

#### ASXL3 (non-ER binding) ATM (non-ER binding) [<=60] p = 0.53036No detectable trend: [<=60] p = 0.49183No detectable trend: 16 16 [>60] p = 0.83651 [>60] p = 0.45266 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.30423[AII] p = 0.20744 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis ATR (non-ER binding) **AXIN1 (ER binding)** [<=60] p = 0.94907No detectable trend: [<=60] p = 0.097443No detectable trend: 16 16 [>60] p = 0.74207 [>60] p = 0.59644|FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.4629[All] p = 0.787074 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

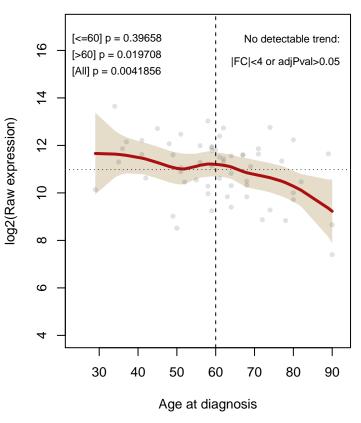
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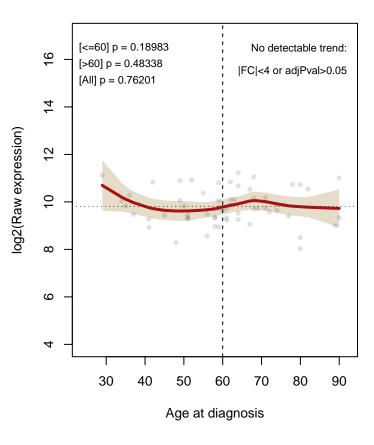
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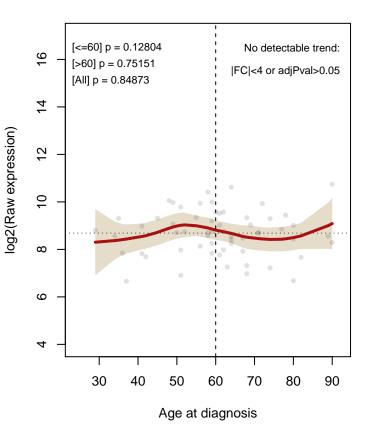
#### **BCL3 (non-ER binding)**

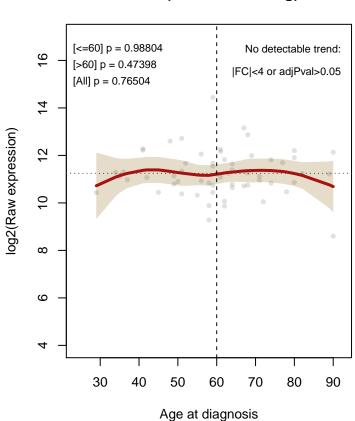


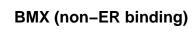


## **BIRC5** (non-ER binding)

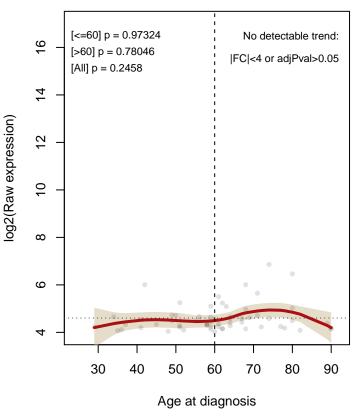
**BMI1 (non-ER binding)** 

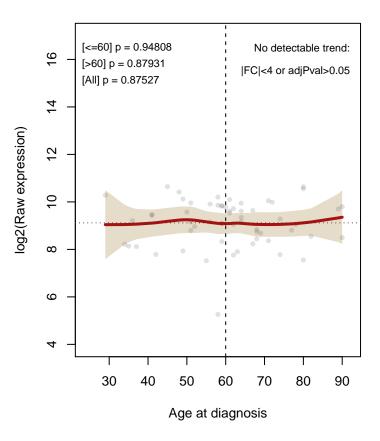






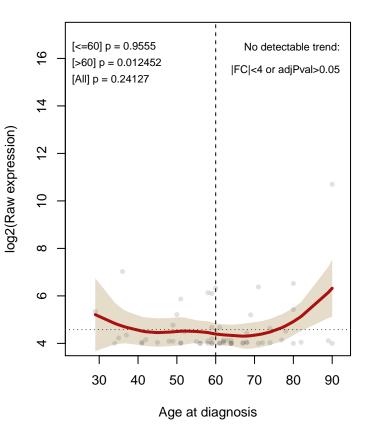
#### BRCA1 (non-ER binding)

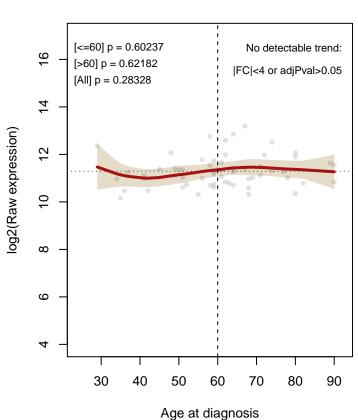




CA9 (non-ER binding)

**CBX1** (non-ER binding)





#### CBX2 (non-ER binding) **CBX4** (non-ER binding) [<=60] p = 0.34252No detectable trend: [<=60] p = 0.31569No detectable trend: 16 16 [>60] p = 0.53166 [>60] p = 0.62417 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.93154[All] p = 0.150634 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis CBX6 (non-ER binding) **CBX7 (non-ER binding)** [<=60] p = 0.78263No detectable trend: [<=60] p = 0.95578No detectable trend: 16 16 [>60] p = 0.038562 [>60] p = 0.023679 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.061326[All] p = 0.0106554 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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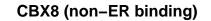
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Age at diagnosis

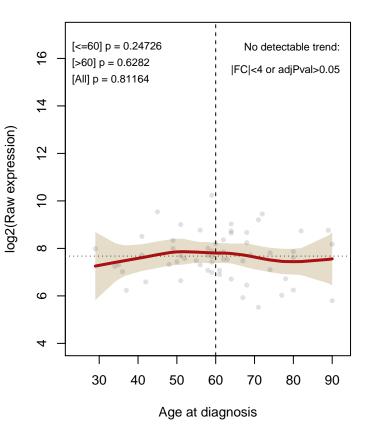
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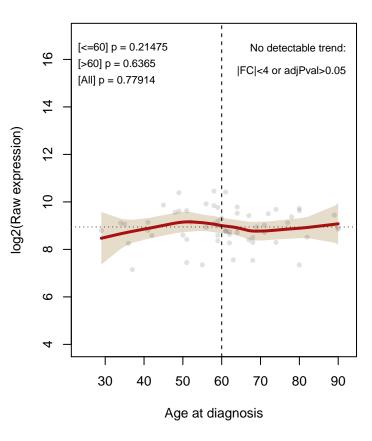
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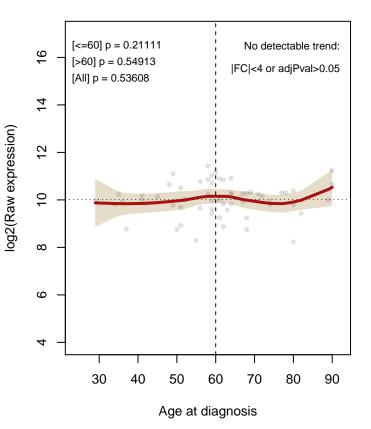
#### CCNA2 (non-ER binding)

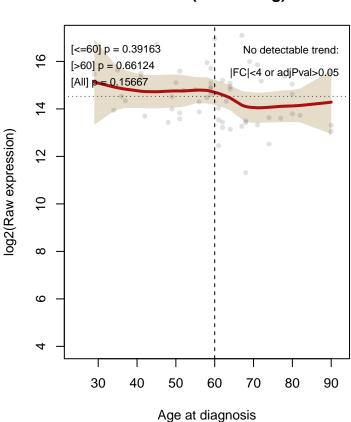


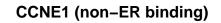


## CCNB1 (non-ER binding)

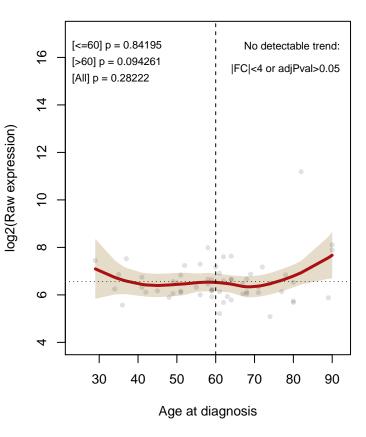
**CCND1 (ER binding)** 

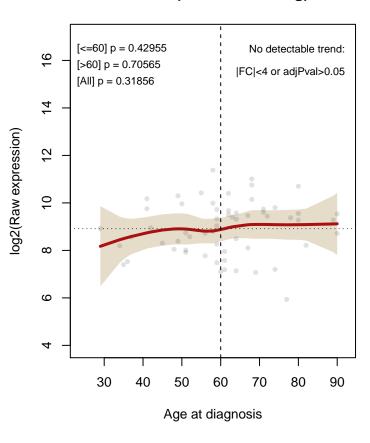






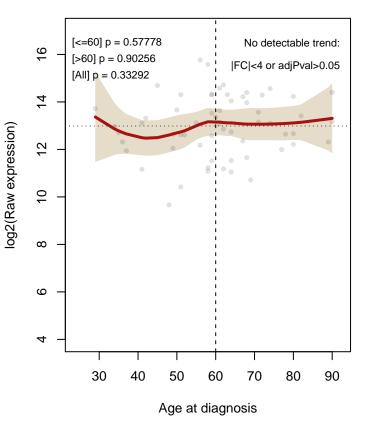
#### CD163 (non-ER binding)

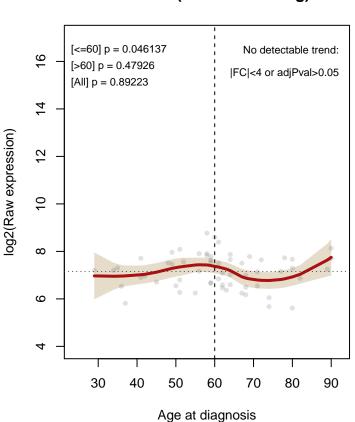


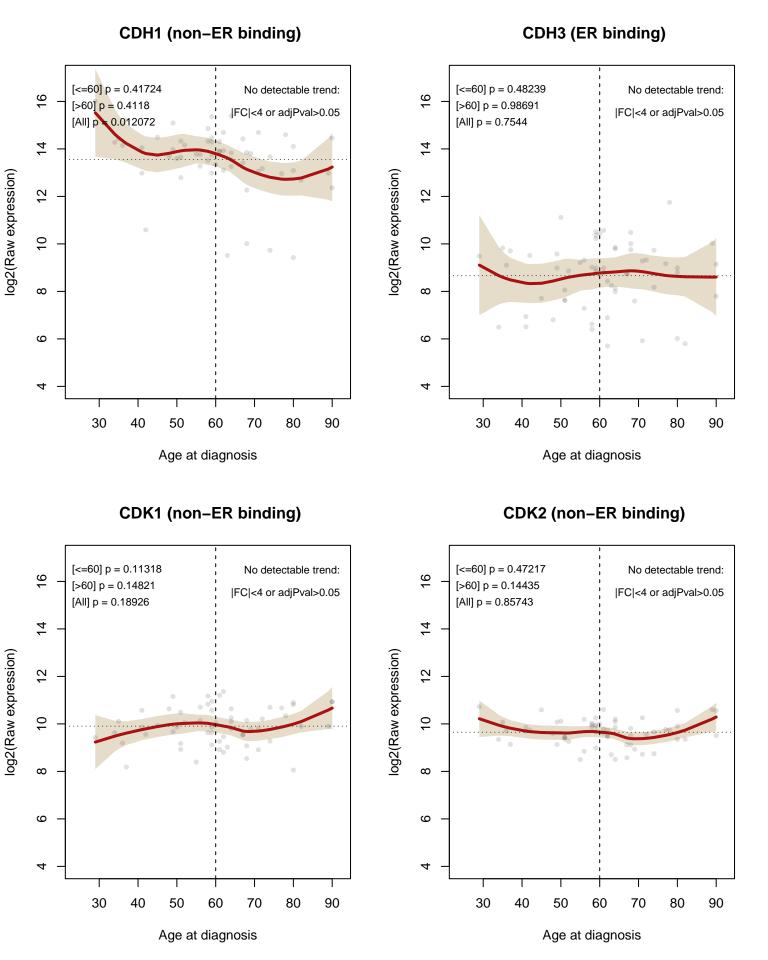


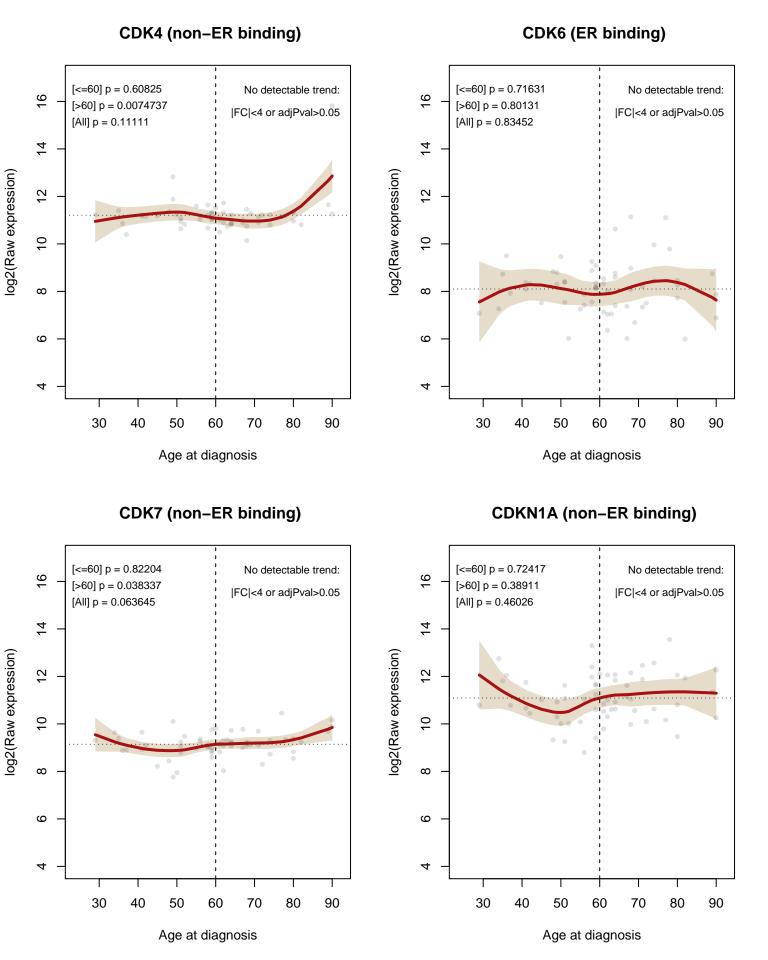
CD44 (non-ER binding)

#### CDC25C (non-ER binding)



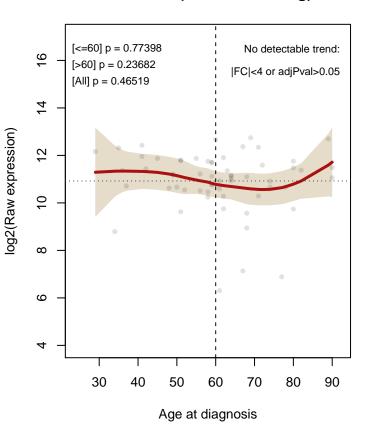


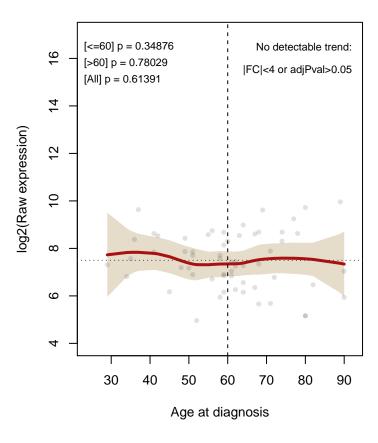




#### CDKN1B (non-ER binding)

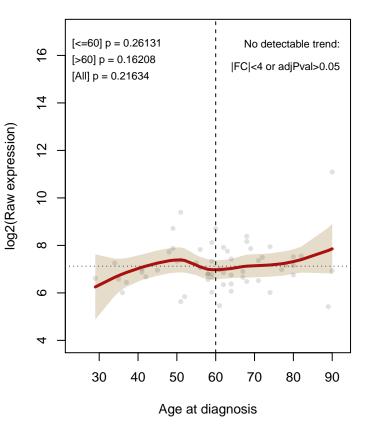
#### CDKN1C (non-ER binding)

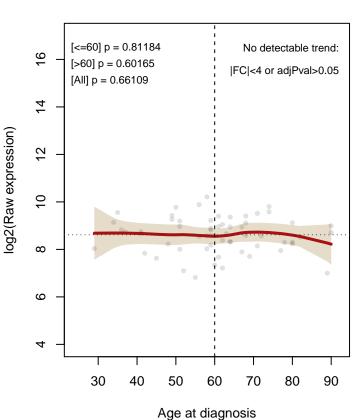




#### CDKN2A (non-ER binding)

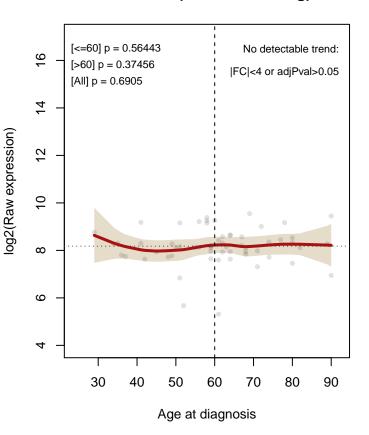
#### CDKN2B (non-ER binding)

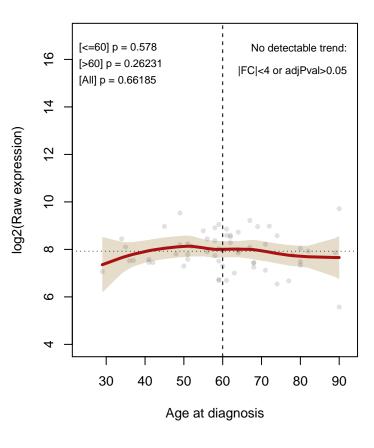




#### CDKN2C (non-ER binding)

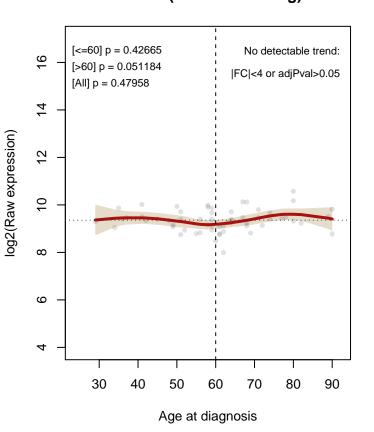
#### CDKN2D (non-ER binding)

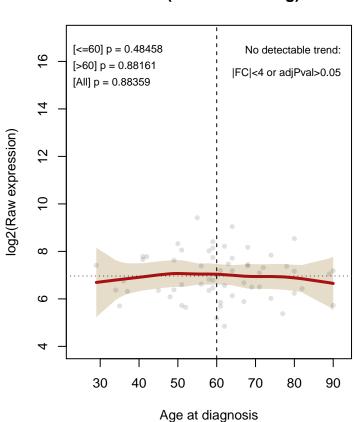




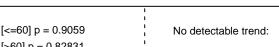
## CHUK (non-ER binding)

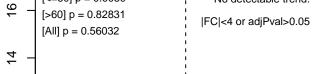
CIITA (non-ER binding)

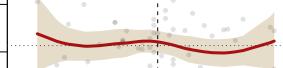


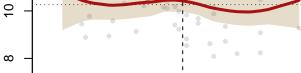


#### CLDN3 (non-ER binding)



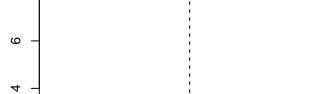






log2(Raw expression)

12



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Age at diagnosis

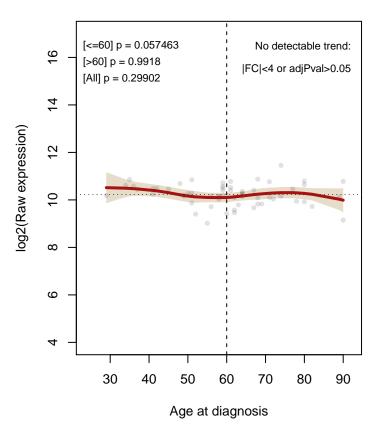
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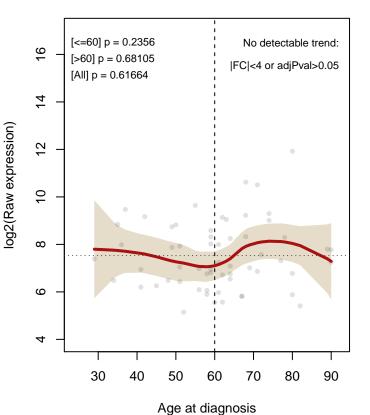
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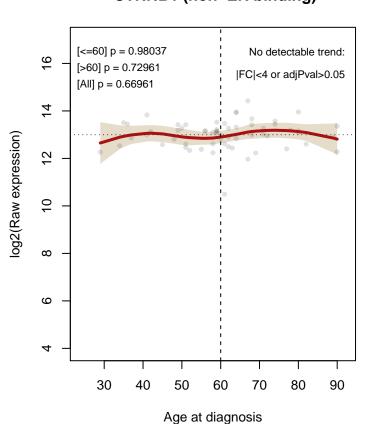
#### CREB1 (non-ER binding)



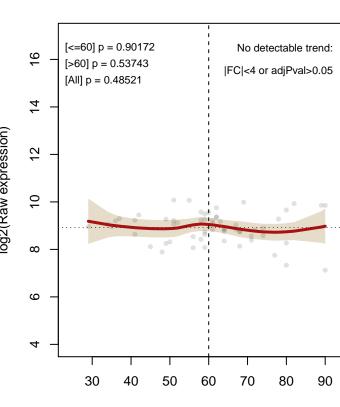
#### **CRYAB** (non-ER binding)

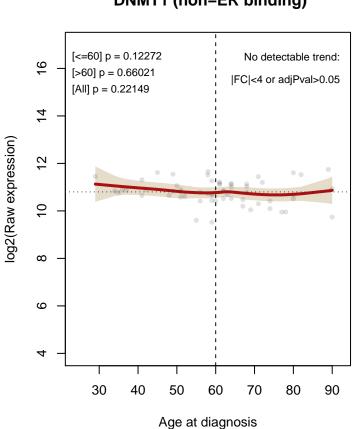


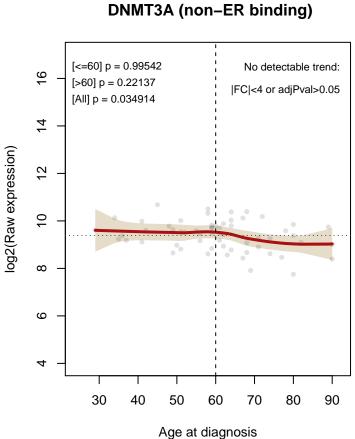
#### CTNNB1 (non-ER binding)



#### **DLC1 (ER binding)** DMAP1 (non-ER binding) [<=60] p = 0.44874No detectable trend: [<=60] p = 0.9017216 16 [>60] p = 0.077541 [>60] p = 0.53743 |FC|<4 or adjPval>0.05 [AII] p = 0.186[All] p = 0.485214 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ ω 9 9 30 40 50 60 70 80 90 30 40 Age at diagnosis Age at diagnosis **DNMT1** (non-ER binding) [<=60] p = 0.12272No detectable trend: [<=60] p = 0.99542

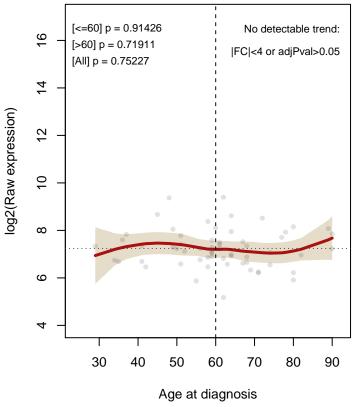


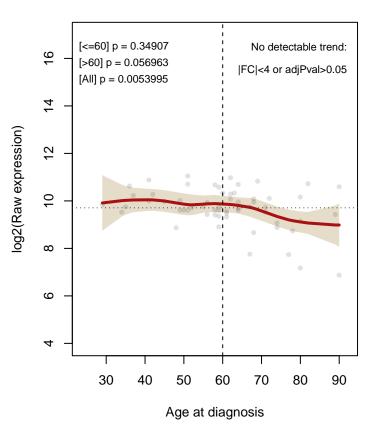






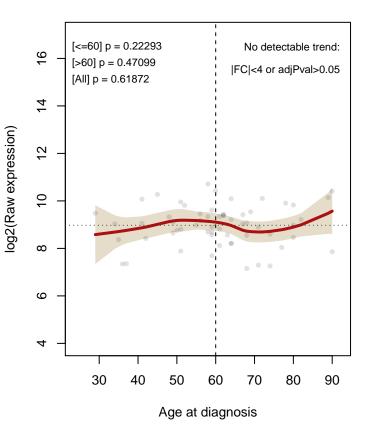
#### **DVL1 (non-ER binding)**

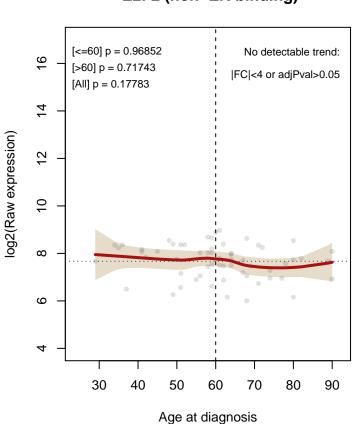


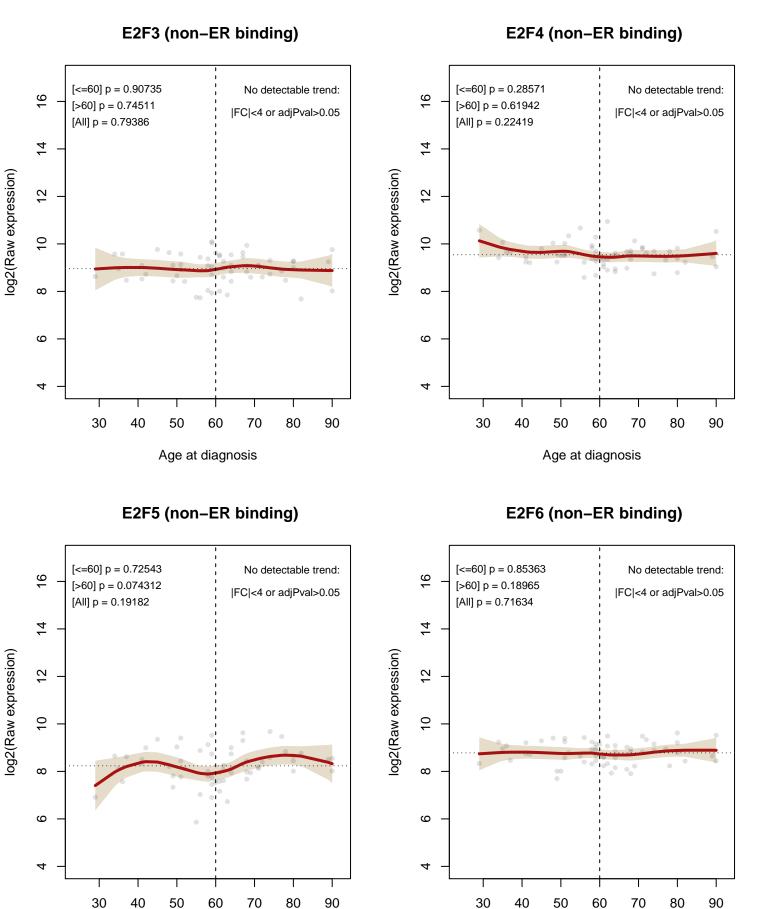


E2F1 (non-ER binding)

E2F2 (non-ER binding)

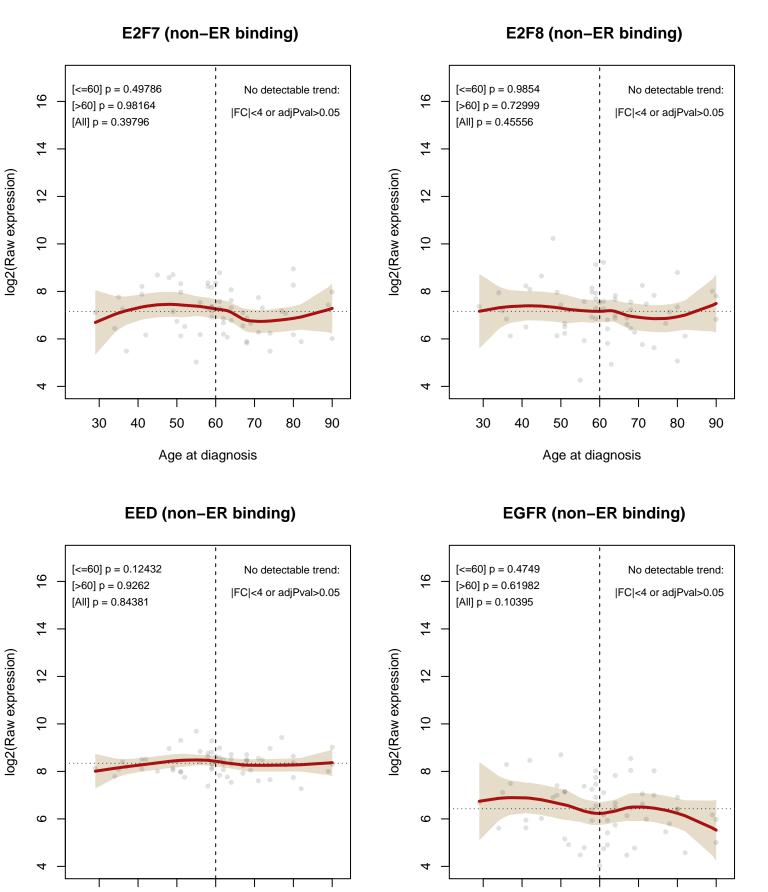






Age at diagnosis

Age at diagnosis

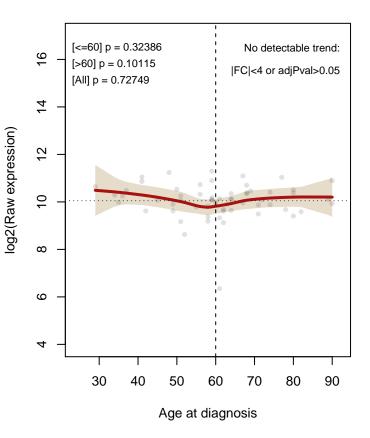


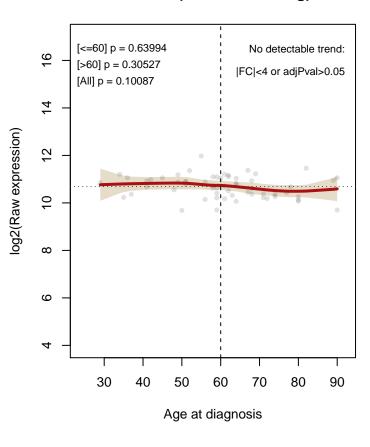
Age at diagnosis

Age at diagnosis



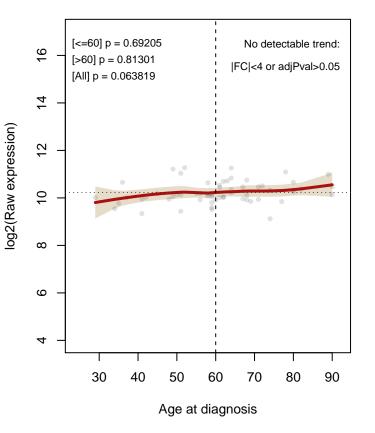
#### EHMT2 (non-ER binding)

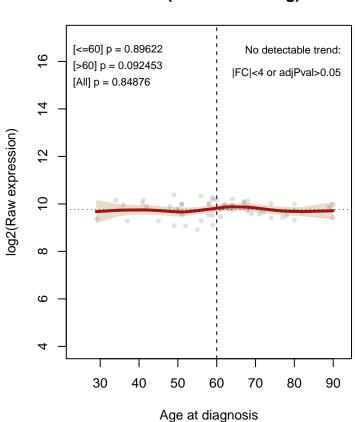




#### **ELAC2 (non-ER binding)**

**ELK1 (non-ER binding)** 





#### EP300 (non-ER binding) **EPAS1** (non-ER binding) [<=60] p = 0.28924No detectable trend: [<=60] p = 0.047791No detectable trend: 16 16 [>60] p = 0.16256 [>60] p = 0.98354 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.052433[All] p = 0.0489114 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 **EPC1** (non-ER binding) **EPC2** (non-ER binding) [<=60] p = 0.04524No detectable trend: [<=60] p = 0.049033No detectable trend: 16 16 [>60] p = 0.09967[>60] p = 0.60229 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.055494[AII] p = 0.00978164 4 log2(Raw expression) log2(Raw expression) 12 12 10 10

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Age at diagnosis

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ω

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Age at diagnosis

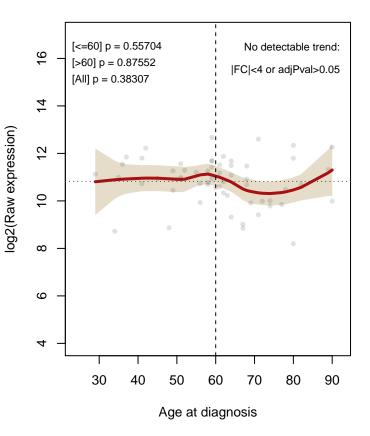
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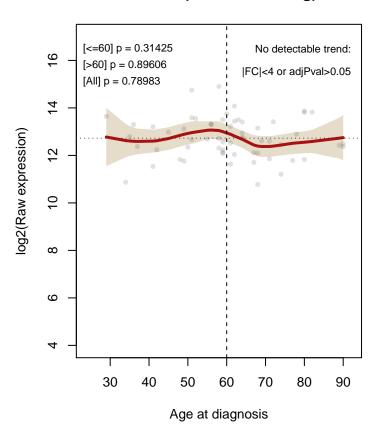
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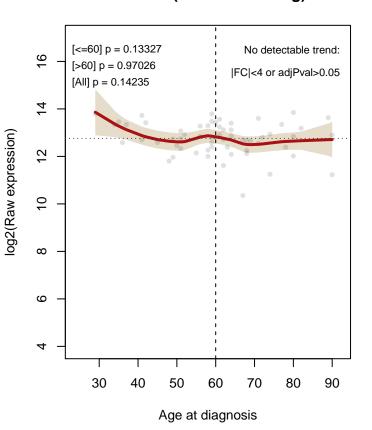
#### ERBB2 (non-ER binding)

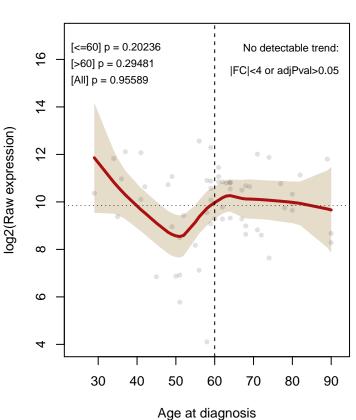


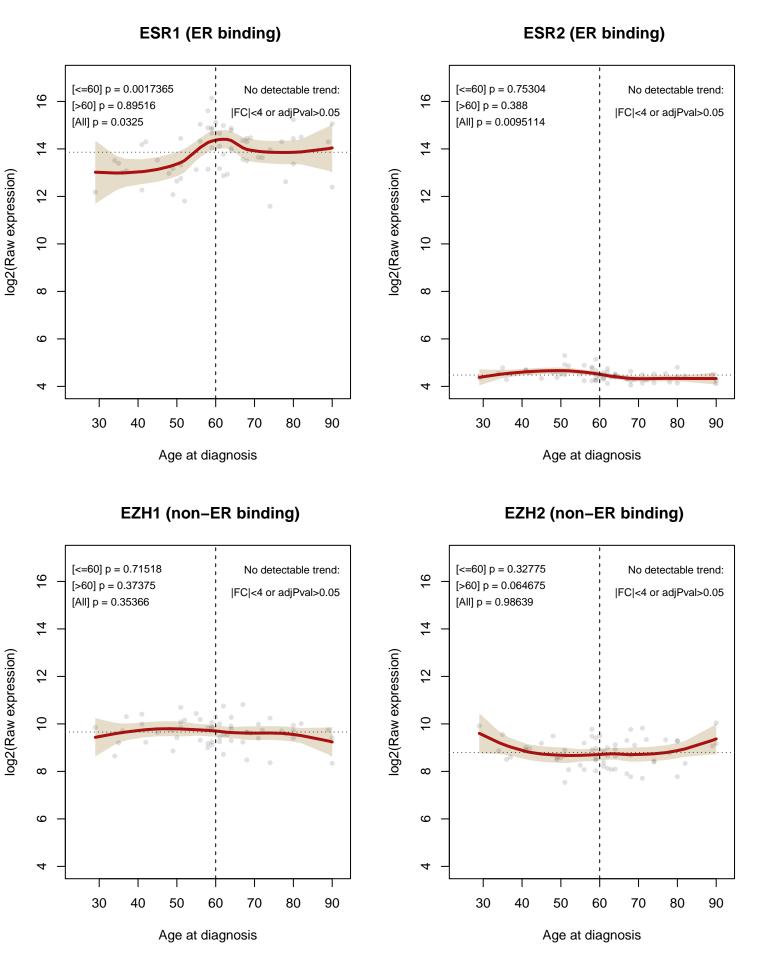


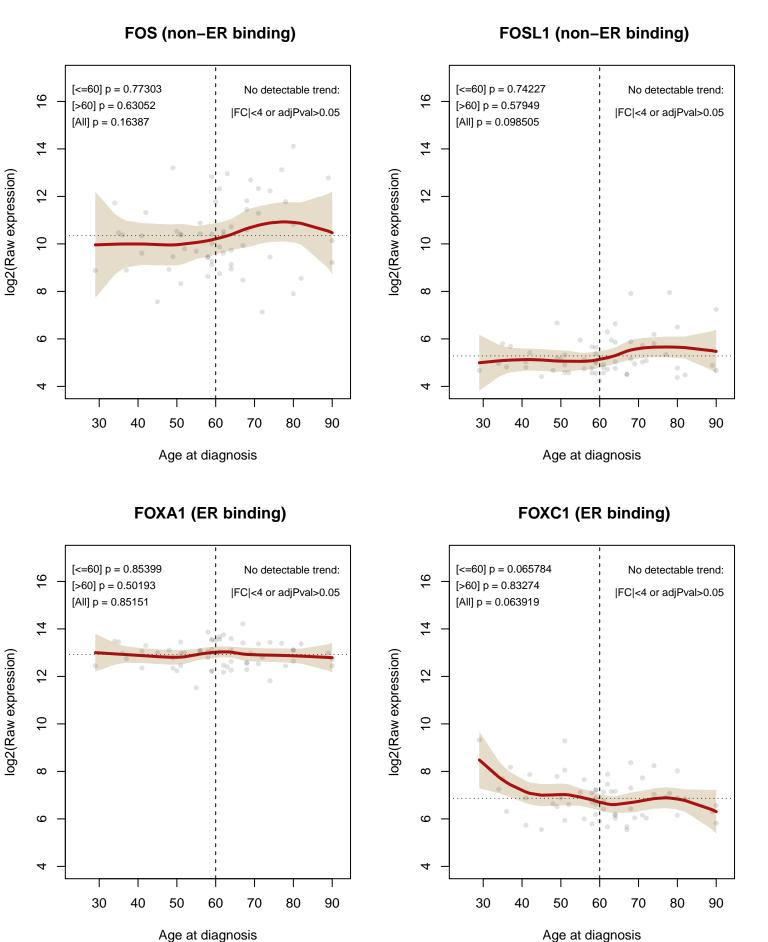
## **ERBB3** (non-ER binding)

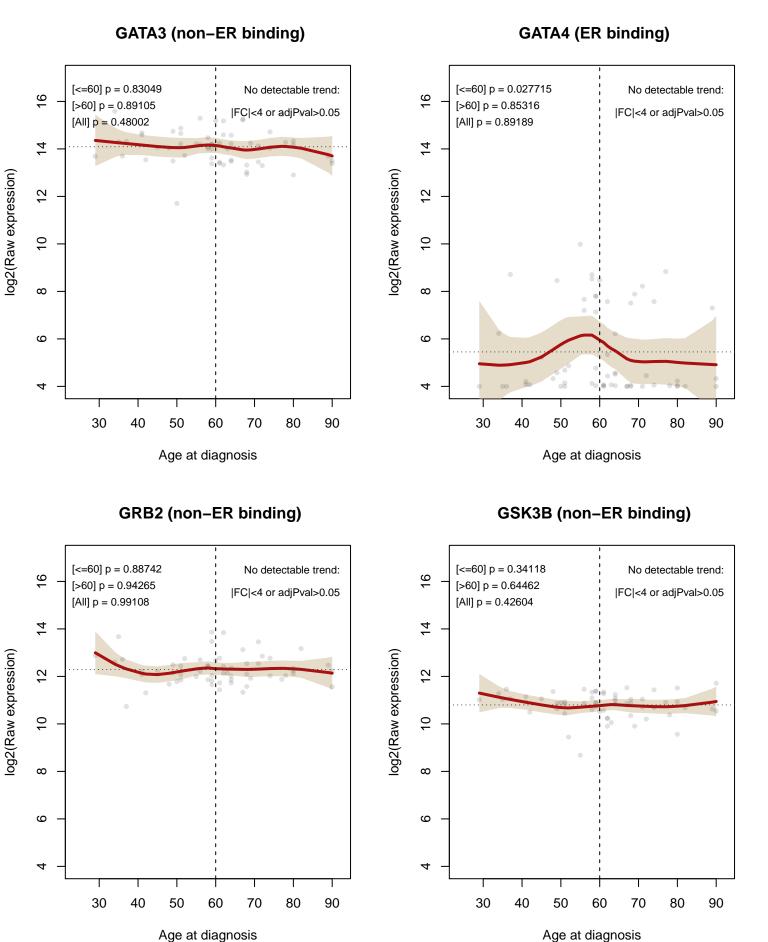
**ERBB4 (ER binding)** 

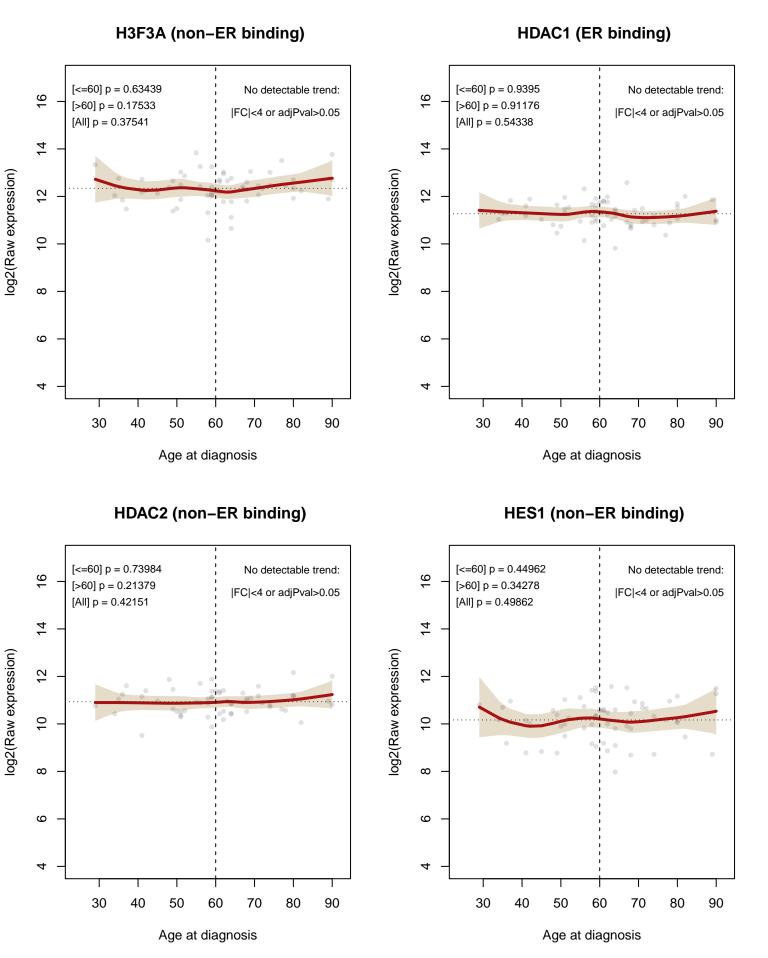






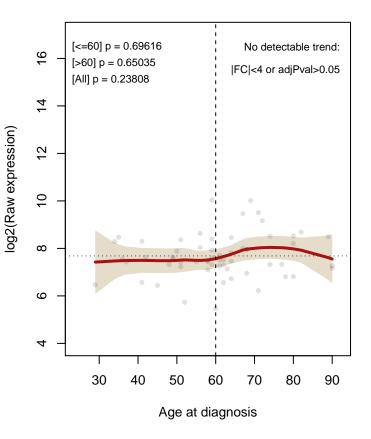


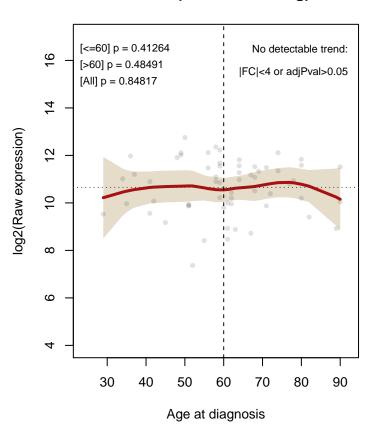






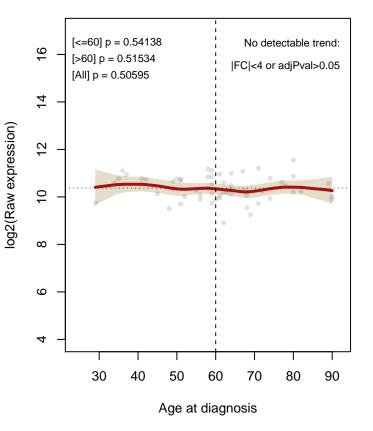
#### HIF1A (non-ER binding)

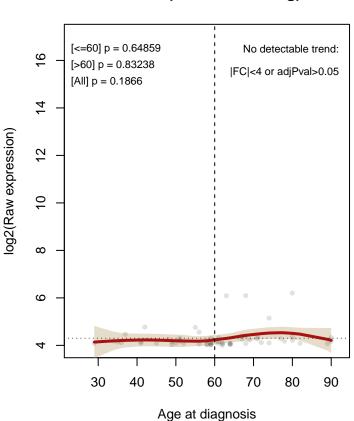




## HIF1AN (non-ER binding)

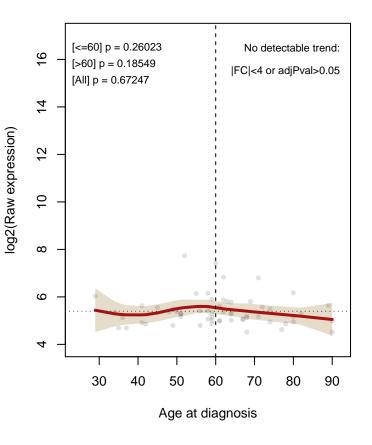
HIF3A (non-ER binding)

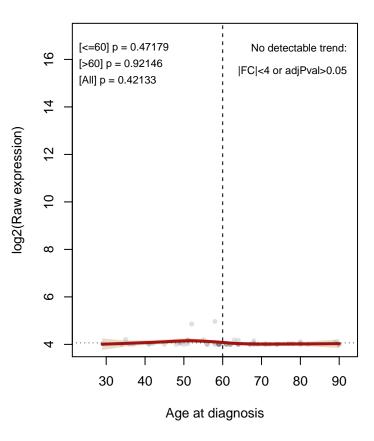




#### **HNF1A** (non-ER binding)

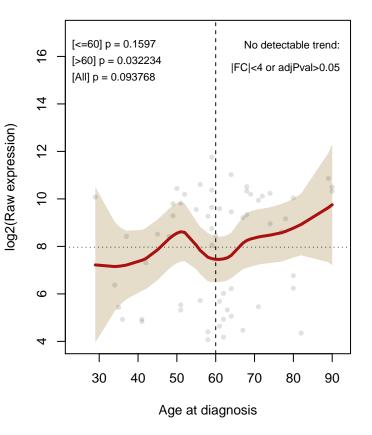
#### HNF1B (non-ER binding)

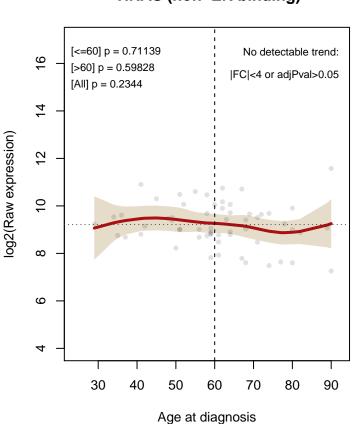




#### **HOXC10 (non-ER binding)**

#### HRAS (non-ER binding)





# **HSPB1** (non-ER binding) [<=60] p = 0.77089No detectable trend: 16 [>60] p = 0.41974 |FC|<4 or adjPval>0.05 [All] p = 0.868284 log2(Raw expression) 12 10

ω

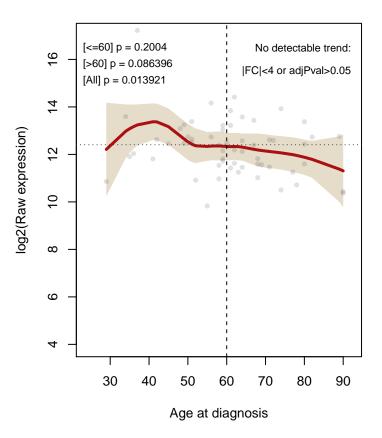
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#### IGF1R (ER binding)



IGFBP2 (non-ER binding)

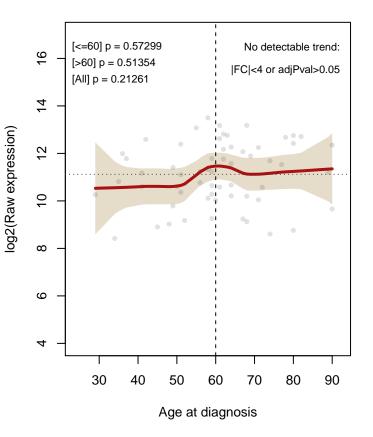
Age at diagnosis

60

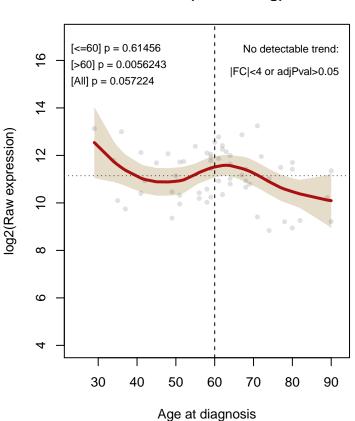
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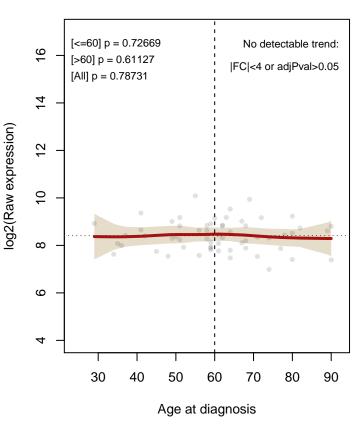


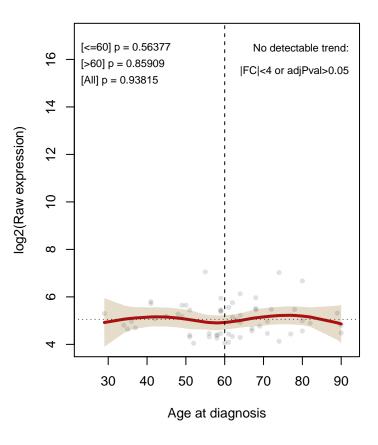
#### **IKBKB (ER binding)**





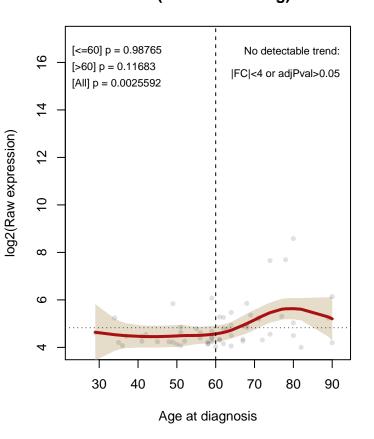
#### IL2RA (non-ER binding)

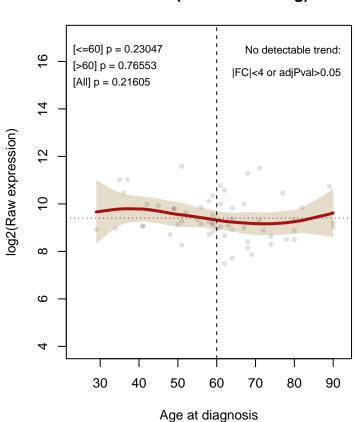


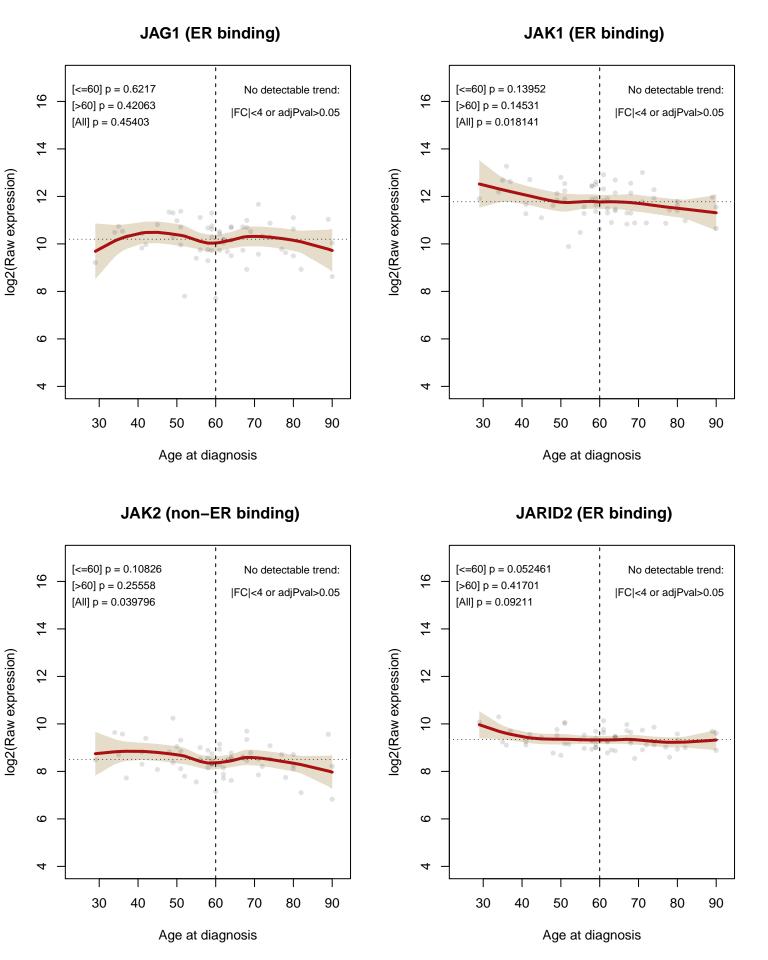


## IL6 (non-ER binding)

**INPP4B** (non-ER binding)

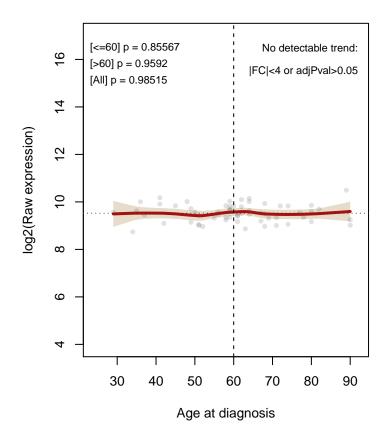


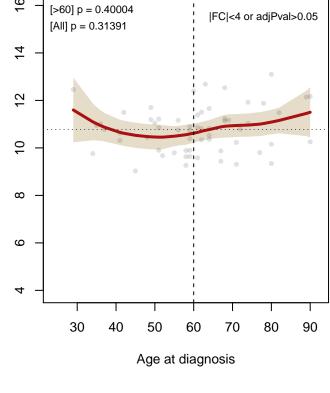




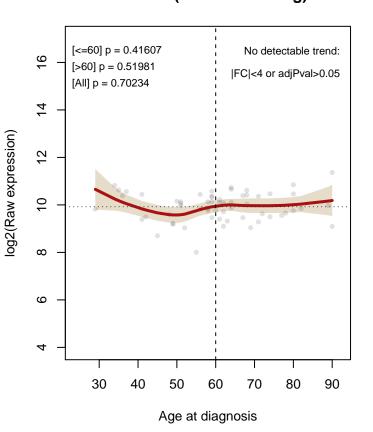
# JUN (non-ER binding) [<=60] p = 0.16349No detectable trend: 16 [>60] p = 0.40004 [All] p = 0.313914 log2(Raw expression)

#### KDM2B (non-ER binding)

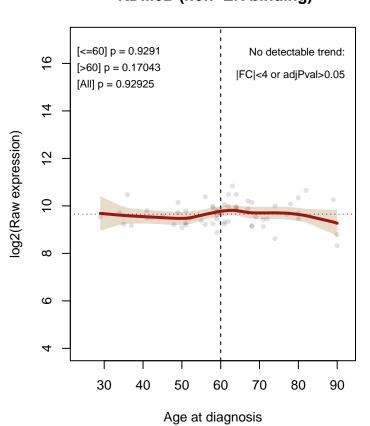




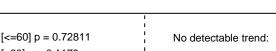
## KDM6A (non-ER binding)

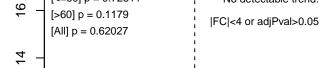


#### KDM6B (non-ER binding)











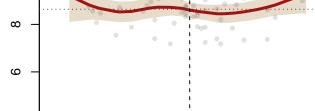
log2(Raw expression)

12

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Age at diagnosis

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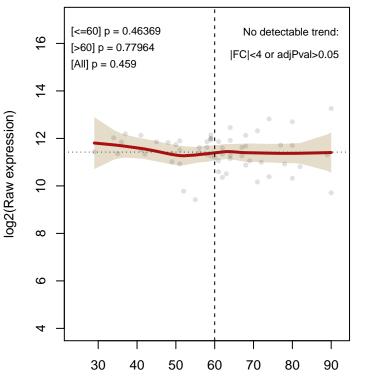
# KMT2C (non-ER binding)

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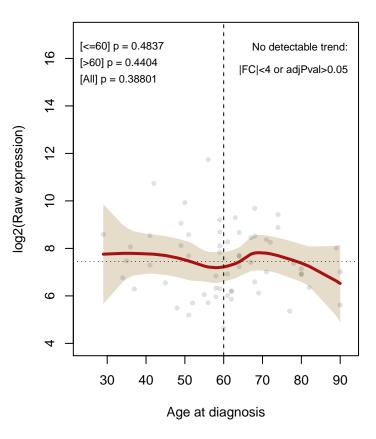
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90

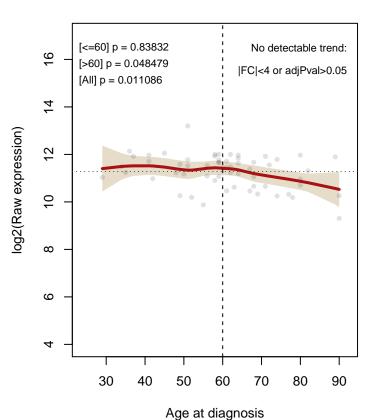


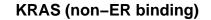
Age at diagnosis

#### KIT (non-ER binding)

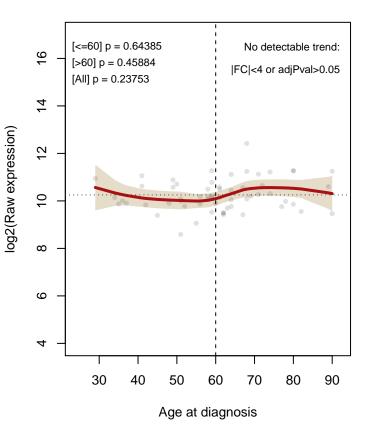


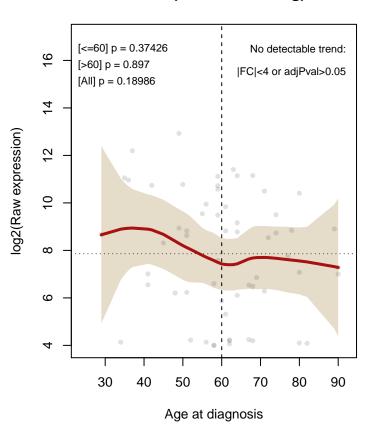
#### KMT2D (non-ER binding)





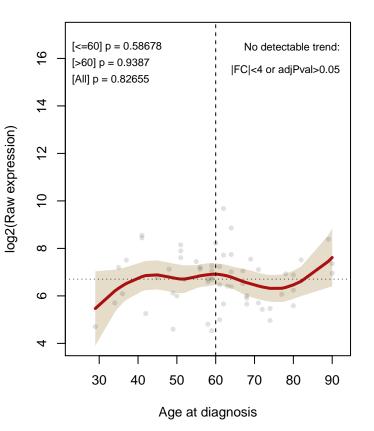
#### KRT5 (non-ER binding)

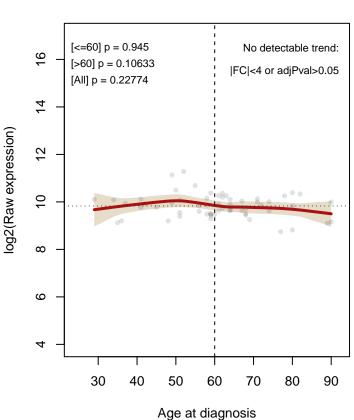




#### L3MBTL1 (non-ER binding)

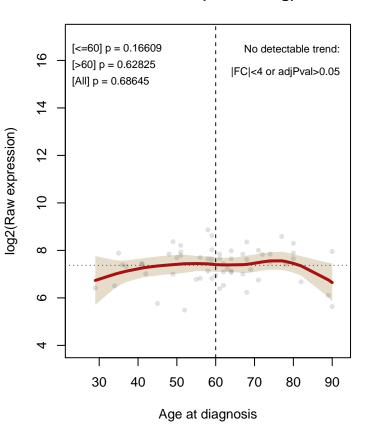
#### L3MBTL2 (non-ER binding)

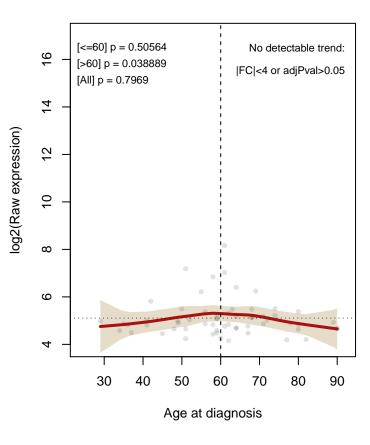




#### L3MBTL3 (ER binding)

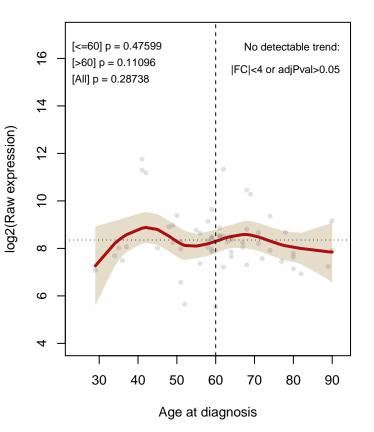
## L3MBTL4 (non-ER binding)

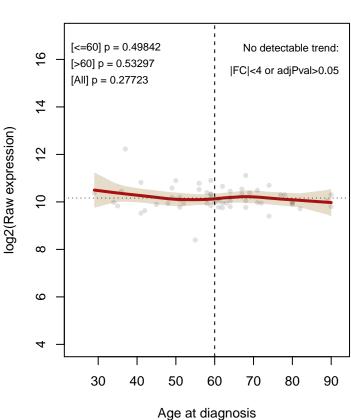




#### LEF1 (non-ER binding)

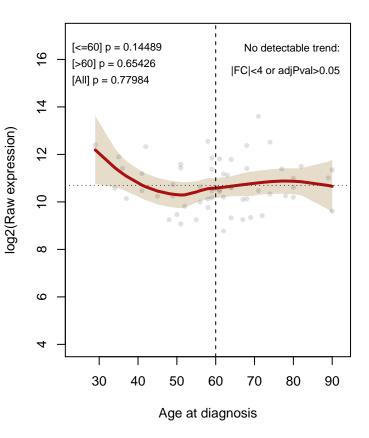
MAP2K1 (non-ER binding)

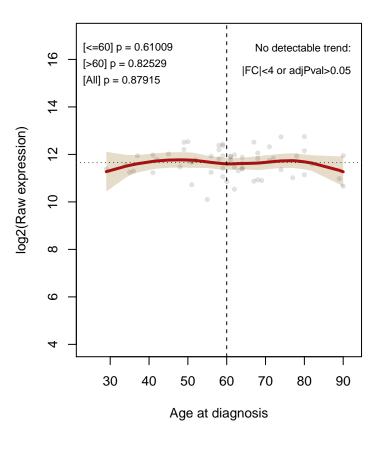






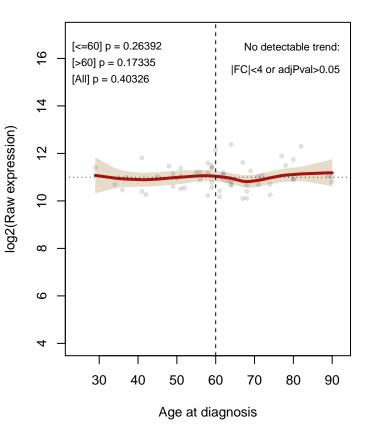
#### MAPK1 (non-ER binding)

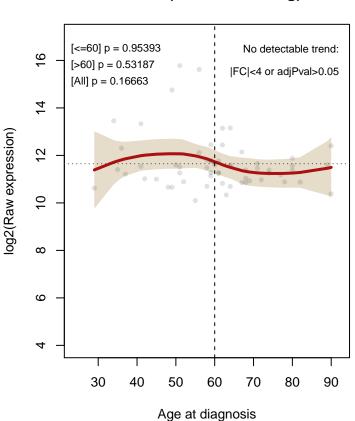


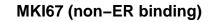


#### MAPK3 (non-ER binding)

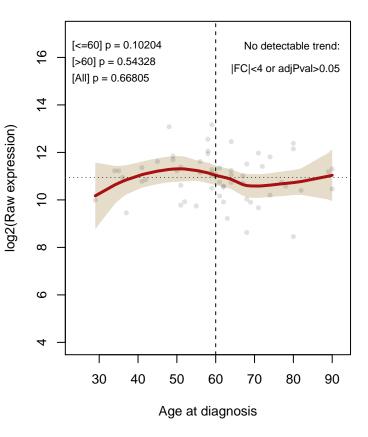
MDM2 (non-ER binding)

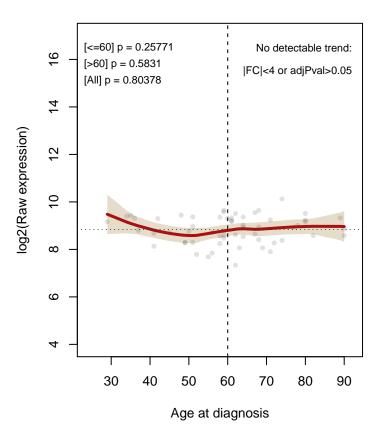






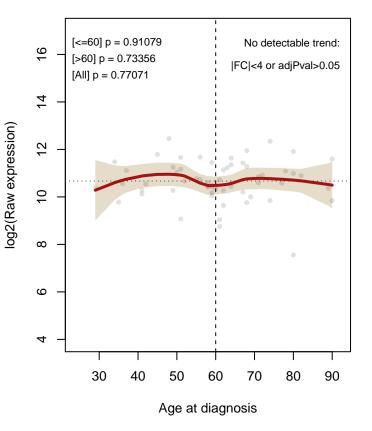
#### MTF2 (non-ER binding)

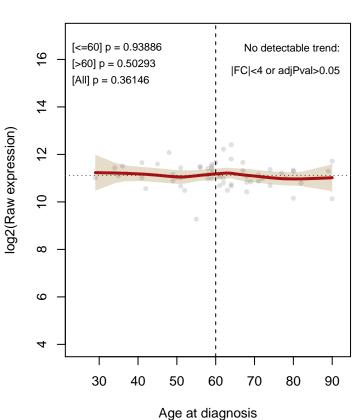




## MYC (non-ER binding)

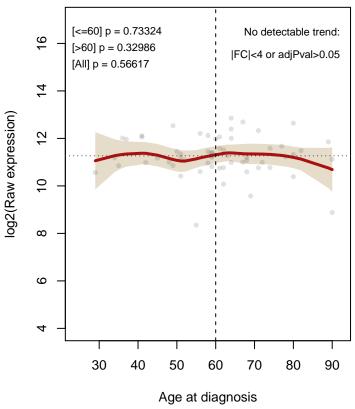
#### NCOA6 (non-ER binding)

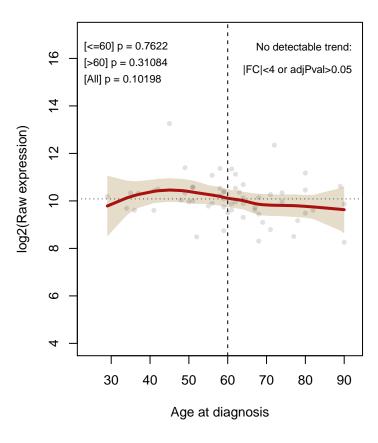






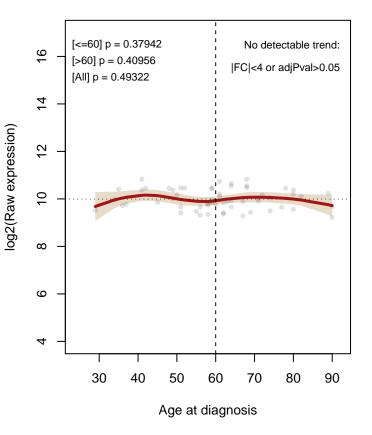
#### NES (non-ER binding)

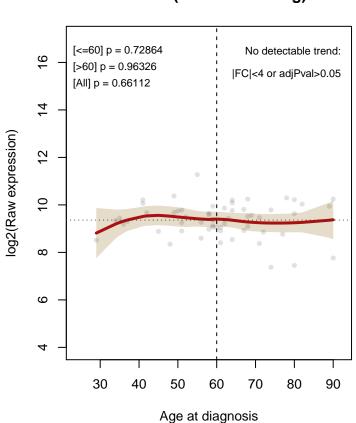




## NFKB1 (non-ER binding)

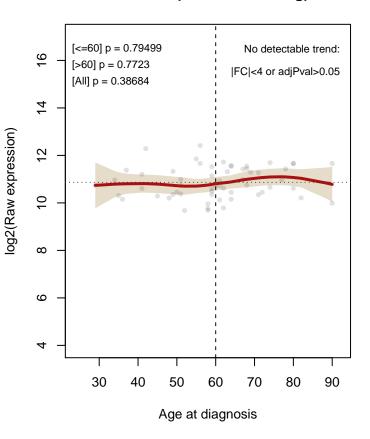
#### NFKB2 (non-ER binding)

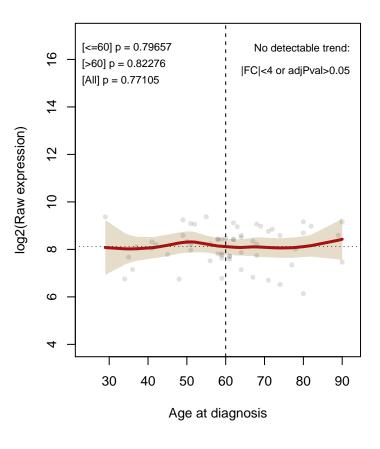




#### **NFKBIA** (non-ER binding)

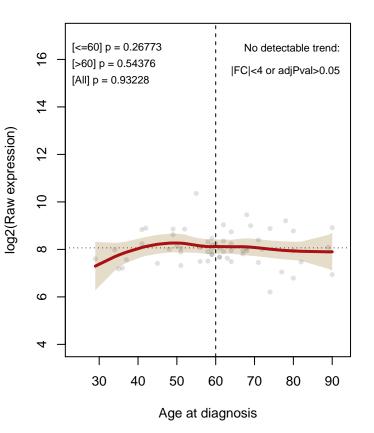
#### NFKBIB (non-ER binding)

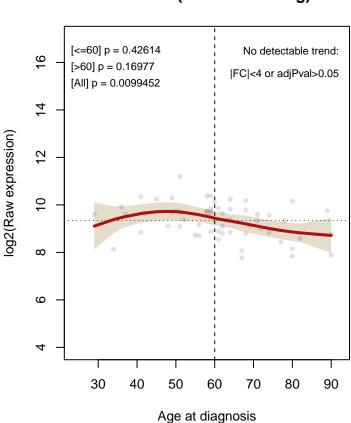




### **NFKBIE** (non-ER binding)

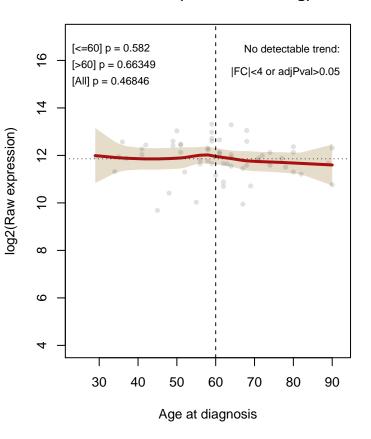
#### **NOTCH1** (non-ER binding)

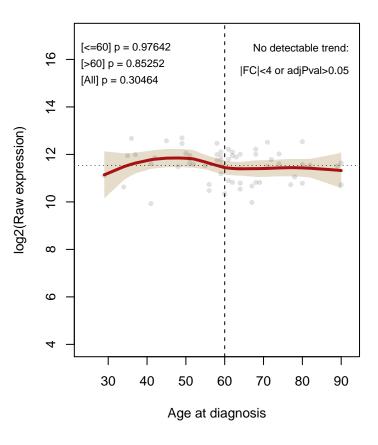




#### NOTCH2 (non-ER binding)

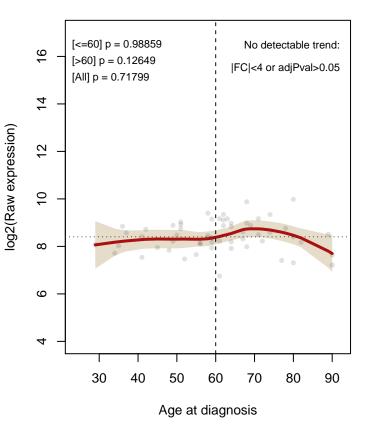
#### NOTCH3 (non-ER binding)

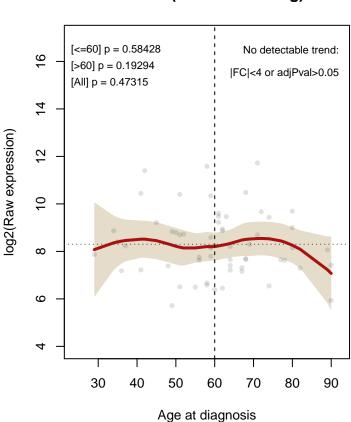




#### NOTCH4 (non-ER binding)

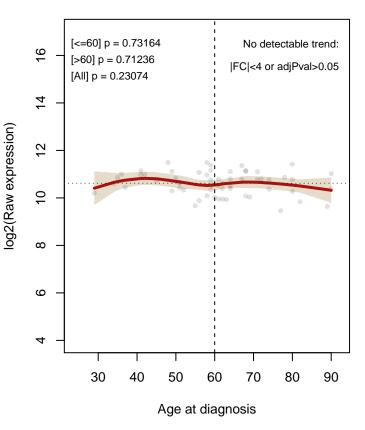
#### NR4A2 (non-ER binding)

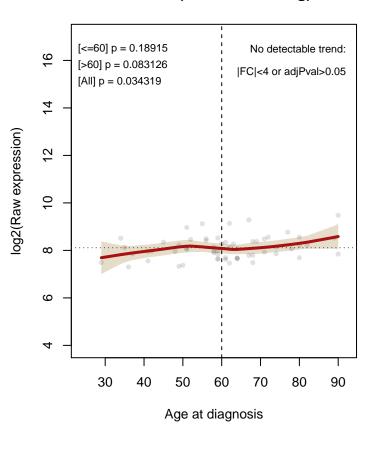






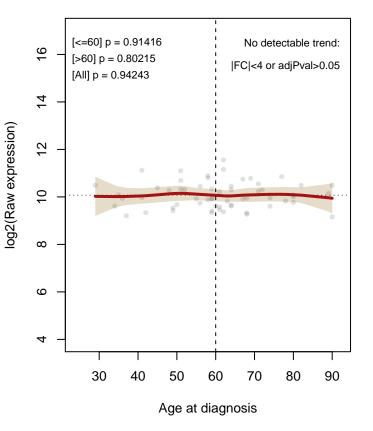
#### PCGF1 (non-ER binding)

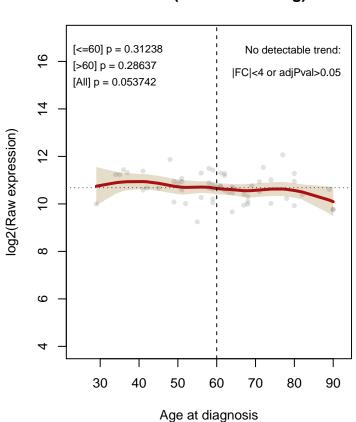




#### PCGF2 (non-ER binding)

#### PCGF3 (non-ER binding)







No detectable trend:

|FC|<4 or adjPval>0.05

[<=60] p = 0.82612

[>60] p = 0.26714

[All] p = 0.29453

30

[>60] p = 0.45668

[AII] p = 0.81272

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60

Age at diagnosis

70

80

90

40

50

16

4

12

10

ω

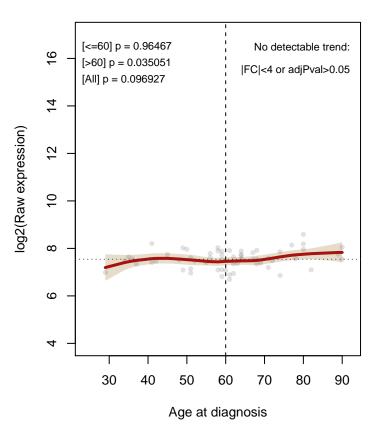
9

16

log2(Raw expression)

log2(Raw expression)

#### PCGF6 (non-ER binding)



#### PDGFRA (non-ER binding)

Age at diagnosis

60

70

80

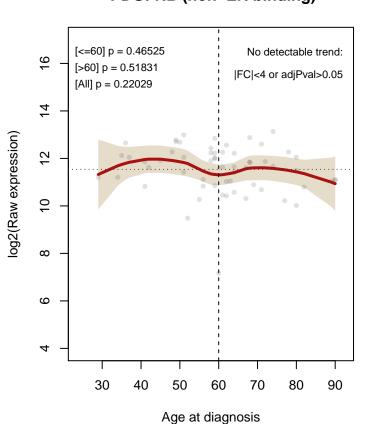
|FC|<4 or adjPval>0.05

90

# [<=60] p = 0.36499No detectable trend:

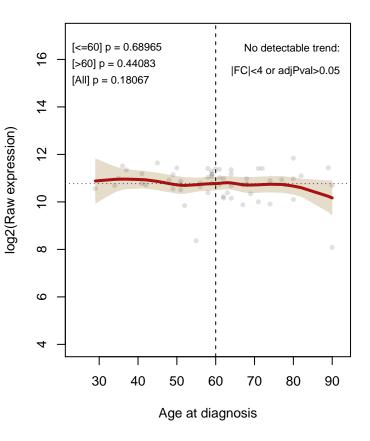
# 4 12 10 $\infty$ 9

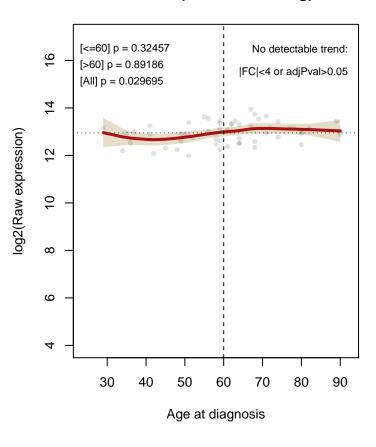
#### PDGFRB (non-ER binding)





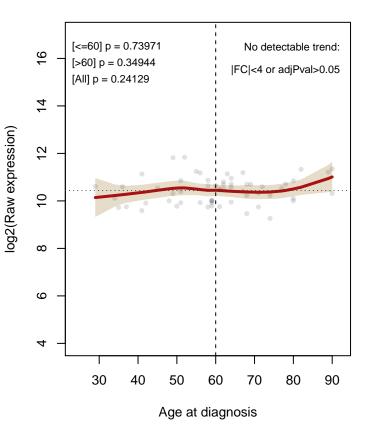
#### PEBP1 (non-ER binding)

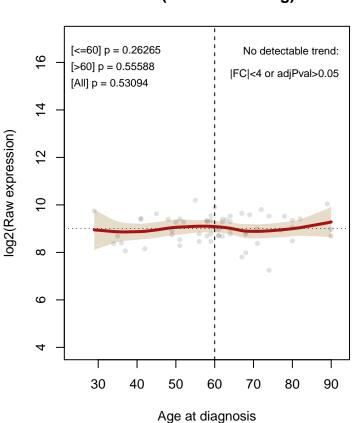


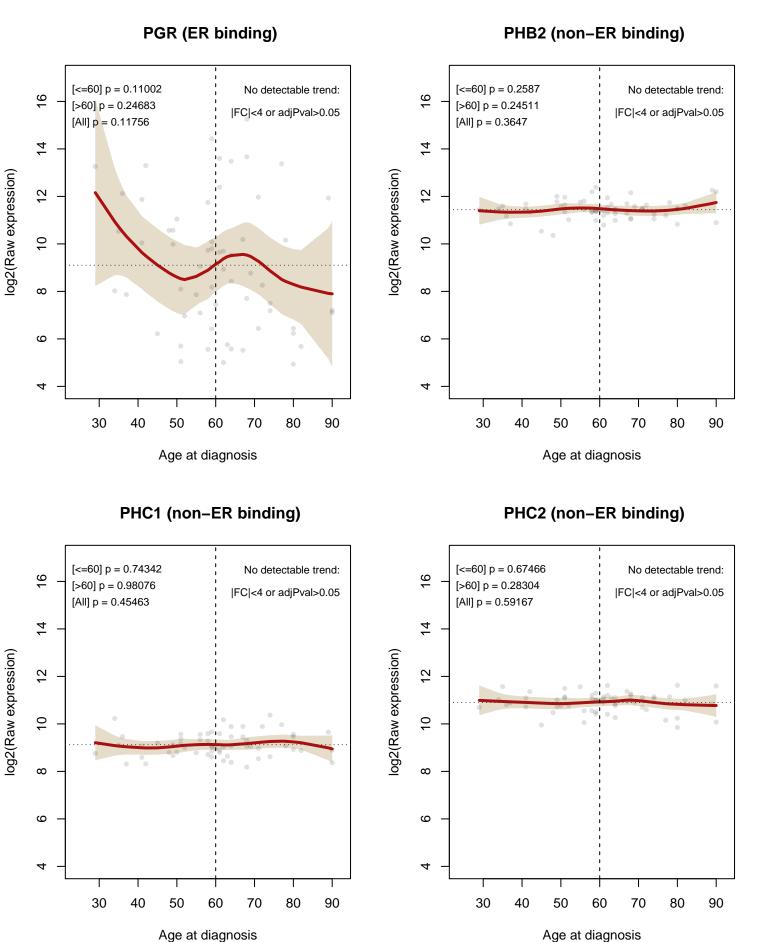


#### PELP1 (non-ER binding)

PGP (non-ER binding)







#### PHC3 (non-ER binding) PHF1 (non-ER binding) [<=60] p = 0.73179No detectable trend: [<=60] p = 0.78378No detectable trend: 16 16 [>60] p = 0.98326 [>60] p = 0.38314 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.67113[AII] p = 0.92784 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 PHF19 (non-ER binding) PIK3CA (non-ER binding) [<=60] p = 0.61202No detectable trend: [<=60] p = 0.44199No detectable trend: 16 16 [>60] p = 0.55718 [>60] p = 0.70526|FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.53658[All] p = 0.0840164 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 $\infty$ ω

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Age at diagnosis

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60

Age at diagnosis

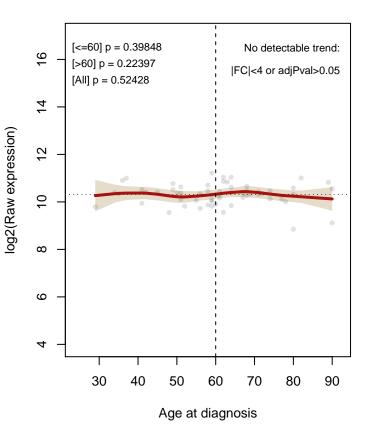
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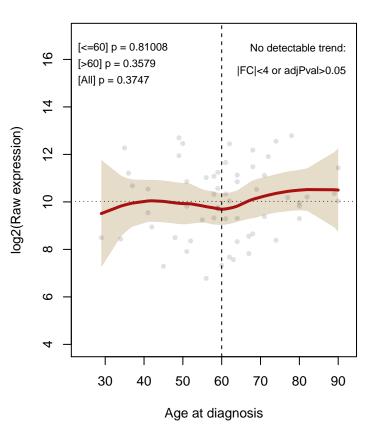
80

90



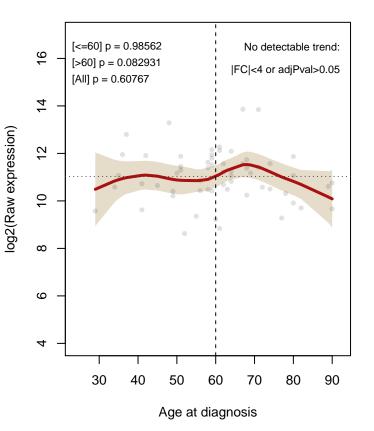
#### PLAU (non-ER binding)

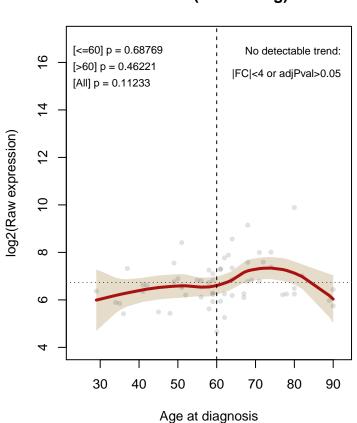


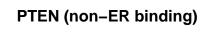


#### PODXL (non-ER binding)

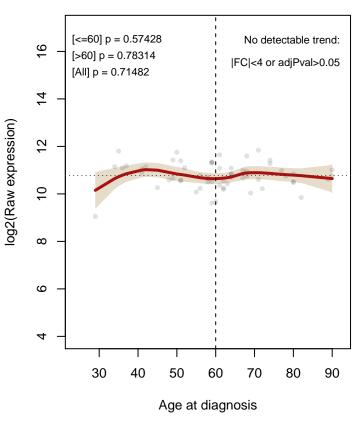
**PPARG (ER binding)** 

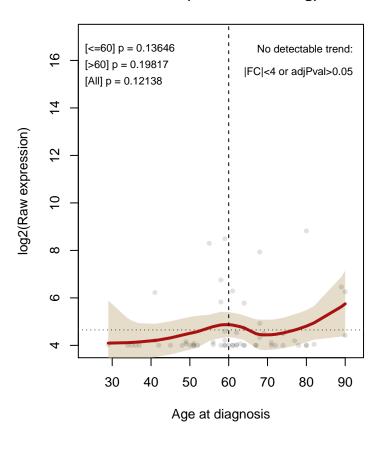






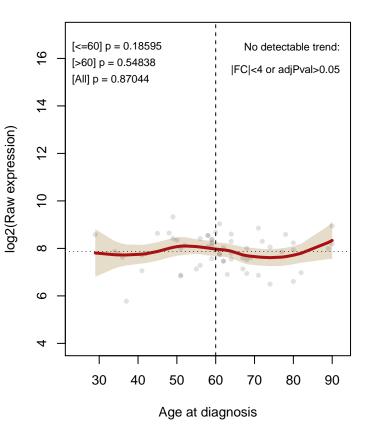
#### **PYDC1** (non-ER binding)

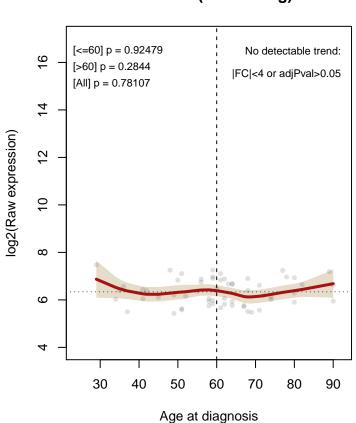




# RAD51 (non-ER binding)

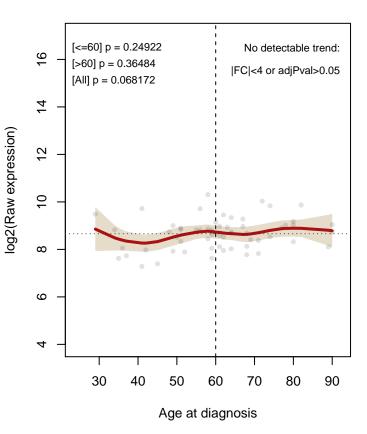
#### RAD51B (ER binding)

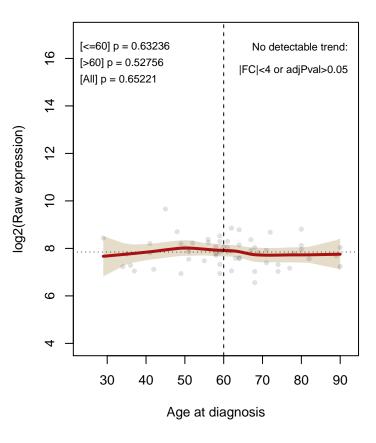




#### RAD51C (non-ER binding)

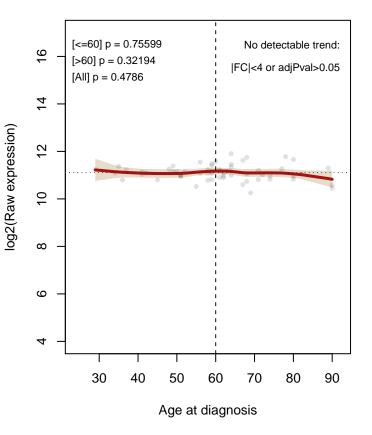
#### RAD51D (non-ER binding)

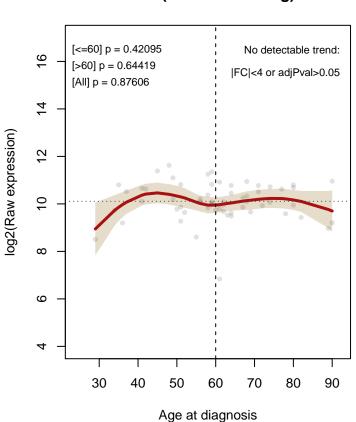


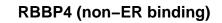


RAF1 (non-ER binding)

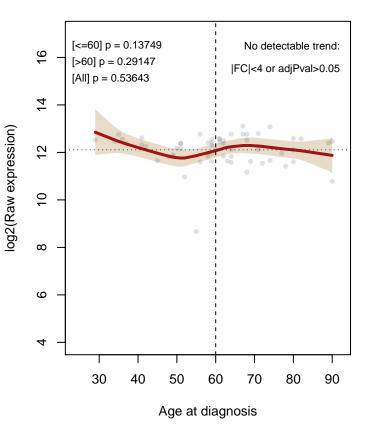
**RB1 (non-ER binding)** 

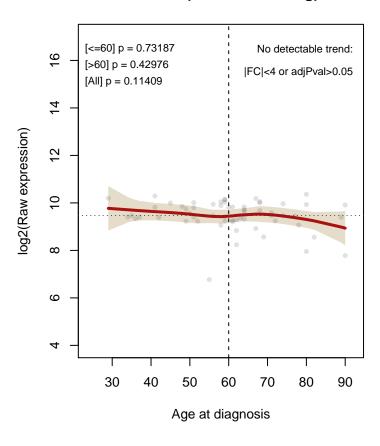






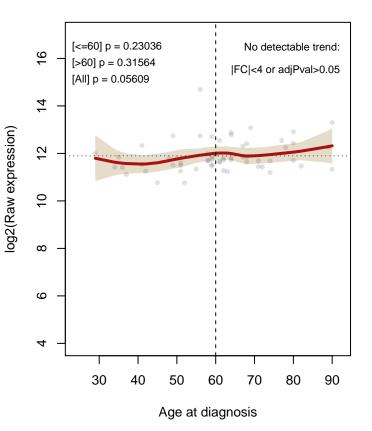
#### RBBP5 (non-ER binding)

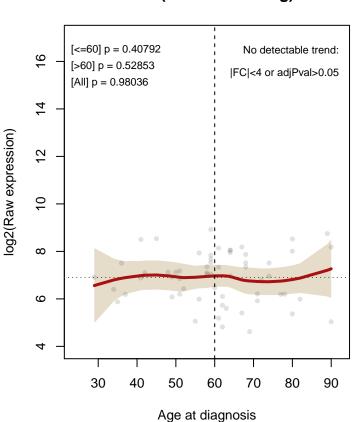


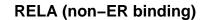


RBBP7 (non-ER binding)

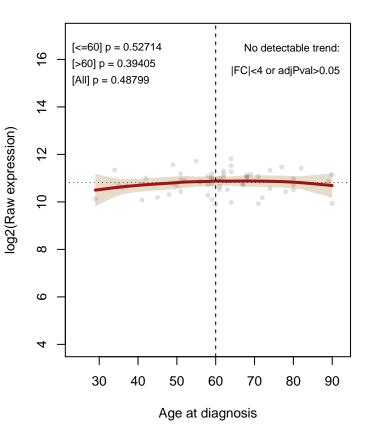
**REL** (non-ER binding)

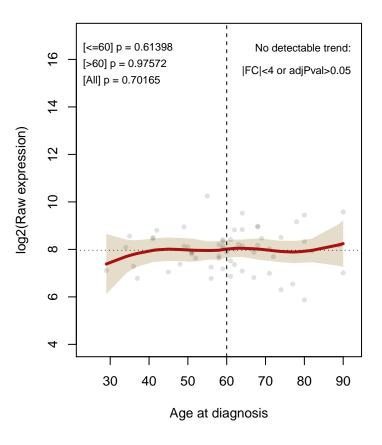






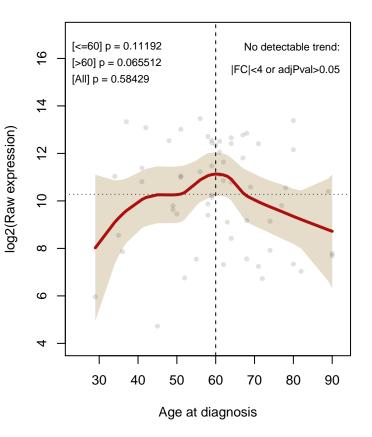
#### **RELB** (non-ER binding)

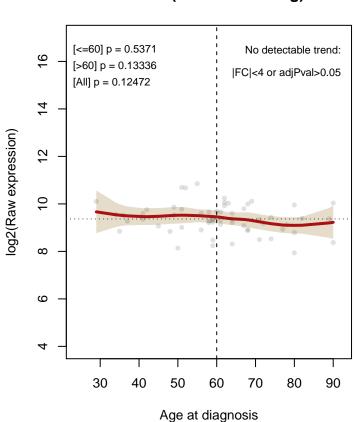




### **RET (ER binding)**

#### RING1 (non-ER binding)





#### RNF2 (non-ER binding) **RUNX1 (ER binding)** [<=60] p = 0.59694No detectable trend: [<=60] p = 0.010356 No detectable trend: 16 16 [>60] p = 0.4497 [>60] p = 0.73913 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.87655[All] p = 0.0406124 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 **RUNX3 (non-ER binding)** RYBP (non-ER binding) [<=60] p = 0.85988No detectable trend: [<=60] p = 0.27077No detectable trend: 16 16 [>60] p = 0.93782[>60] p = 0.99931 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.91783[All] p = 0.663884 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 $\infty$ $\infty$ 9 9

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Age at diagnosis

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Age at diagnosis

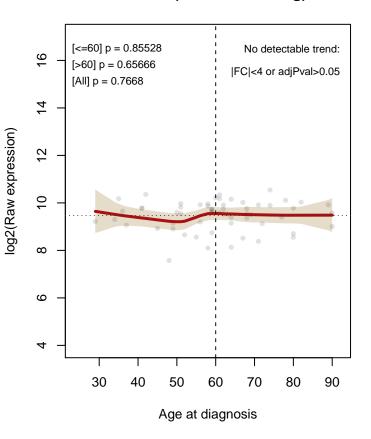
70

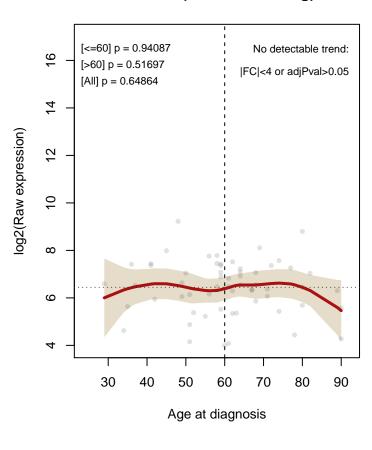
80

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#### SCMH1 (non-ER binding)

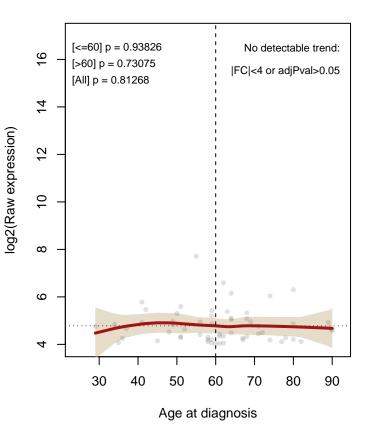
#### SCML2 (non-ER binding)

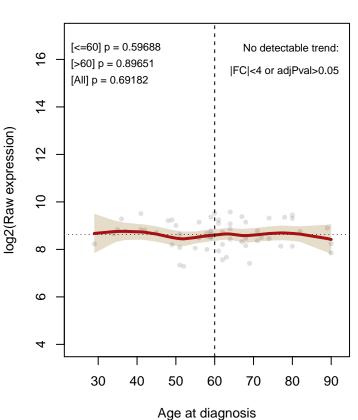




### SCML4 (non-ER binding)

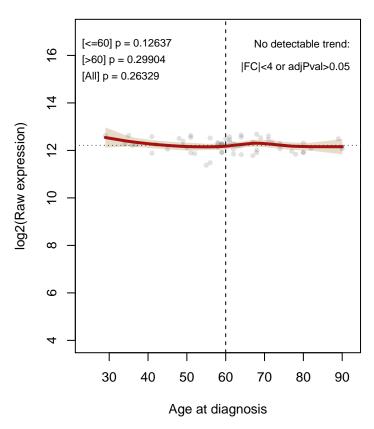
#### SFMBT1 (ER binding)





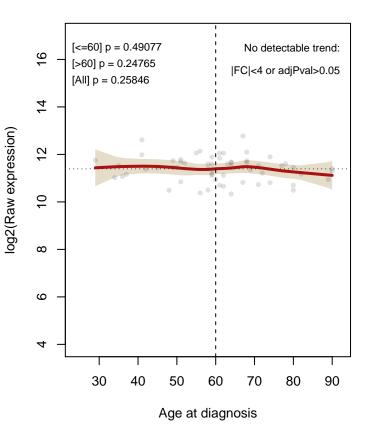
# 

#### SFPQ (non-ER binding)

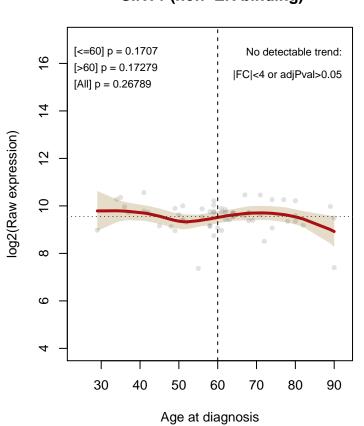


SHC1 (non-ER binding)

Age at diagnosis

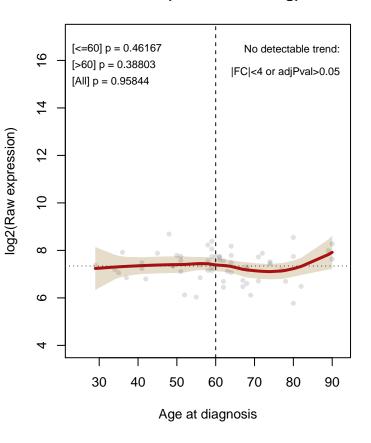


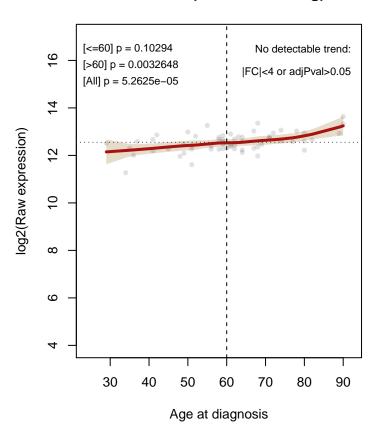
#### SIRT1 (non-ER binding)



#### SKP2 (non-ER binding)

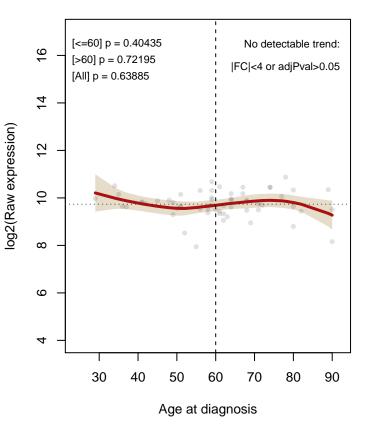
#### SLC25A3 (non-ER binding)

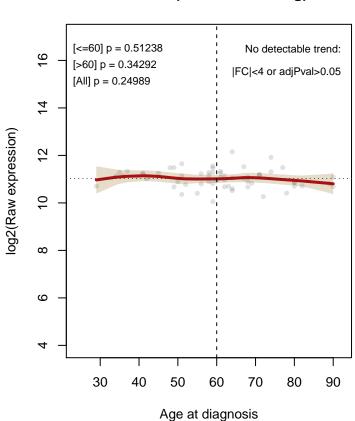




### SMAD1 (non-ER binding)

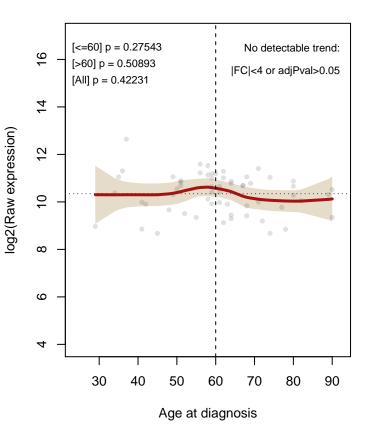
SMAD2 (non-ER binding)

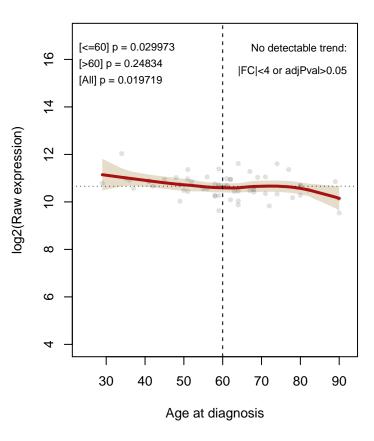






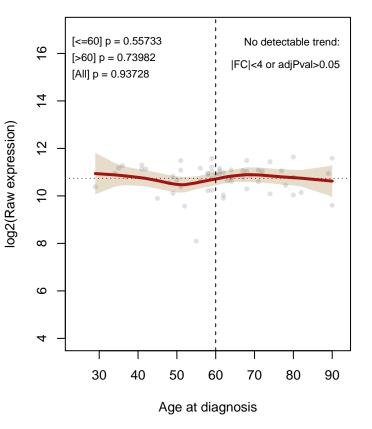
#### SMAD4 (non-ER binding)

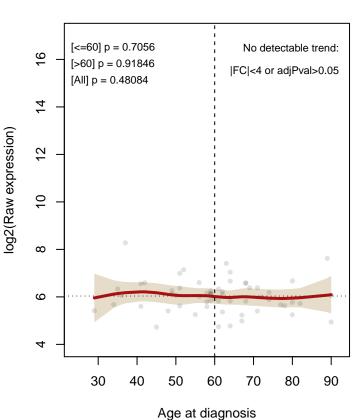


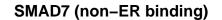


### **SMAD5** (non-ER binding)

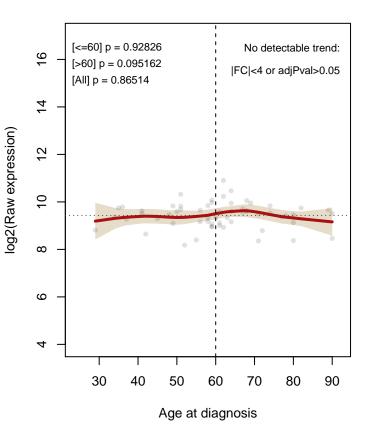
SMAD6 (non-ER binding)

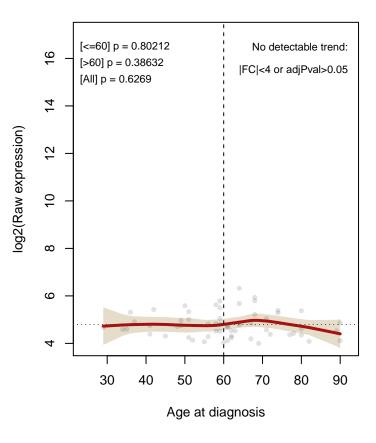






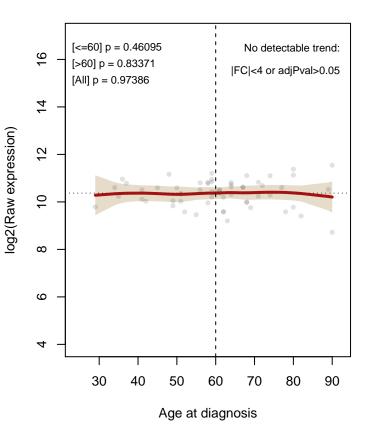
#### SMAD9 (non-ER binding)

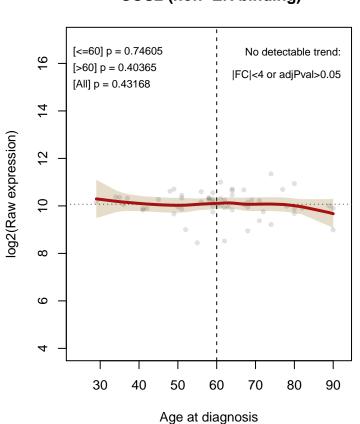


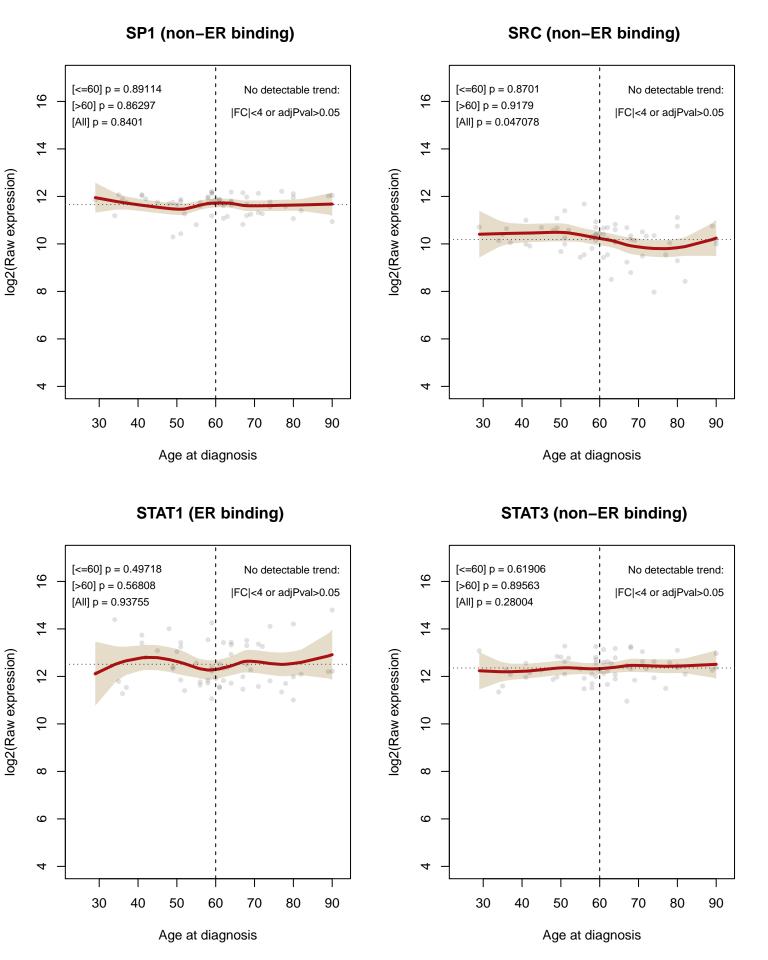


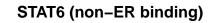
### SOS1 (non-ER binding)

SOS2 (non-ER binding)

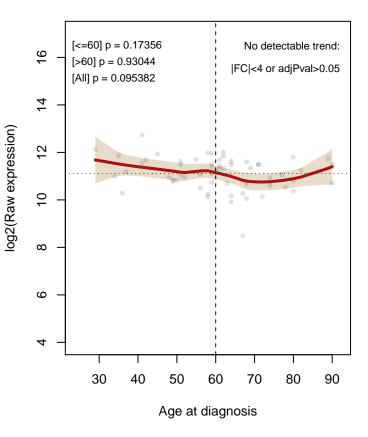


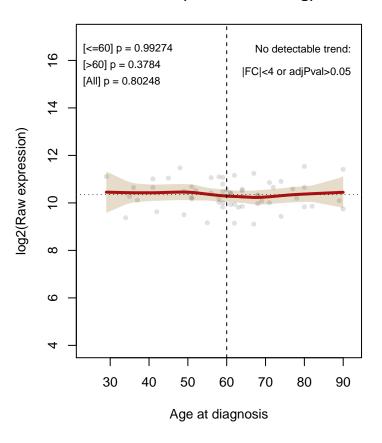






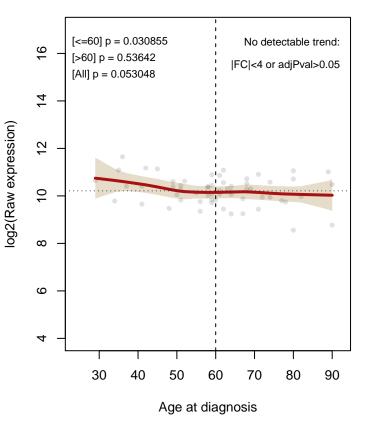
#### SUZ12 (non-ER binding)

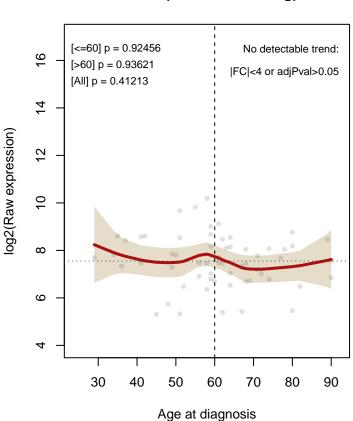




TCF3 (non-ER binding)

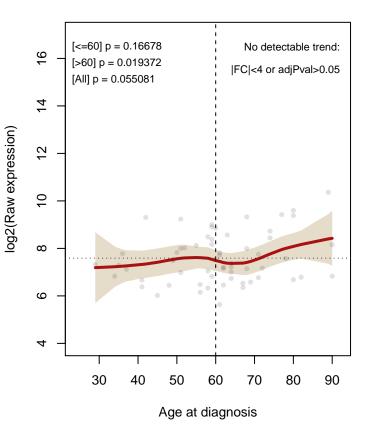
#### TCF7 (non-ER binding)

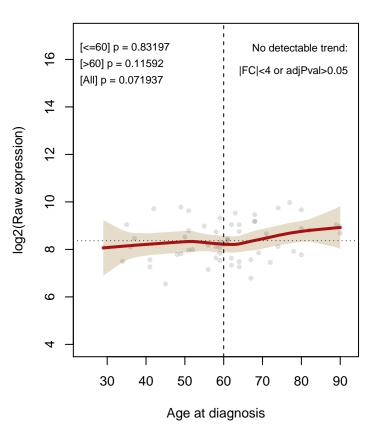






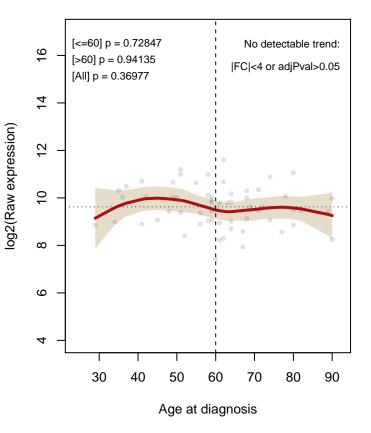
## TCF7L2 (non-ER binding)

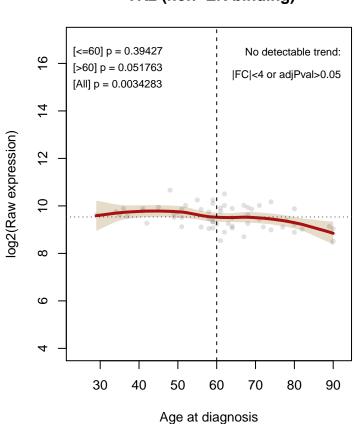


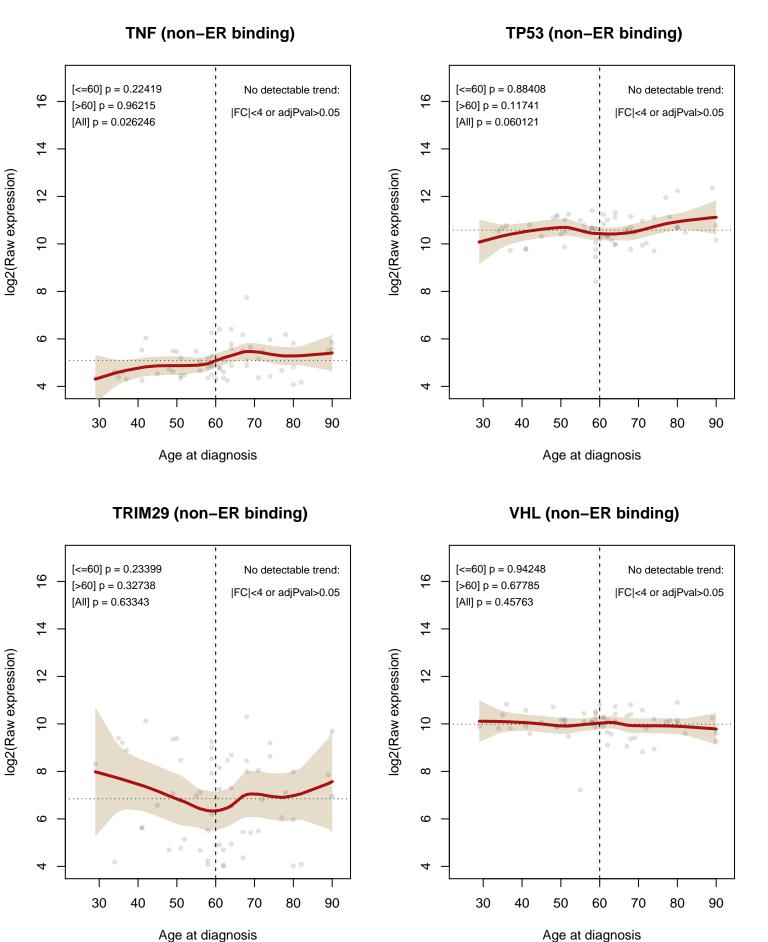


TGFB1 (non-ER binding)

TK2 (non-ER binding)

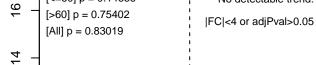


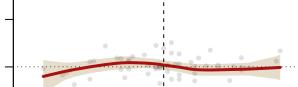






# [<=60] p = 0.14656No detectable trend:





log2(Raw expression)

12

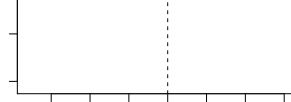
19

 $\infty$ 

9

30

40



50

Age at diagnosis

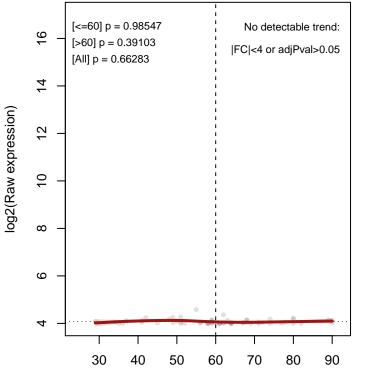
WNT1 (non-ER binding)

60

70

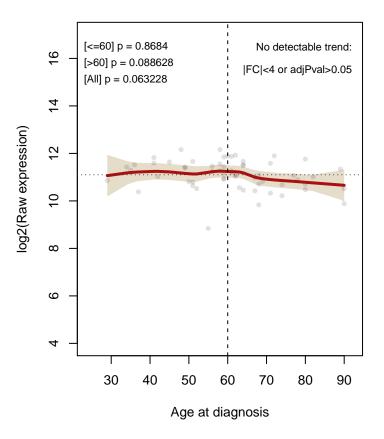
80

90

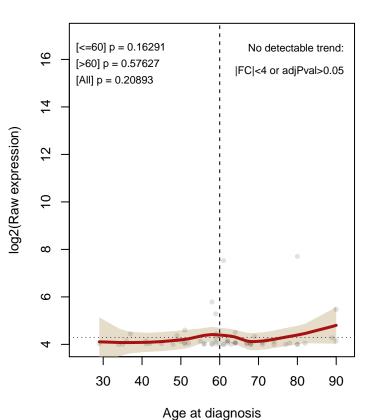


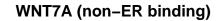
Age at diagnosis

#### WHSC1 (non-ER binding)

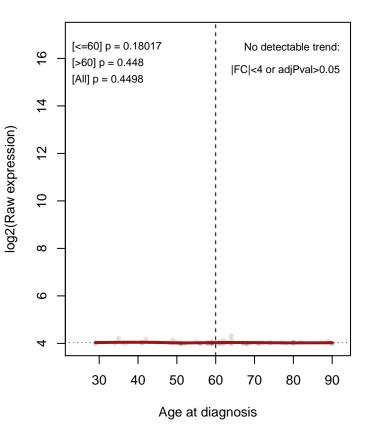


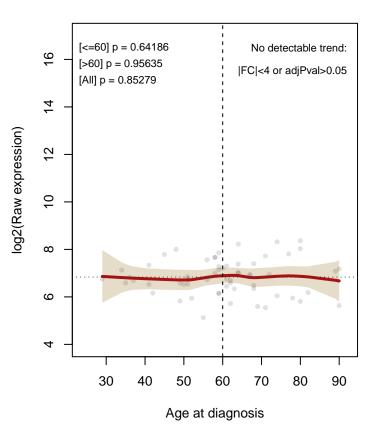
#### WNT3A (non-ER binding)





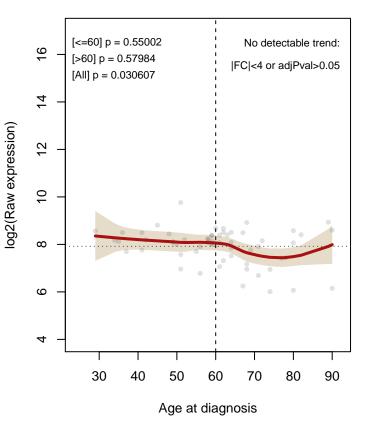
#### XRCC2 (non-ER binding)

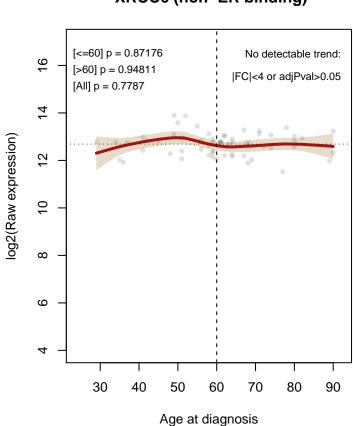




### XRCC3 (non-ER binding)

XRCC6 (non-ER binding)

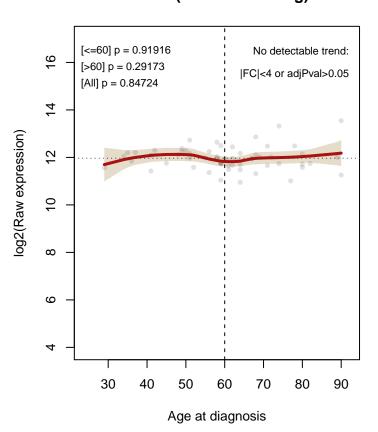




#### YAF2 (non-ER binding)

#### [<=60] p = 0.84462No detectable trend: 16 [>60] p = 0.084945 |FC|<4 or adjPval>0.05 [All] p = 0.122864 log2(Raw expression) 12 10 $\infty$ 9 4 30 40 50 60 70 80 90

## YBX1 (non-ER binding)



#### YY1 (non-ER binding)

Age at diagnosis

