

#### ASXL3 (non-ER binding) ATM (non-ER binding) [<=60] p = 0.21325No detectable trend: [<=60] p = 0.49291No detectable trend: 16 16 [>60] p = 0.87501 [>60] p = 0.13774 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.31398[All] p = 0.118694 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 ATR (non-ER binding) **AXIN1 (ER binding)** [<=60] p = 0.10275No detectable trend: [<=60] p = 0.66325No detectable trend: 16 16 [>60] p = 0.00012877 [>60] p = 0.36718 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.24535[All] p = 0.239694 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω $\infty$ 9 9

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Age at diagnosis

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Age at diagnosis

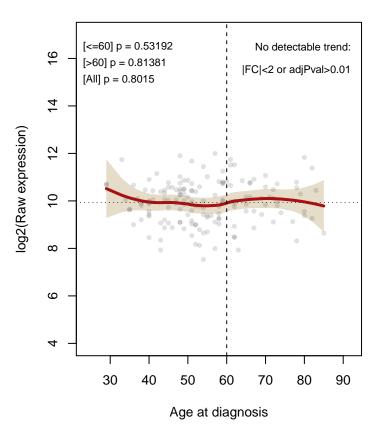
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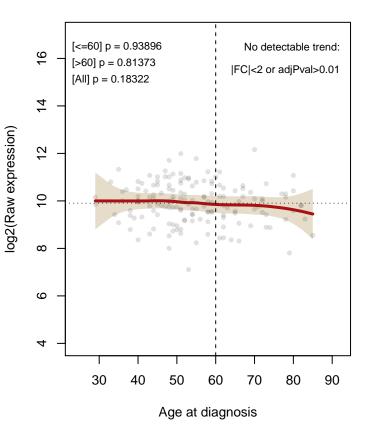
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# **BCL2 (non-ER binding)** [<=60] p = 0.53054No detectable trend: 16 [>60] p = 0.90639 |FC|<2 or adjPval>0.01 [All] p = 0.103174 12

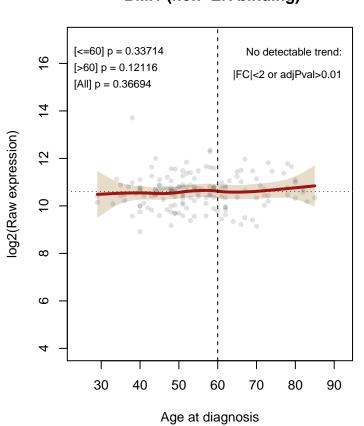
### **BCL3 (non-ER binding)**



log2(Raw expression) 10  $\infty$ 9 30 40 50 60 70 80 90 Age at diagnosis BIRC5 (non-ER binding)

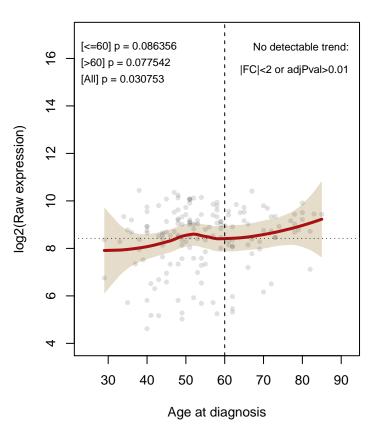


**BMI1 (non-ER binding)** 



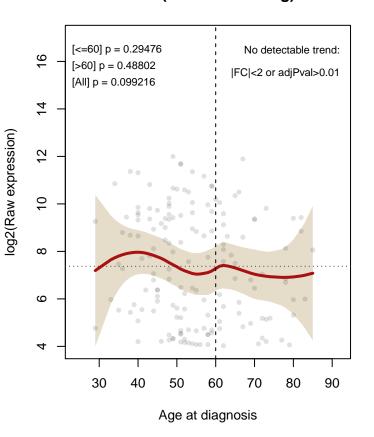
# BMX (non-ER binding) [<=60] p = 0.85384No detectable trend: 16 [>60] p = 0.1325 |FC|<2 or adjPval>0.01 [All] p = 0.625674 log2(Raw expression) 12 10 $\infty$ 9 30 40 50 60 70 80 90

### BRCA1 (non-ER binding)

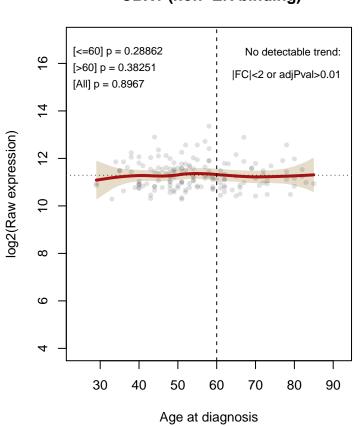


CA9 (non-ER binding)

Age at diagnosis



#### CBX1 (non-ER binding)



#### CBX2 (non-ER binding) CBX4 (non-ER binding) [<=60] p = 0.52687No detectable trend: [<=60] p = 0.98846No detectable trend: 16 16 [>60] p = 0.52295 [>60] p = 0.089668|FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.11144[All] p = 0.743914 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 CBX6 (non-ER binding) **CBX7 (non-ER binding)** [<=60] p = 0.55263No detectable trend: [<=60] p = 0.66268No detectable trend: 16 16 [>60] p = 0.85869 [>60] p = 0.15682 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.40457[All] p = 0.422384 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 $\infty$ ω 9 9

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Age at diagnosis

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Age at diagnosis

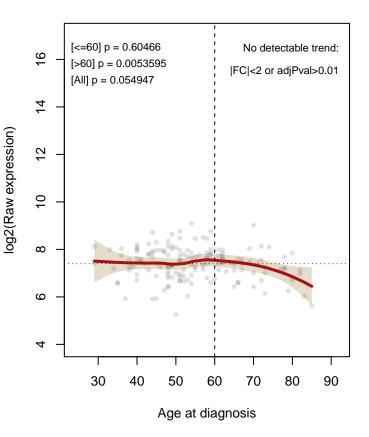
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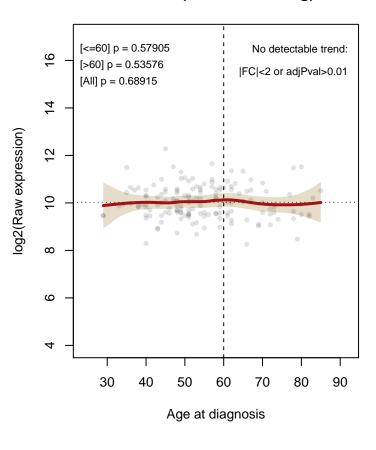
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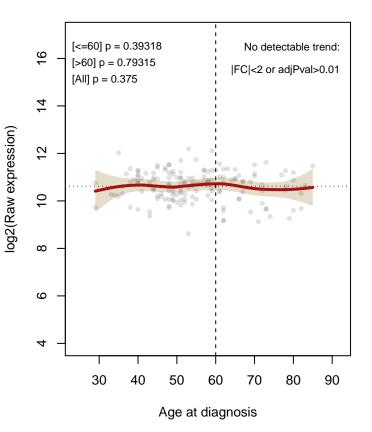
#### CCNA2 (non-ER binding)

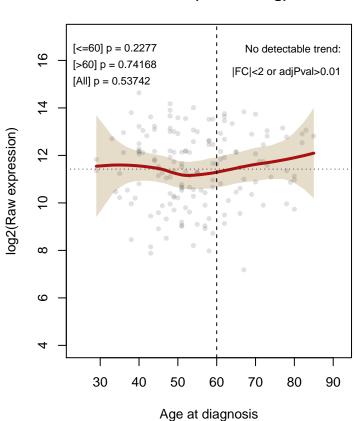




#### CCNB1 (non-ER binding)

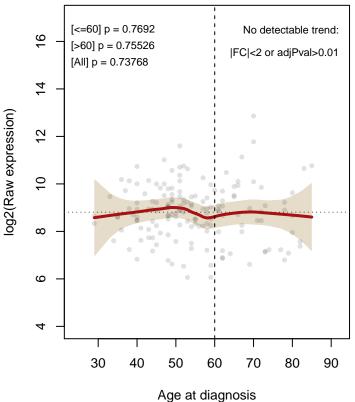
#### **CCND1 (ER binding)**

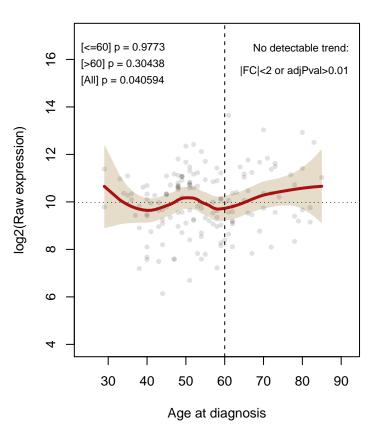






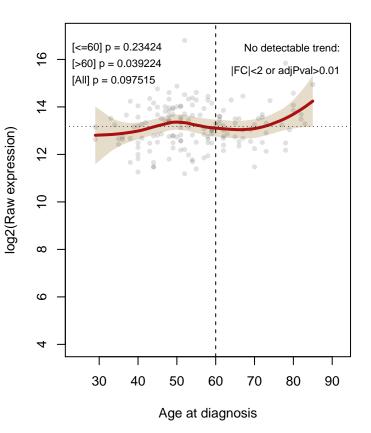
#### CD163 (non-ER binding)

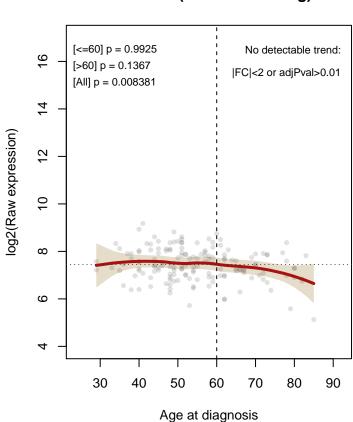


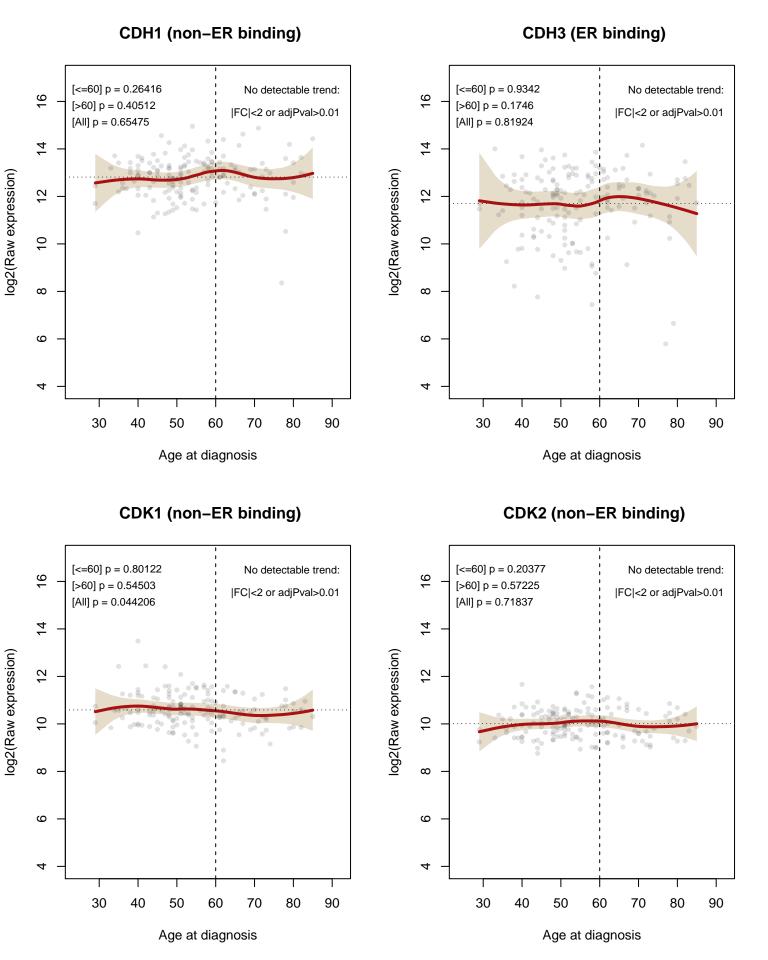


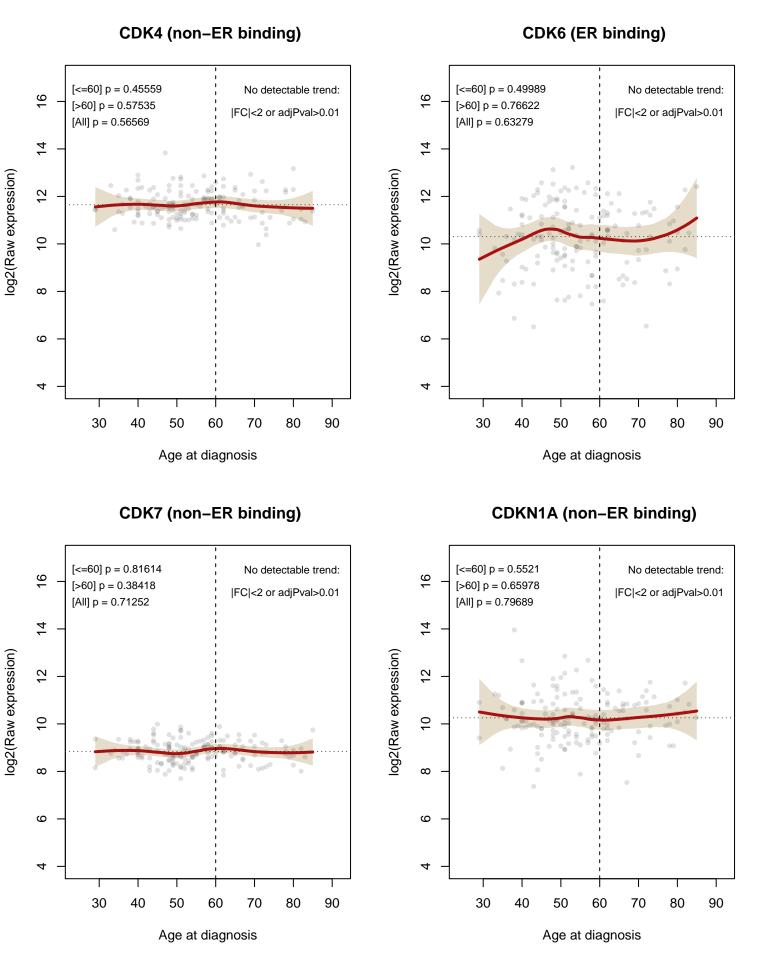
CD44 (non-ER binding)

CDC25C (non-ER binding)



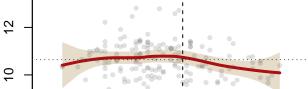






#### CDKN1B (non-ER binding)





log2(Raw expression)



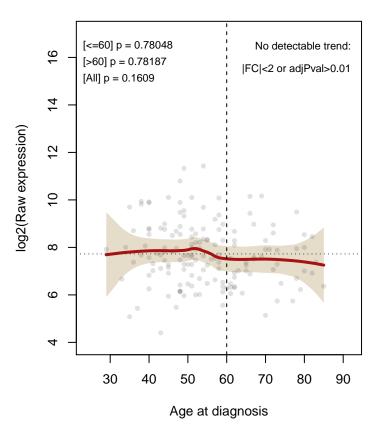
Age at diagnosis

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## CDKN1C (non-ER binding)



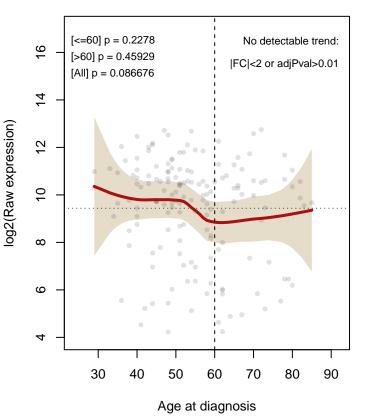
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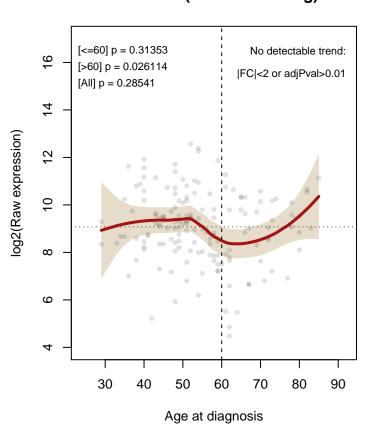
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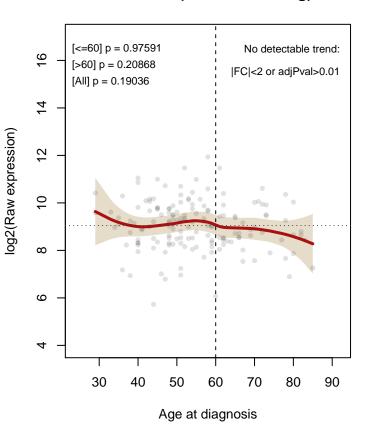


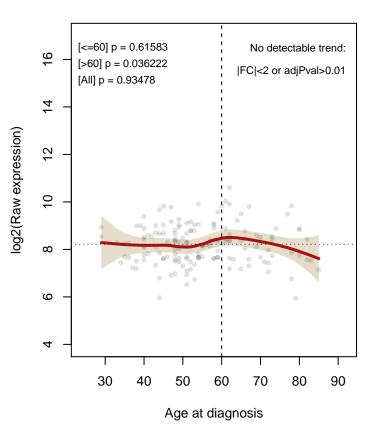
#### CDKN2B (non-ER binding)



#### CDKN2C (non-ER binding)

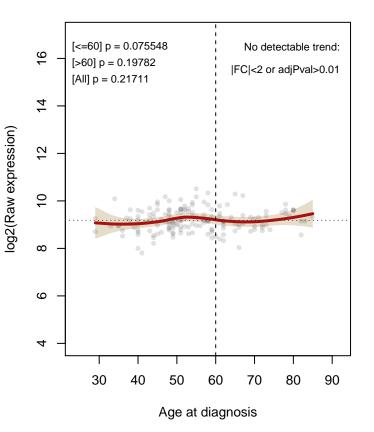
#### CDKN2D (non-ER binding)

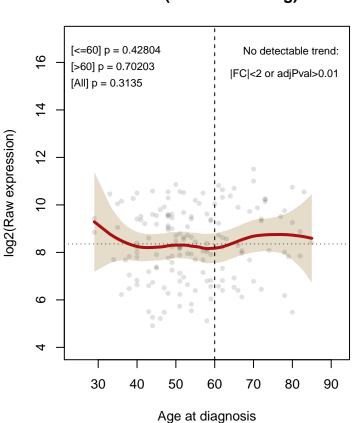




#### CHUK (non-ER binding)

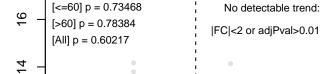
CIITA (non-ER binding)

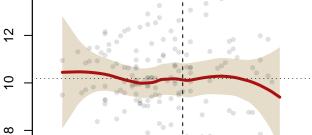




#### CLDN3 (non-ER binding)

# !





log2(Raw expression)

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Age at diagnosis

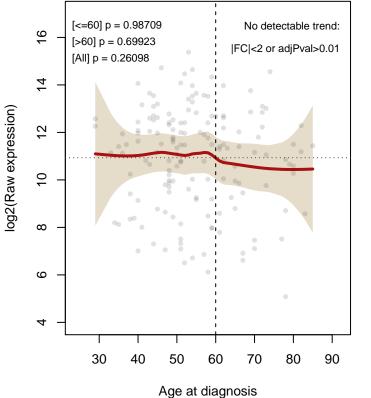
**CRYAB** (non-ER binding)

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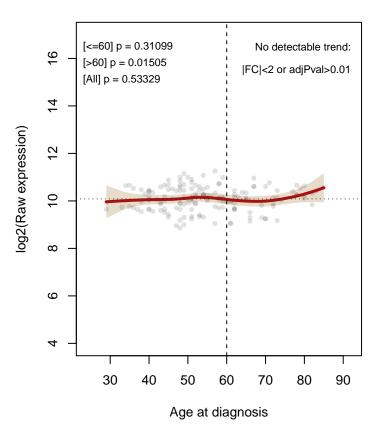
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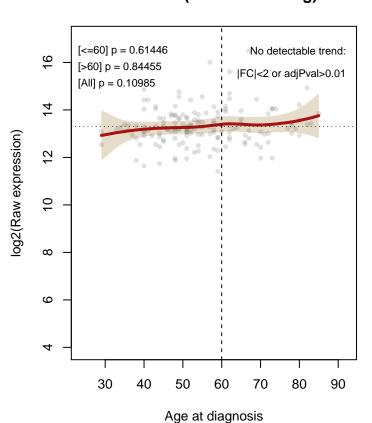
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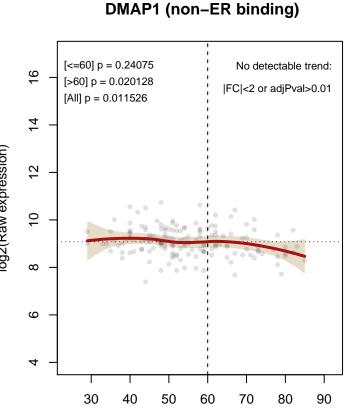
#### CREB1 (non-ER binding)



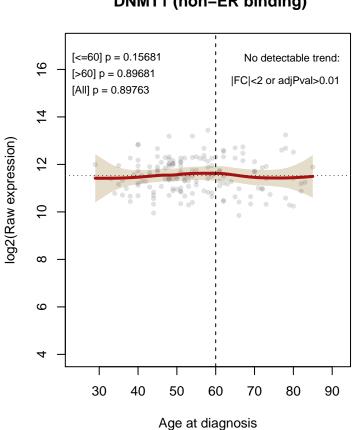
#### CTNNB1 (non-ER binding)

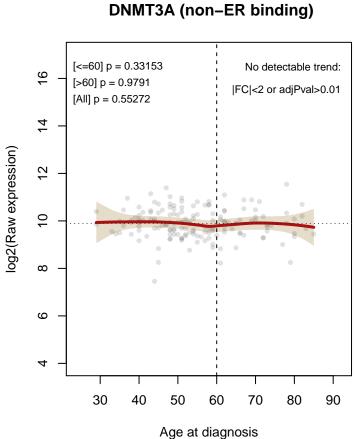


#### **DLC1 (ER binding)** [<=60] p = 0.29939No detectable trend: 16 16 [>60] p = 0.25213 |FC|<2 or adjPval>0.01 [All] p = 0.617694 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 Age at diagnosis **DNMT1** (non-ER binding)



Age at diagnosis





#### **DVL1 (non-ER binding) DNMT3B** (non-ER binding) [<=60] p = 0.82373No detectable trend: [<=60] p = 0.89602No detectable trend: 16 16 [>60] p = 0.23854 [>60] p = 0.040946 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.58383[All] p = 0.518034 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 E2F1 (non-ER binding) E2F2 (non-ER binding) [<=60] p = 0.74544No detectable trend: [<=60] p = 0.88934No detectable trend: 16 16 [>60] p = 0.35266[>60] p = 0.036075 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.034109[All] p = 0.524664 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω $\infty$ 9 9

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Age at diagnosis

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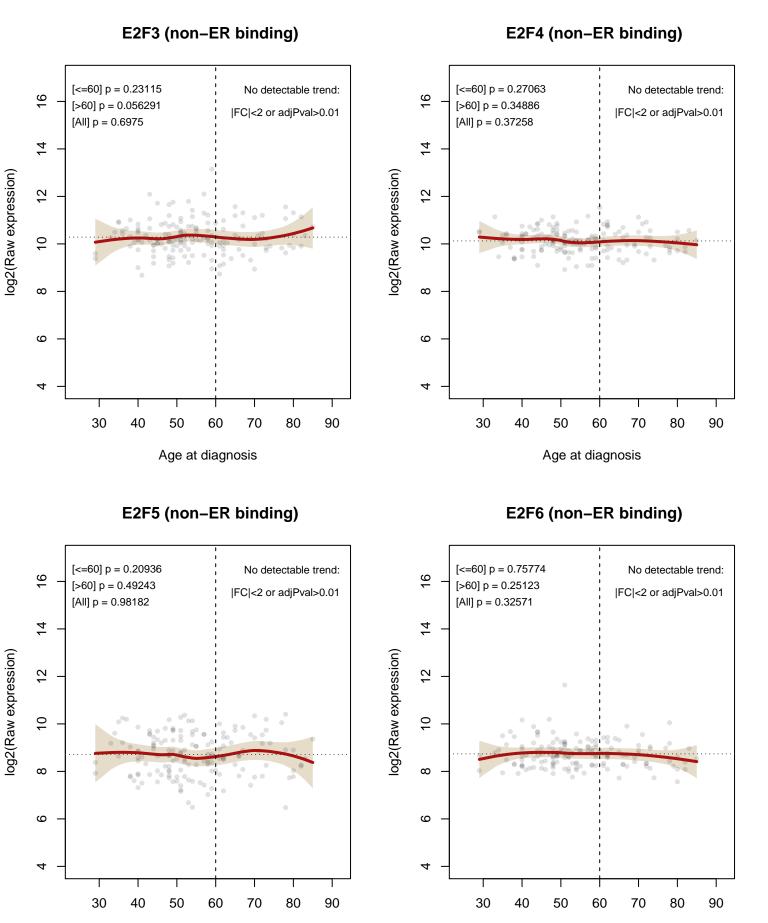
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Age at diagnosis

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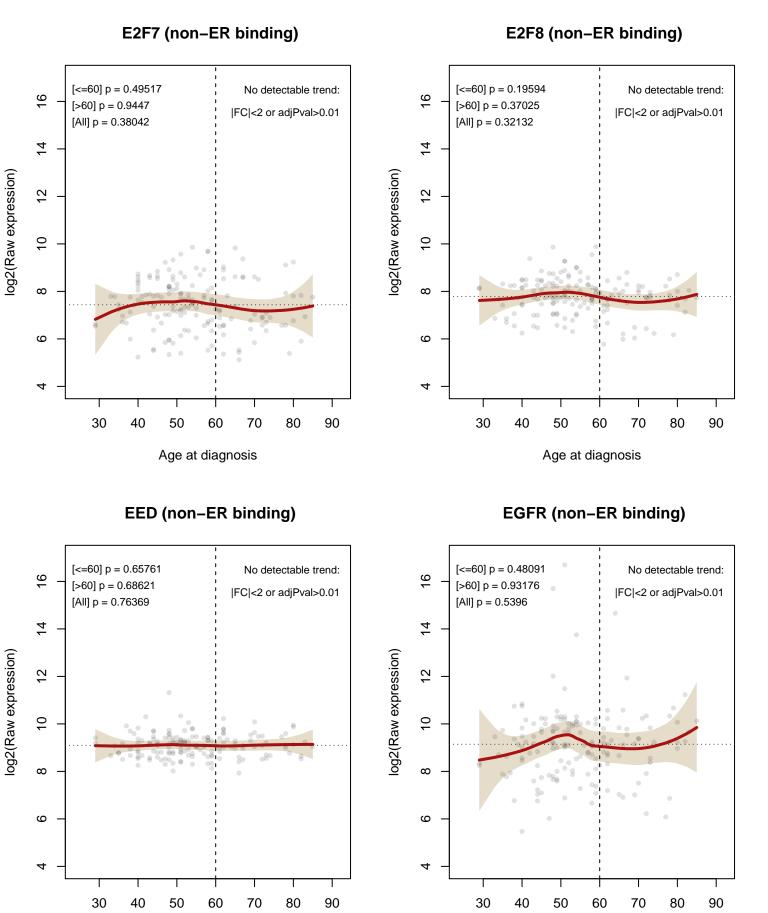
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Age at diagnosis

Age at diagnosis

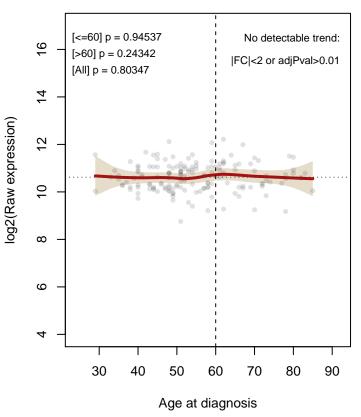


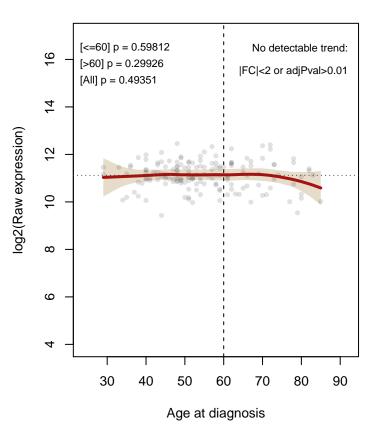
Age at diagnosis

Age at diagnosis



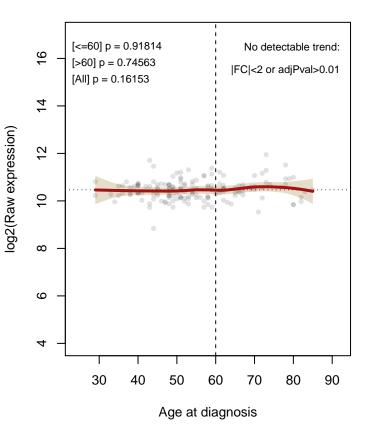
#### **EHMT2** (non-ER binding)

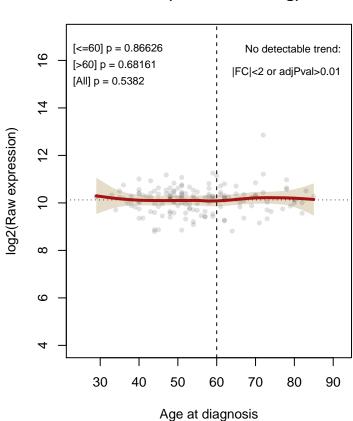




**ELAC2 (non-ER binding)** 

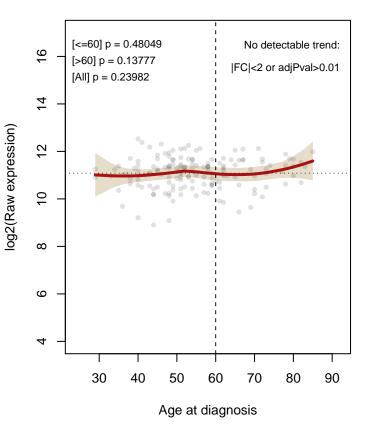
**ELK1 (non-ER binding)** 

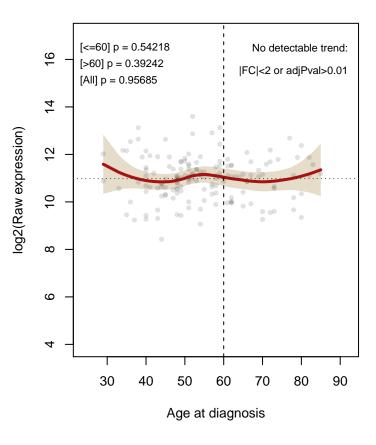






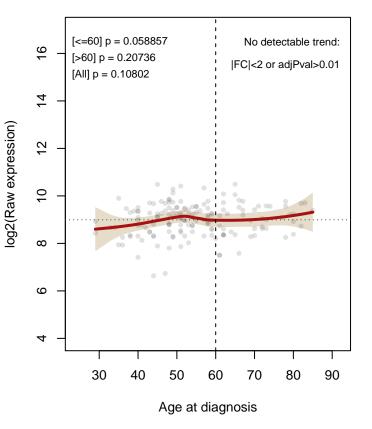
#### **EPAS1** (non-ER binding)

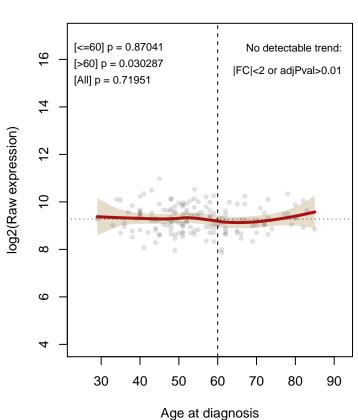


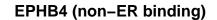


**EPC1 (non-ER binding)** 

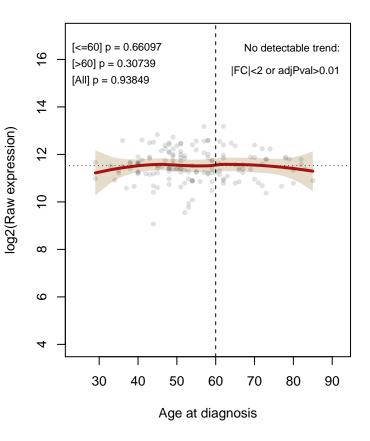
**EPC2** (non-ER binding)

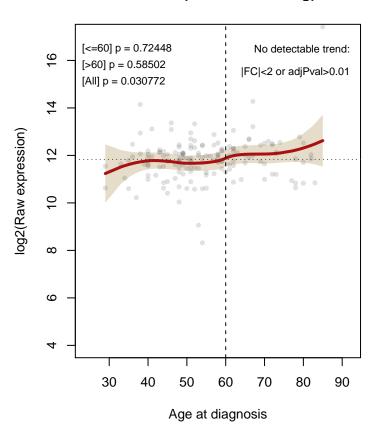






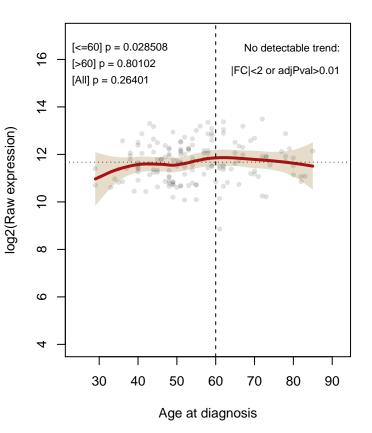
#### **ERBB2** (non-ER binding)

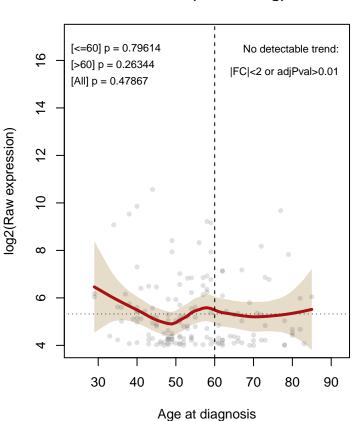


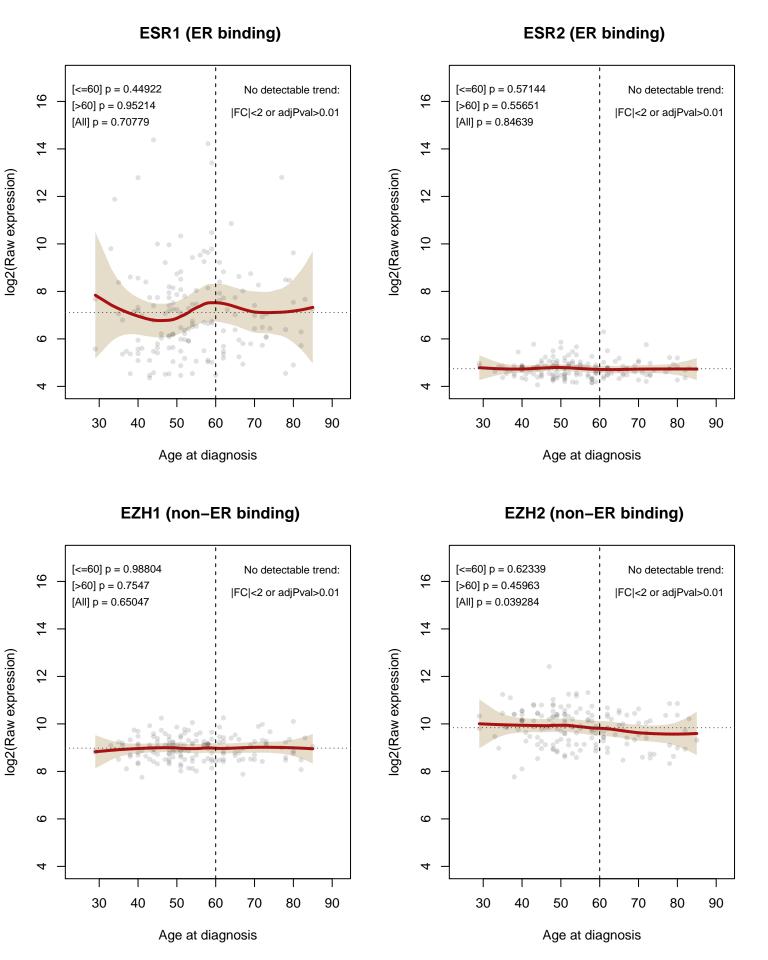


#### **ERBB3** (non-ER binding)

**ERBB4 (ER binding)** 







#### FOS (non-ER binding) FOSL1 (non-ER binding) [<=60] p = 0.32845No detectable trend: [<=60] p = 0.24833No detectable trend: 16 16 [>60] p = 0.58607 [>60] p = 0.66489 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.73893[All] p = 0.546694 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 **FOXA1 (ER binding)** FOXC1 (ER binding) [<=60] p = 0.63271No detectable trend: [<=60] p = 0.7572No detectable trend: 16 16 [>60] p = 0.05505 [>60] p = 0.1491 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.83405[All] p = 0.734244 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω $\infty$ 9 9

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Age at diagnosis

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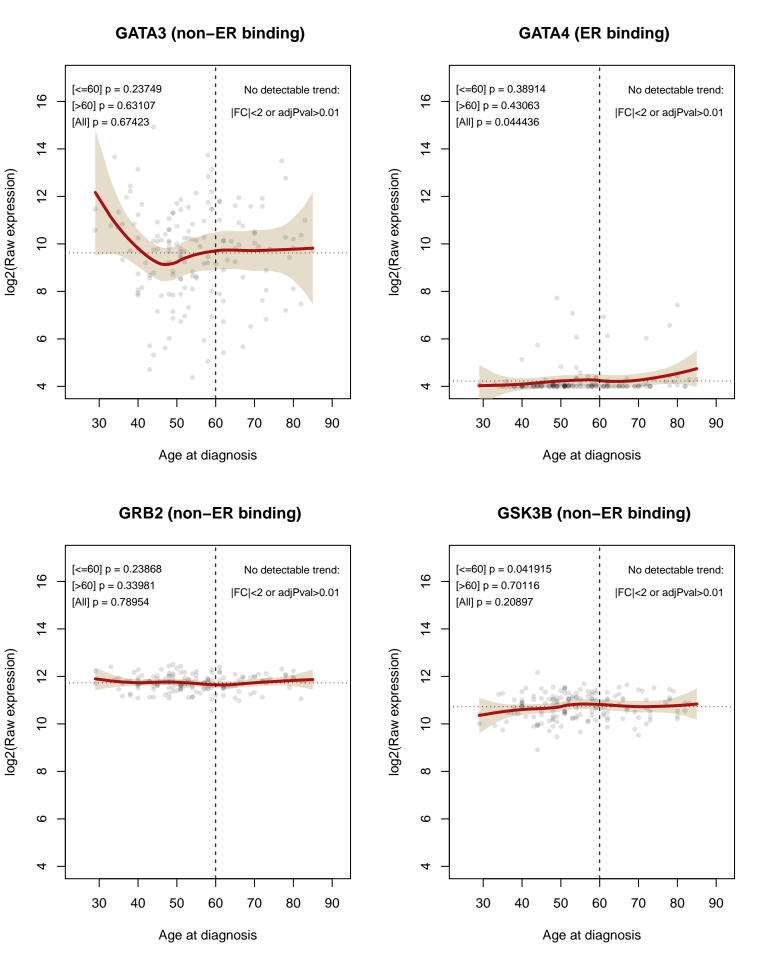
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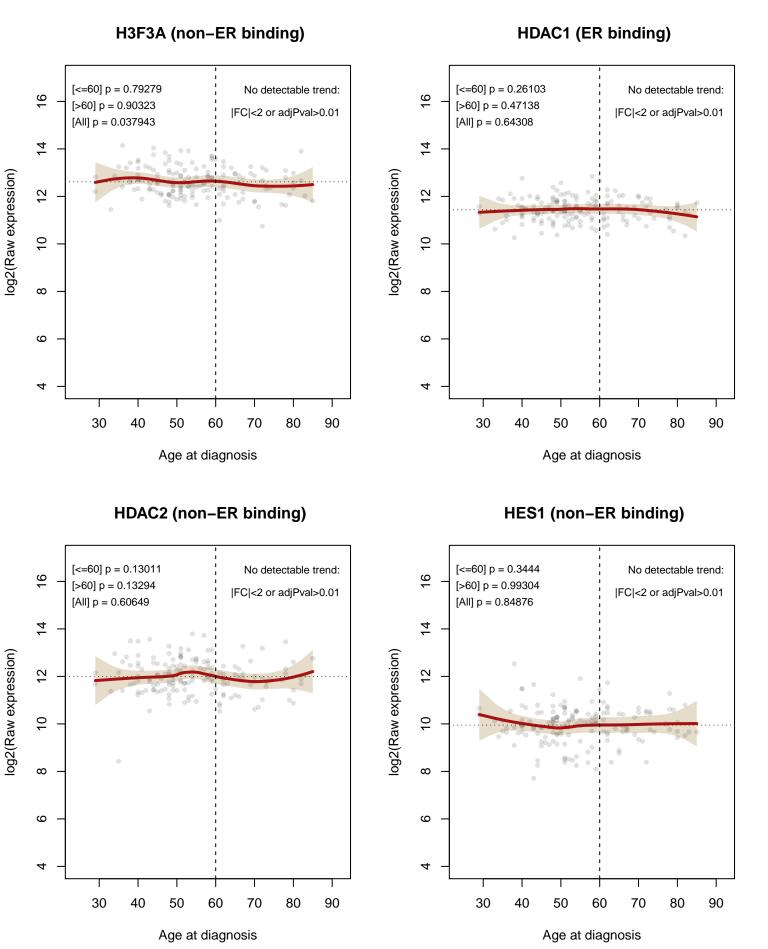
Age at diagnosis

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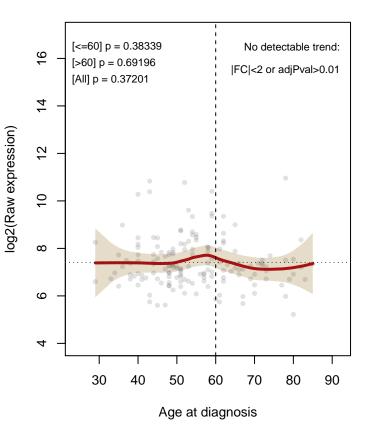
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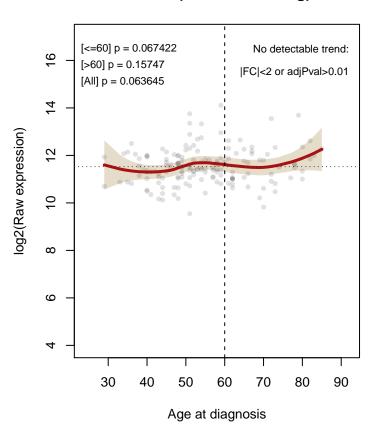






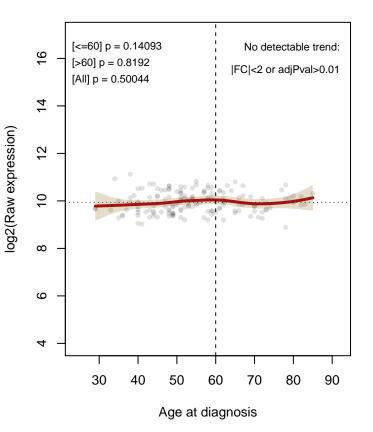
#### HIF1A (non-ER binding)

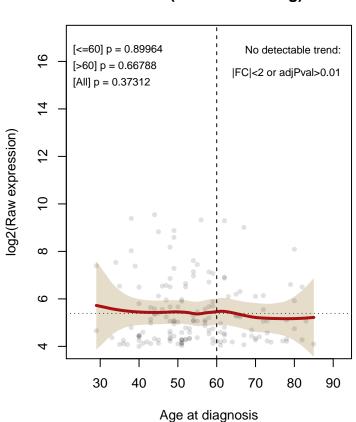




#### HIF1AN (non-ER binding)

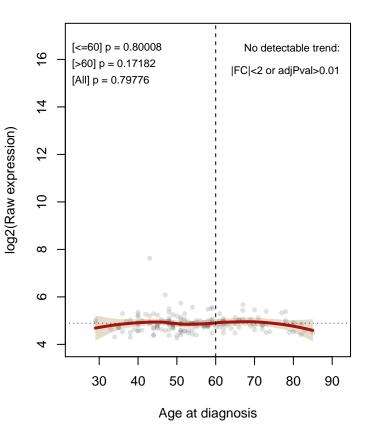
#### HIF3A (non-ER binding)

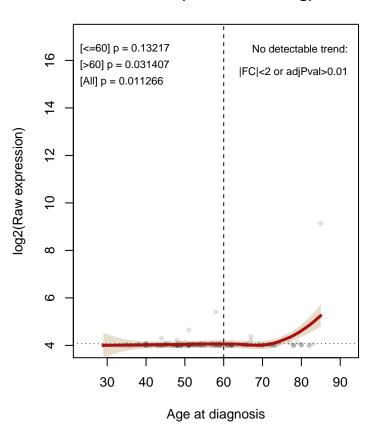




#### **HNF1A** (non-ER binding)

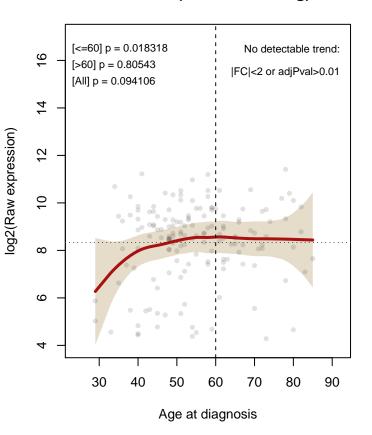
#### HNF1B (non-ER binding)

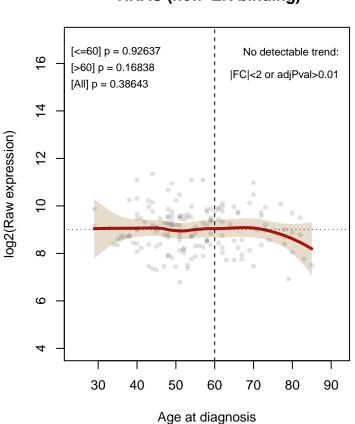




#### **HOXC10 (non-ER binding)**

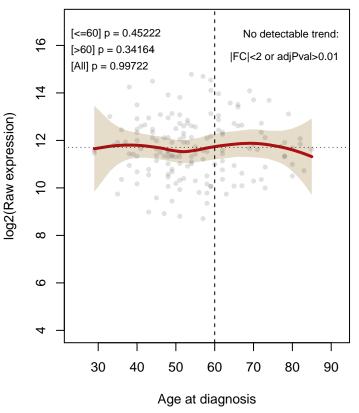
HRAS (non-ER binding)

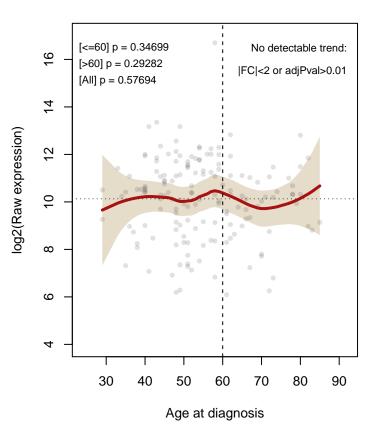






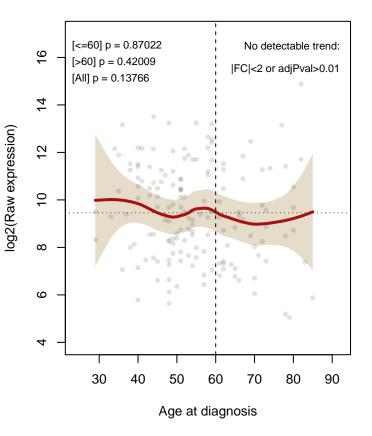
#### IGF1R (ER binding)

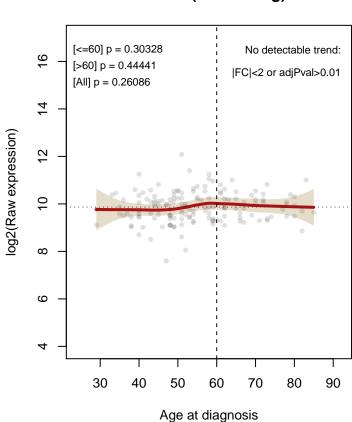




IGFBP2 (non-ER binding)

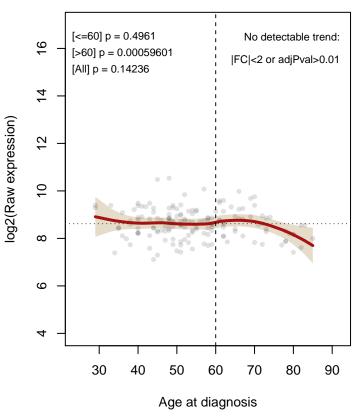
**IKBKB (ER binding)** 

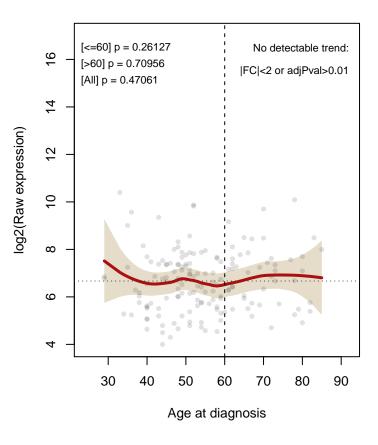






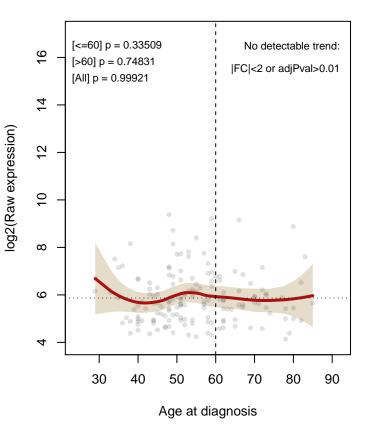
#### IL2RA (non-ER binding)

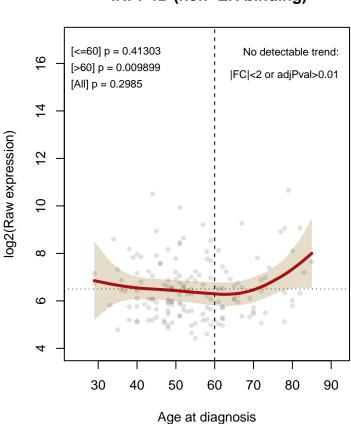


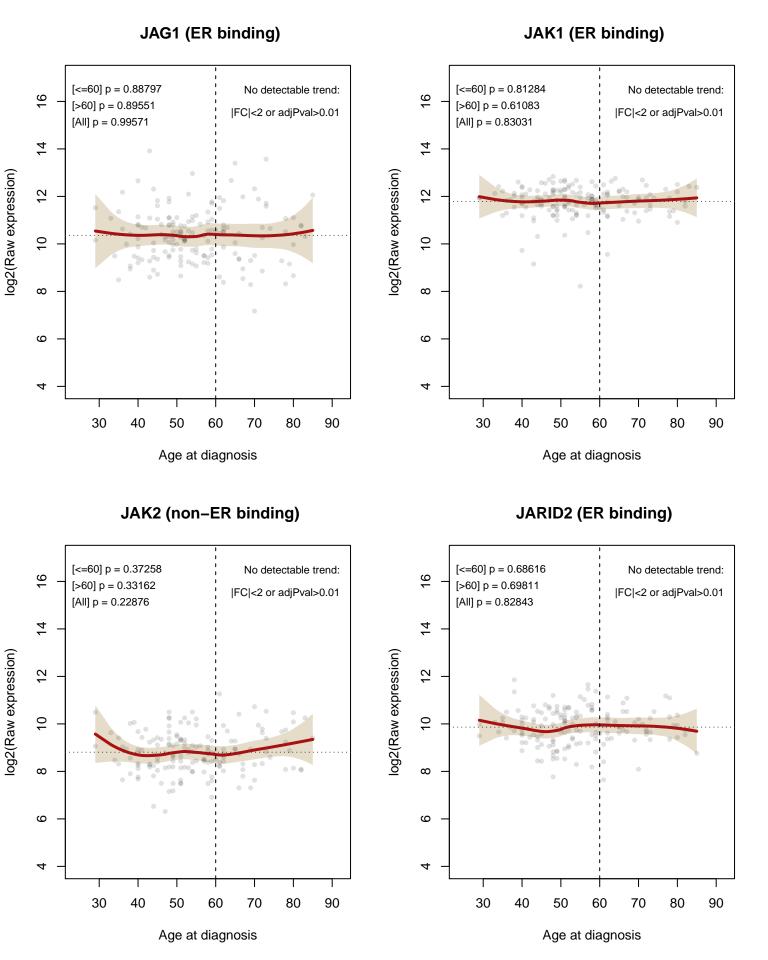


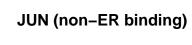
#### IL6 (non-ER binding)

**INPP4B** (non-ER binding)

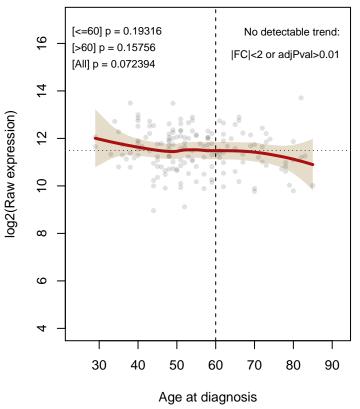


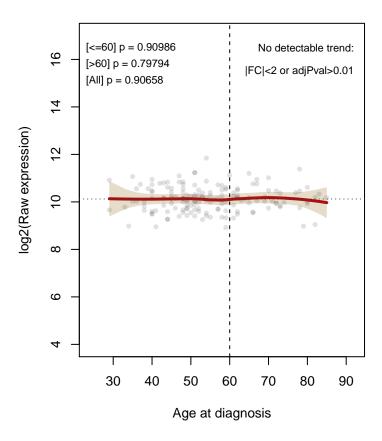






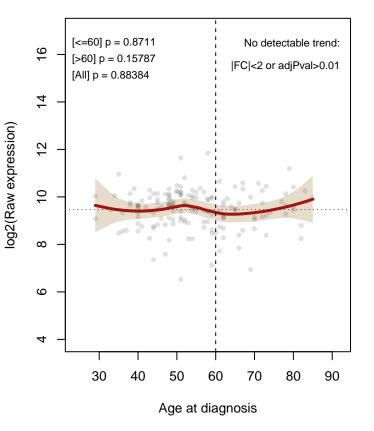
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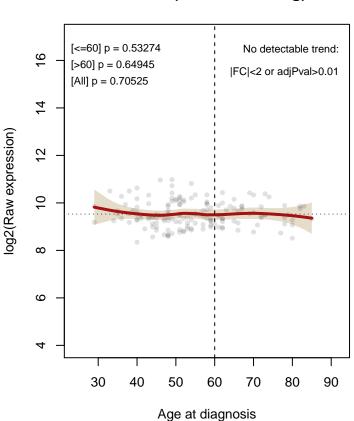




### KDM6A (non-ER binding)

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



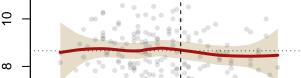






log2(Raw expression)

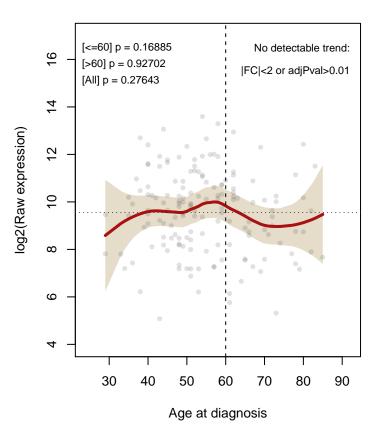




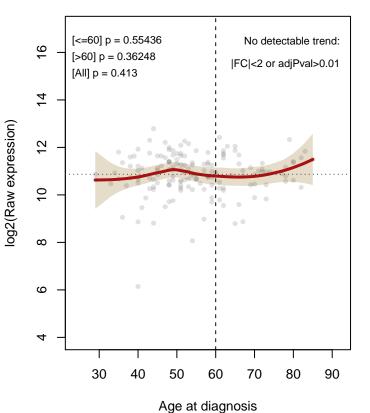


Age at diagnosis

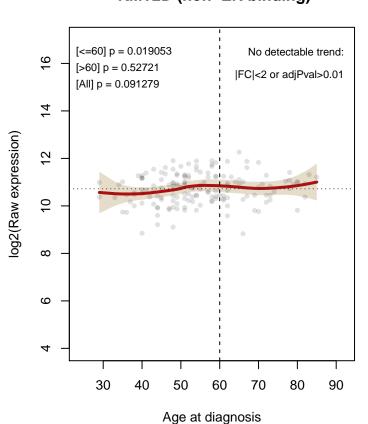
#### KIT (non-ER binding)



### KMT2C (non-ER binding)

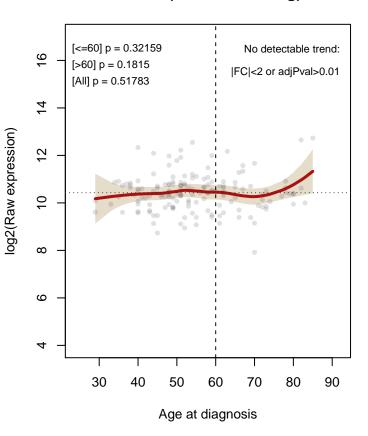


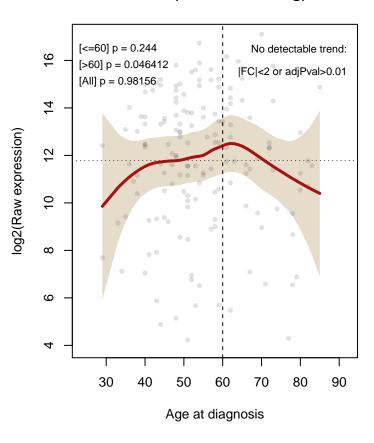
#### KMT2D (non-ER binding)



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

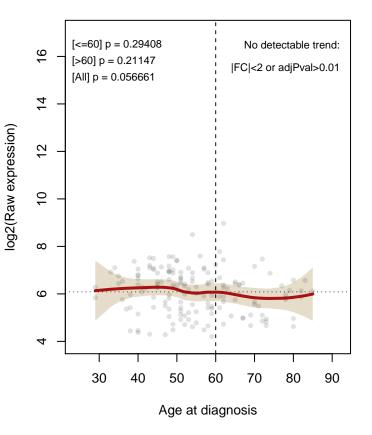
#### KRT5 (non-ER binding)

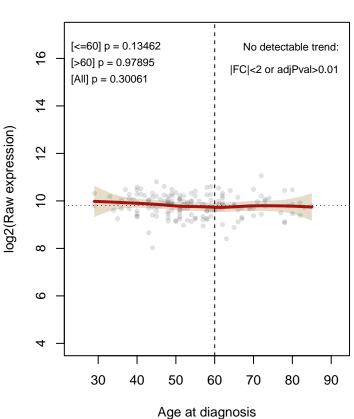




### L3MBTL1 (non-ER binding)

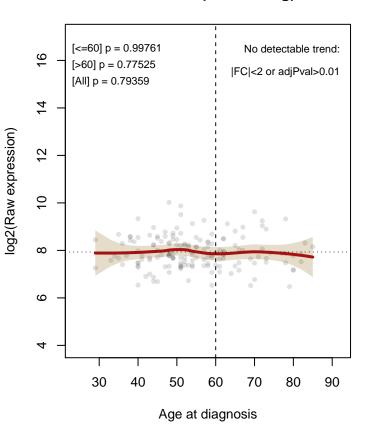
#### L3MBTL2 (non-ER binding)

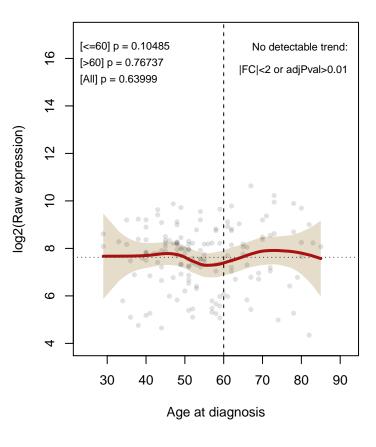




#### L3MBTL3 (ER binding)

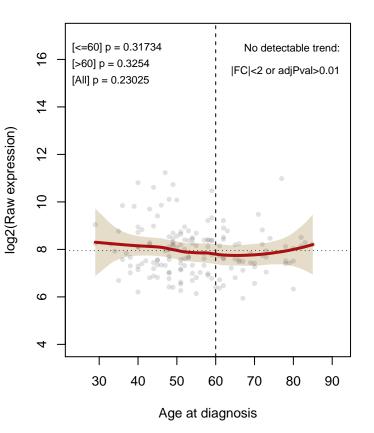
# L3MBTL4 (non-ER binding)

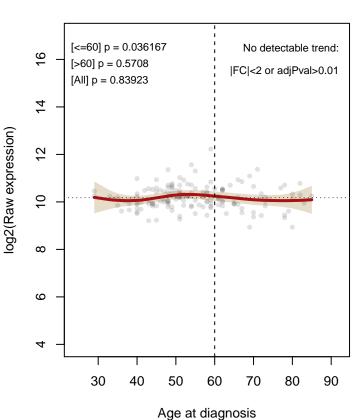




LEF1 (non-ER binding)

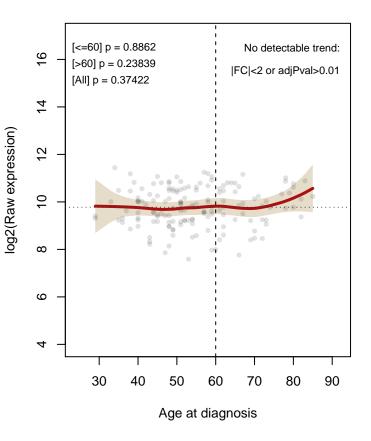
MAP2K1 (non-ER binding)

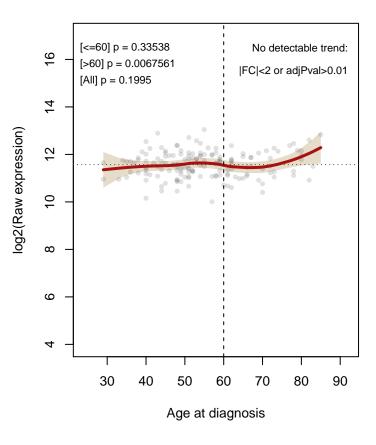






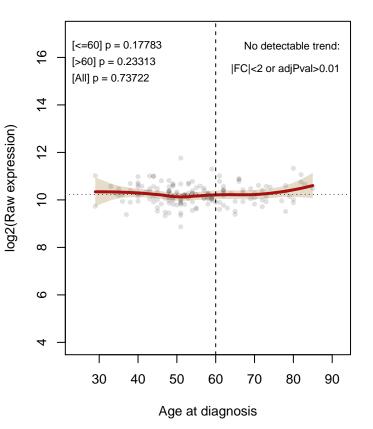
#### MAPK1 (non-ER binding)

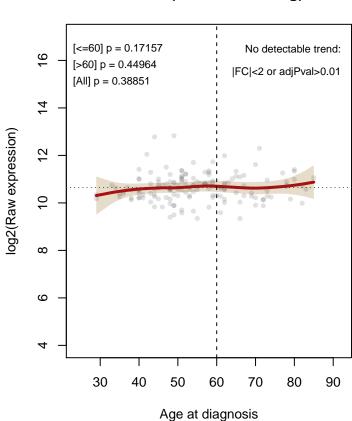




#### MAPK3 (non-ER binding)

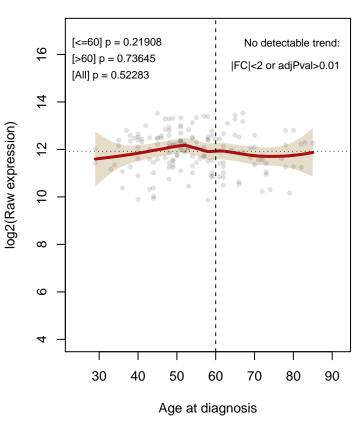
MDM2 (non-ER binding)

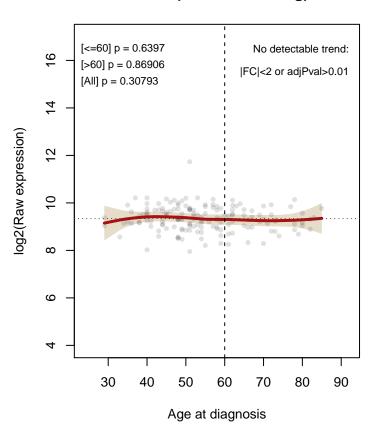






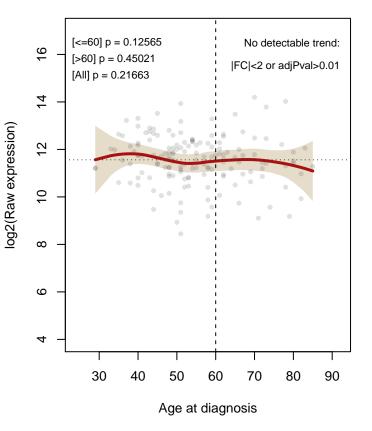
#### MTF2 (non-ER binding)

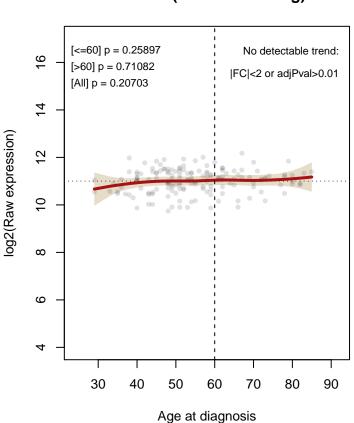




### MYC (non-ER binding)

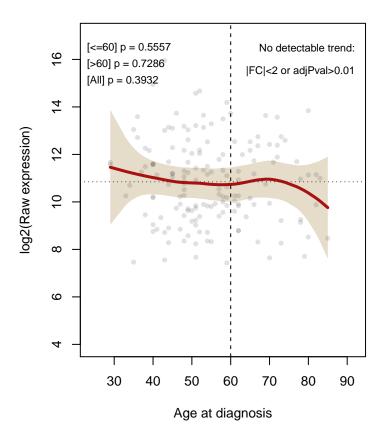
#### NCOA6 (non-ER binding)

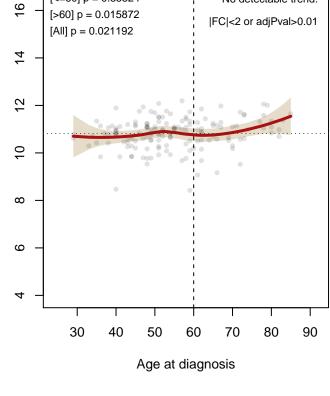




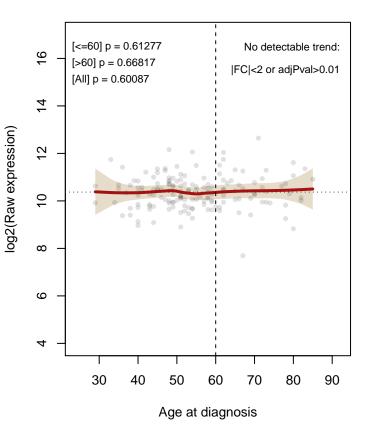
# NCOR1 (non-ER binding) [<=60] p = 0.35524No detectable trend: 16 [>60] p = 0.015872 [All] p = 0.0211924 log2(Raw expression) 12

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

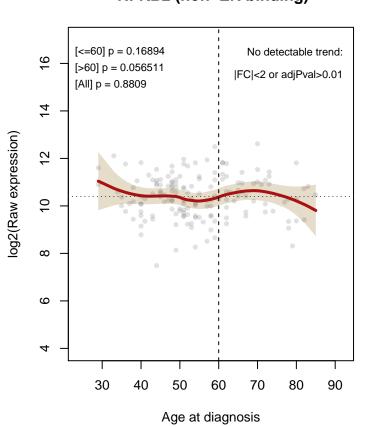




# NFKB1 (non-ER binding)

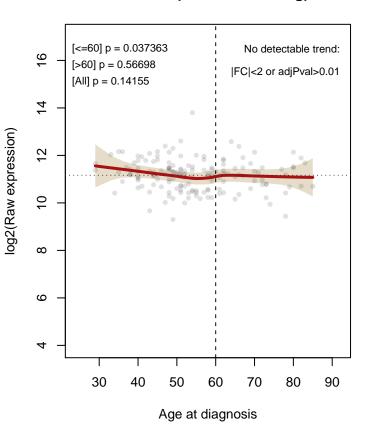


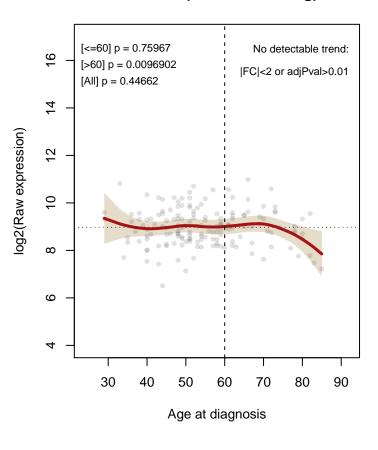
# NFKB2 (non-ER binding)



### NFKBIA (non-ER binding)

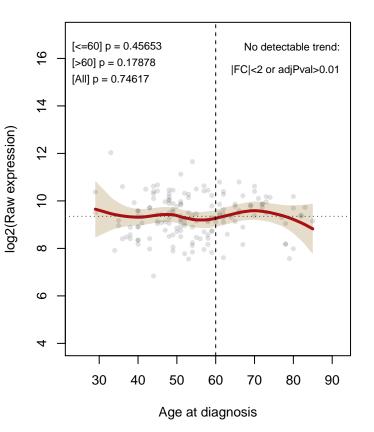
#### NFKBIB (non-ER binding)

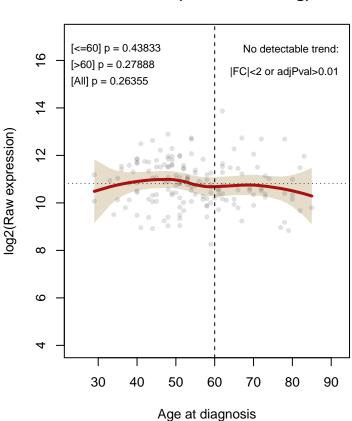




# NFKBIE (non-ER binding)

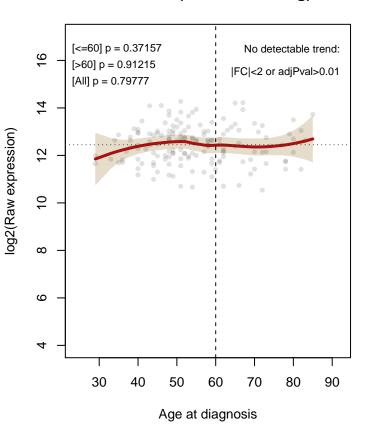
# NOTCH1 (non-ER binding)

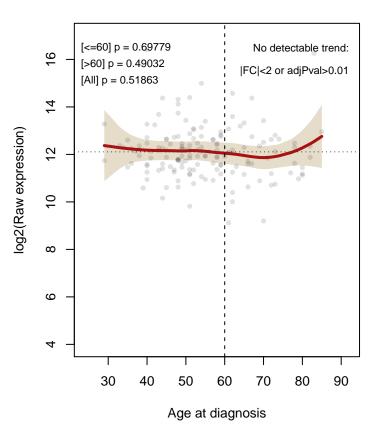




### NOTCH2 (non-ER binding)

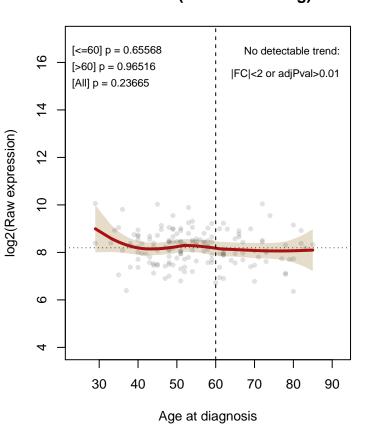
#### NOTCH3 (non-ER binding)

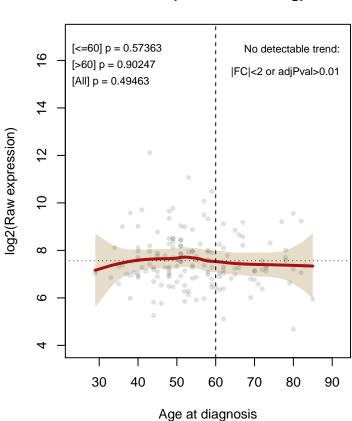


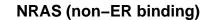


# NOTCH4 (non-ER binding)

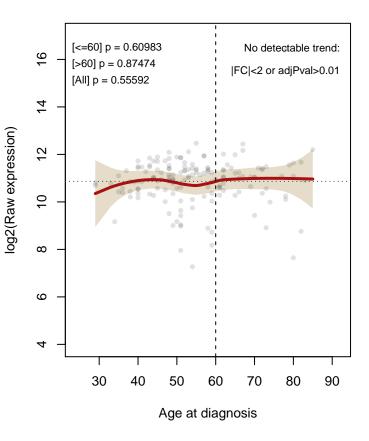
NR4A2 (non-ER binding)

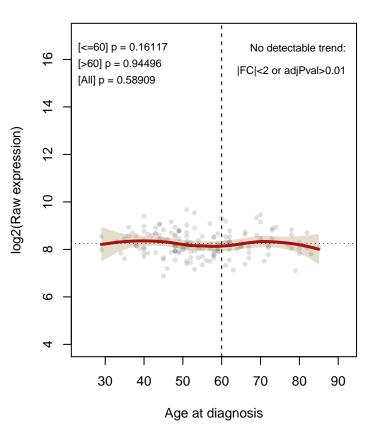






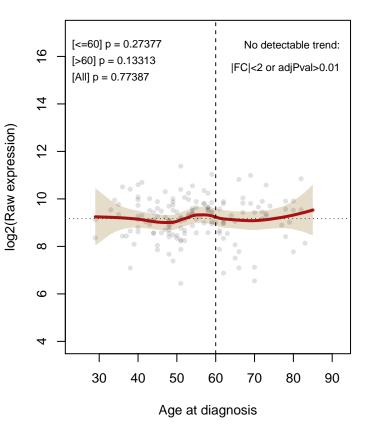
# PCGF1 (non-ER binding)

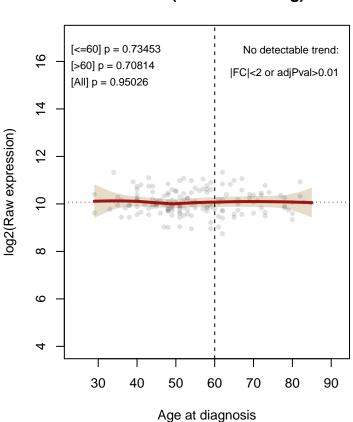




# PCGF2 (non-ER binding)

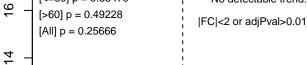
# PCGF3 (non-ER binding)

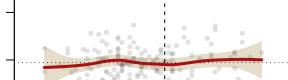






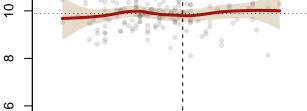
# [<=60] p = 0.55479No detectable trend:

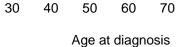




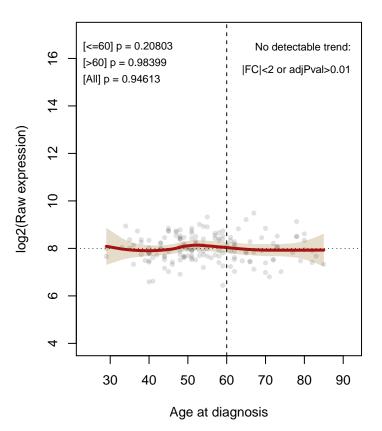
log2(Raw expression)

12





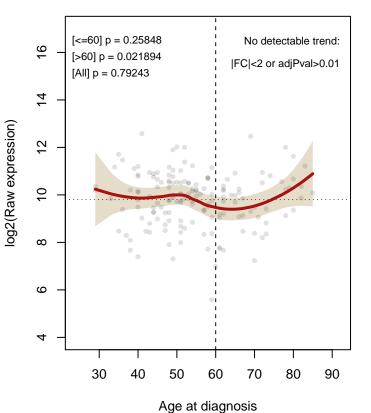
# PCGF6 (non-ER binding)



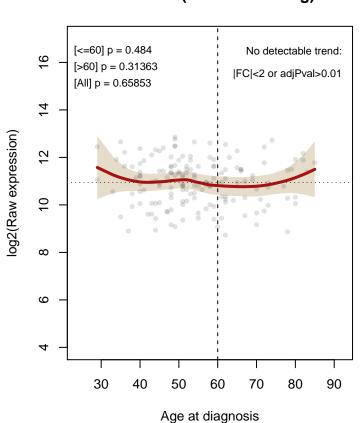
# PDGFRA (non-ER binding)

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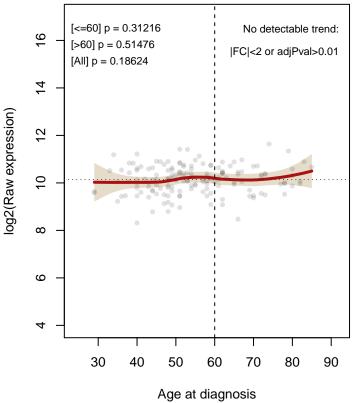


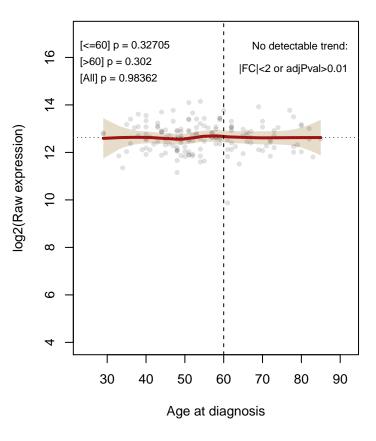
# PDGFRB (non-ER binding)



# 

# PEBP1 (non-ER binding)





PELP1 (non-ER binding)

[<=60] p = 0.70834 | No detectable trend:
|>60] p = 0.032605 | FC|<2 or adjPval>0.01

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Age at diagnosis

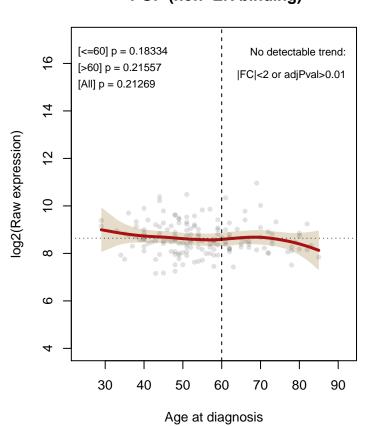
70

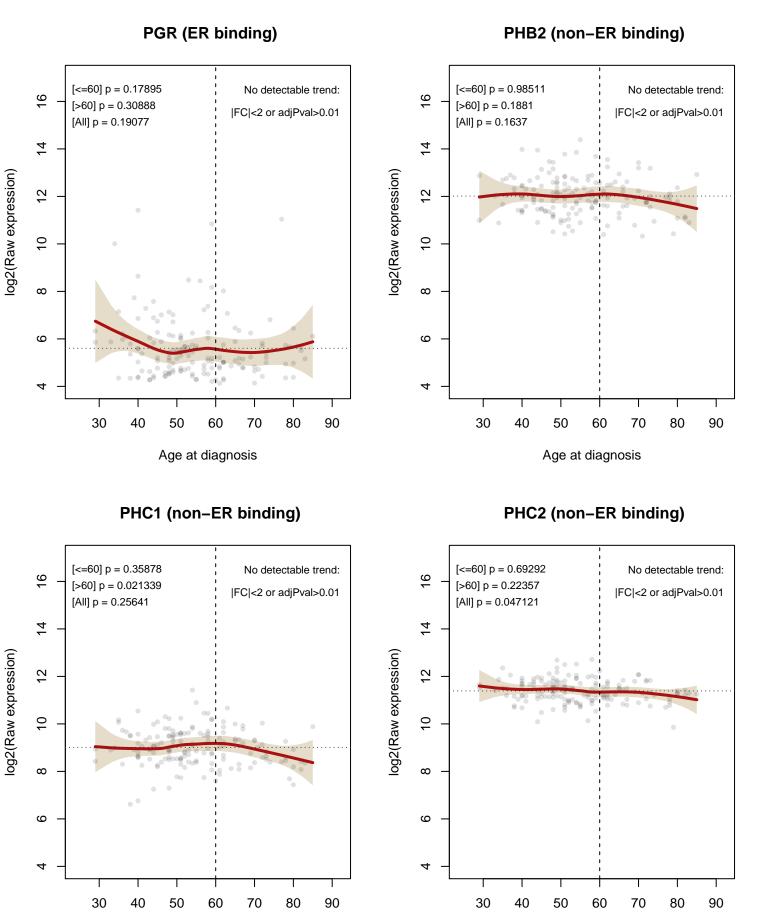
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log2(Raw expression)

# PGP (non-ER binding)



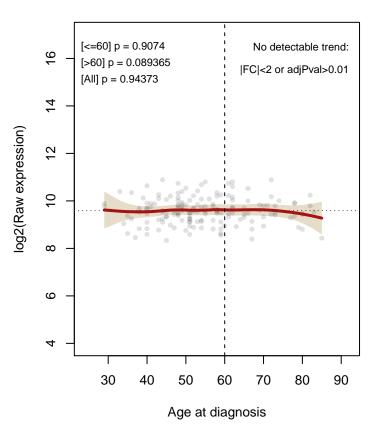


Age at diagnosis

Age at diagnosis

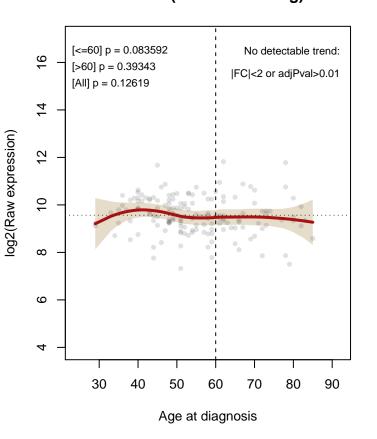
# 

# PHF1 (non-ER binding)

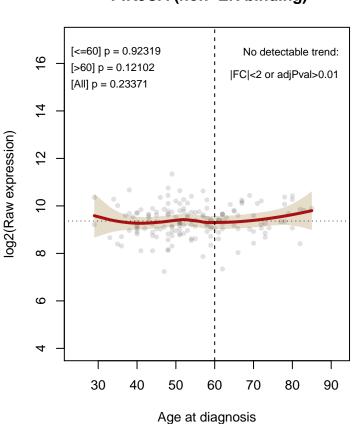


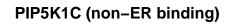
PHF19 (non-ER binding)

Age at diagnosis

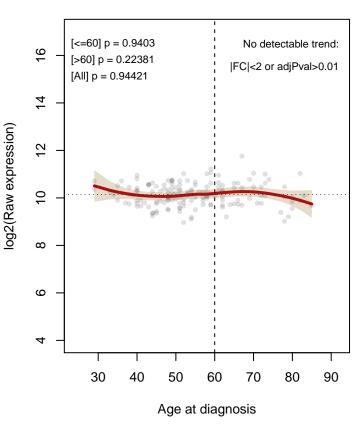


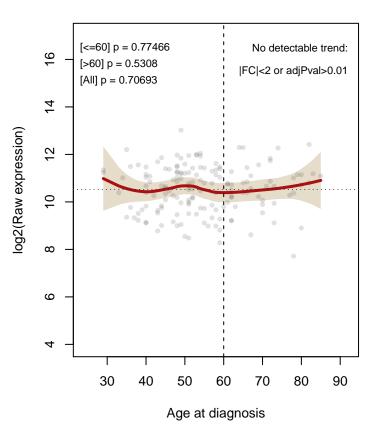
# PIK3CA (non-ER binding)





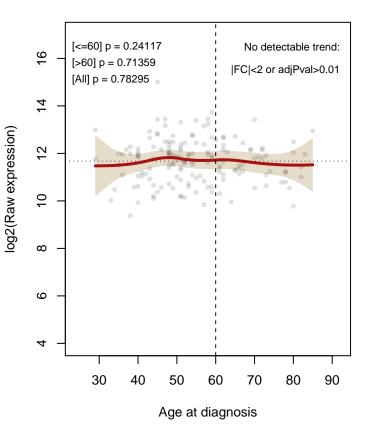
# PLAU (non-ER binding)

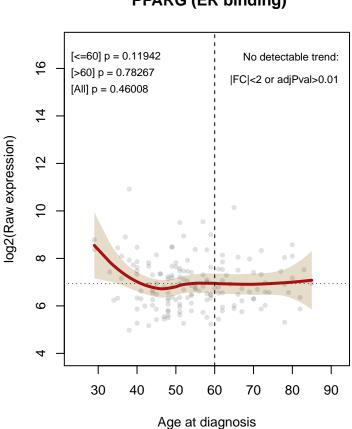


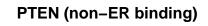


# PODXL (non-ER binding)

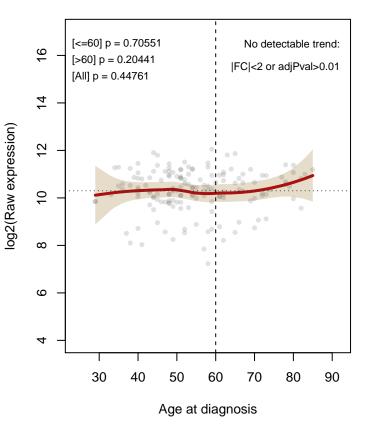
# **PPARG (ER binding)**

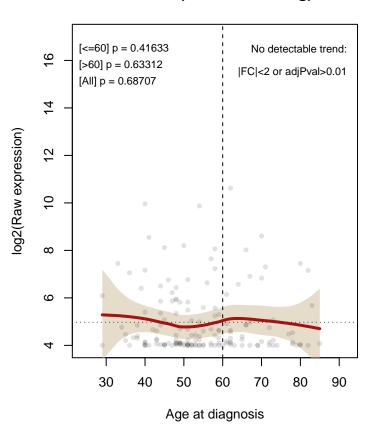






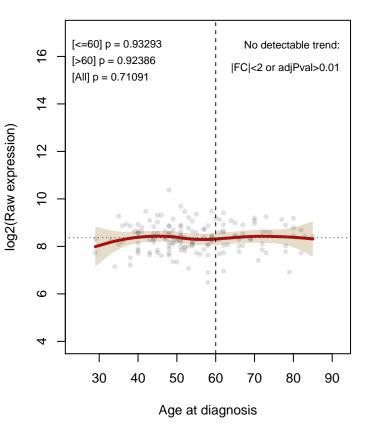
### **PYDC1** (non-ER binding)

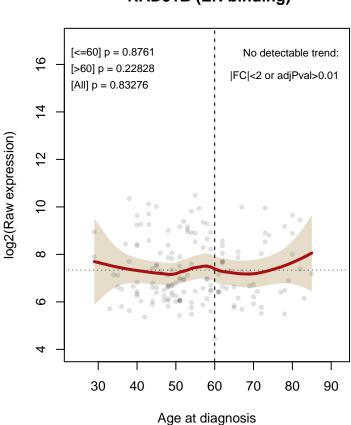




# RAD51 (non-ER binding)

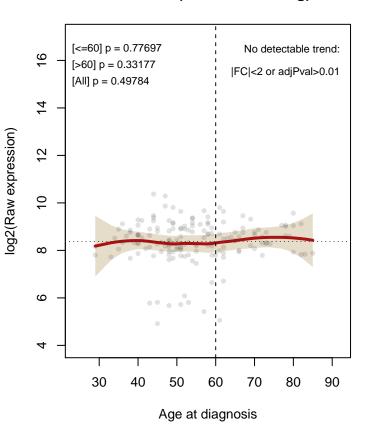
#### RAD51B (ER binding)

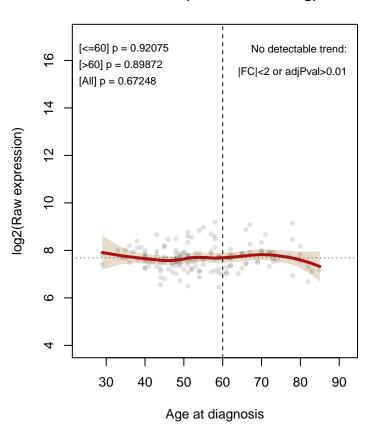




### RAD51C (non-ER binding)

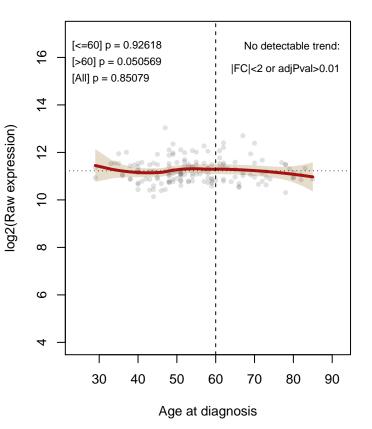
#### RAD51D (non-ER binding)

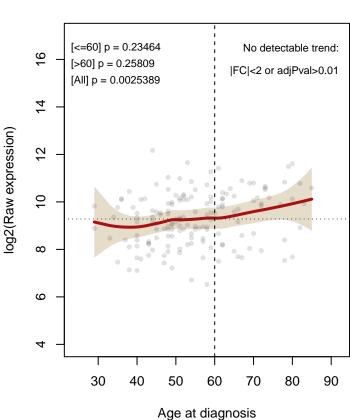




RAF1 (non-ER binding)

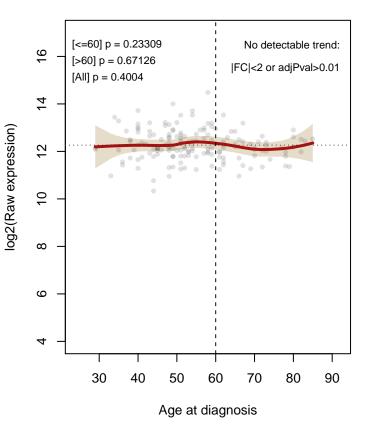
RB1 (non-ER binding)

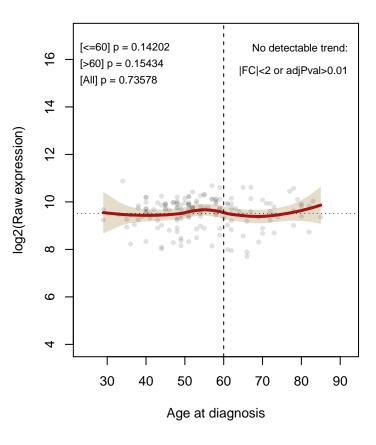






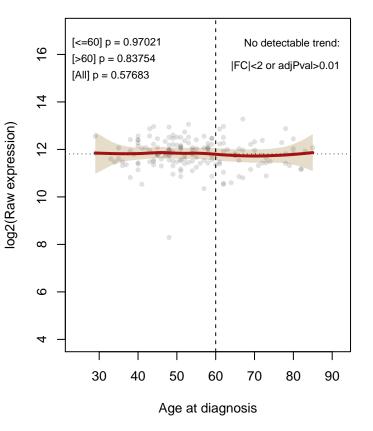
### RBBP5 (non-ER binding)

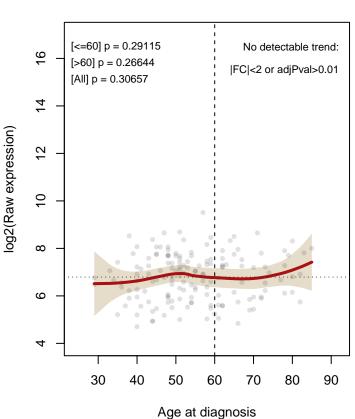


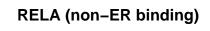


# RBBP7 (non-ER binding)

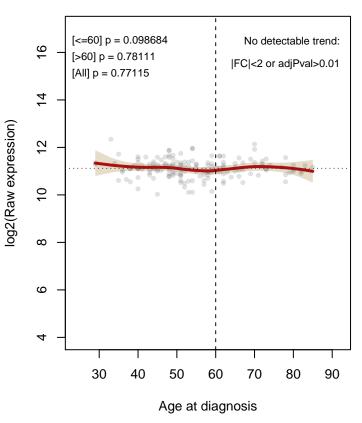
# **REL** (non-ER binding)

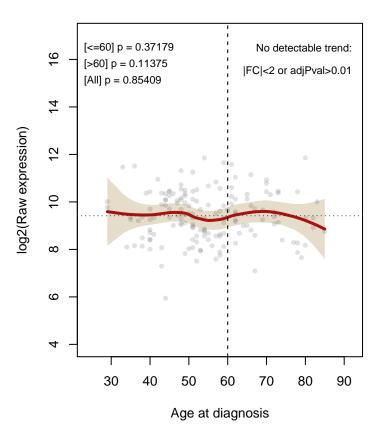






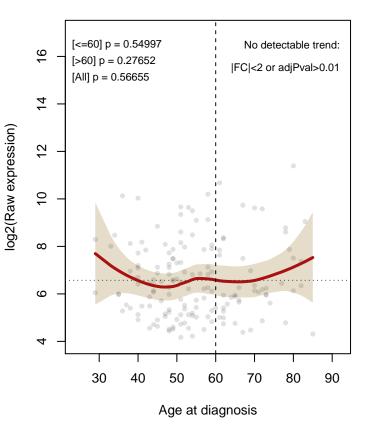
### **RELB** (non-ER binding)

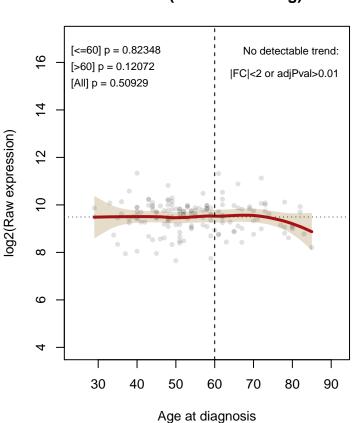




**RET (ER binding)** 

RING1 (non-ER binding)





#### RNF2 (non-ER binding) **RUNX1 (ER binding)** [<=60] p = 0.81231 No detectable trend: [<=60] p = 0.62143No detectable trend: 16 16 [>60] p = 0.13624 [>60] p = 0.90129 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.81596[All] p = 0.781614 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 = 0.70614No detectable trend: [<=60] p = 0.87289No detectable trend: 16 16 [>60] p = 0.42662 [>60] p = 0.28576 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.60174[All] p = 0.257494 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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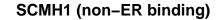
60

Age at diagnosis

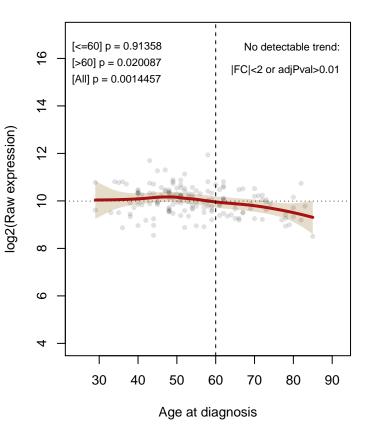
70

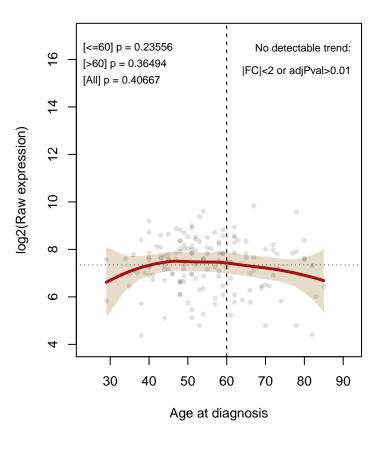
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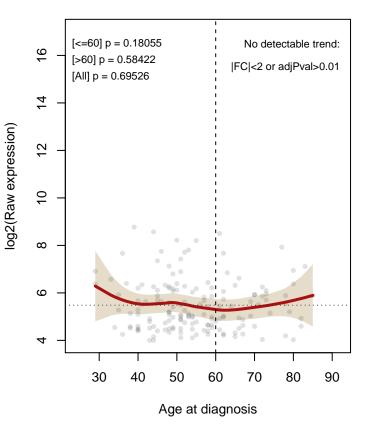
#### SCML2 (non-ER binding)

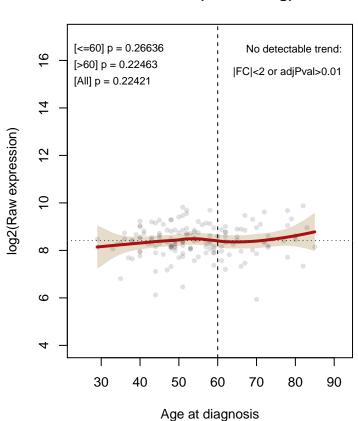




# SCML4 (non-ER binding)

SFMBT1 (ER binding)





#### SFMBT2 (ER binding) SFPQ (non-ER binding) [<=60] p = 0.7865No detectable trend: [<=60] p = 0.42756No detectable trend: 16 16 [>60] p = 0.34762 [>60] p = 0.39227 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.17509[All] p = 0.147874 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 = 0.10932No detectable trend: [<=60] p = 0.55709No detectable trend: 16 16 [>60] p = 0.37026 [>60] p = 0.13009 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [All] p = 0.26352[All] p = 0.824624 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

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Age at diagnosis

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Age at diagnosis

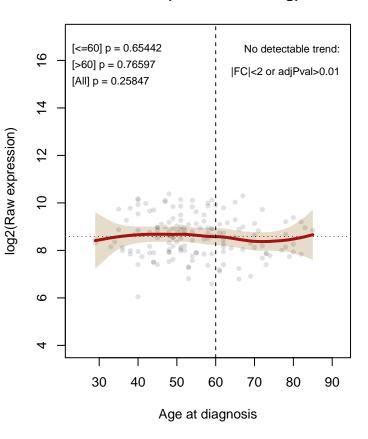
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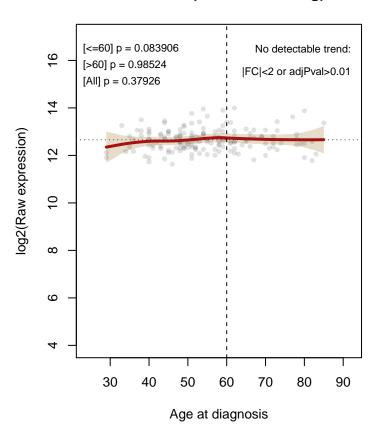
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#### SKP2 (non-ER binding)

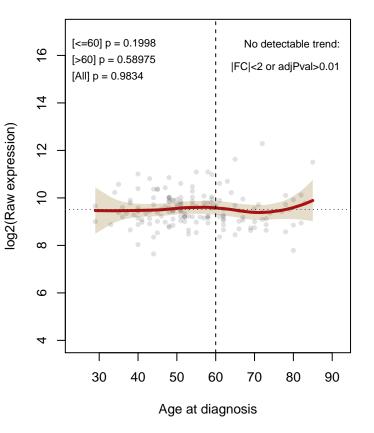
#### SLC25A3 (non-ER binding)

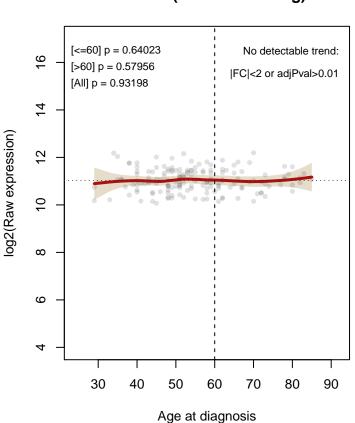




# SMAD1 (non-ER binding)

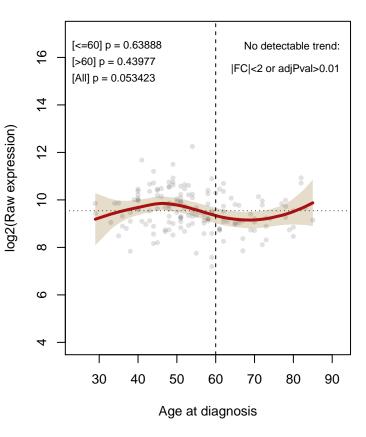
# SMAD2 (non-ER binding)

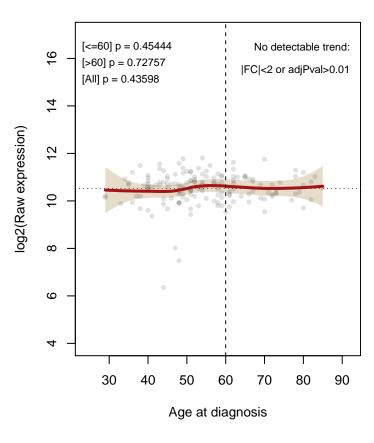






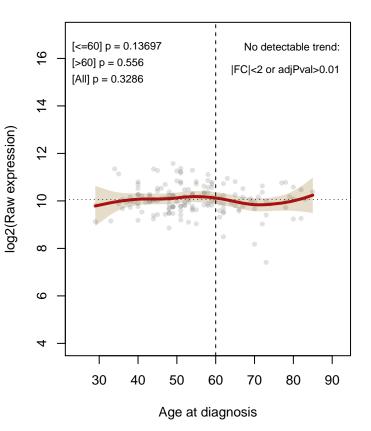
# SMAD4 (non-ER binding)

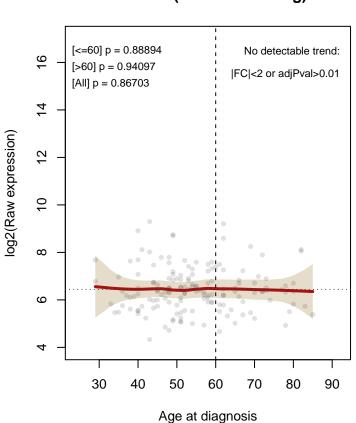


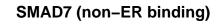


# SMAD5 (non-ER binding)

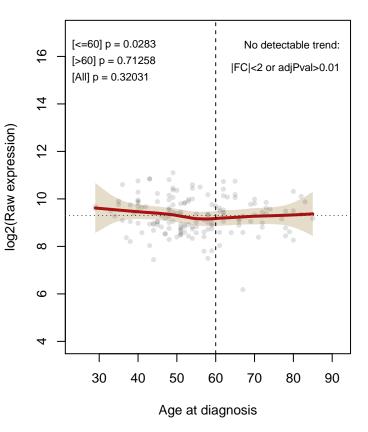
# SMAD6 (non-ER binding)

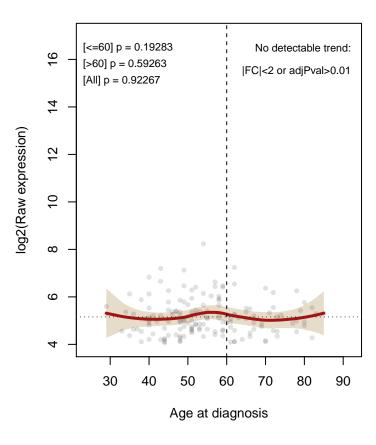






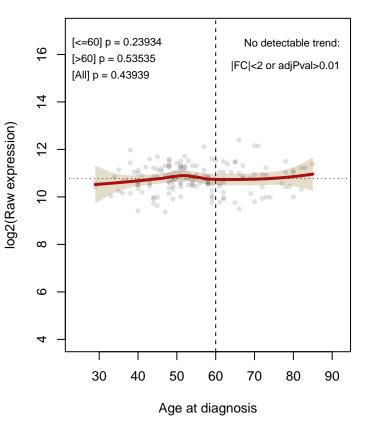
### SMAD9 (non-ER binding)

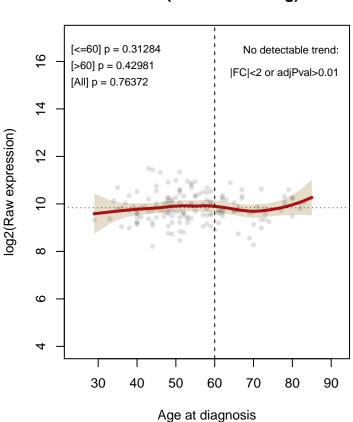


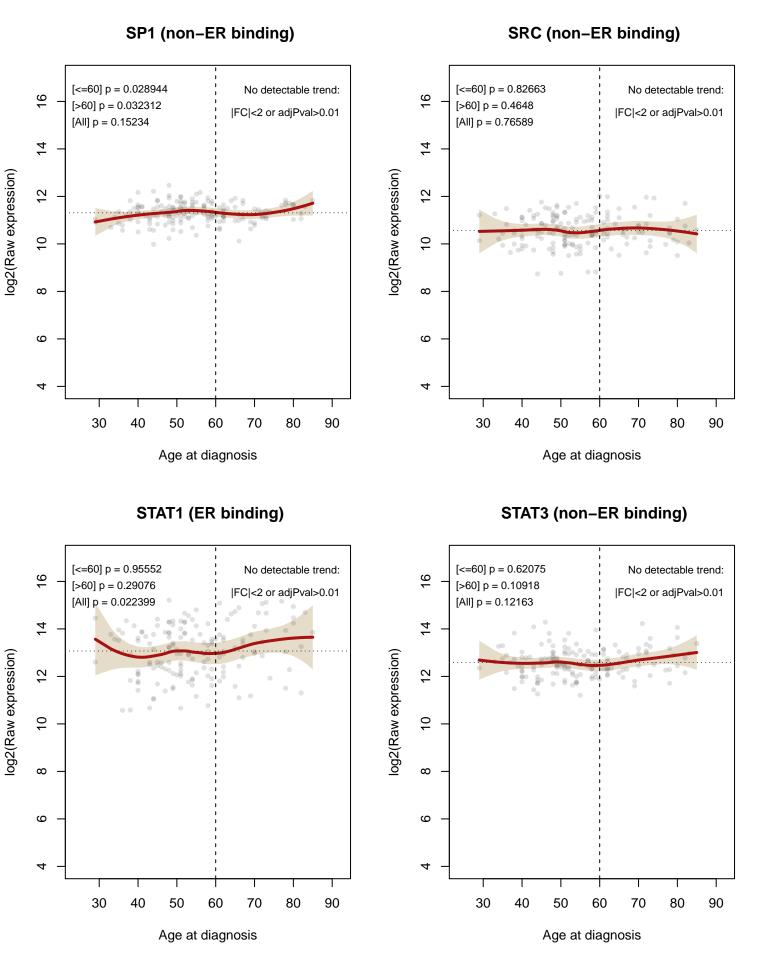


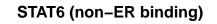
# SOS1 (non-ER binding)

# SOS2 (non-ER binding)

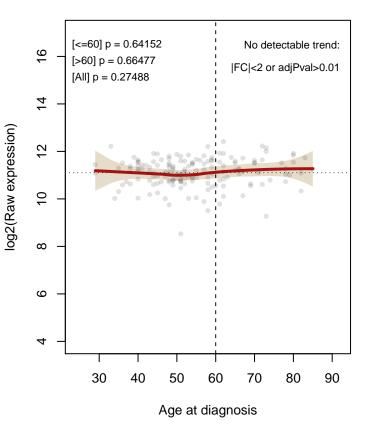


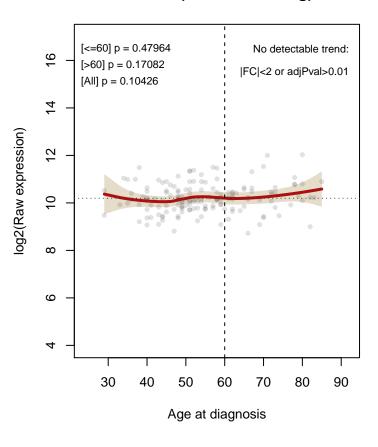






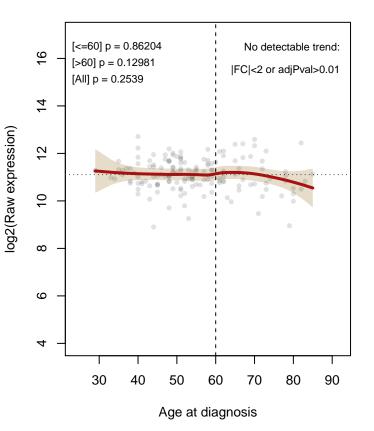
#### SUZ12 (non-ER binding)

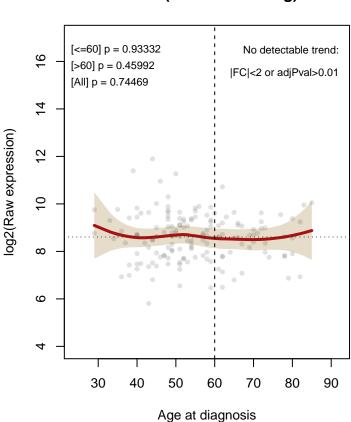




TCF3 (non-ER binding)

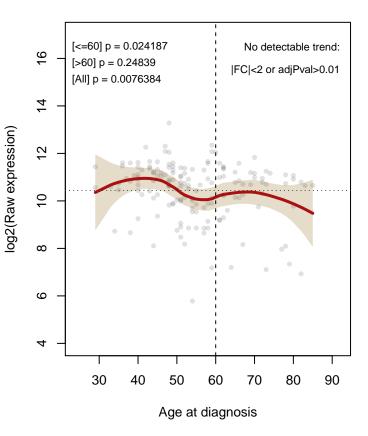
TCF7 (non-ER binding)

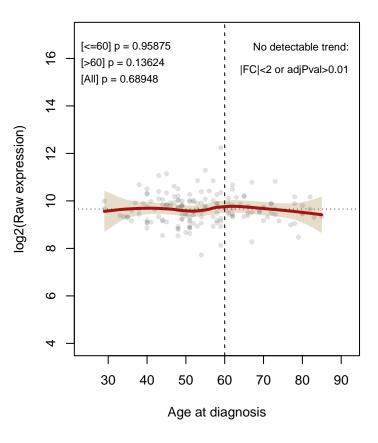






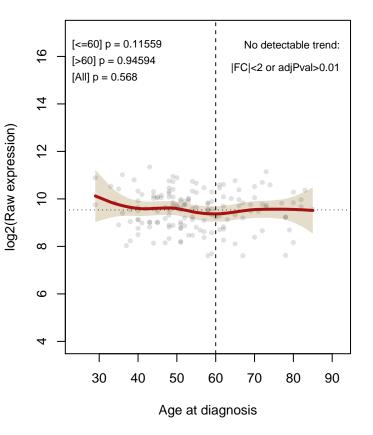
# TCF7L2 (non-ER binding)

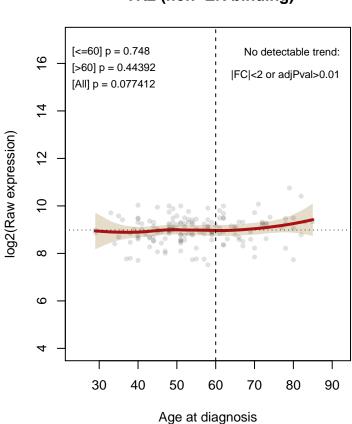


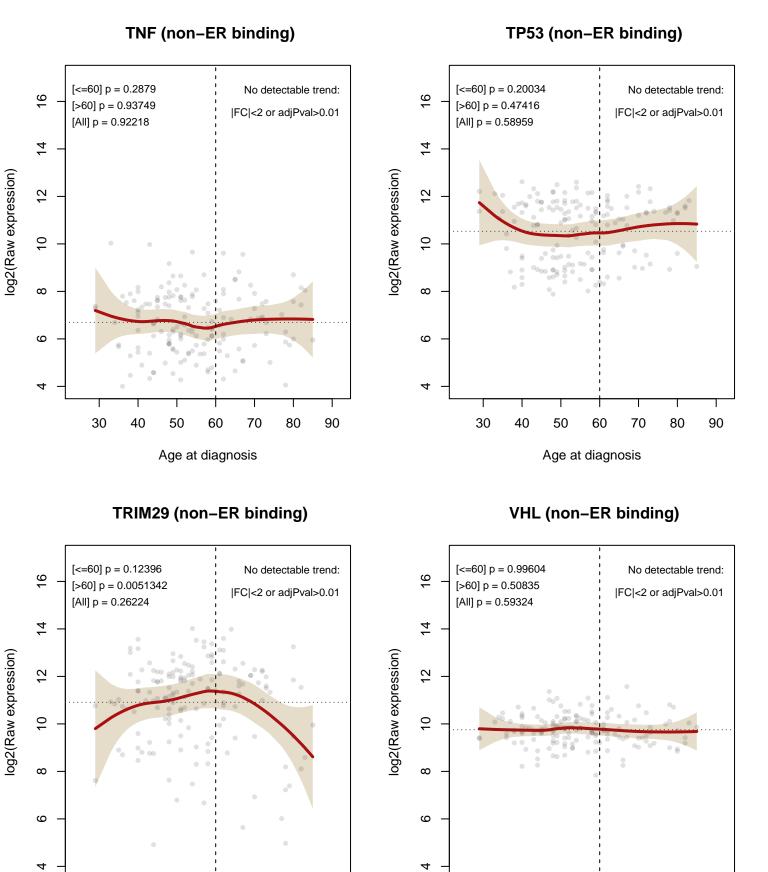


# TGFB1 (non-ER binding)

TK2 (non-ER binding)





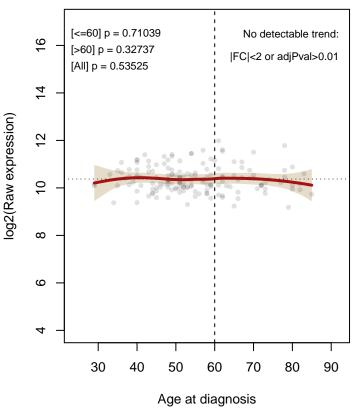


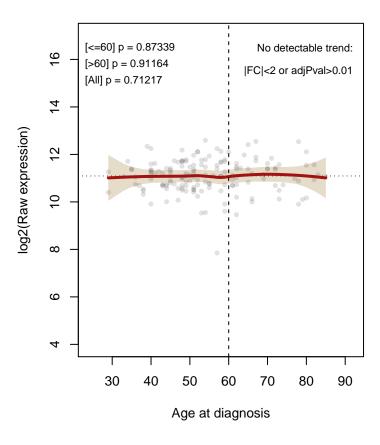
Age at diagnosis

Age at diagnosis



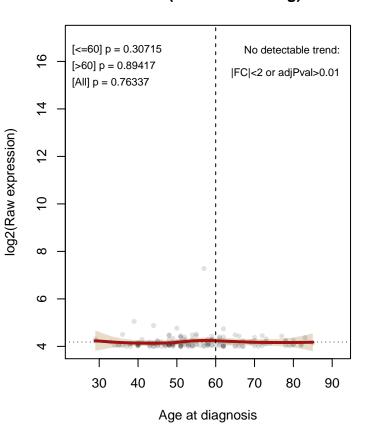
#### WHSC1 (non-ER binding)

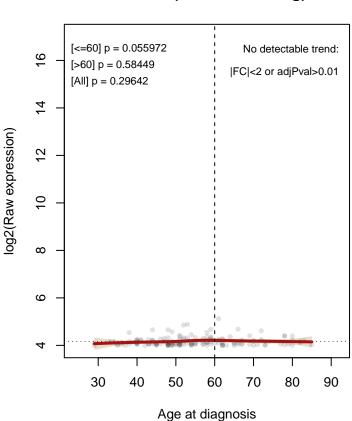


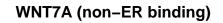


# WNT1 (non-ER binding)

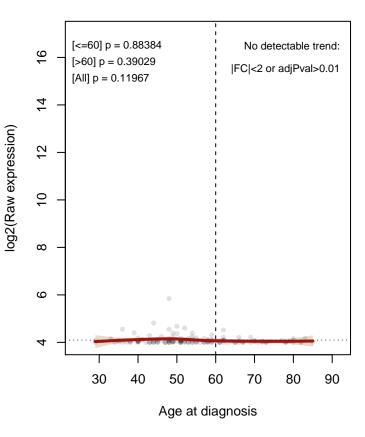
WNT3A (non-ER binding)

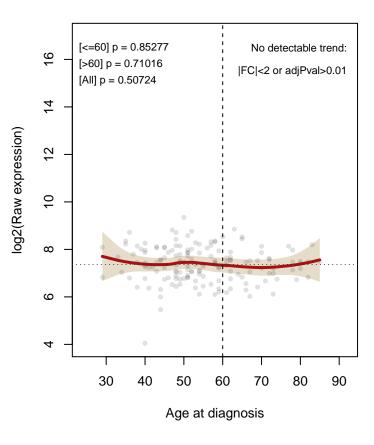






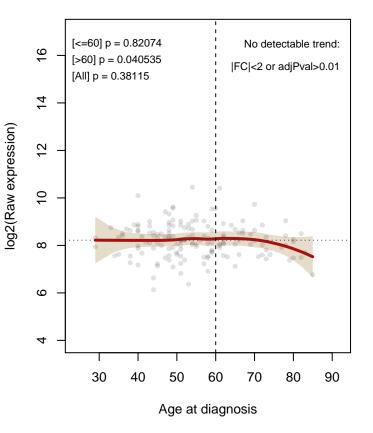
#### XRCC2 (non-ER binding)

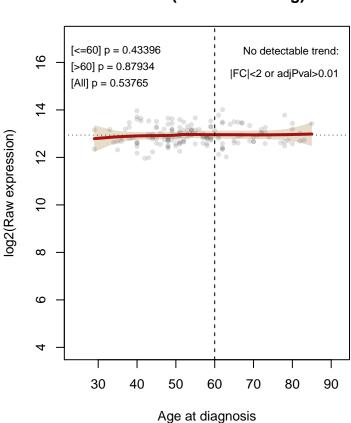




# XRCC3 (non-ER binding)

# XRCC6 (non-ER binding)





### YAF2 (non-ER binding)

# 

log2(Raw expression)

ω

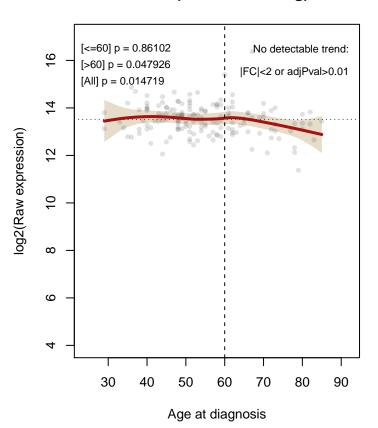
9

30

40

50

# YBX1 (non-ER binding)



YY1 (non-ER binding)

Age at diagnosis

60

70

80

90

