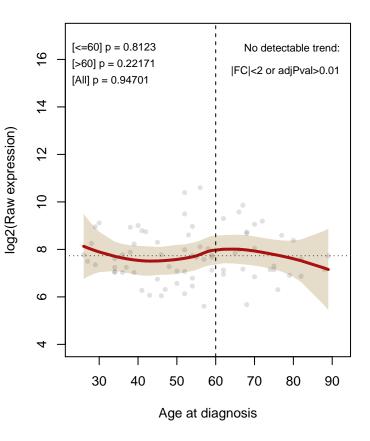
TCF7 (non-ER binding)

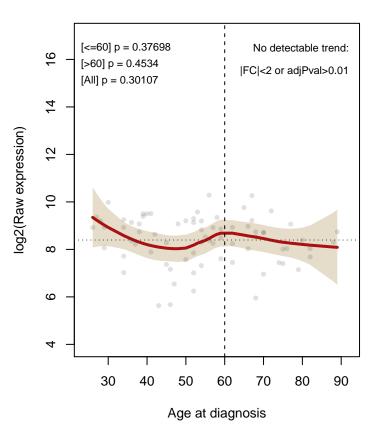






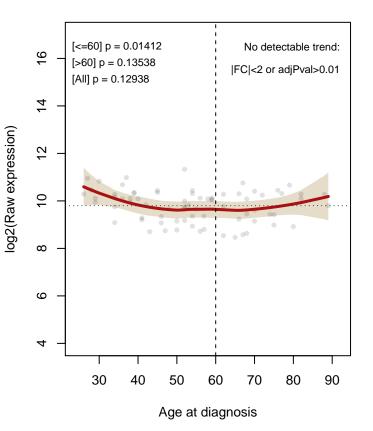
### TCF7L2 (non-ER binding)

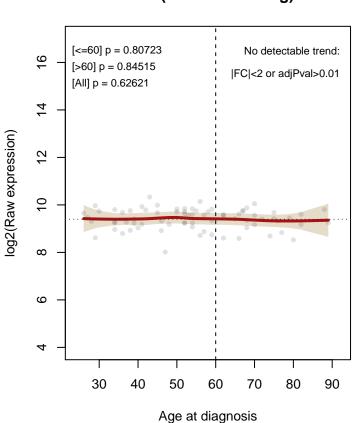


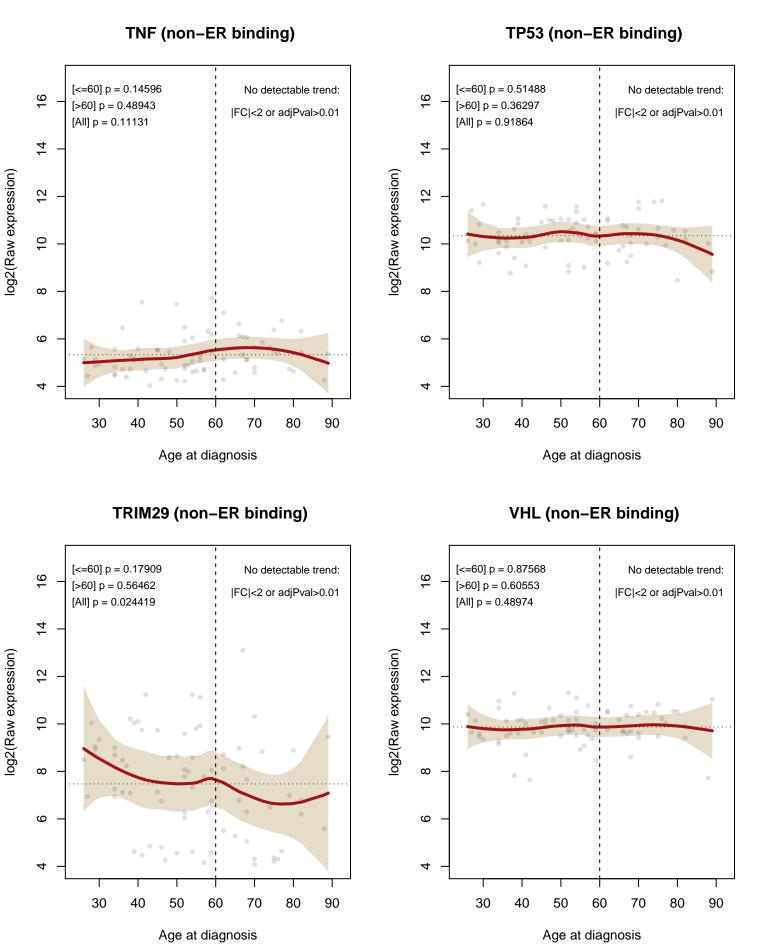


### TGFB1 (non-ER binding)

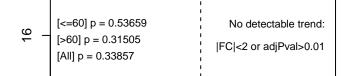
TK2 (non-ER binding)

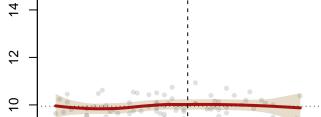




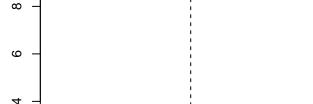








log2(Raw expression)



50

30

40

Age at diagnosis

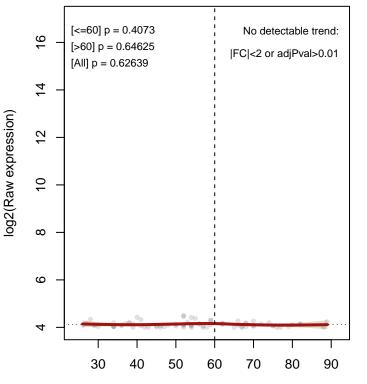
60

70

80

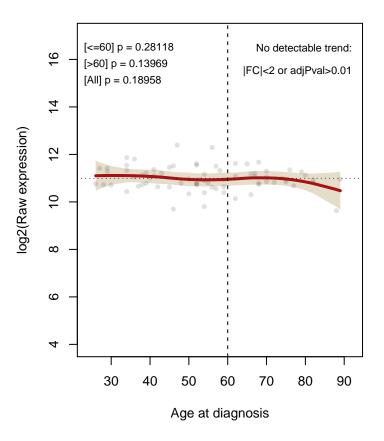
90

# WNT1 (non-ER binding)

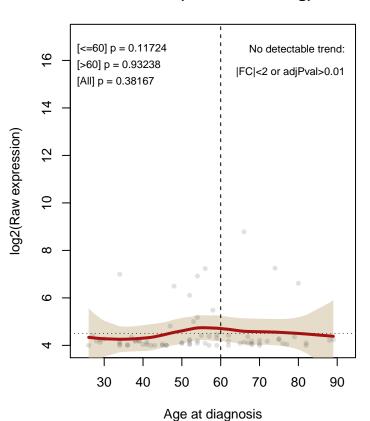


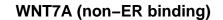
Age at diagnosis

### WHSC1 (non-ER binding)

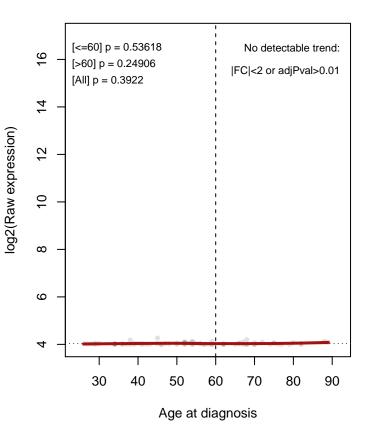


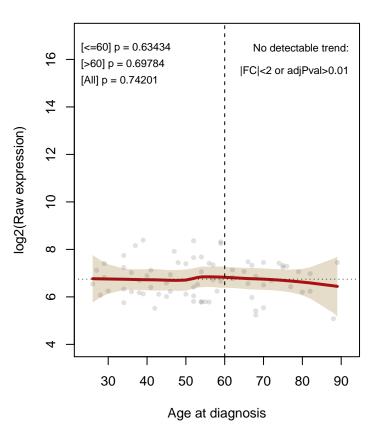
### WNT3A (non-ER binding)





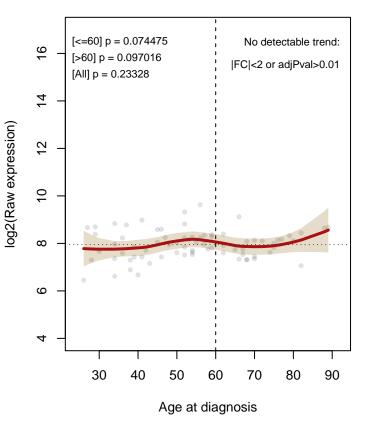
### XRCC2 (non-ER binding)

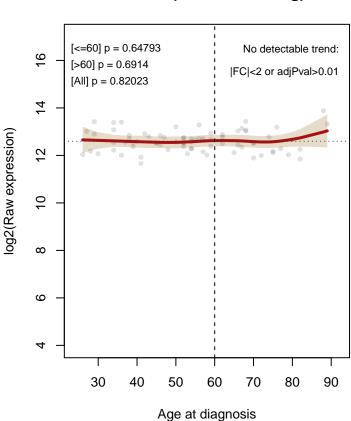




### XRCC3 (non-ER binding)

XRCC6 (non-ER binding)





### YAF2 (non-ER binding)

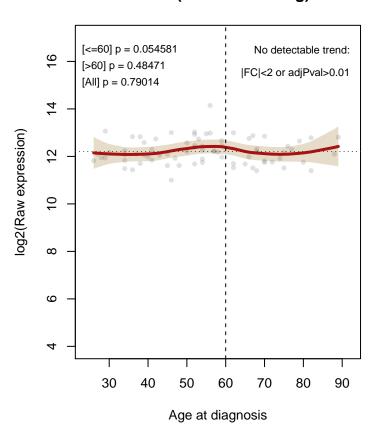
# | Second | S

30

40

50

### YBX1 (non-ER binding)



### YY1 (non-ER binding)

Age at diagnosis

60

70

80

90

