

#### 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|<4 or adjPval>0.01 |FC|<4 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|<4 or adjPval>0.01 |FC|<4 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|<4 or adjPval>0.01 [All] p = 0.0443174 log2(Raw expression) 12 10

 $\infty$ 

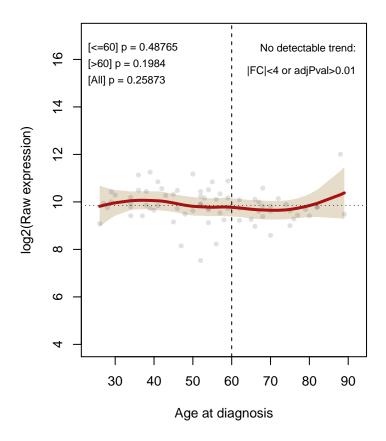
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#### **BCL3 (non-ER binding)**



BIRC5 (non-ER binding)

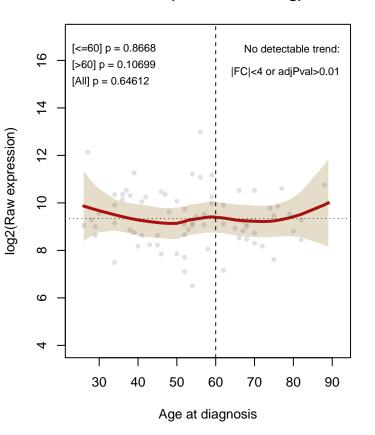
Age at diagnosis

60

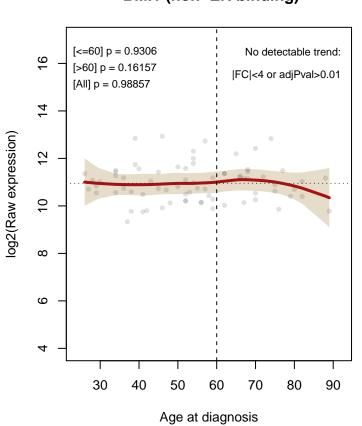
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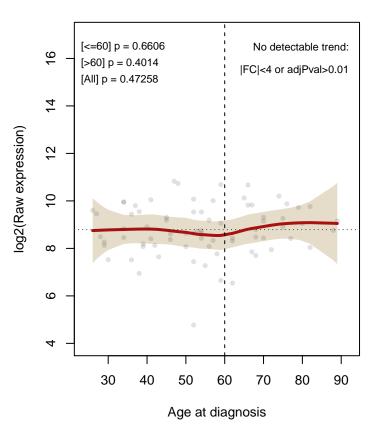


#### **BMI1 (non-ER binding)**



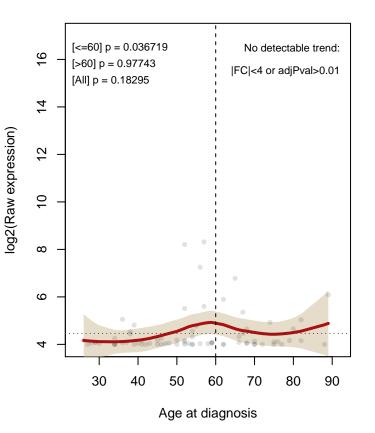
# BMX (non–ER binding) | Color | Color

#### BRCA1 (non-ER binding)

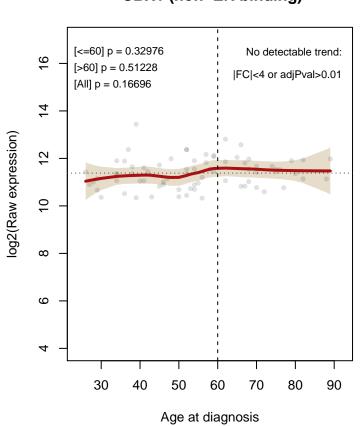


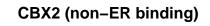
CA9 (non-ER binding)

Age at diagnosis

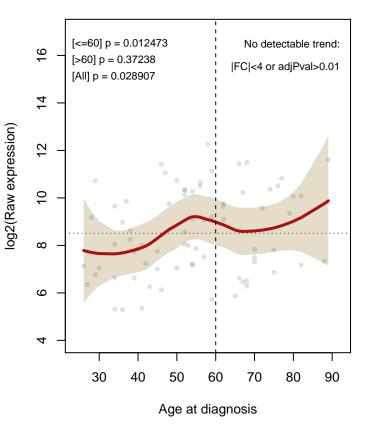


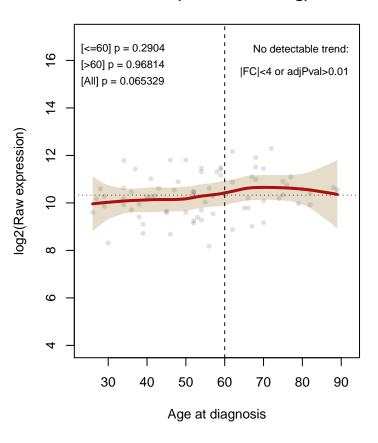
#### CBX1 (non-ER binding)





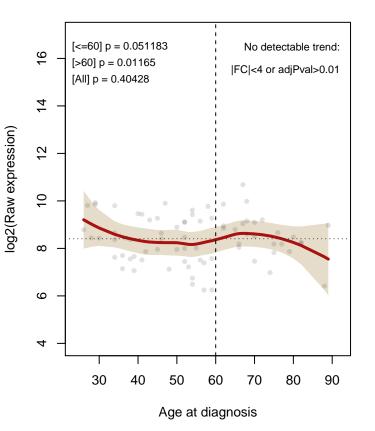
#### CBX4 (non-ER binding)

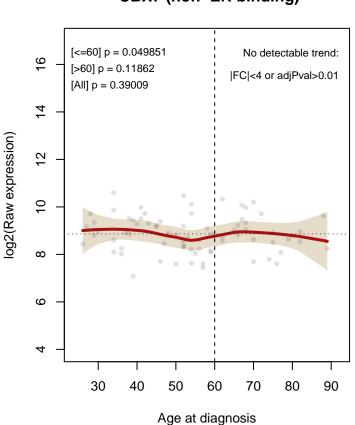


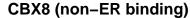


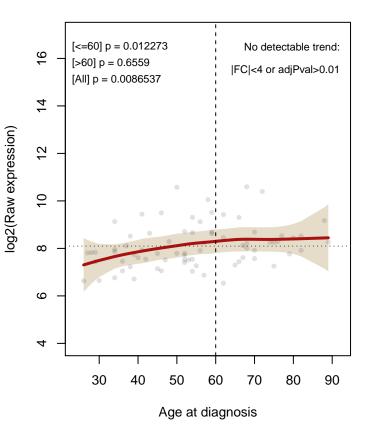
#### CBX6 (non-ER binding)

**CBX7 (non-ER binding)** 

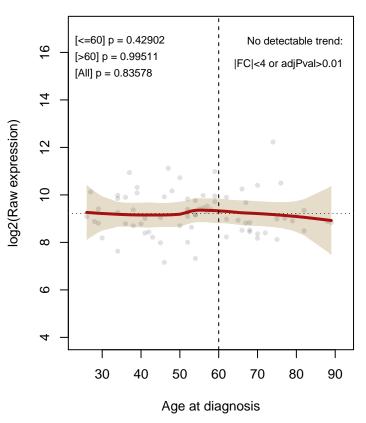








## CCNA2 (non-ER binding)



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

# [<=60] p = 0.54908 No detectable trend: 16 [>60] p = 0.66401 |FC|<4 or adjPval>0.01 [All] p = 0.934424 log2(Raw expression) 12 19 $\infty$ 9

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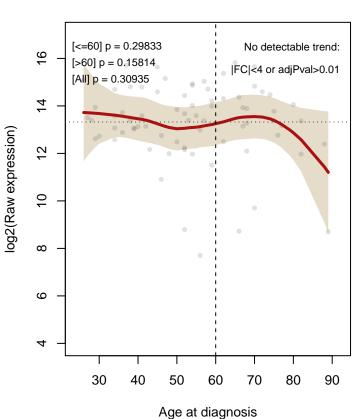
Age at diagnosis

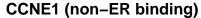
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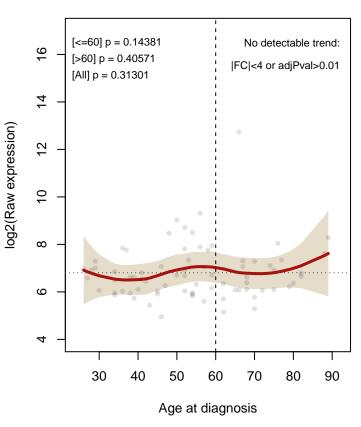
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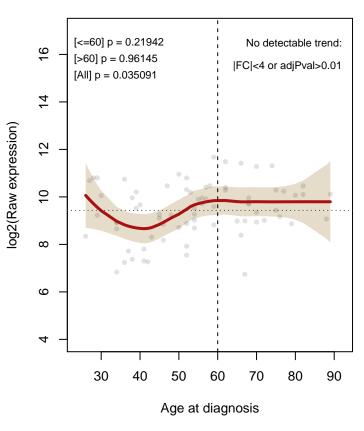
#### **CCND1 (ER binding)**





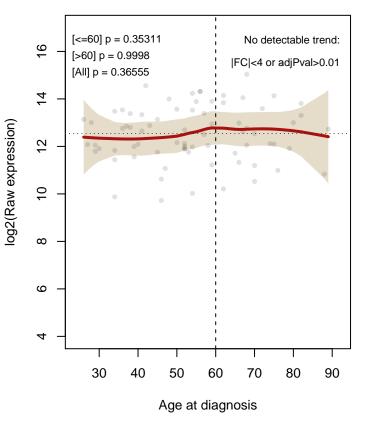
### CD163 (non-ER binding)

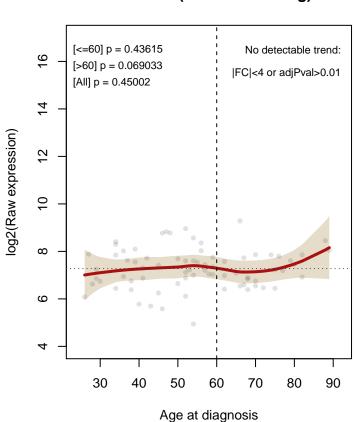


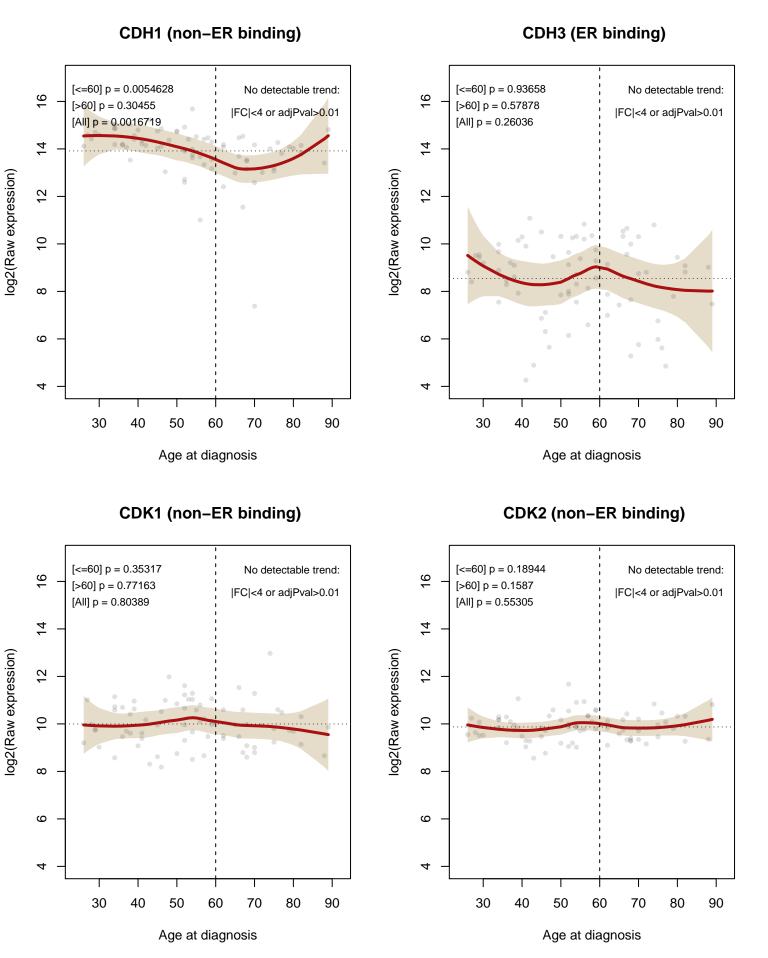


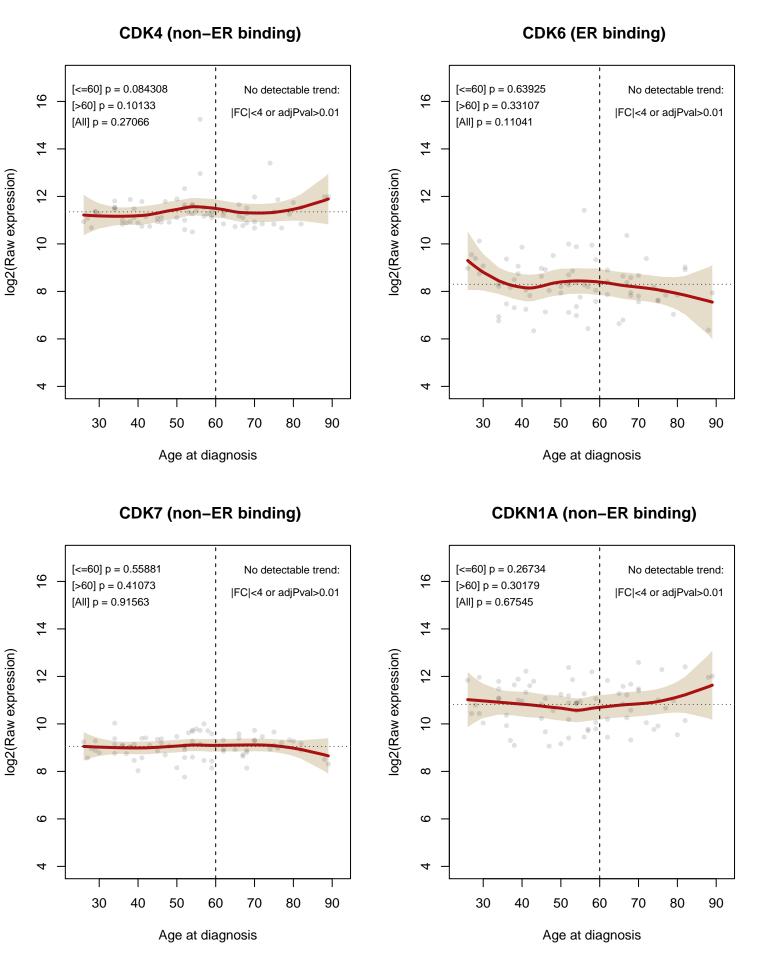
CD44 (non-ER binding)

CDC25C (non-ER binding)









#### CDKN1B (non-ER binding)

#### [<=60] p = 0.25855No detectable trend: [>60] p = 0.019409 |FC|<4 or adjPval>0.01

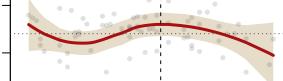


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log2(Raw expression)





Age at diagnosis

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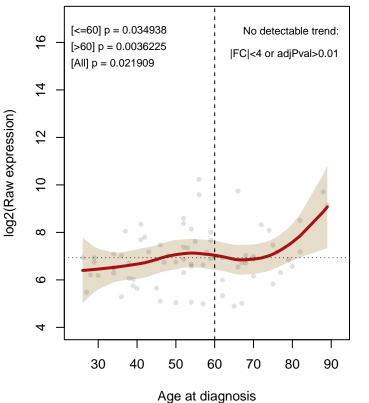
#### CDKN2A (non-ER binding)

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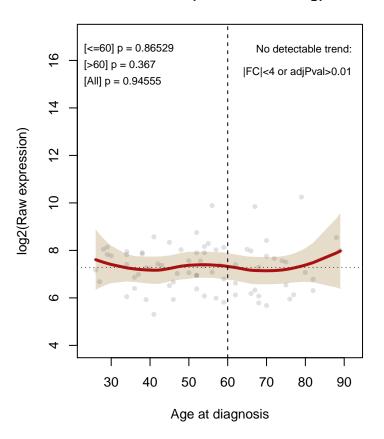
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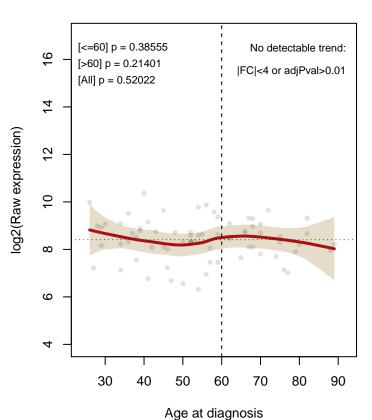
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#### CDKN1C (non-ER binding)

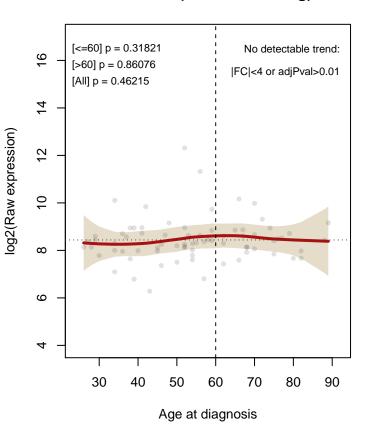


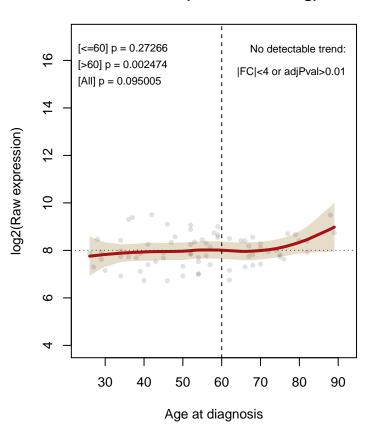
#### CDKN2B (non-ER binding)



#### CDKN2C (non-ER binding)

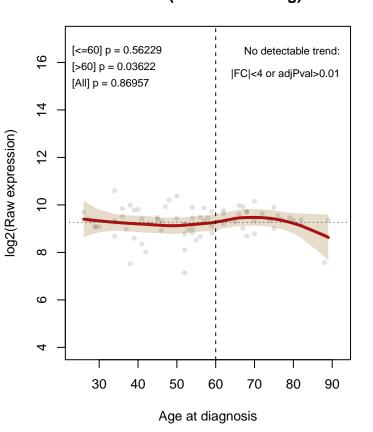
#### CDKN2D (non-ER binding)

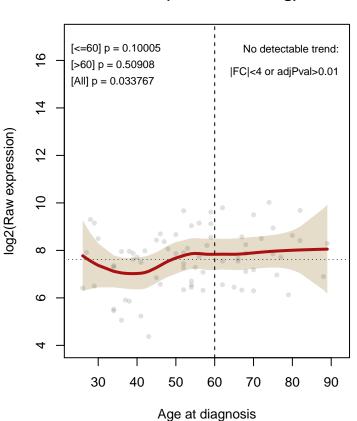




#### CHUK (non-ER binding)

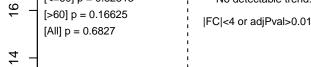
CIITA (non-ER binding)

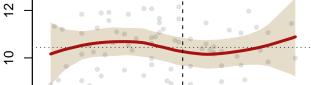




#### CLDN3 (non-ER binding)

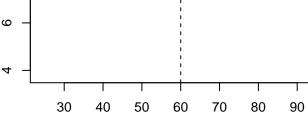
# [<=60] p = 0.82513No detectable trend:





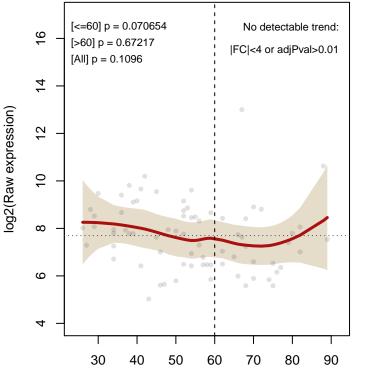
log2(Raw expression)





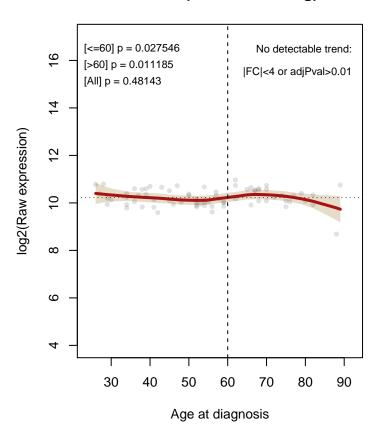
Age at diagnosis

**CRYAB** (non-ER binding)

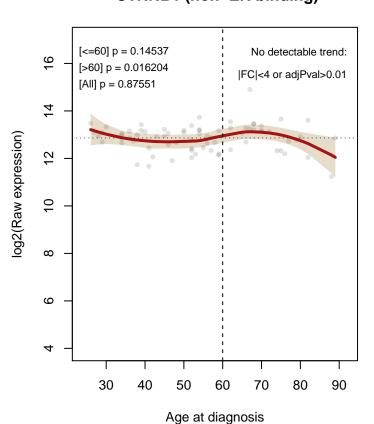


Age at diagnosis

#### CREB1 (non-ER binding)



#### CTNNB1 (non-ER binding)



#### **DLC1 (ER binding)** DMAP1 (non-ER binding) [<=60] p = 0.003966No detectable trend: [<=60] p = 0.062038 16 16 [>60] p = 0.92683 [>60] p = 0.36405 |FC|<4 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 Age at diagnosis **DNMT1** (non-ER binding) [<=60] p = 0.24559No detectable trend: [<=60] p = 0.7131416 16 [>60] p = 0.62636 [>60] p = 0.85072 |FC|<4 or adjPval>0.01 [AII] p = 0.70899[All] p = 0.46436

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ω

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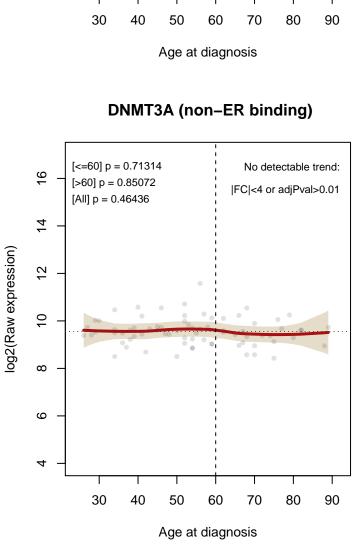
Age at diagnosis

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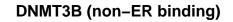
90

log2(Raw expression)

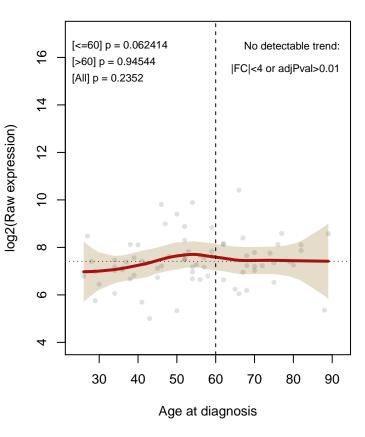


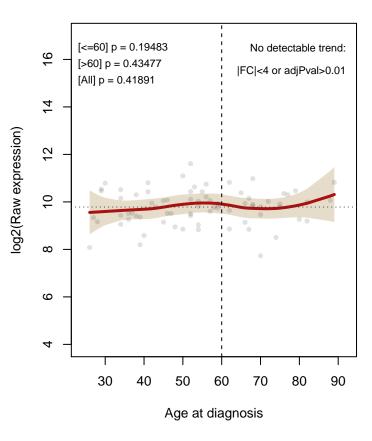
No detectable trend:

|FC|<4 or adjPval>0.01



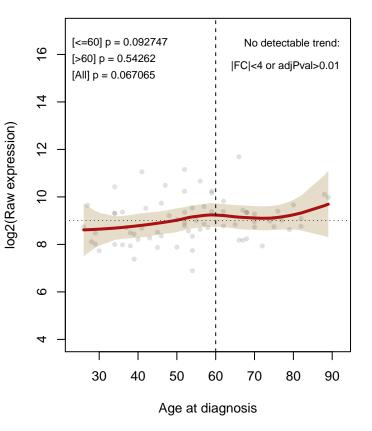
#### DVL1 (non-ER binding)

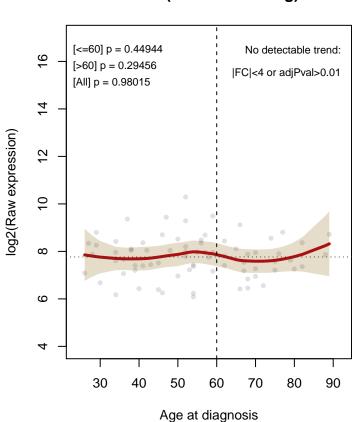


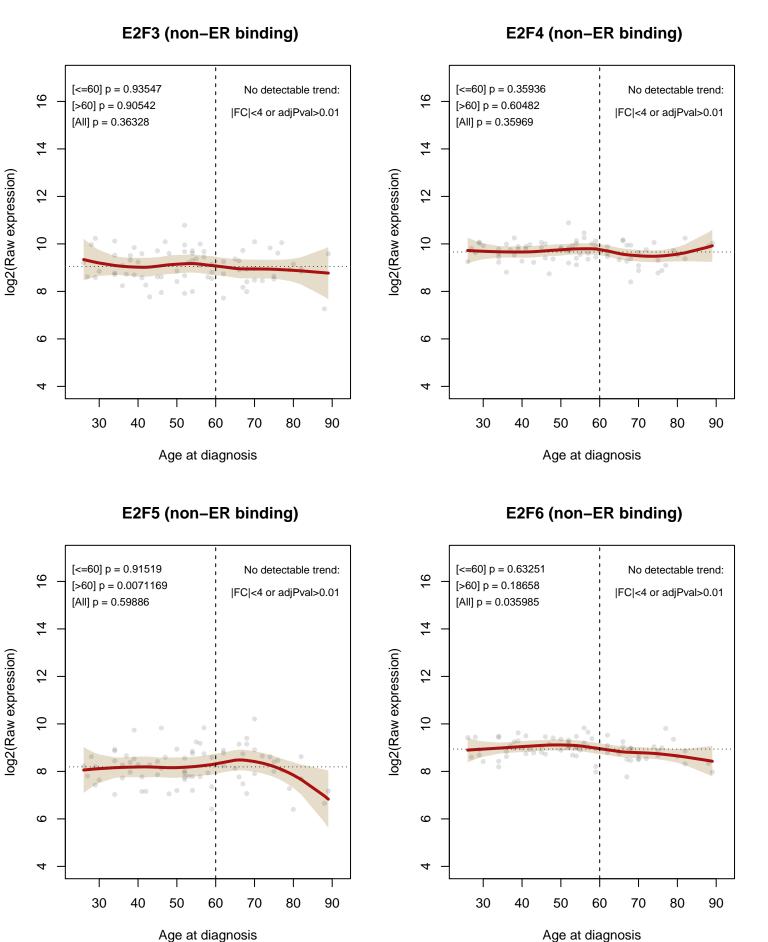


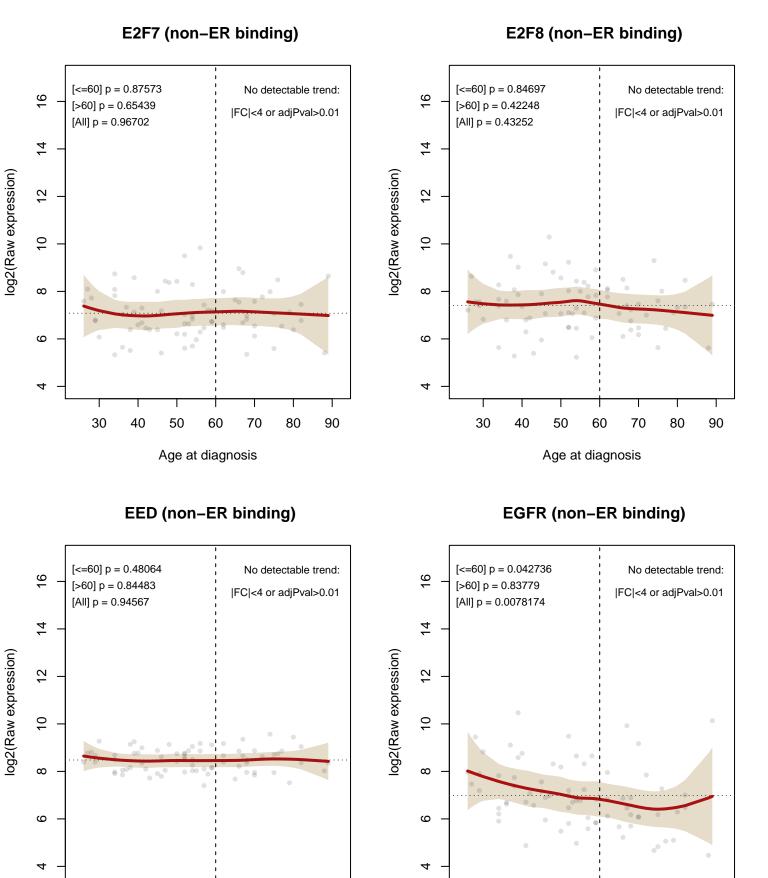
E2F1 (non-ER binding)

E2F2 (non-ER binding)



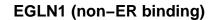




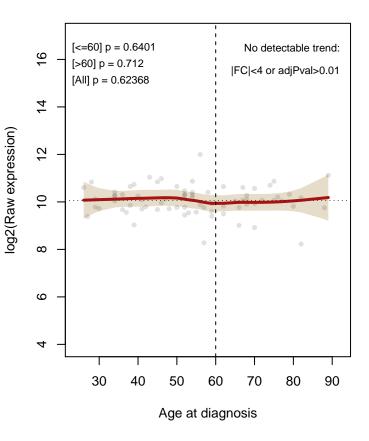


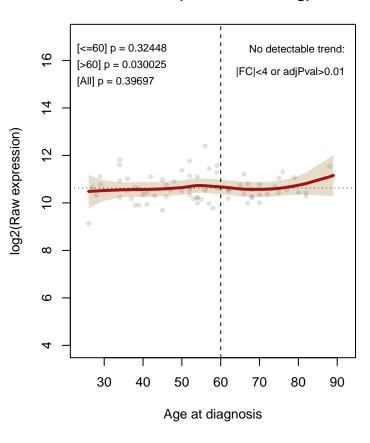
Age at diagnosis

Age at diagnosis



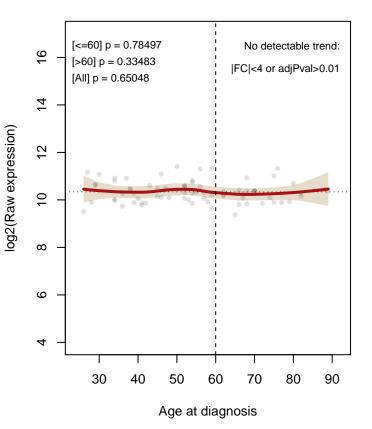
#### EHMT2 (non-ER binding)

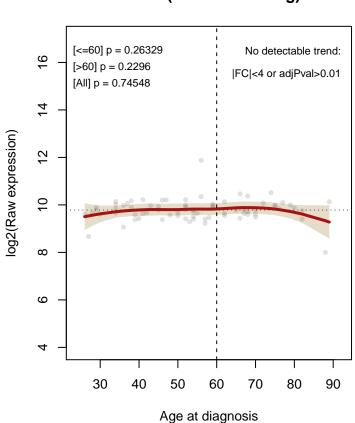




#### **ELAC2** (non-ER binding)

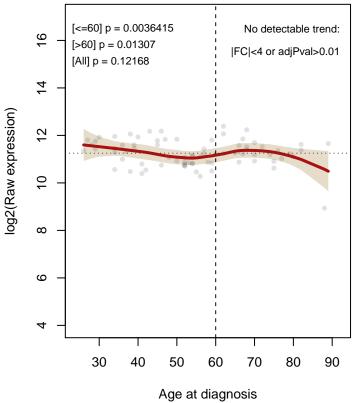
**ELK1 (non-ER binding)** 

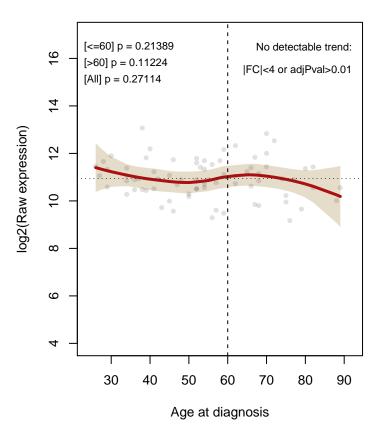




# EP300 (non-ER binding)

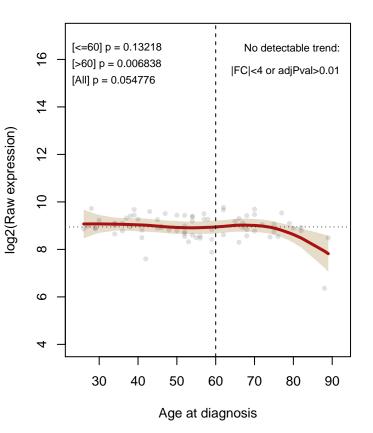
#### **EPAS1** (non-ER binding)

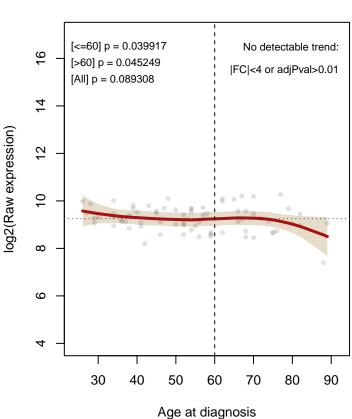




**EPC1 (non-ER binding)** 

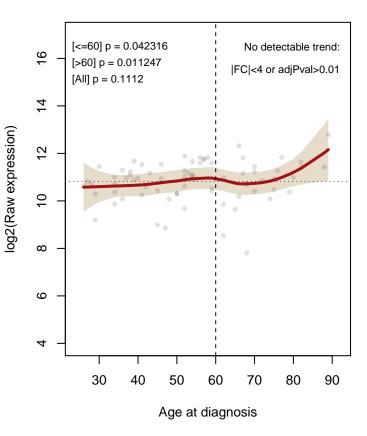
**EPC2** (non-ER binding)

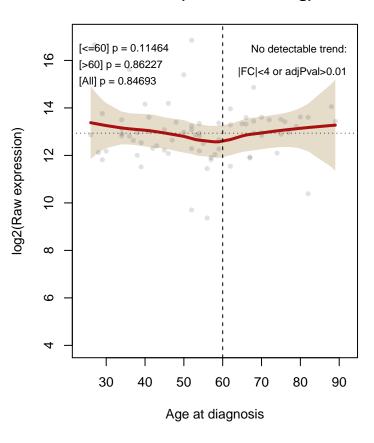






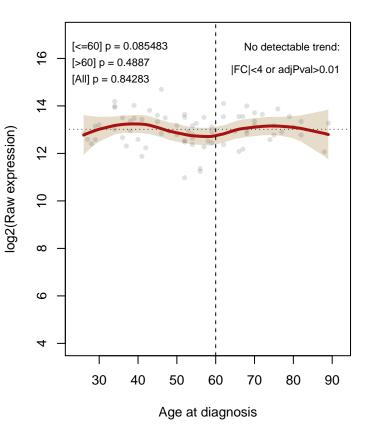
#### **ERBB2** (non-ER binding)

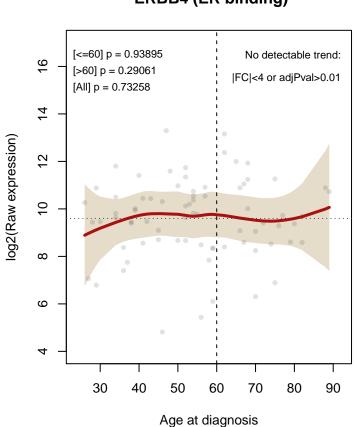


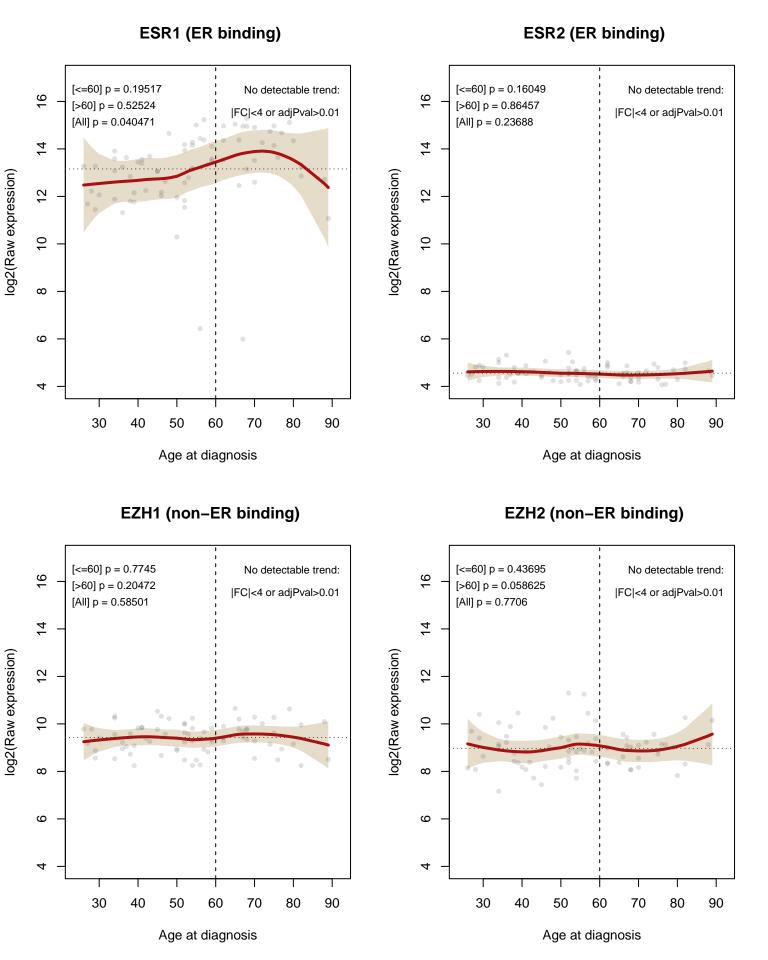


#### **ERBB3** (non-ER binding)

**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|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.6791[All] p = 0.116594 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 **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|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.59884[All] p = 0.218494 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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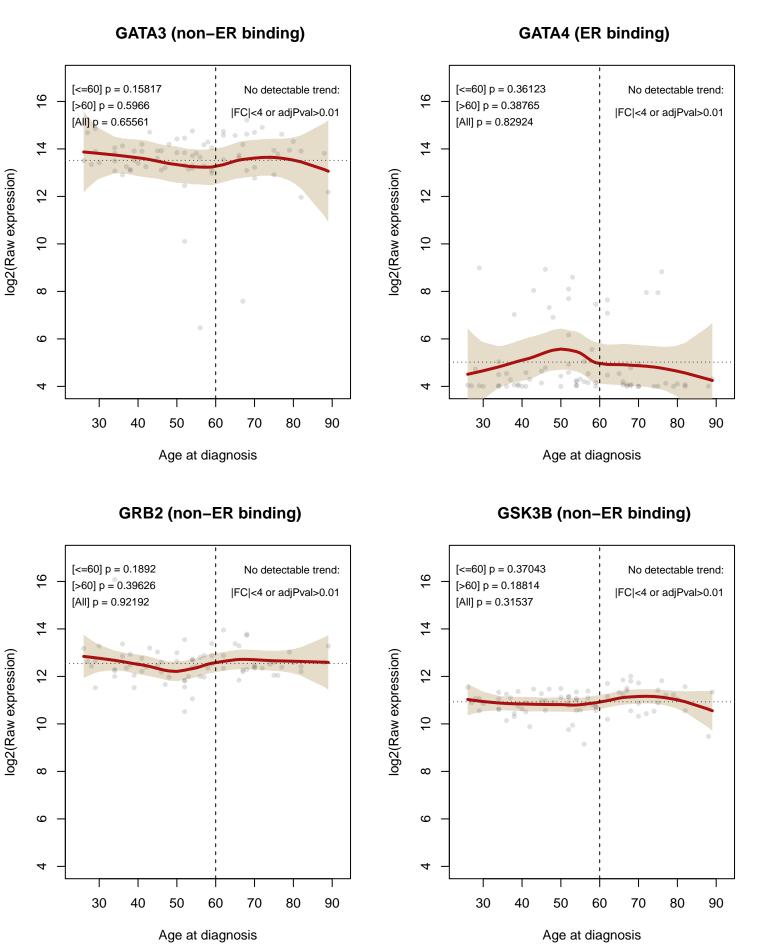
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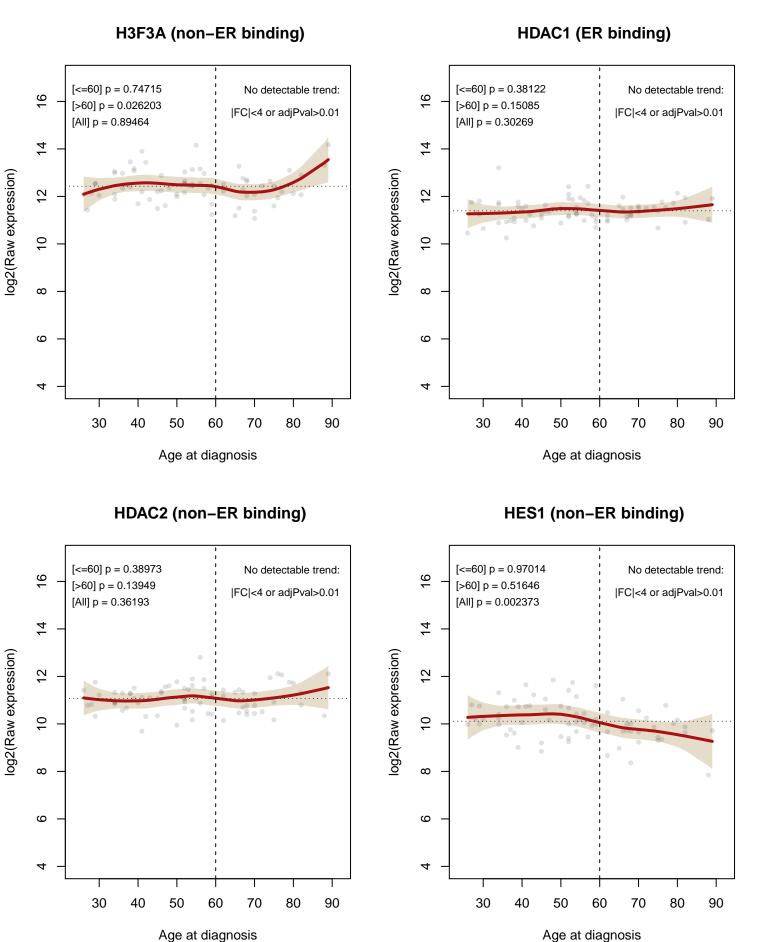
Age at diagnosis

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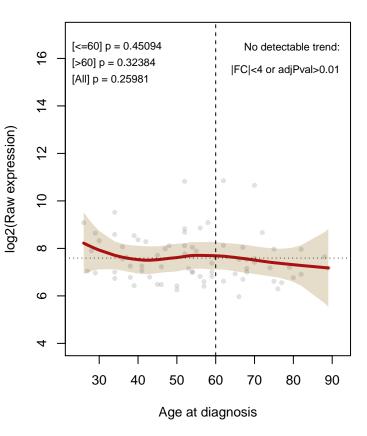
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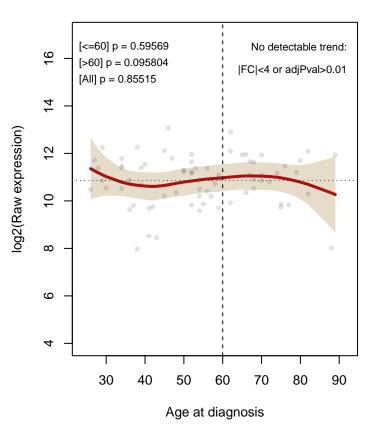






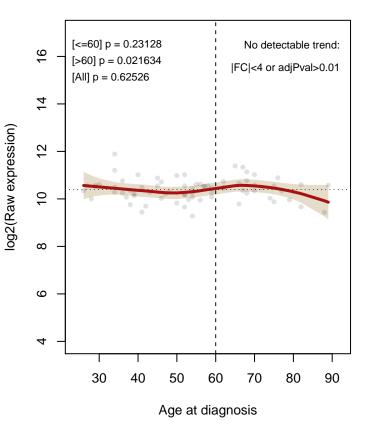
#### HIF1A (non-ER binding)

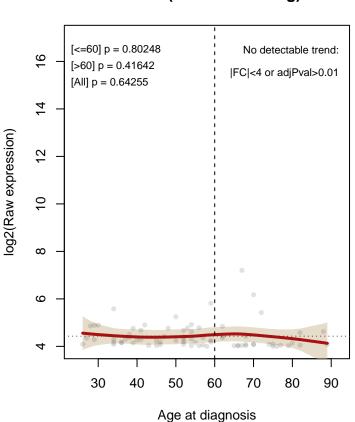




#### HIF1AN (non-ER binding)

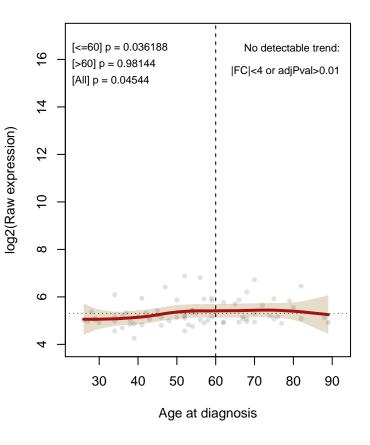
#### HIF3A (non-ER binding)

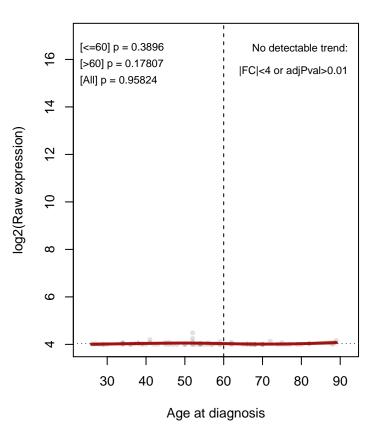




#### **HNF1A** (non-ER binding)

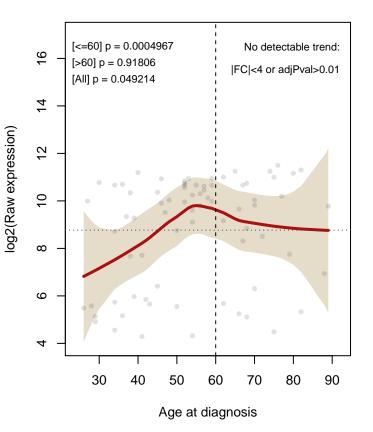
#### HNF1B (non-ER binding)

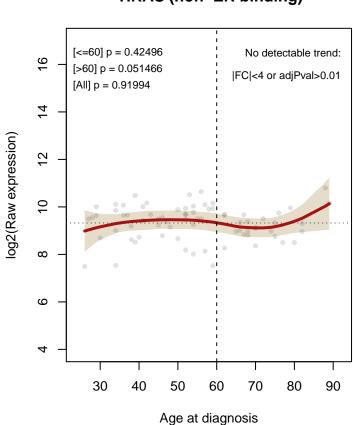




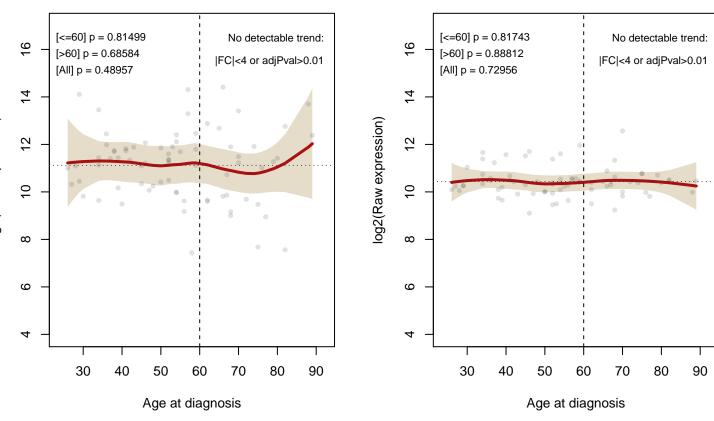
#### **HOXC10 (non-ER binding)**

HRAS (non-ER binding)



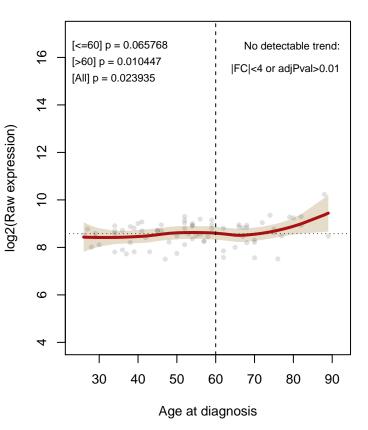


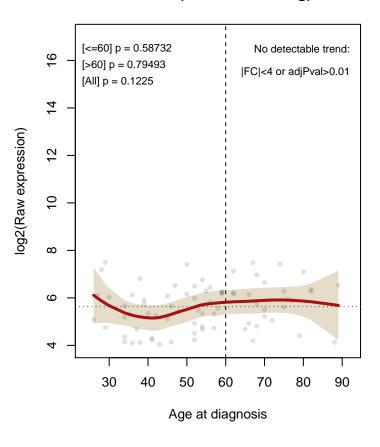
#### **HSPB1** (non-ER binding) IGF1R (ER binding) [<=60] p = 0.12231 No detectable trend: [<=60] p = 0.60543No detectable trend: 16 16 [>60] p = 0.016117 [>60] p = 0.12102 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.377[All] p = 0.817754 4 log2(Raw expression) log2(Raw expression) 12 12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





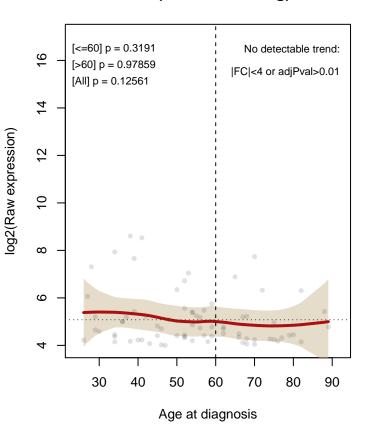
#### IL2RA (non-ER binding)

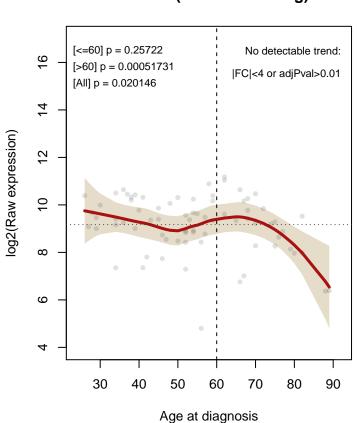


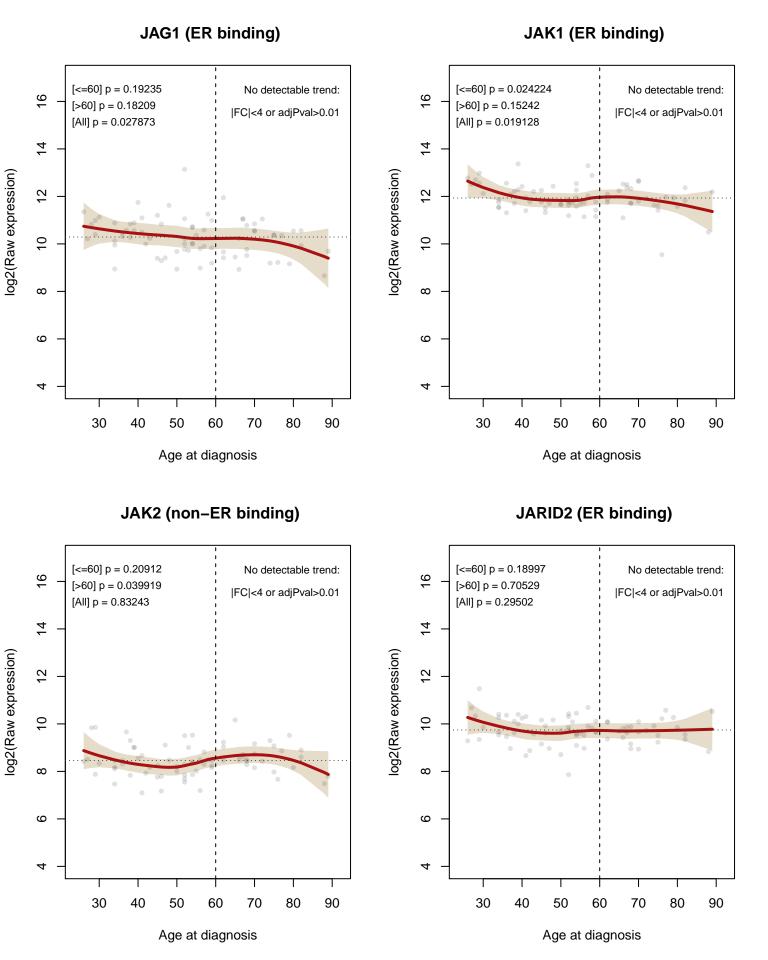


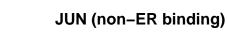
#### IL6 (non-ER binding)

**INPP4B** (non-ER binding)

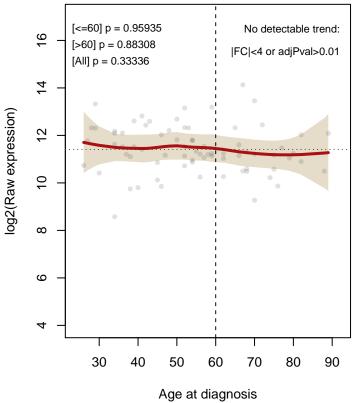


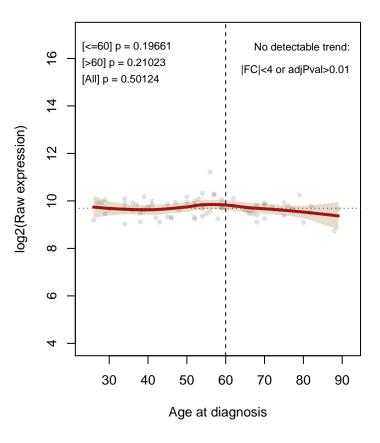






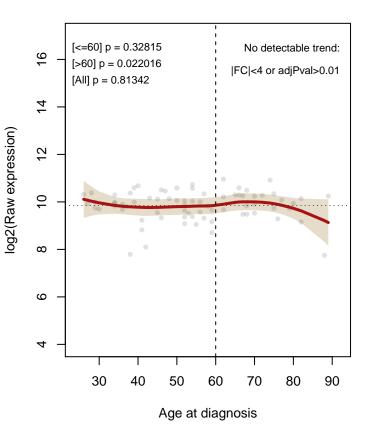
#### KDM2B (non-ER binding)

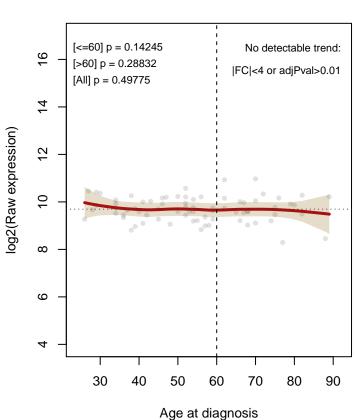




#### KDM6A (non-ER binding)

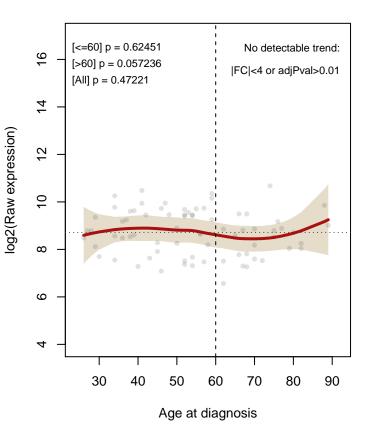
KDM6B (non-ER binding)

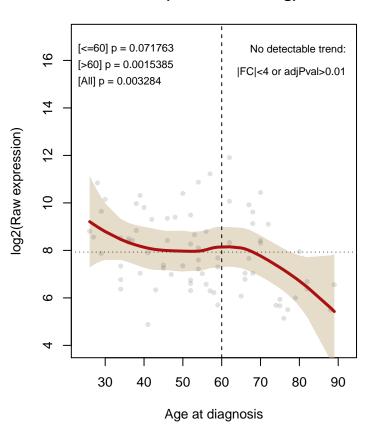






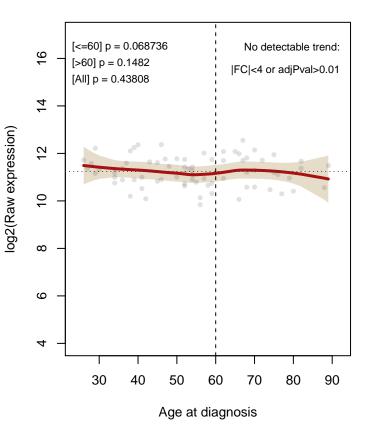
#### KIT (non-ER binding)

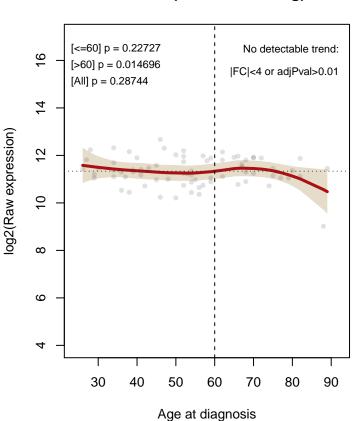


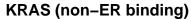


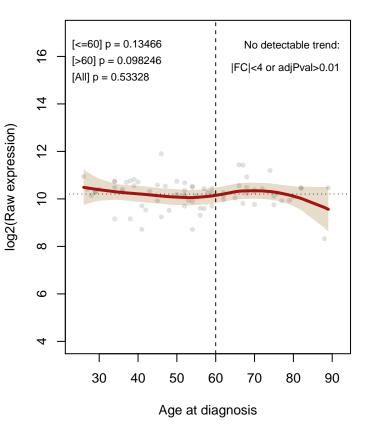
#### KMT2C (non-ER binding)

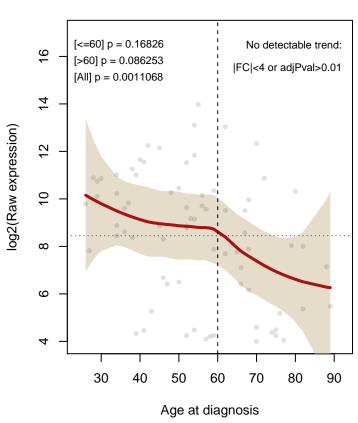
#### KMT2D (non-ER binding)









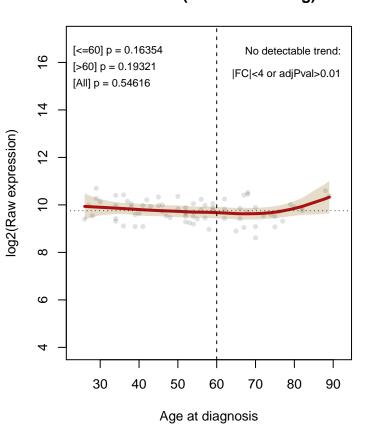


KRT5 (non-ER binding)

#### L3MBTL1 (non-ER binding)

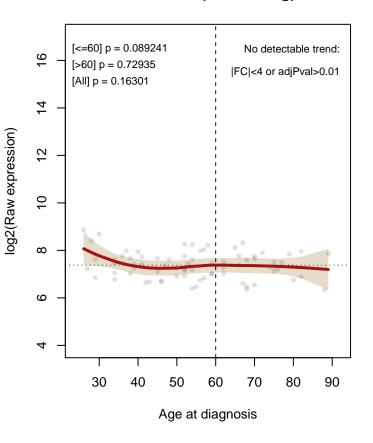
#### [<=60] p = 0.97536No detectable trend: 16 [>60] p = 0.22264 |FC|<4 or adjPval>0.01 [All] p = 0.482354 log2(Raw expression) 12 19 $\infty$ 30 40 50 60 70 80 90 Age at diagnosis

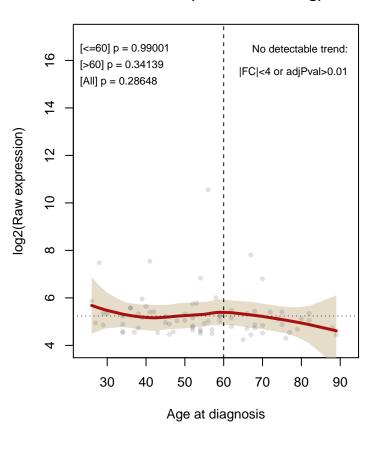
#### L3MBTL2 (non-ER binding)



#### L3MBTL3 (ER binding)

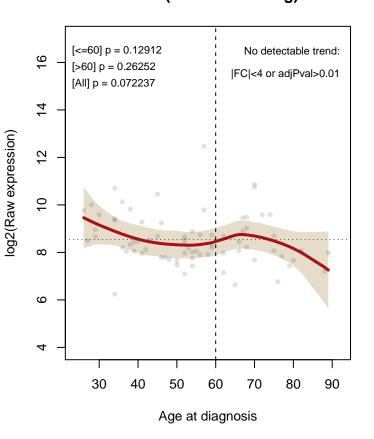
#### L3MBTL4 (non-ER binding)

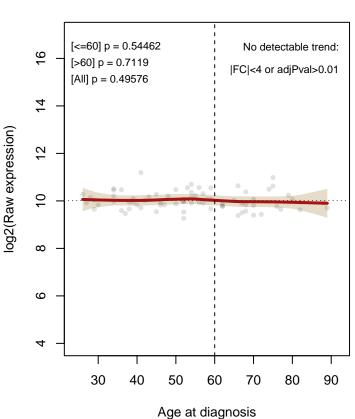




#### LEF1 (non-ER binding)

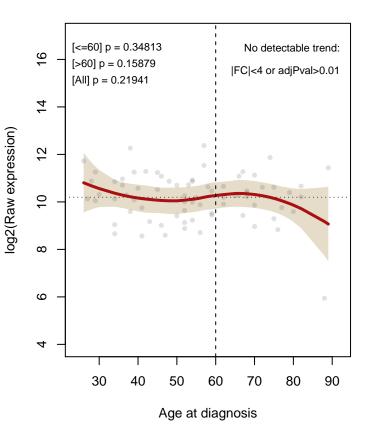
#### MAP2K1 (non-ER binding)

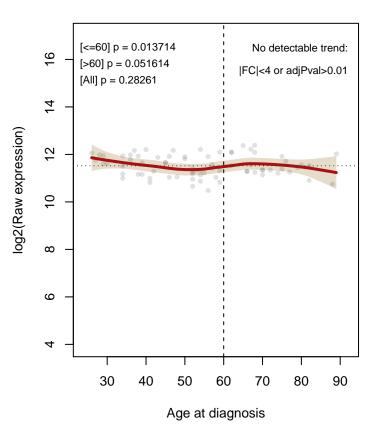






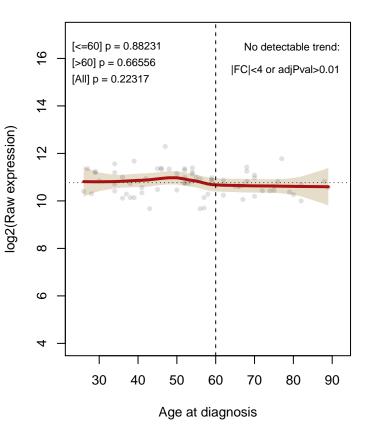
#### MAPK1 (non-ER binding)

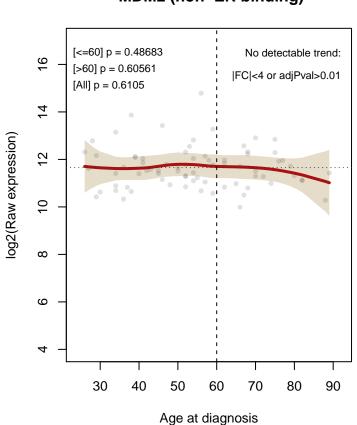


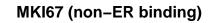


#### MAPK3 (non-ER binding)

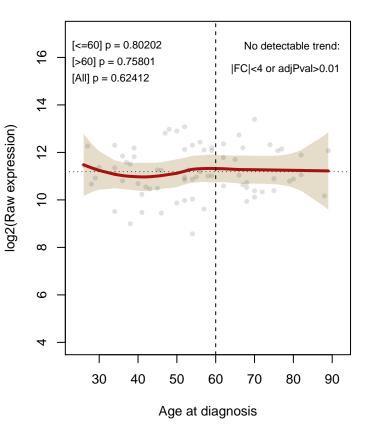
MDM2 (non-ER binding)

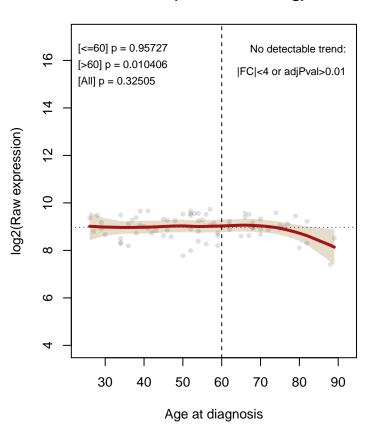






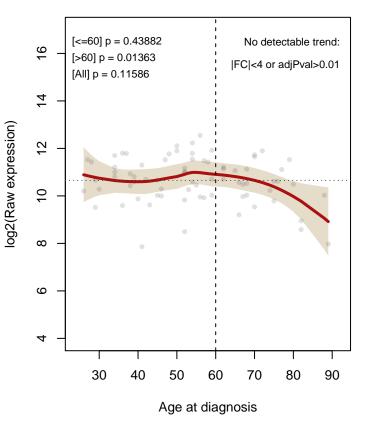
#### MTF2 (non-ER binding)

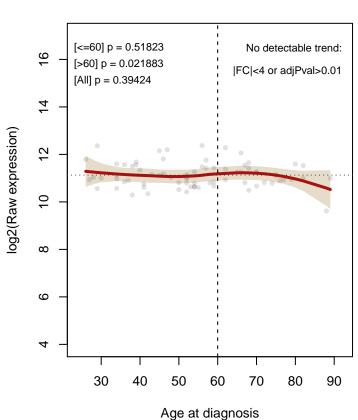




#### MYC (non-ER binding)

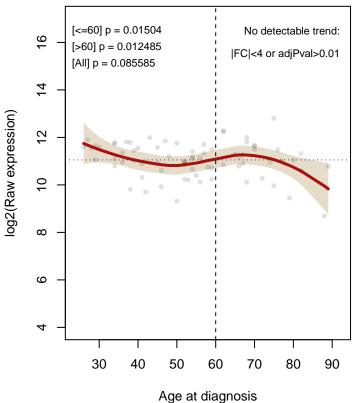
#### NCOA6 (non-ER binding)

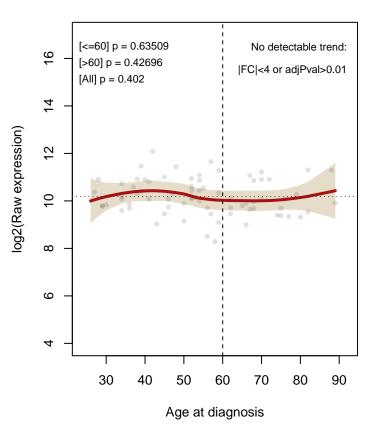






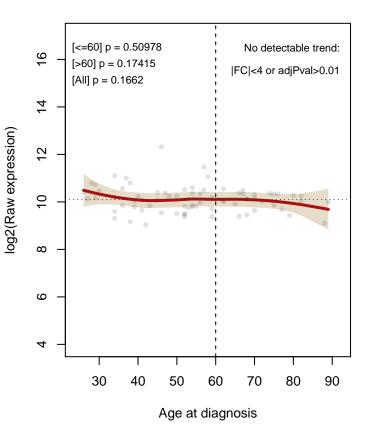
### **NES** (non-ER binding)

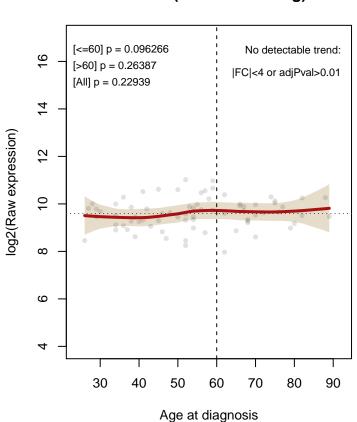




### NFKB1 (non-ER binding)

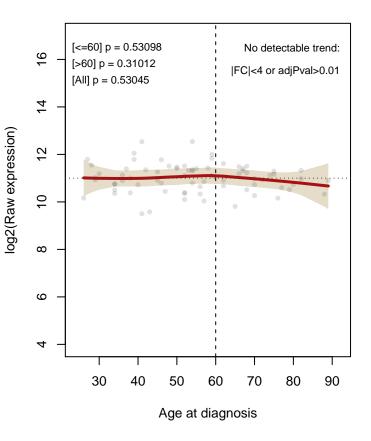
NFKB2 (non-ER binding)

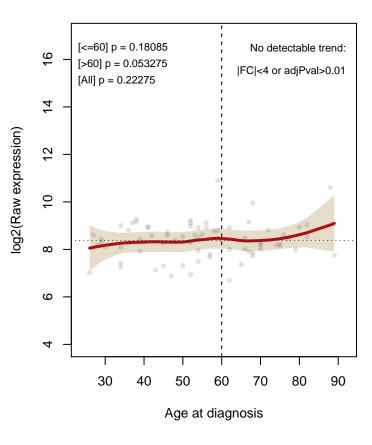




### NFKBIA (non-ER binding)

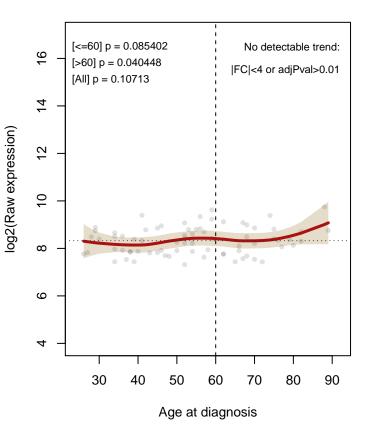
### NFKBIB (non-ER binding)

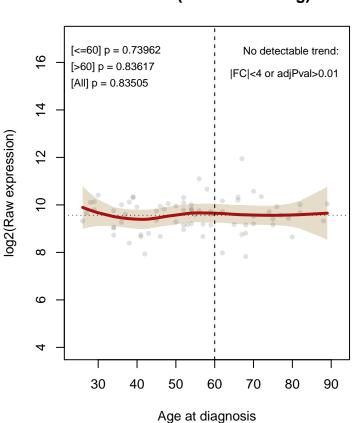




### **NFKBIE** (non-ER binding)

### NOTCH1 (non-ER binding)





### NOTCH2 (non-ER binding)

### [<=60] p = 0.25003No detectable trend: [>60] p = 0.073955



16

12

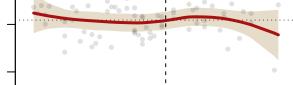
10

9

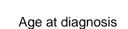
30

40

log2(Raw expression)



# ω



60

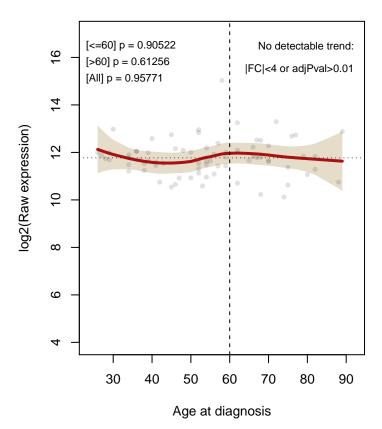
70

80

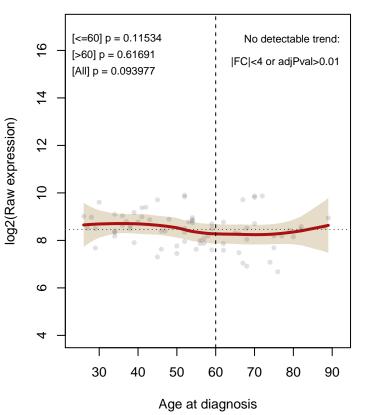
90

50

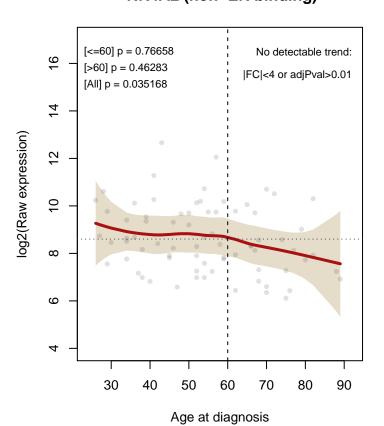
# NOTCH3 (non-ER binding)

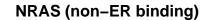


# NOTCH4 (non-ER binding)

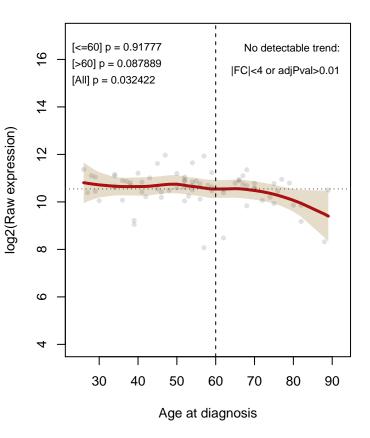


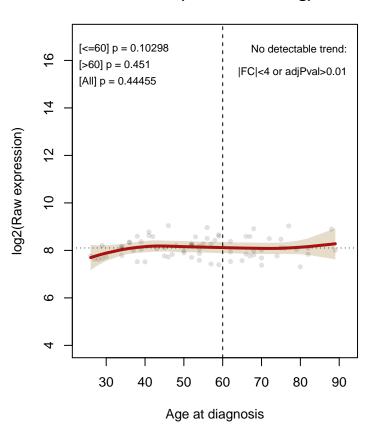
### NR4A2 (non-ER binding)





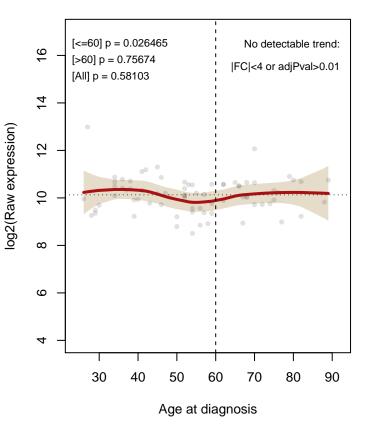
### PCGF1 (non-ER binding)

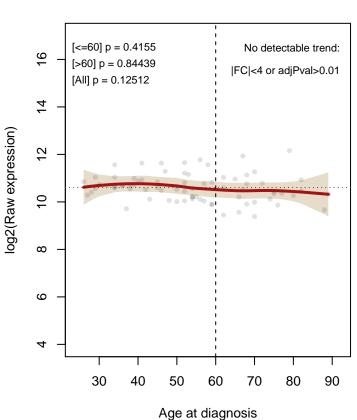




### PCGF2 (non-ER binding)

### PCGF3 (non-ER binding)

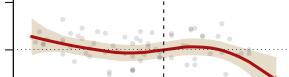






# [<=60] p = 0.019803No detectable trend:





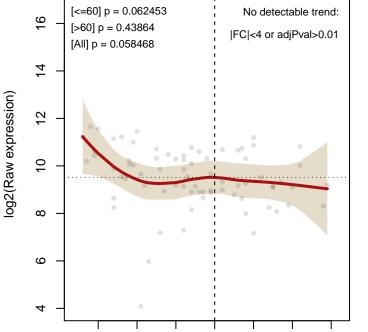
log2(Raw expression)

Age at diagnosis

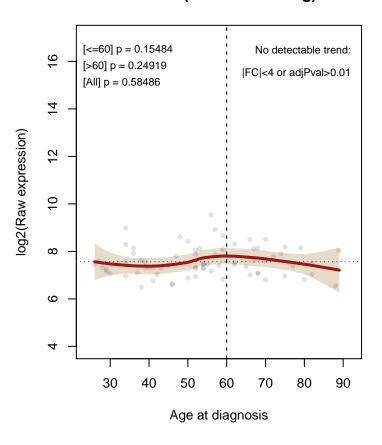


Age at diagnosis

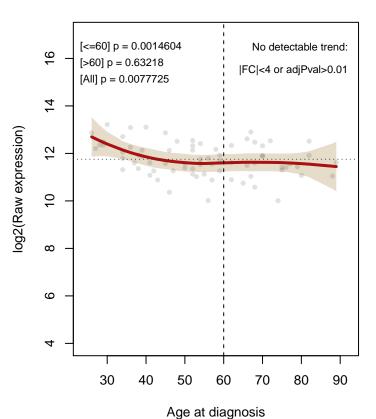
### PDGFRA (non-ER binding)



### PCGF6 (non-ER binding)

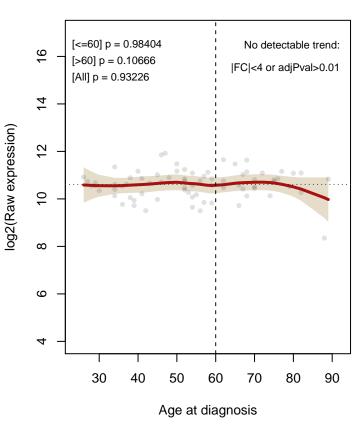


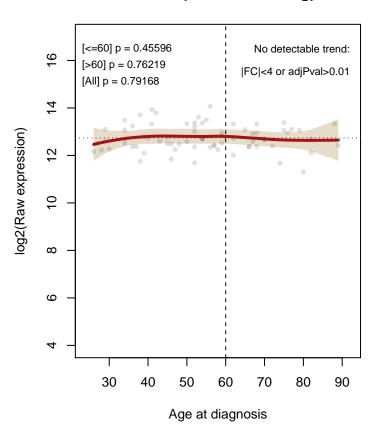
### PDGFRB (non-ER binding)





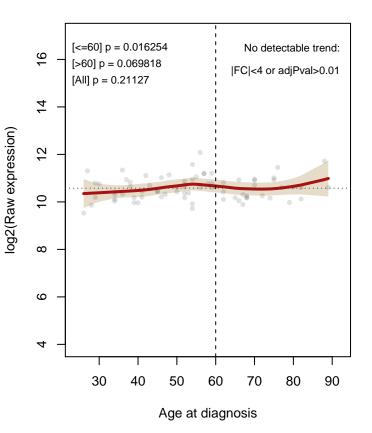
### PEBP1 (non-ER binding)

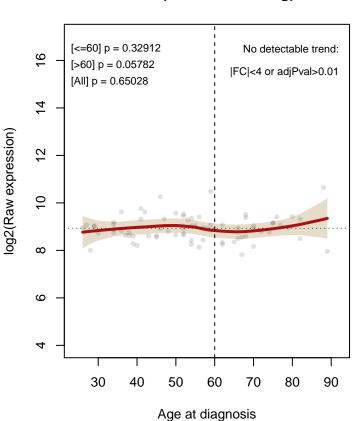


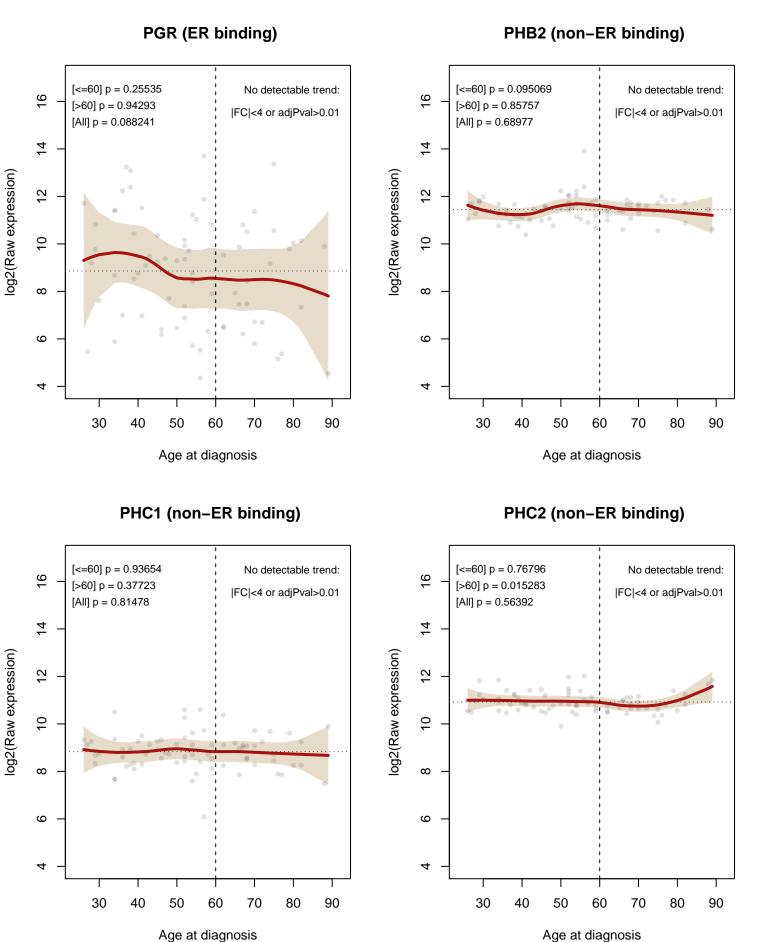


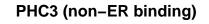
# PELP1 (non-ER binding)

PGP (non-ER binding)

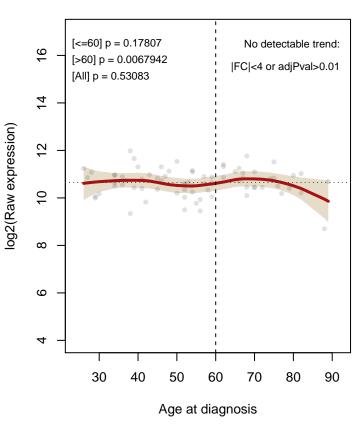


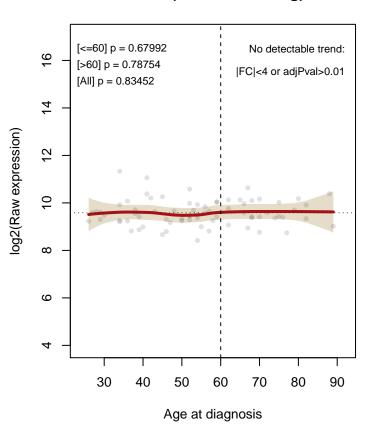






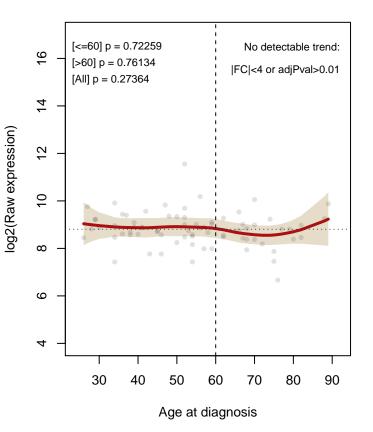
### PHF1 (non-ER binding)

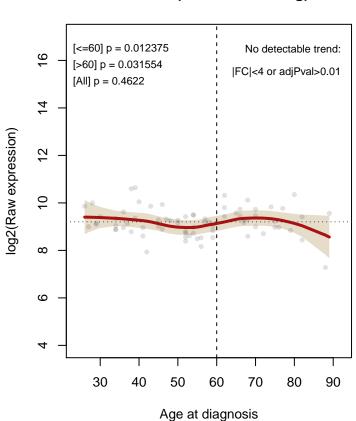




### PHF19 (non-ER binding)

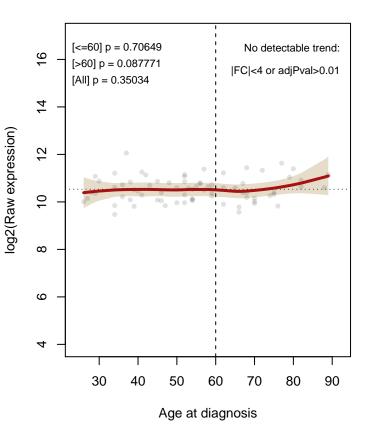
### PIK3CA (non-ER binding)

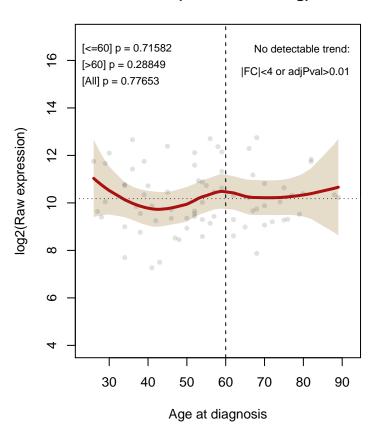






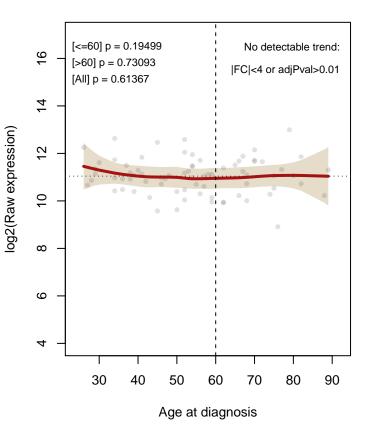
### PLAU (non-ER binding)

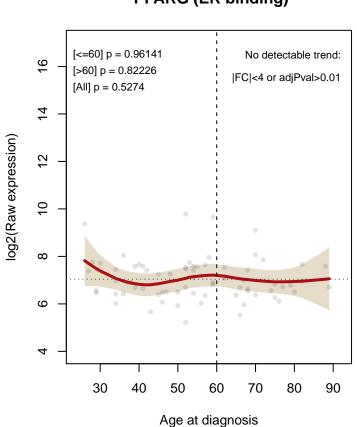


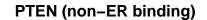


# PODXL (non-ER binding)

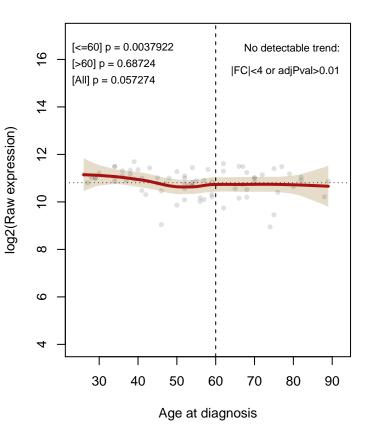
### **PPARG (ER binding)**

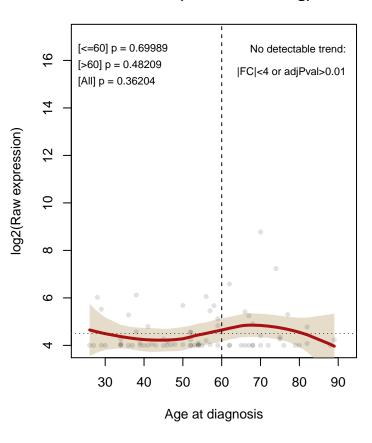






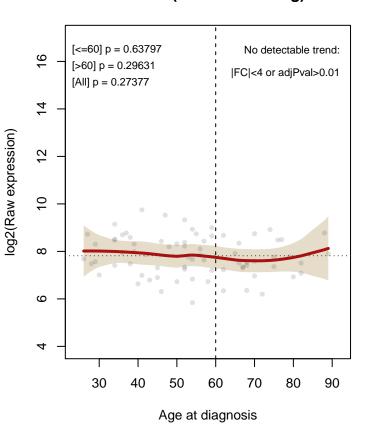
### **PYDC1** (non-ER binding)

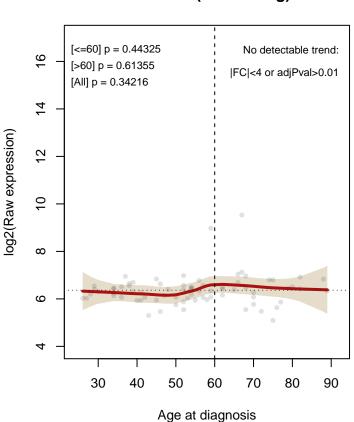




### RAD51 (non-ER binding)

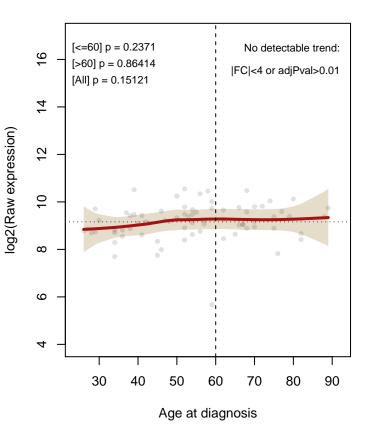
### **RAD51B (ER binding)**

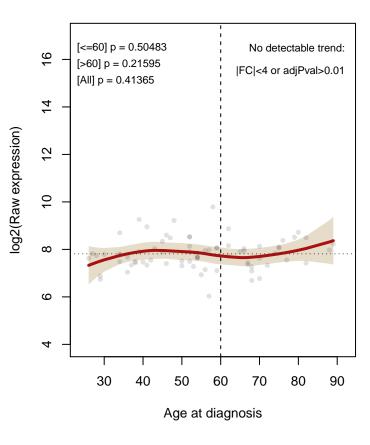




### RAD51C (non-ER binding)

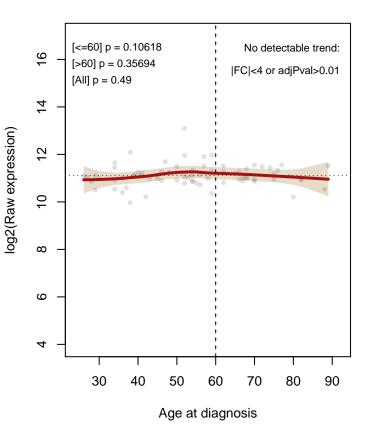
### RAD51D (non-ER binding)

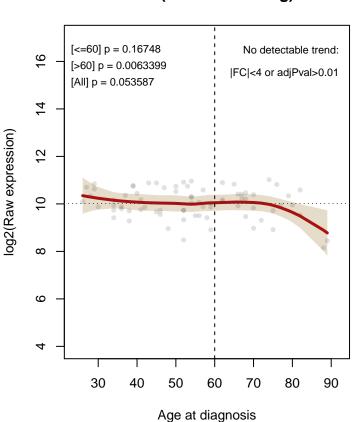


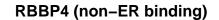


### RAF1 (non-ER binding)

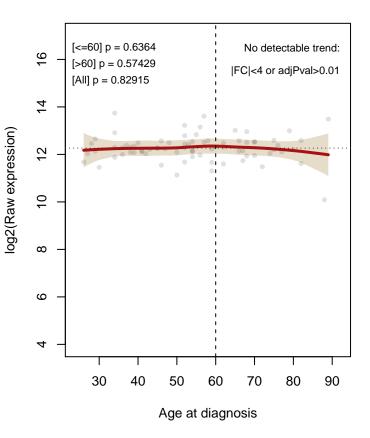
**RB1 (non-ER binding)** 

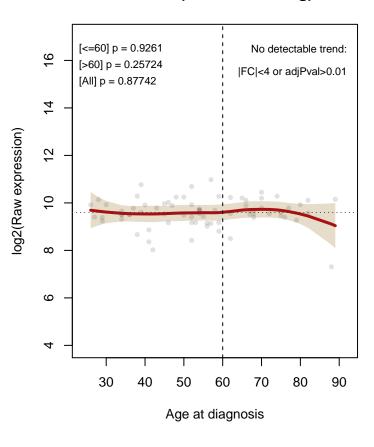






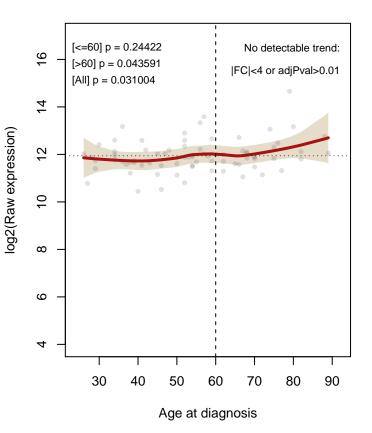
### RBBP5 (non-ER binding)

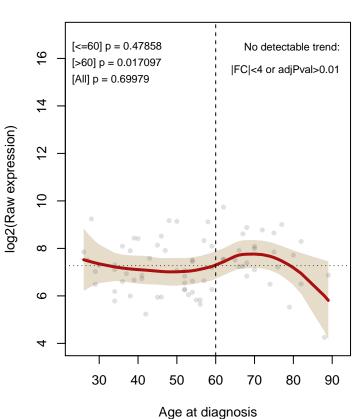


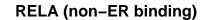


### RBBP7 (non-ER binding)

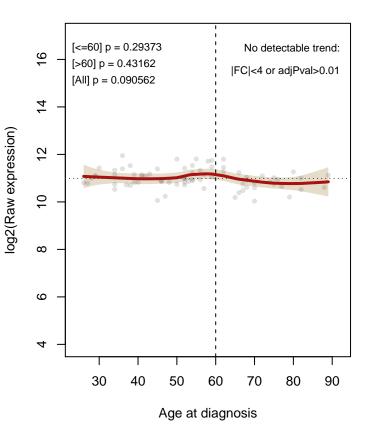
**REL** (non-ER binding)

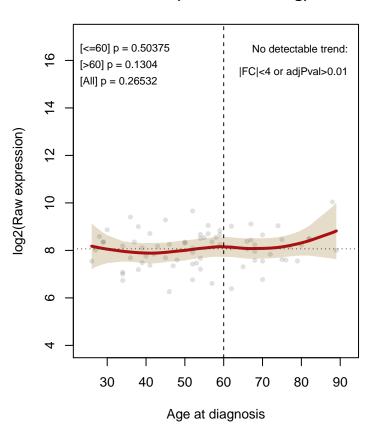






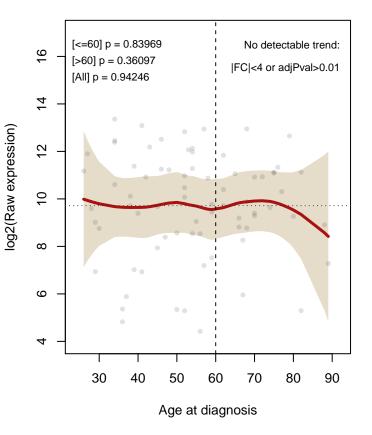
### **RELB** (non-ER binding)

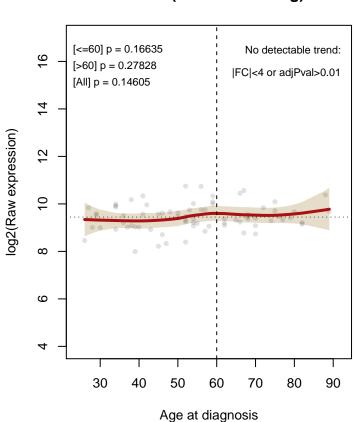




**RET (ER binding)** 

### RING1 (non-ER binding)





### RNF2 (non-ER binding) **RUNX1 (ER binding)** [<=60] p = 0.35351No detectable trend: [<=60] p = 0.019197No detectable trend: 16 16 [>60] p = 0.022482 [>60] p = 0.42635 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.89635[AII] p = 0.00739784 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 **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|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.40309[All] p = 0.880394 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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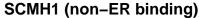
60

Age at diagnosis

70

80

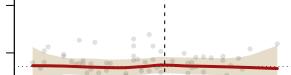
90







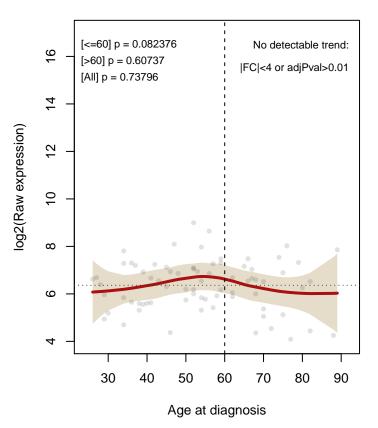
log2(Raw expression)



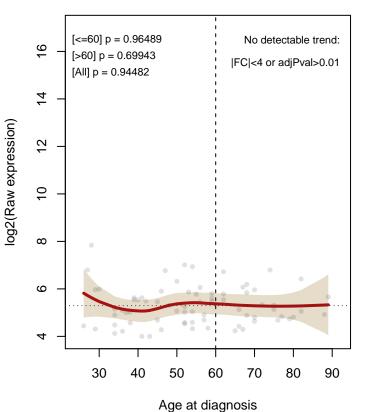




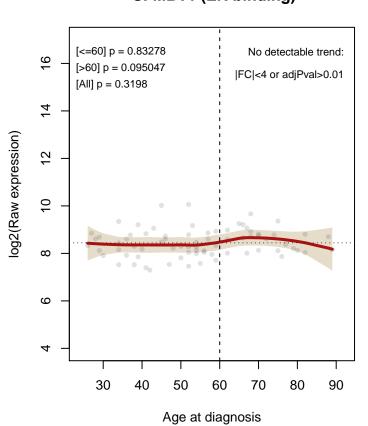
# SCML2 (non-ER binding)



### 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|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.67567[All] p = 0.461124 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis SHC1 (non-ER binding) SIRT1 (non-ER binding) [<=60] p = 0.086661No detectable trend: [<=60] p = 0.42473No detectable trend: 16 16 [>60] p = 0.676[>60] p = 0.017039 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.062834[All] p = 0.197934 4 log2(Raw expression) log2(Raw expression) 12 12 10 10

ω

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Age at diagnosis

70

80

90

ω

9

30

40

50

60

Age at diagnosis

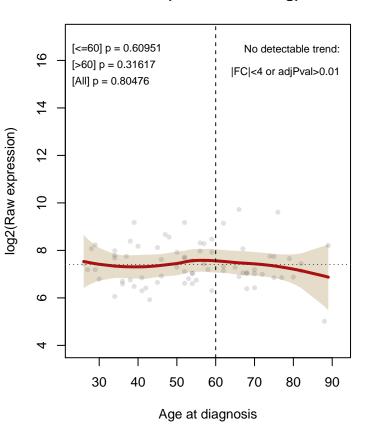
70

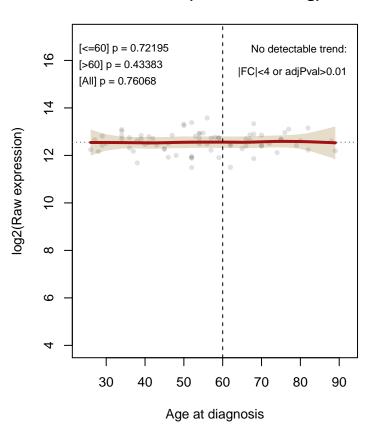
80

90

### SKP2 (non-ER binding)

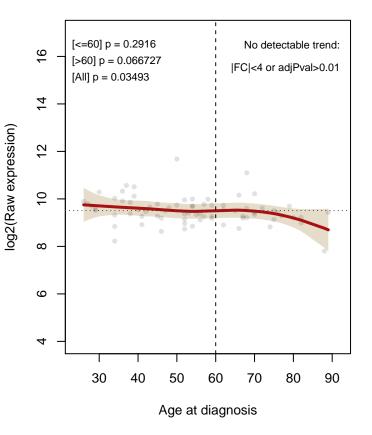
### SLC25A3 (non-ER binding)

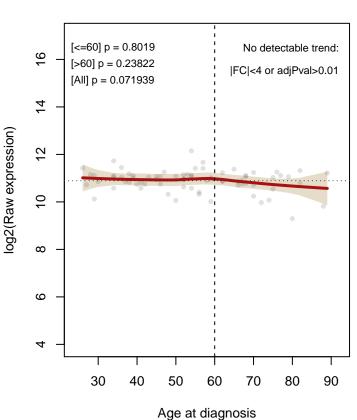




### SMAD1 (non-ER binding)

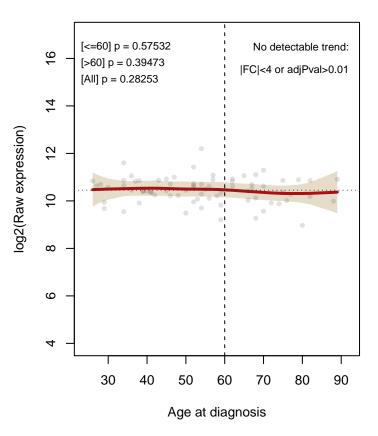
### SMAD2 (non-ER binding)





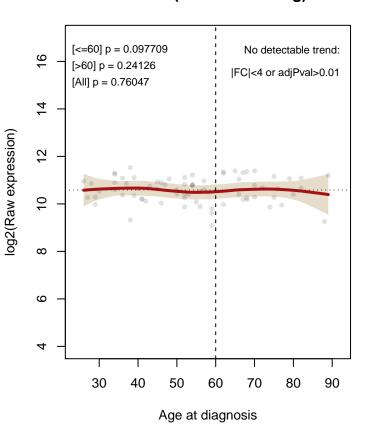
# **SMAD3 (ER binding)** [<=60] p = 0.38696No detectable trend: 16 [>60] p = 0.12864 |FC|<4 or adjPval>0.01 [All] p = 0.316524 log2(Raw expression) 12 10 ω 9 30 40 50 60 70 80 90

### SMAD4 (non-ER binding)

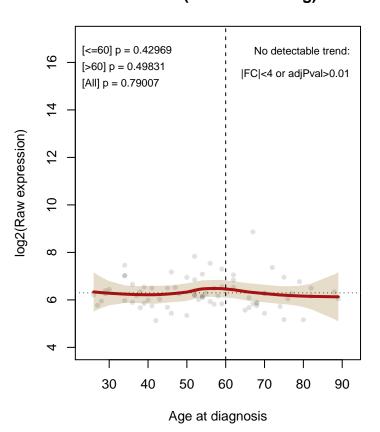


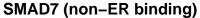
SMAD5 (non-ER binding)

Age at diagnosis

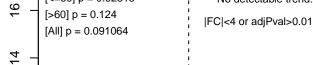


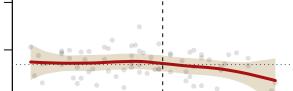
### SMAD6 (non-ER binding)





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





# ω 9

log2(Raw expression)

12

10

30

40

Age at diagnosis

60

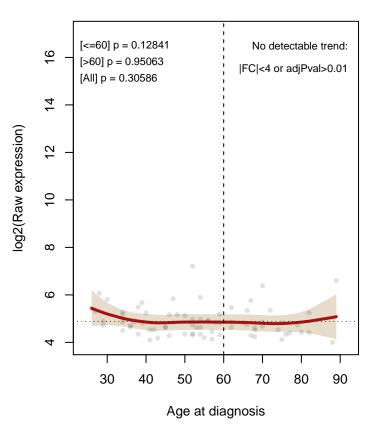
70

80

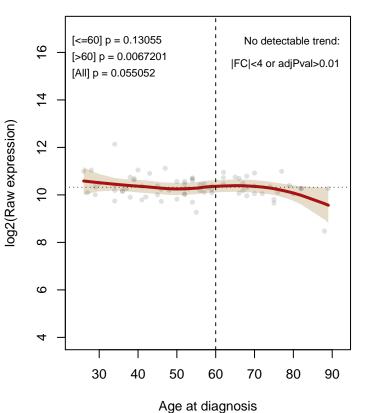
90

50

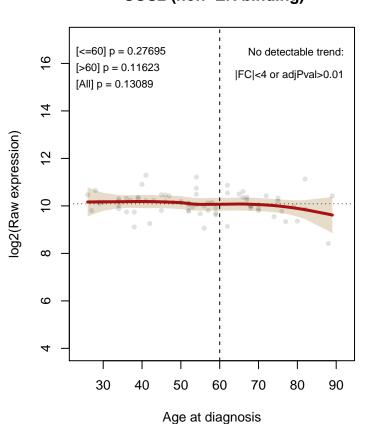
### SMAD9 (non-ER binding)

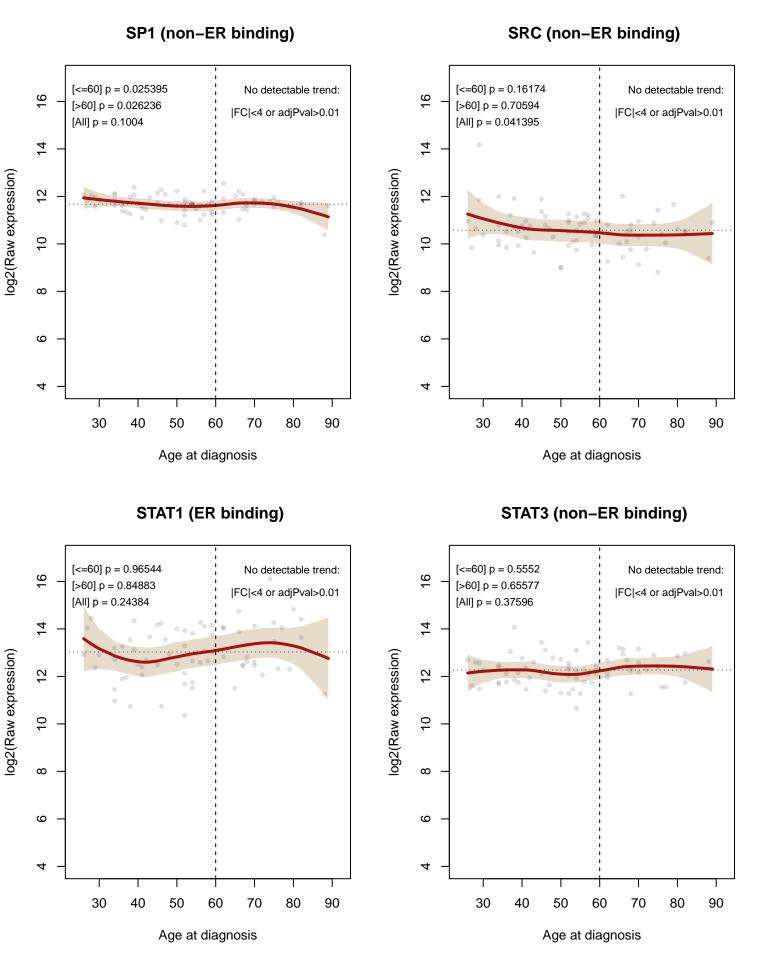


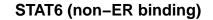
# SOS1 (non-ER binding)



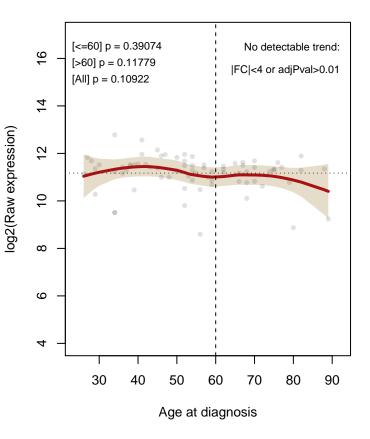
### SOS2 (non-ER binding)

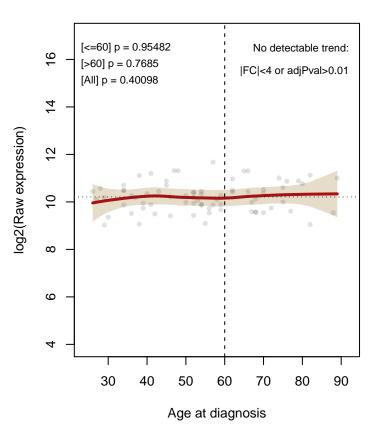






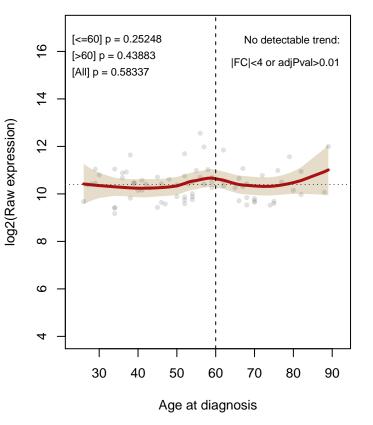
### SUZ12 (non-ER binding)

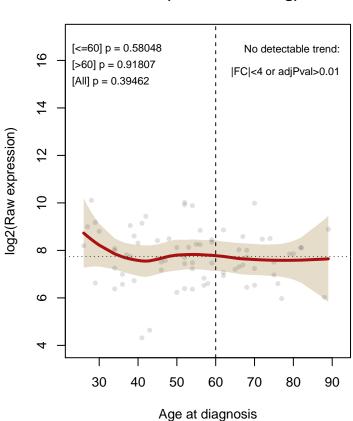




TCF3 (non-ER binding)

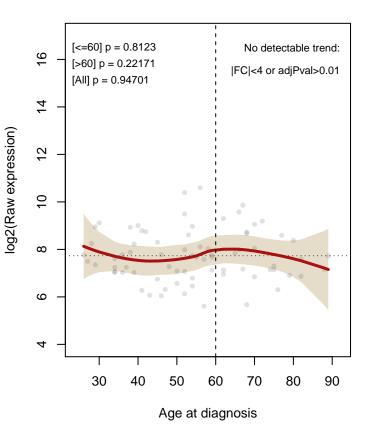
TCF7 (non-ER binding)

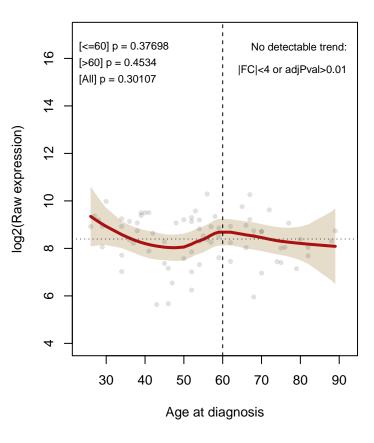






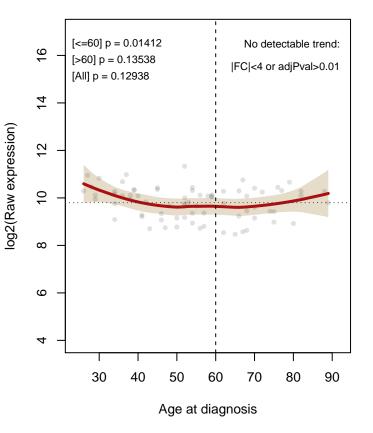
### TCF7L2 (non-ER binding)

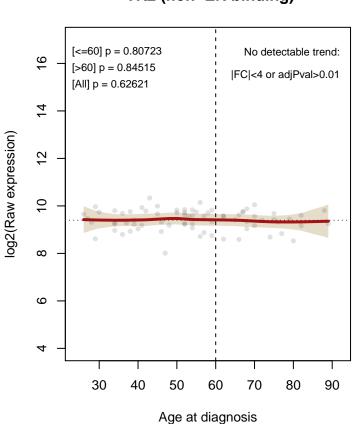


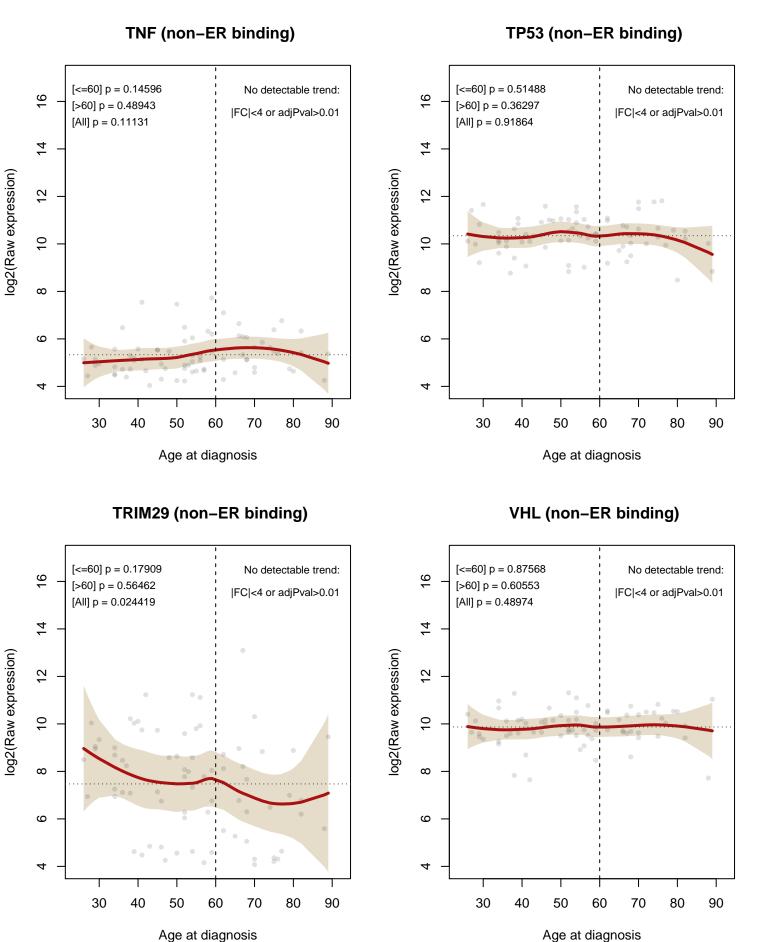


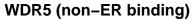
### TGFB1 (non-ER binding)

TK2 (non-ER binding)

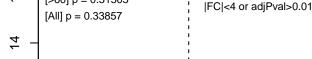




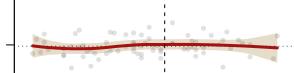








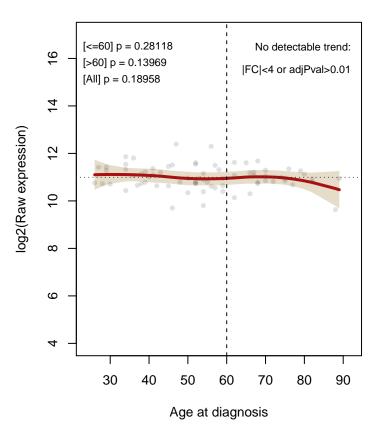
log2(Raw expression)



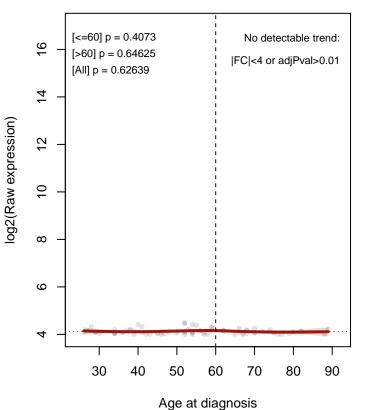


Age at diagnosis

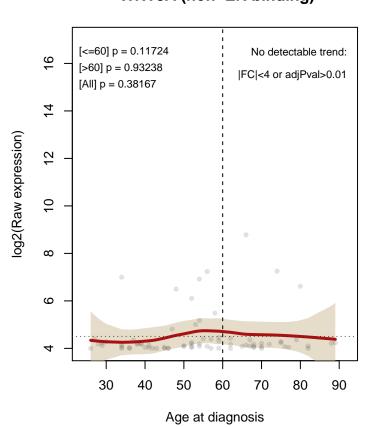
### WHSC1 (non-ER binding)

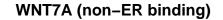


### WNT1 (non-ER binding)

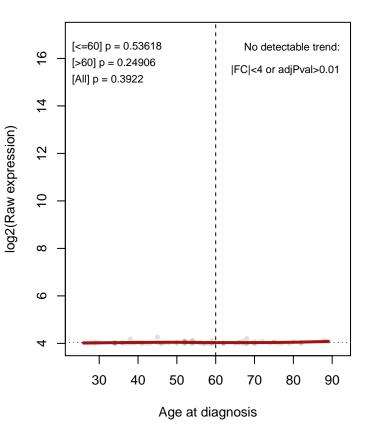


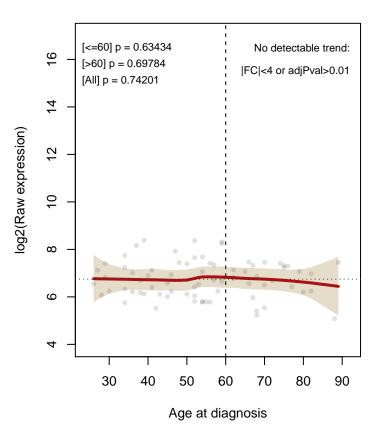
### WNT3A (non-ER binding)





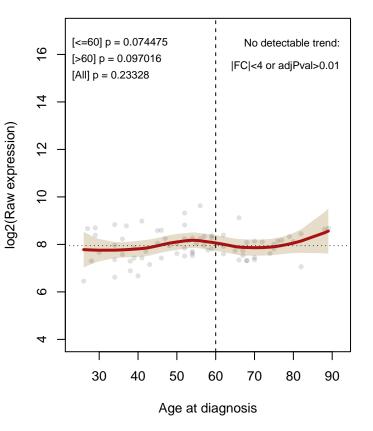
### XRCC2 (non-ER binding)

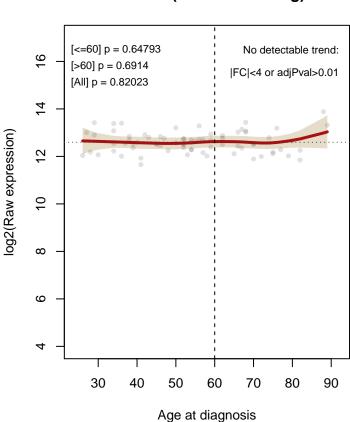




### XRCC3 (non-ER binding)

XRCC6 (non-ER binding)

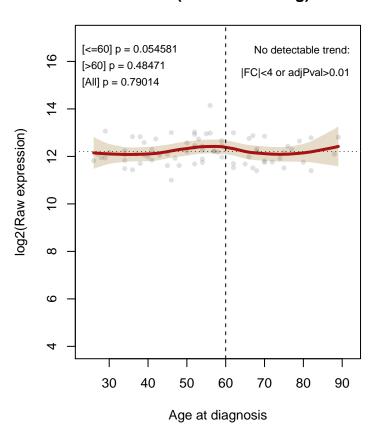




### YAF2 (non-ER binding)

# 

# YBX1 (non-ER binding)



### YY1 (non-ER binding)

Age at diagnosis

