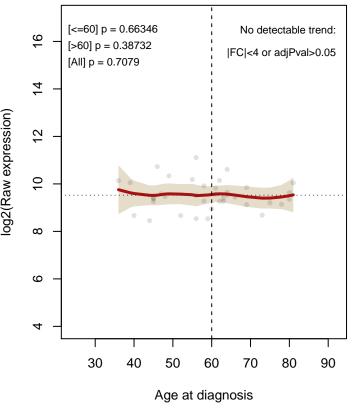


# ASXL3 (non-ER binding) [<=60] p = 0.24824No detectable trend: 16 16 [>60] p = 0.16117 |FC|<4 or adjPval>0.05 [All] p = 0.224094 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9

# ATM (non-ER binding)



ATR (non-ER binding)

Age at diagnosis

60

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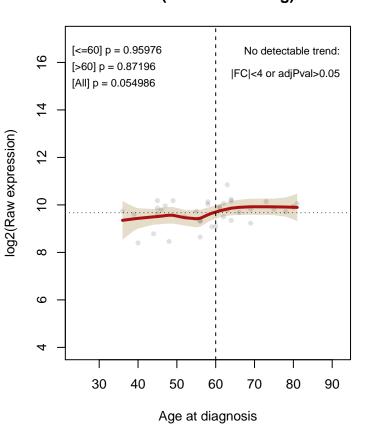
80

90

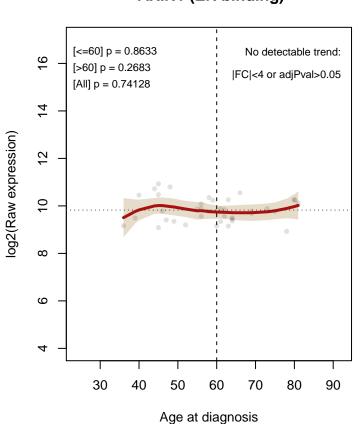
30

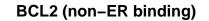
40

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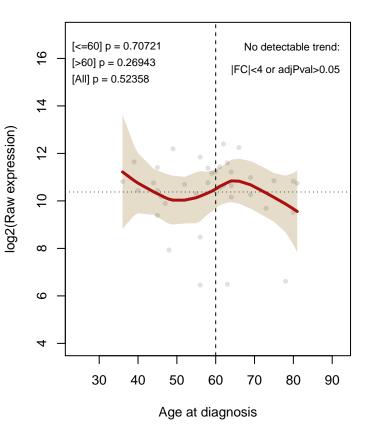


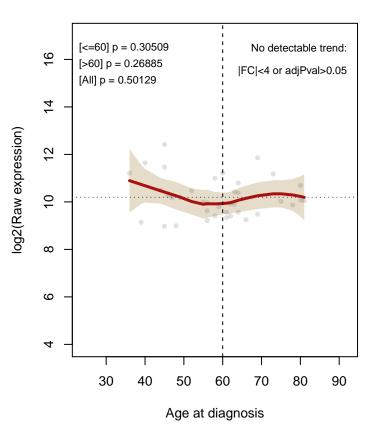
# **AXIN1 (ER binding)**





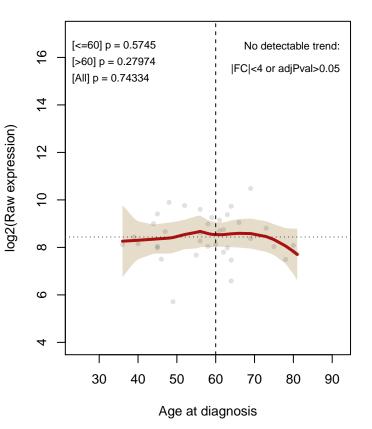
#### BCL3 (non-ER binding)

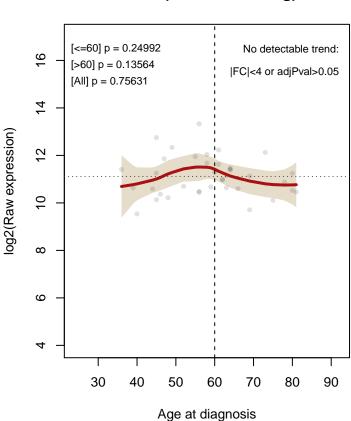




# **BIRC5** (non-ER binding)

**BMI1 (non-ER binding)** 





#### BMX (non-ER binding) **BRCA1** (non-ER binding) [<=60] p = 0.49465No detectable trend: [<=60] p = 0.16945No detectable trend: 16 16 [>60] p = 0.19758 [>60] p = 0.04659 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.60877[AII] p = 0.35894 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 CA9 (non-ER binding) **CBX1** (non-ER binding) [<=60] p = 0.33664No detectable trend: [<=60] p = 0.68954No detectable trend: 16 16 [>60] p = 0.1574 [>60] p = 0.31832 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.9758[AII] p = 0.0270464 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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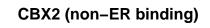
60

Age at diagnosis

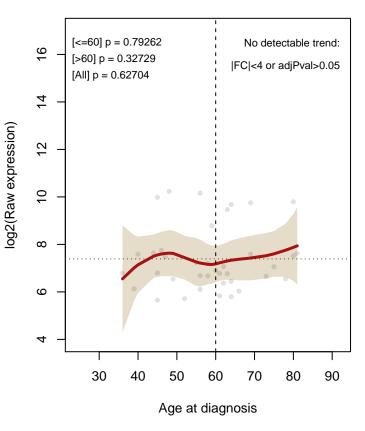
70

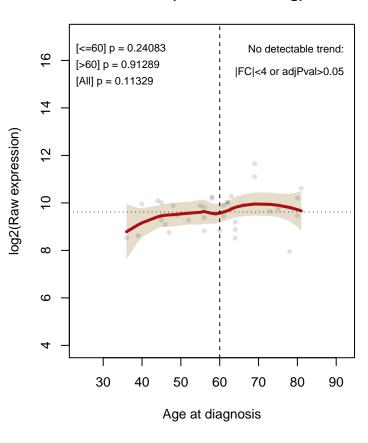
80

90



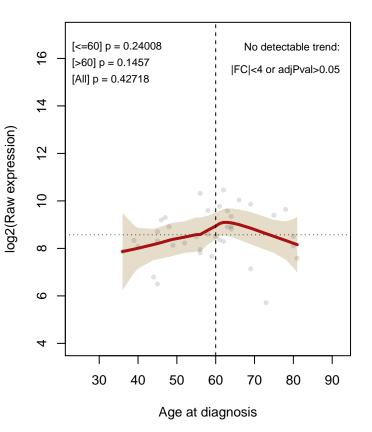
#### CBX4 (non-ER binding)

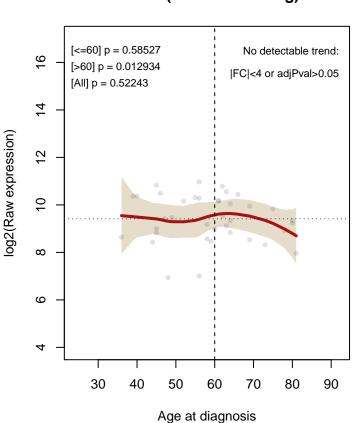


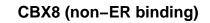


# CBX6 (non-ER binding)

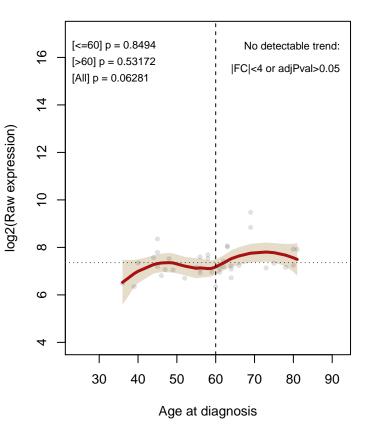
### **CBX7 (non-ER binding)**

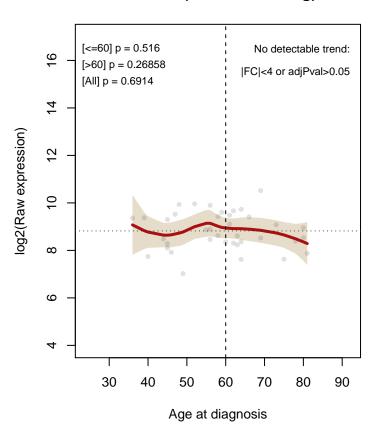






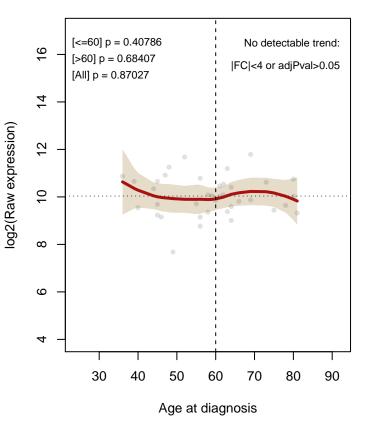
### CCNA2 (non-ER binding)

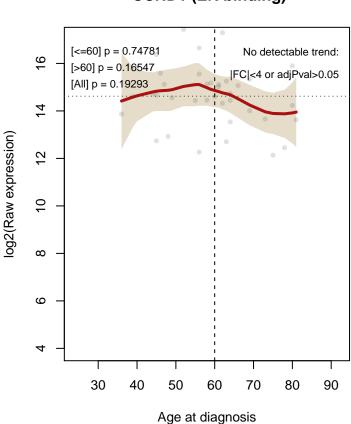


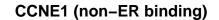


# CCNB1 (non-ER binding)

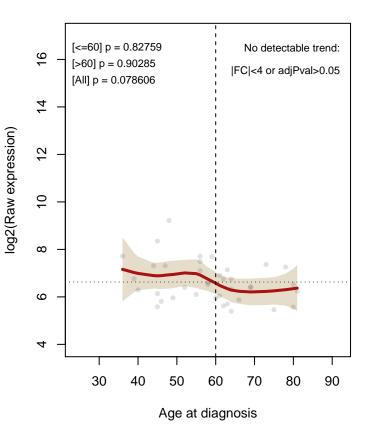
# **CCND1 (ER binding)**

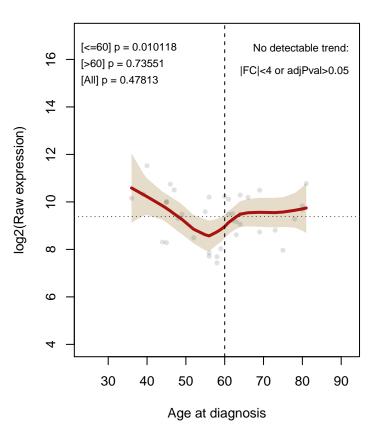






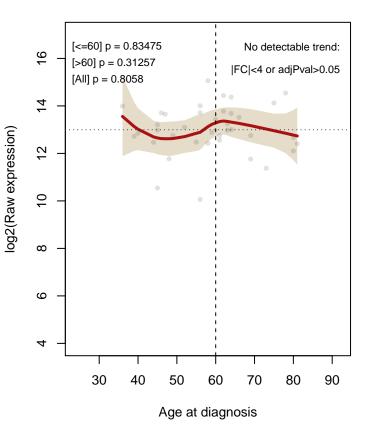
### CD163 (non-ER binding)

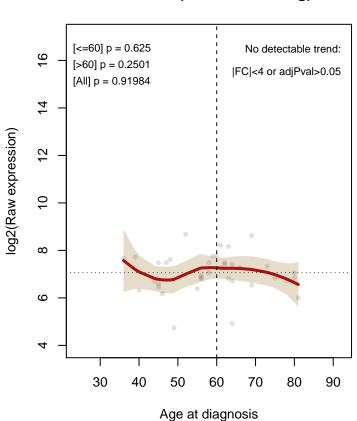




# CD44 (non-ER binding)

CDC25C (non-ER binding)

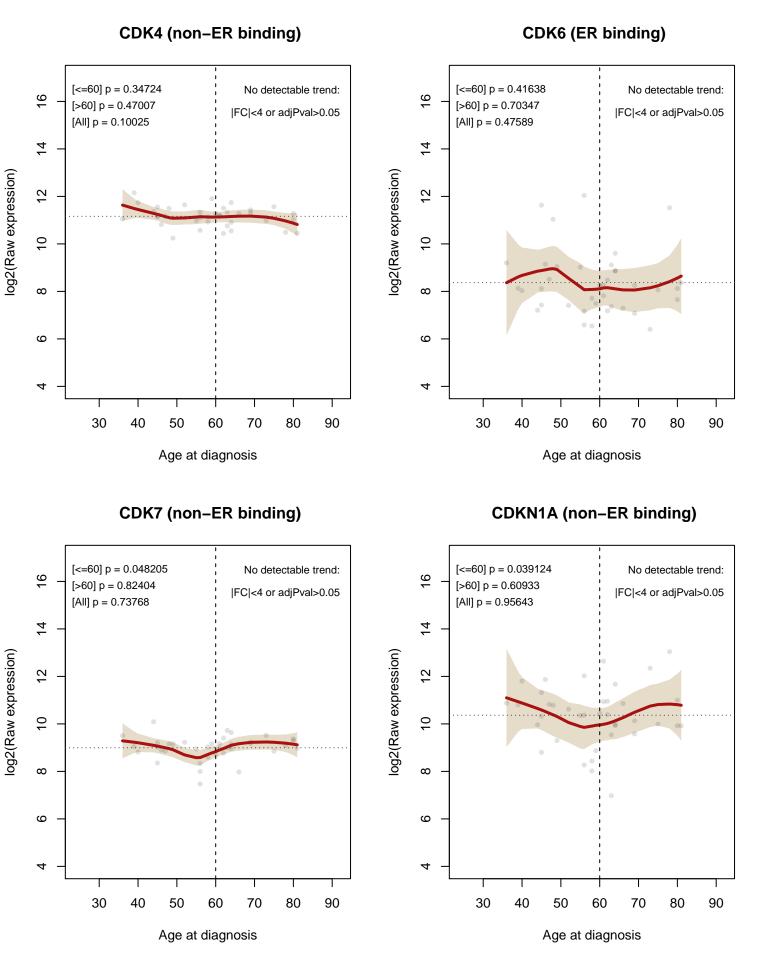




#### CDH1 (non-ER binding) CDH3 (ER binding) [<=60] p = 0.49491No detectable trend: [<=60] p = 0.28692No detectable trend: 16 16 [>60] p = 0.57918 [>60] p = 0.86282 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.063768[All] p = 0.125564 4 log2(Raw expression) log2(Raw expression) 12 12 10 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 CDK1 (non-ER binding) CDK2 (non-ER binding) [<=60] p = 0.4043No detectable trend: [<=60] p = 0.066856No detectable trend: 16 16 [>60] p = 0.045925 [>60] p = 0.14154 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.6235[AII] p = 0.990064 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90

Age at diagnosis

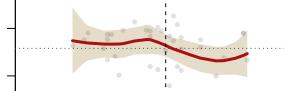
Age at diagnosis



#### CDKN1B (non-ER binding)

# p = 0.93729 No detectable trend:





log2(Raw expression)

12



Age at diagnosis

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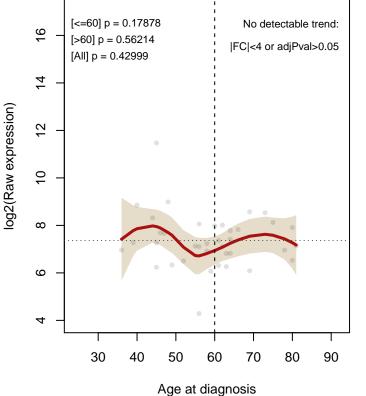
# CDKN2A (non-ER binding)

60

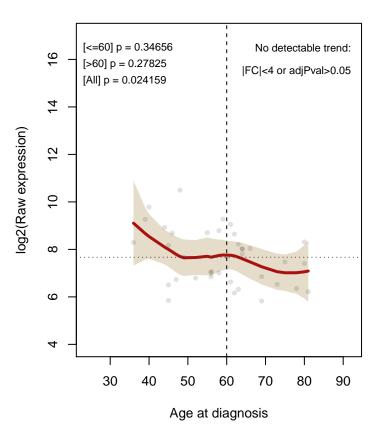
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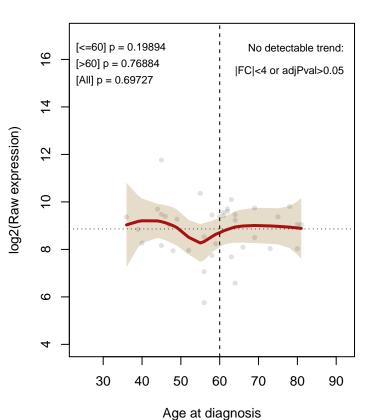
90



### CDKN1C (non-ER binding)

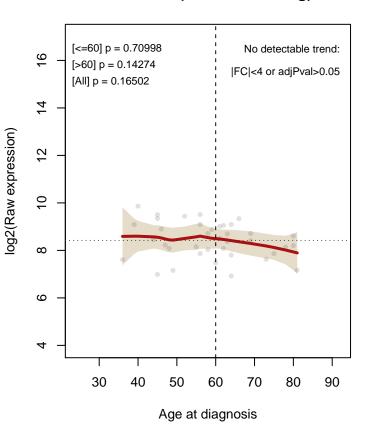


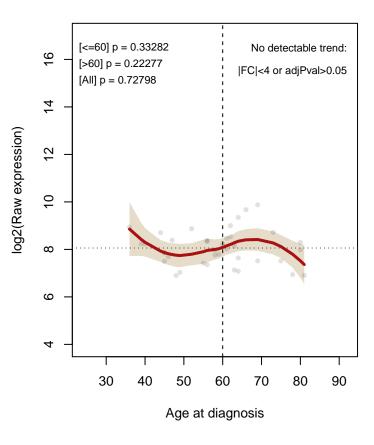
# CDKN2B (non-ER binding)



#### CDKN2C (non-ER binding)

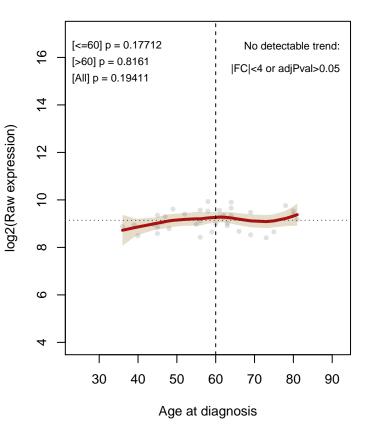
#### CDKN2D (non-ER binding)

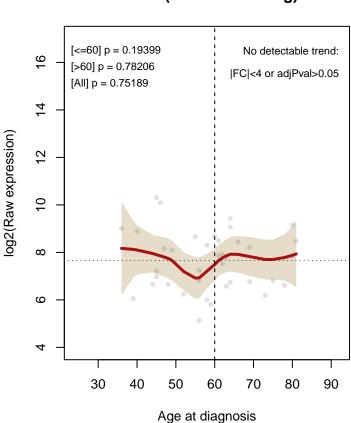




# CHUK (non-ER binding)

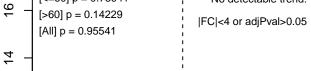
**CIITA (non-ER binding)** 

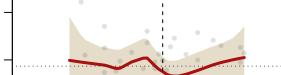




#### CLDN3 (non-ER binding)

# [<=60] p = 0.78941No detectable trend:





log2(Raw expression)

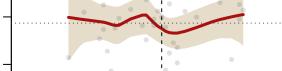
log2(Raw expression)

12

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Age at diagnosis

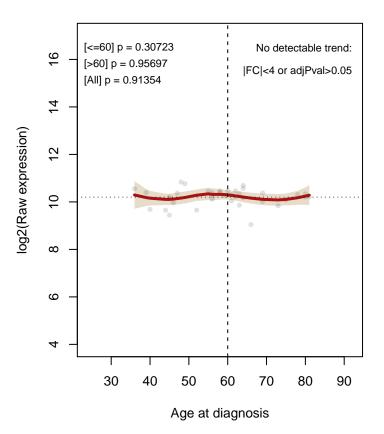
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#### CREB1 (non-ER binding)

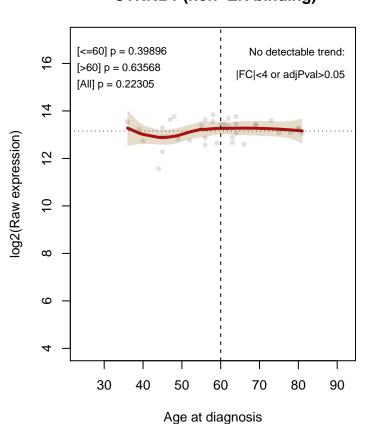


# **CRYAB** (non-ER binding)

# [<=60] p = 0.10057No detectable trend: 16 [>60] p = 0.90388|FC|<4 or adjPval>0.05 [AII] p = 0.558144 12 10 $\infty$ 9 30 40 50 60 70 80 90

Age at diagnosis

# CTNNB1 (non-ER binding)



#### **DLC1 (ER binding)** DMAP1 (non-ER binding) [<=60] p = 0.72135No detectable trend: [<=60] p = 0.74909No detectable trend: 16 16 [>60] p = 0.22298 [>60] p = 0.18199 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.038881[All] p = 0.461554 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis **DNMT1** (non-ER binding) **DNMT3A (non-ER binding)** [<=60] p = 0.11788No detectable trend: [<=60] p = 0.67542No detectable trend: 16 16 [>60] p = 0.77413 [>60] p = 0.38655 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.92136[AII] p = 0.566054 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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# **DNMT3B** (non-ER binding) [<=60] p = 0.30572No detectable trend: 16 [>60] p = 0.19837 |FC|<4 or adjPval>0.05 [All] p = 0.997194 log2(Raw expression) 12

10

 $\infty$ 

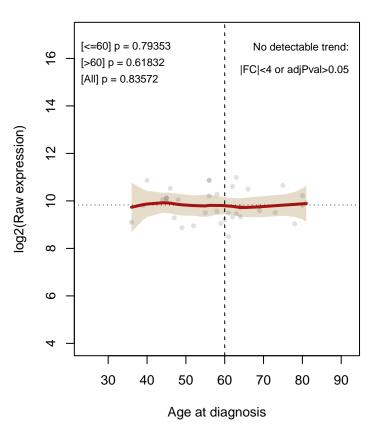
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# **DVL1 (non-ER binding)**



Age at diagnosis E2F1 (non-ER binding)

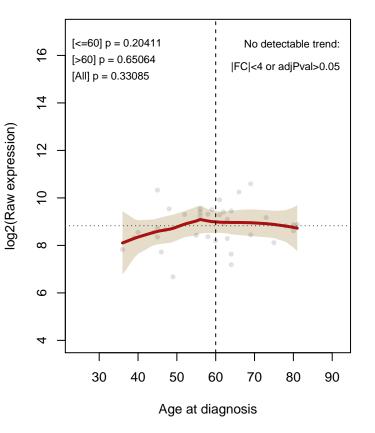
60

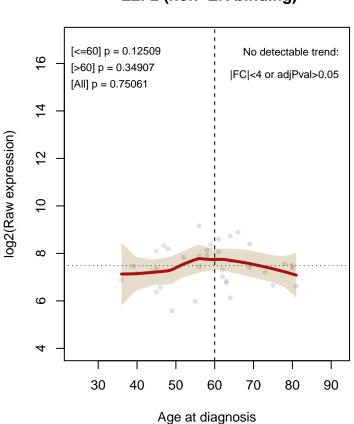
70

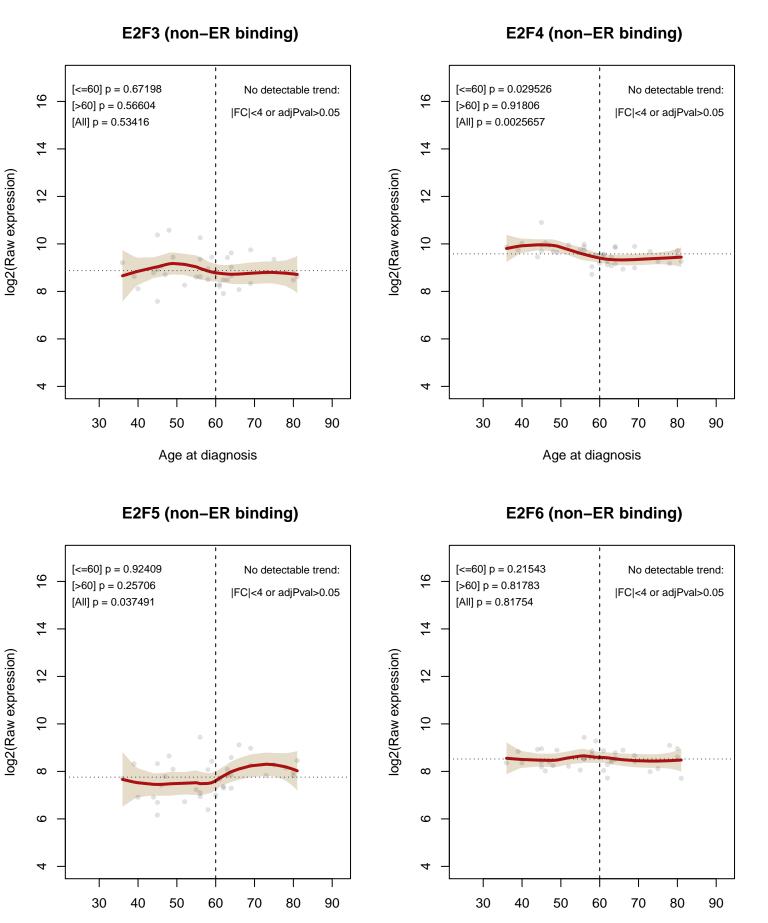
80

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E2F2 (non-ER binding)







Age at diagnosis

Age at diagnosis

#### E2F7 (non-ER binding) E2F8 (non-ER binding) [<=60] p = 0.052046No detectable trend: [<=60] p = 0.12972No detectable trend: 16 16 [>60] p = 0.018326 [>60] p = 0.36429 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.90135[All] p = 0.950184 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 **EED (non-ER binding)** EGFR (non-ER binding) [<=60] p = 0.34369No detectable trend: [<=60] p = 0.49317No detectable trend: 16 16 [>60] p = 0.79826 [>60] p = 0.4028 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.80066[All] p = 0.158624 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 $\infty$ ω

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Age at diagnosis

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Age at diagnosis

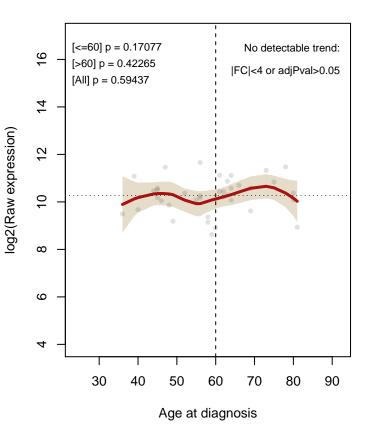
70

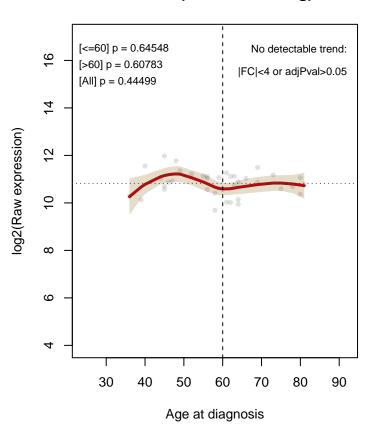
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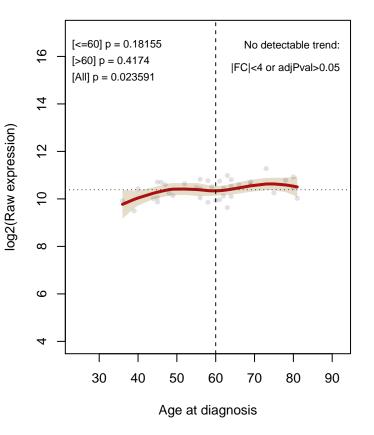
#### **EHMT2** (non-ER binding)

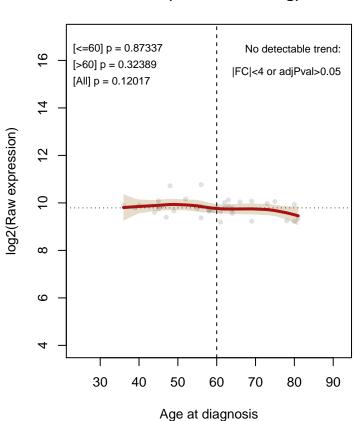


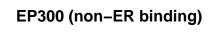


**ELAC2 (non-ER binding)** 

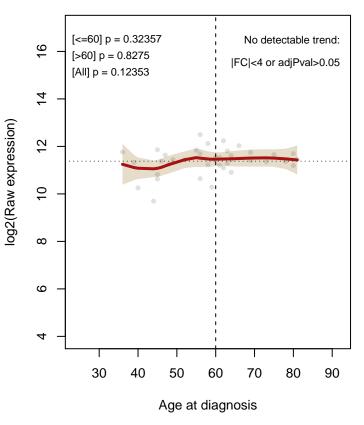
# **ELK1 (non-ER binding)**

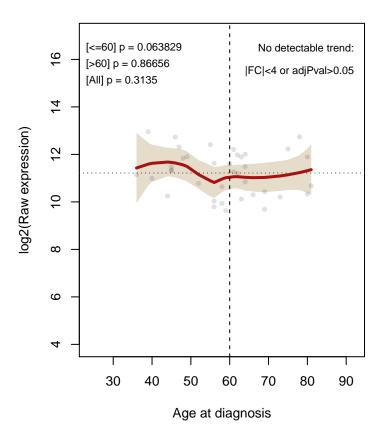






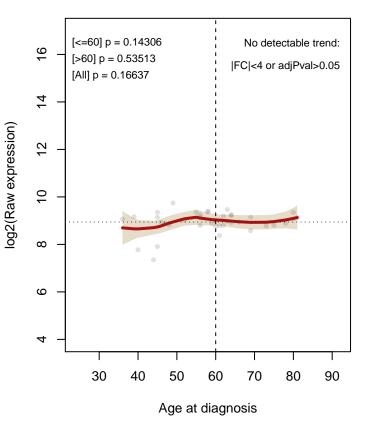
### **EPAS1** (non-ER binding)

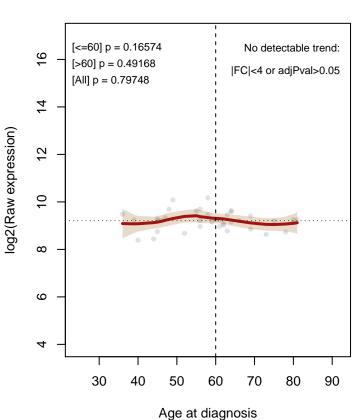




**EPC1 (non-ER binding)** 

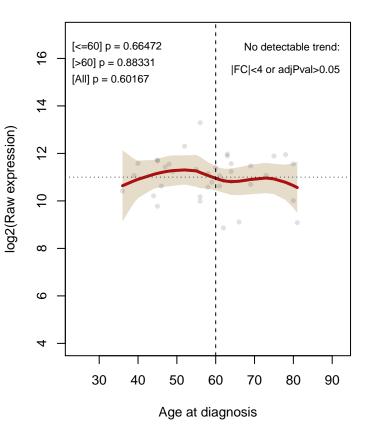
**EPC2** (non-ER binding)

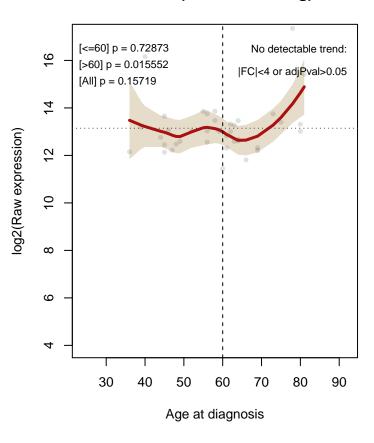






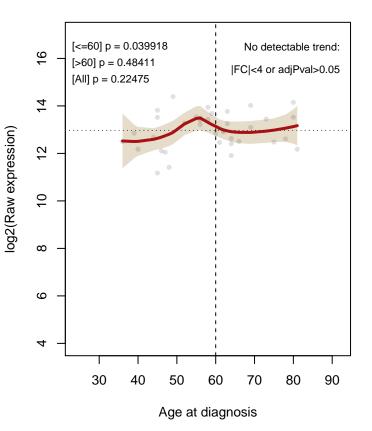
#### **ERBB2** (non-ER binding)

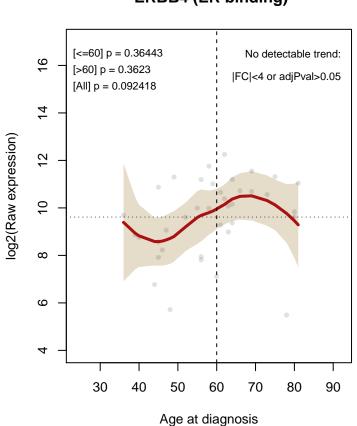


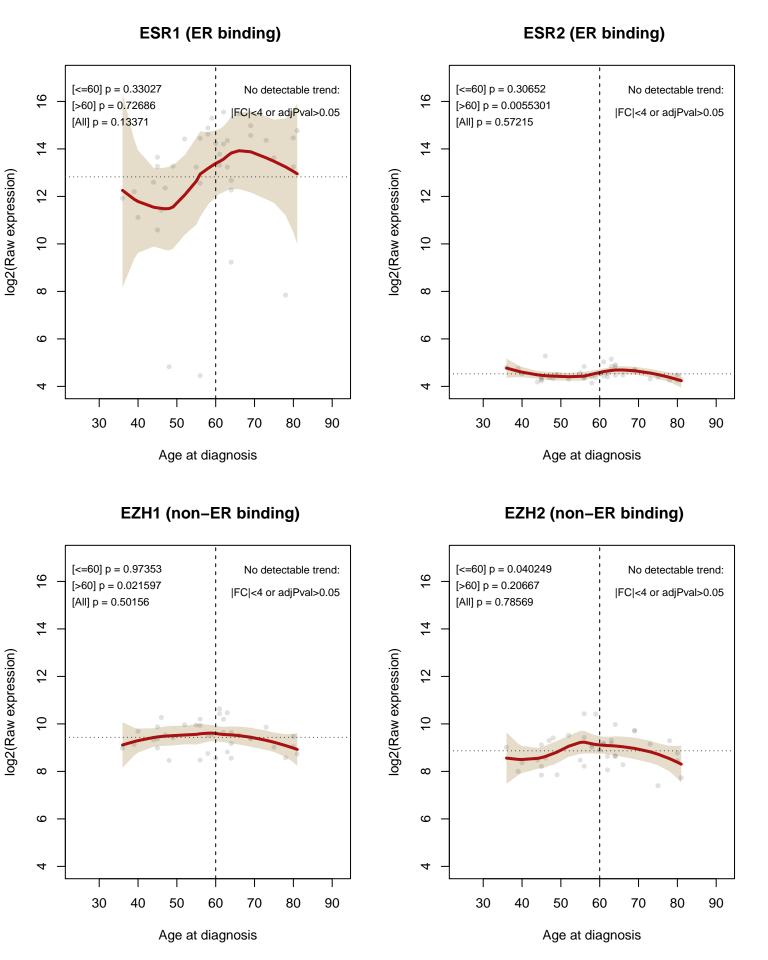


# ERBB3 (non-ER binding)

**ERBB4 (ER binding)** 

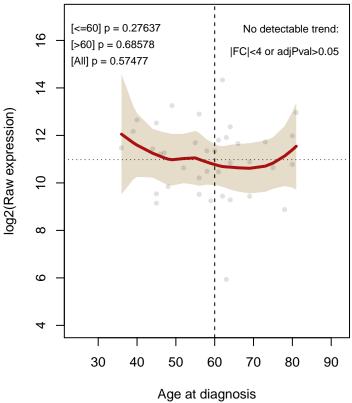


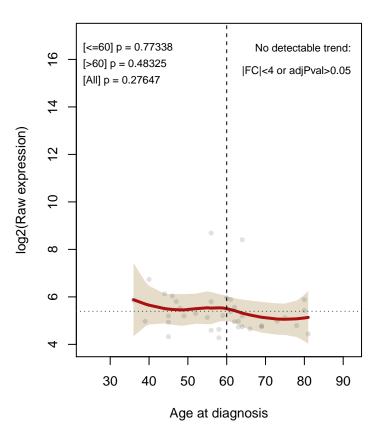






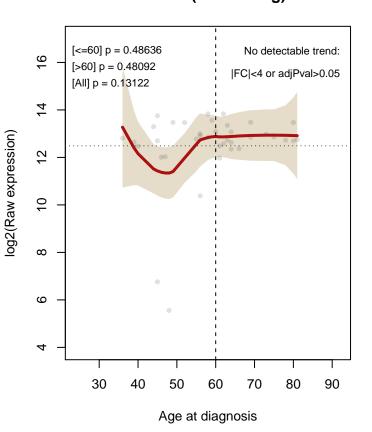
# FOSL1 (non-ER binding)

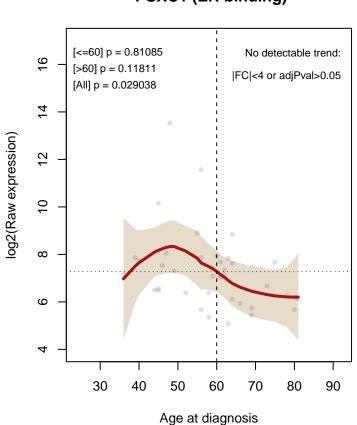


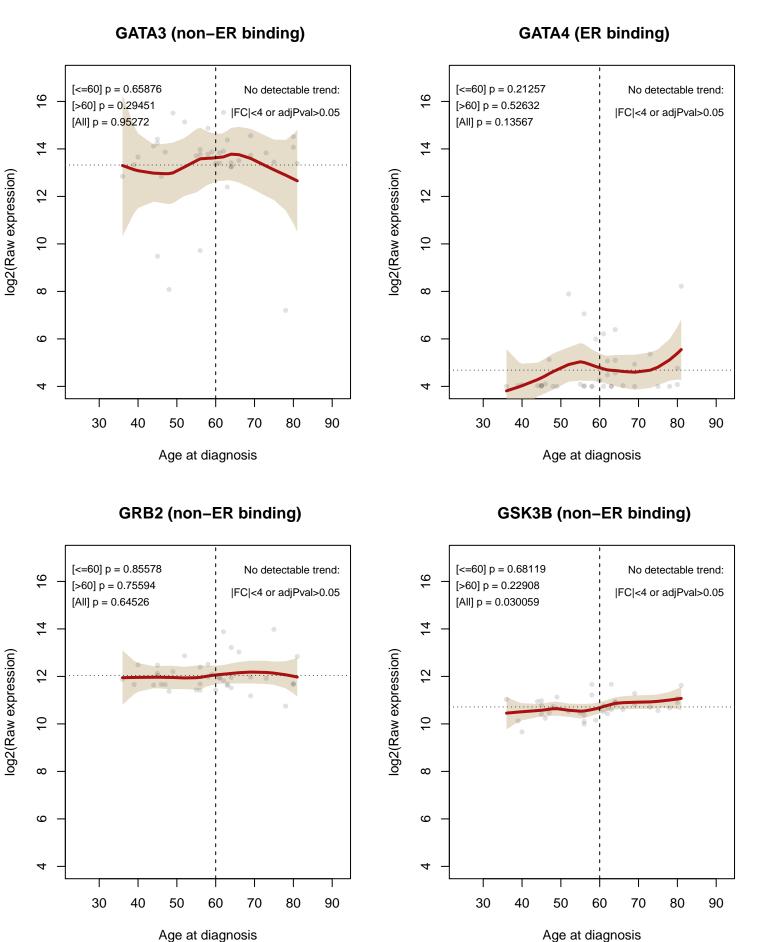


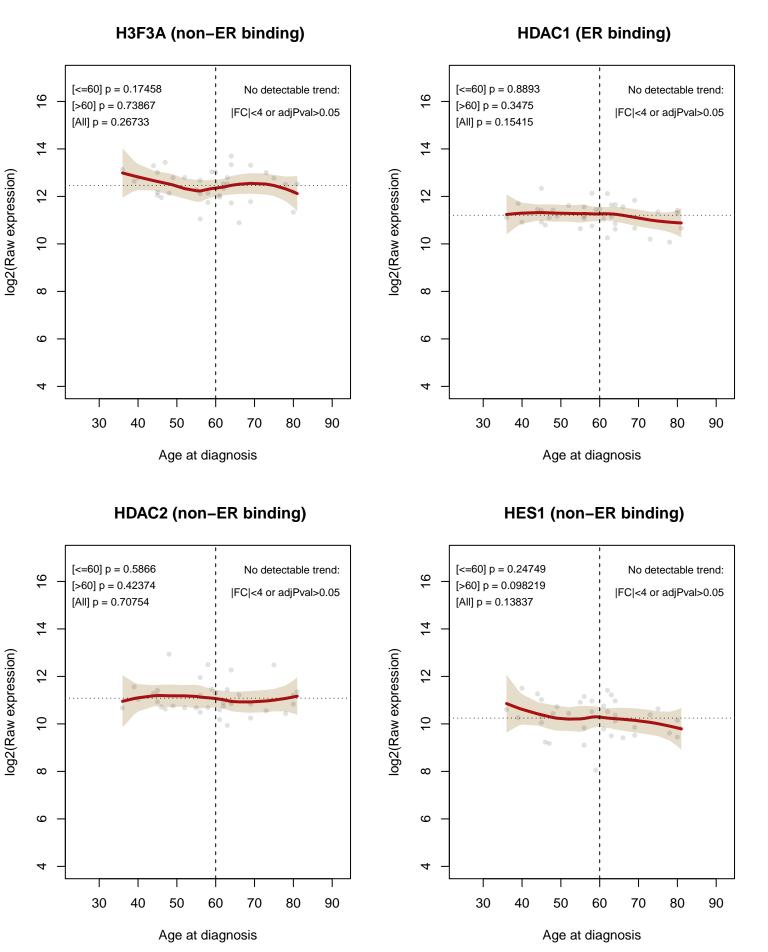
**FOXA1 (ER binding)** 

FOXC1 (ER binding)



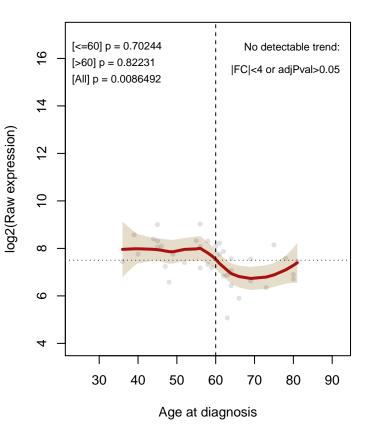


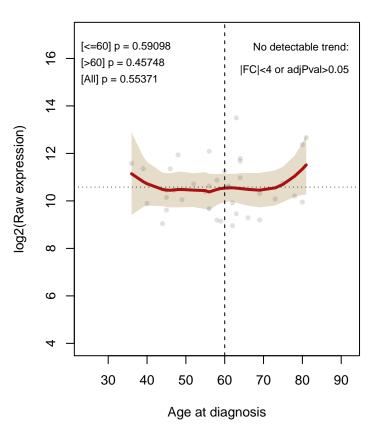






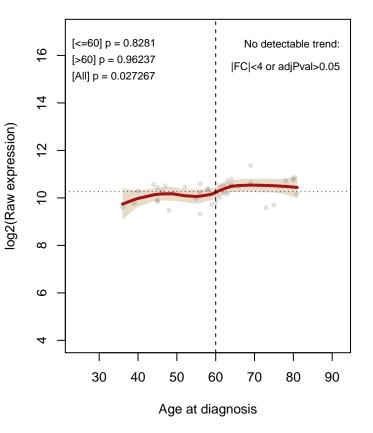
# HIF1A (non-ER binding)

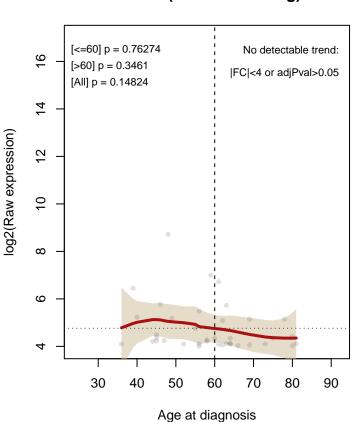




# HIF1AN (non-ER binding)

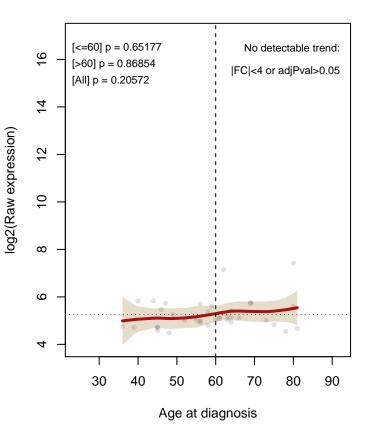
### HIF3A (non-ER binding)

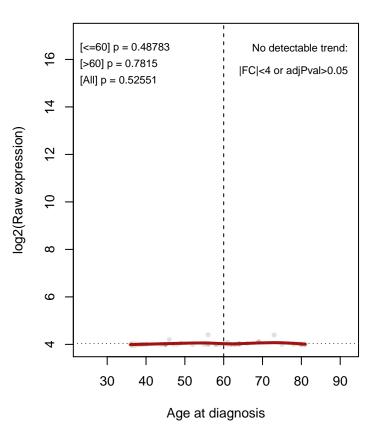




#### **HNF1A** (non-ER binding)

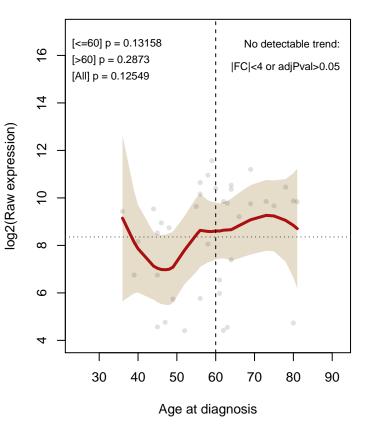
### HNF1B (non-ER binding)

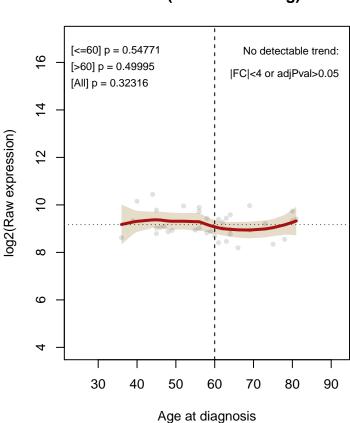




# **HOXC10 (non-ER binding)**

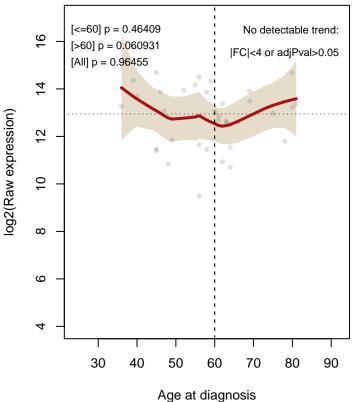
HRAS (non-ER binding)

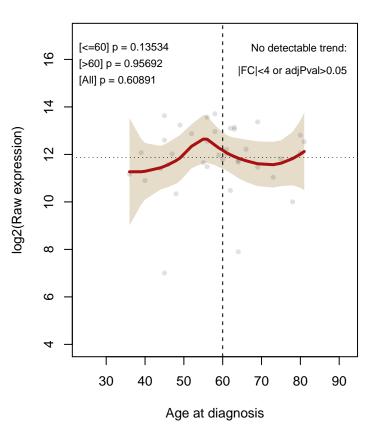






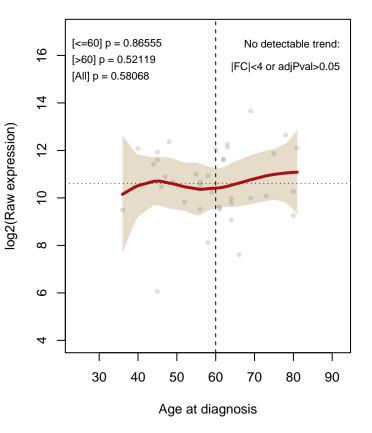
# IGF1R (ER binding)

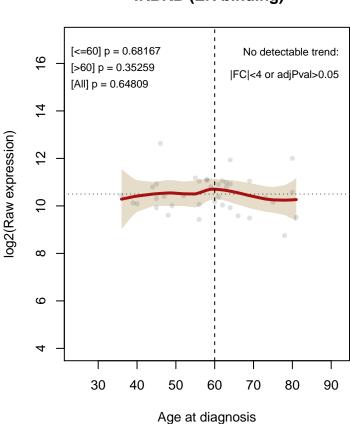




IGFBP2 (non-ER binding)

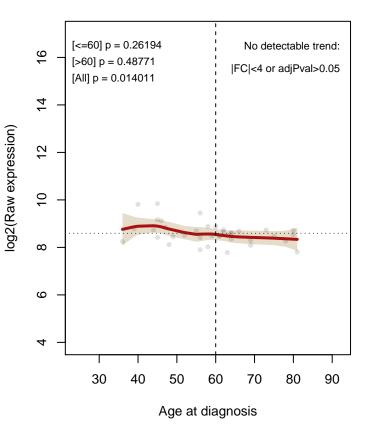
**IKBKB (ER binding)** 

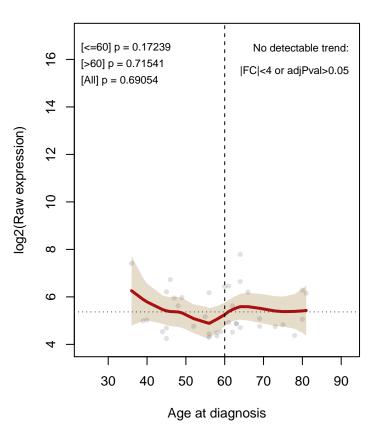






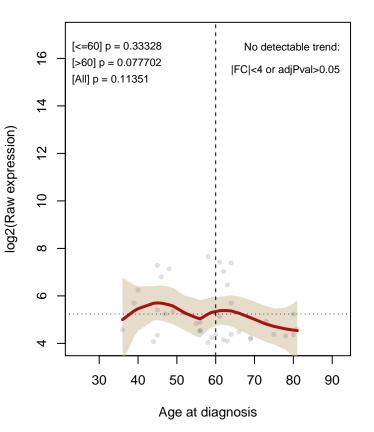
#### IL2RA (non-ER binding)

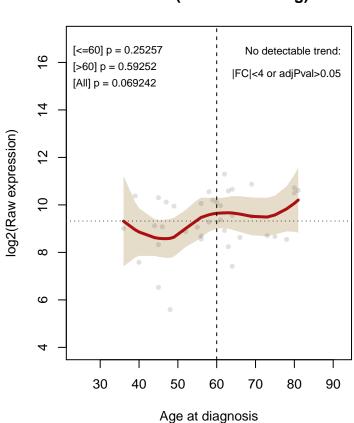


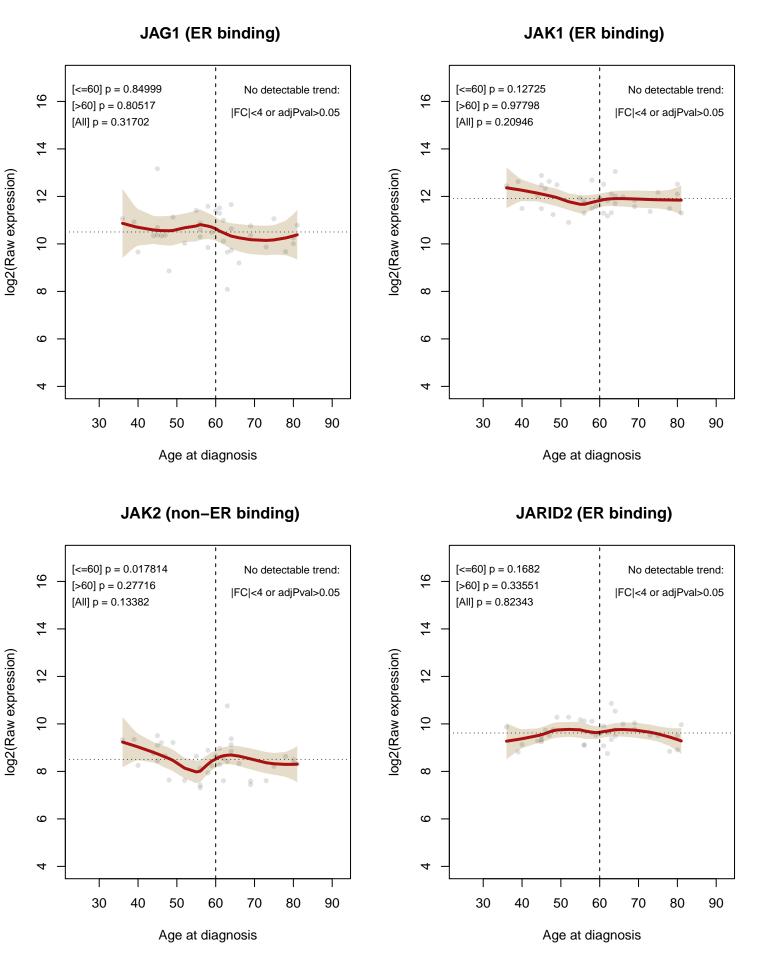


# IL6 (non-ER binding)

**INPP4B** (non-ER binding)

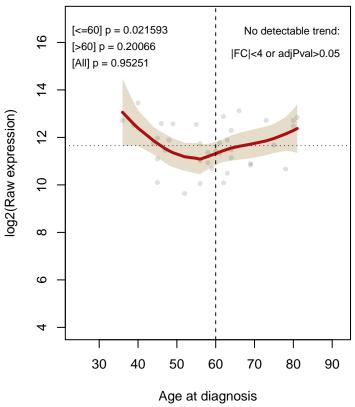


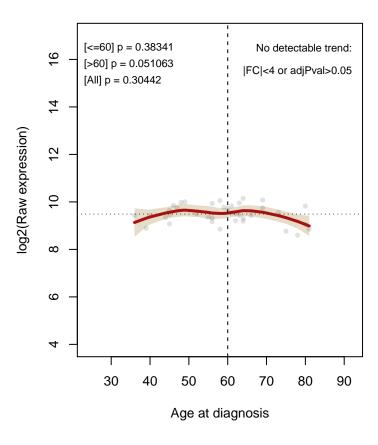






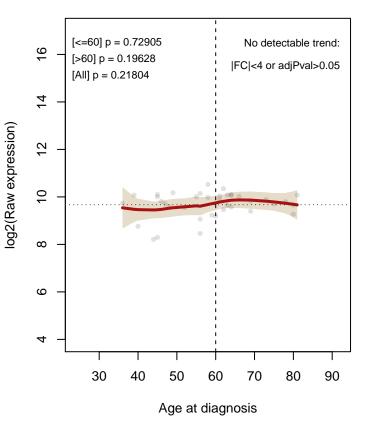
# KDM2B (non-ER binding)

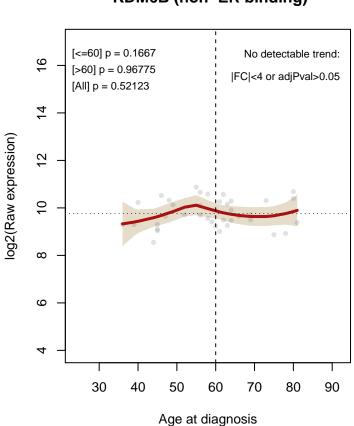




# KDM6A (non-ER binding)

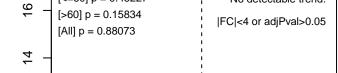
KDM6B (non-ER binding)







# [<=60] p = 0.45227No detectable trend:





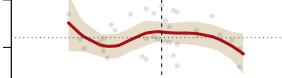
log2(Raw expression)

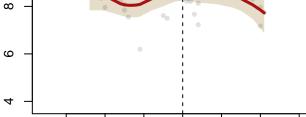
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Age at diagnosis

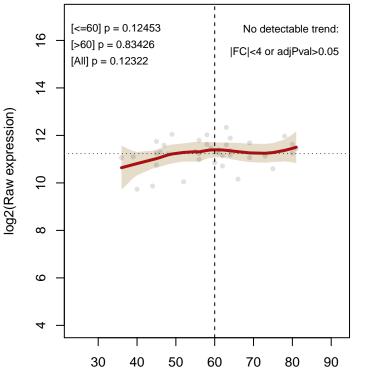
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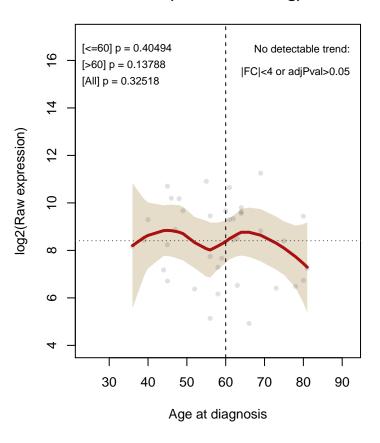
90

# KMT2C (non-ER binding)

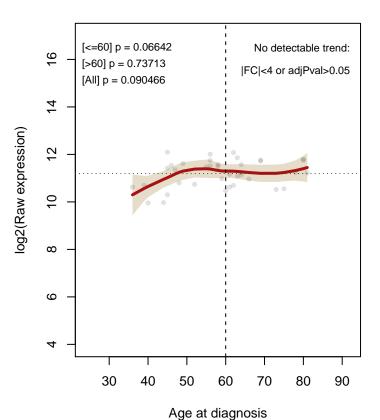


Age at diagnosis

#### KIT (non-ER binding)

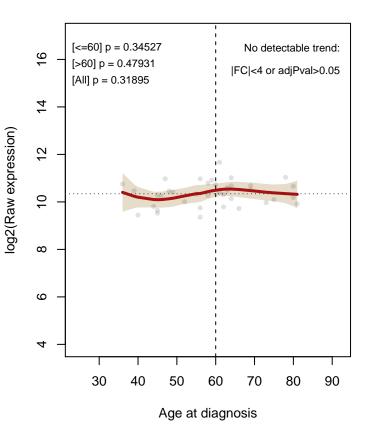


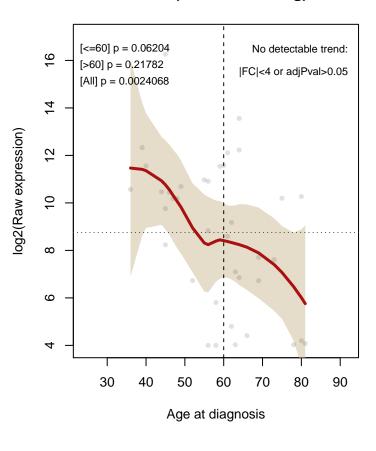
# KMT2D (non-ER binding)





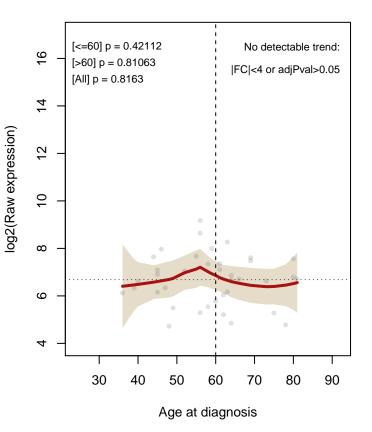
#### KRT5 (non-ER binding)

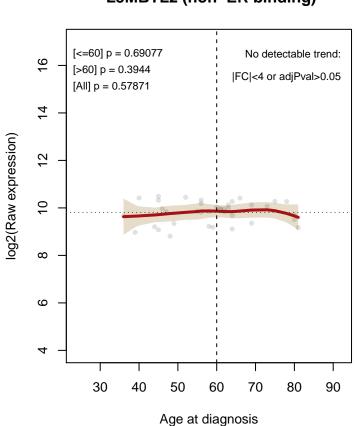




# L3MBTL1 (non-ER binding)

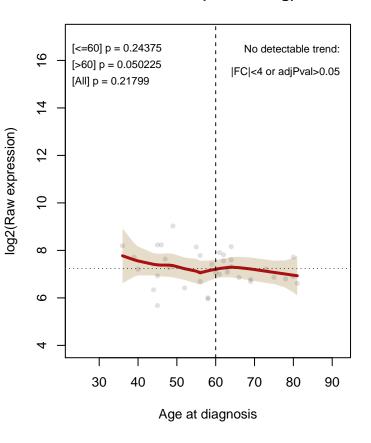
L3MBTL2 (non-ER binding)

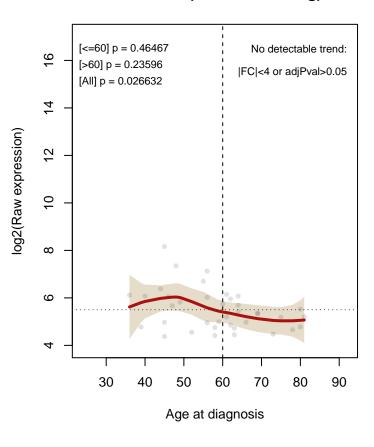




#### L3MBTL3 (ER binding)

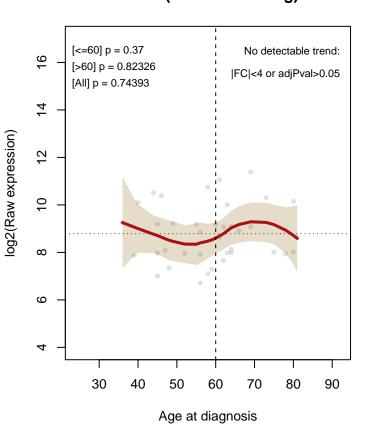
### L3MBTL4 (non-ER binding)

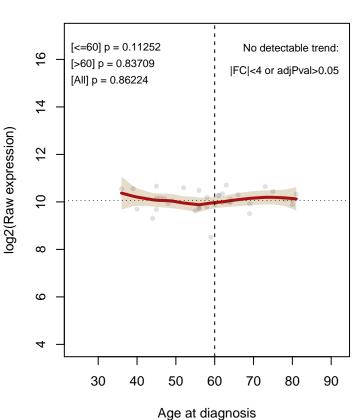




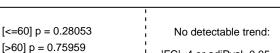
# LEF1 (non-ER binding)

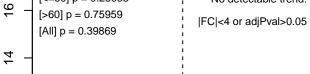
MAP2K1 (non-ER binding)

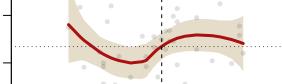




#### MAP3K1 (non-ER binding)







log2(Raw expression)

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Age at diagnosis

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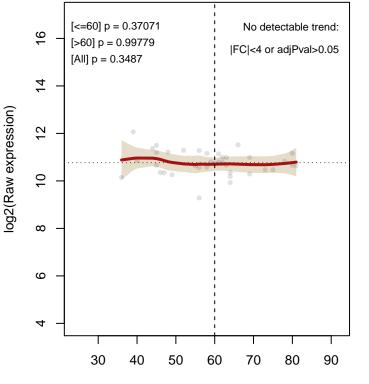
# MAPK3 (non-ER binding)

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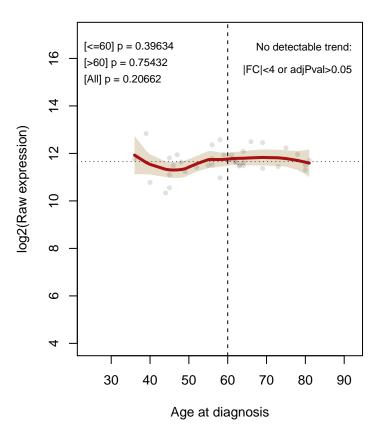
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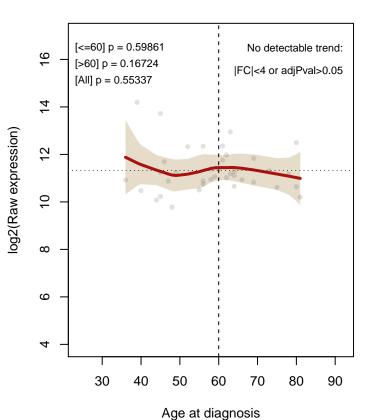


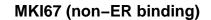
Age at diagnosis

# MAPK1 (non-ER binding)

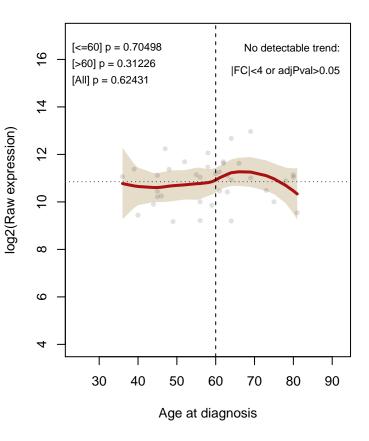


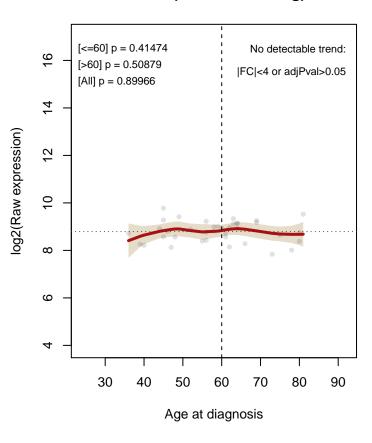
# MDM2 (non-ER binding)





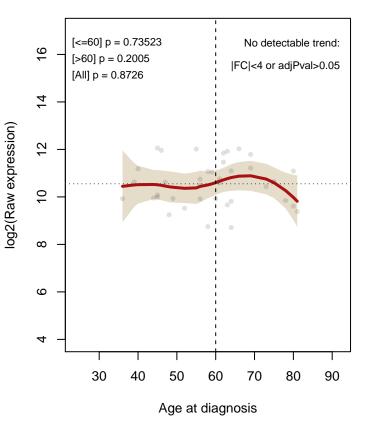
#### MTF2 (non-ER binding)

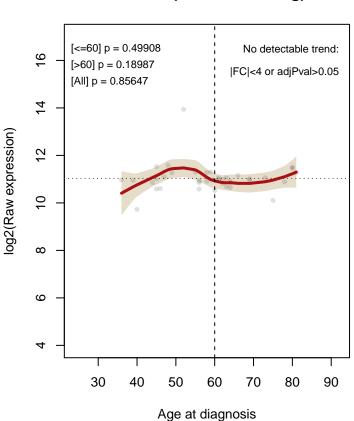


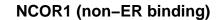


# MYC (non-ER binding)

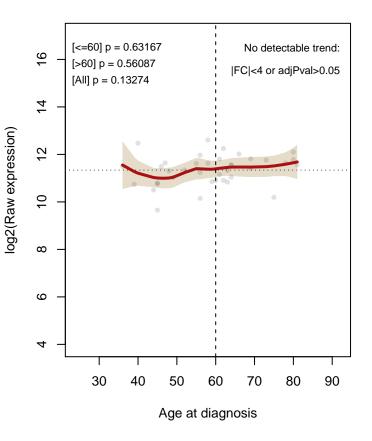
# NCOA6 (non-ER binding)

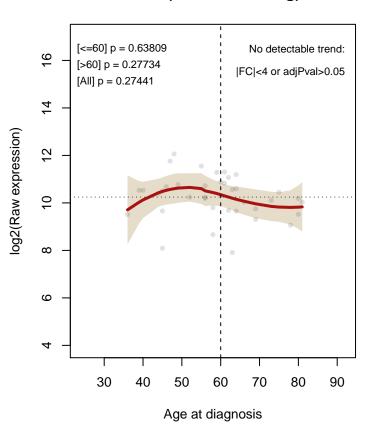






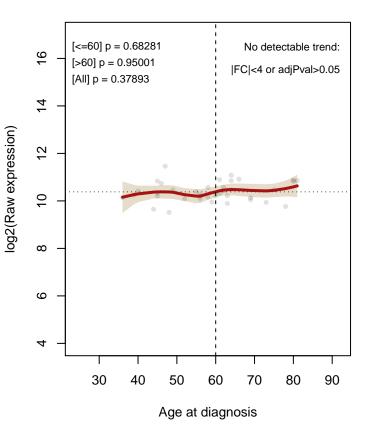
#### **NES (non-ER binding)**

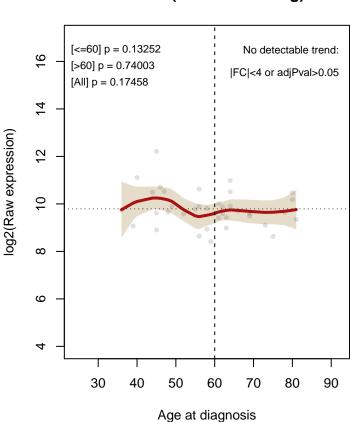




# NFKB1 (non-ER binding)

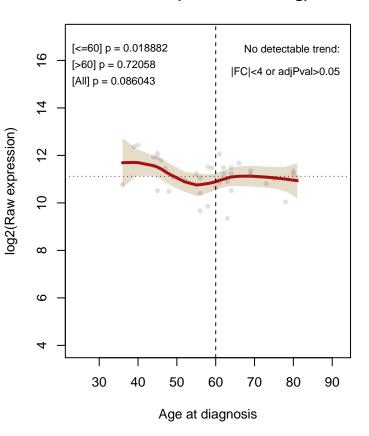
NFKB2 (non-ER binding)

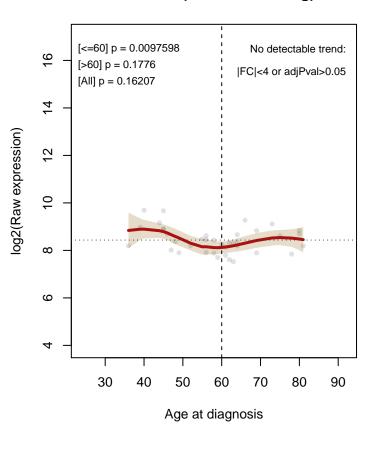




#### NFKBIA (non-ER binding)

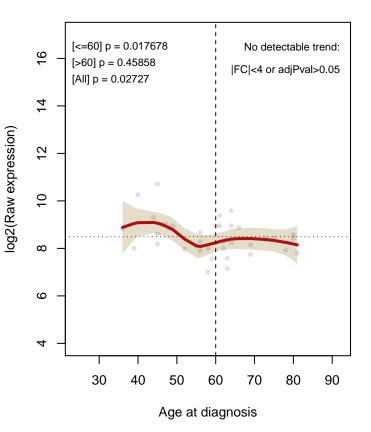
#### NFKBIB (non-ER binding)

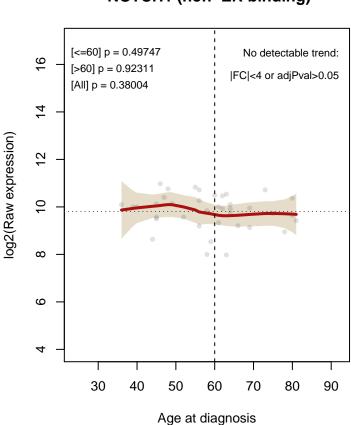




# NFKBIE (non-ER binding)

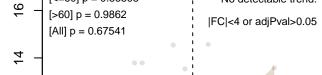
# NOTCH1 (non-ER binding)

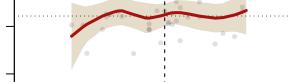




#### NOTCH2 (non-ER binding)

# [<=60] p = 0.56598No detectable trend:



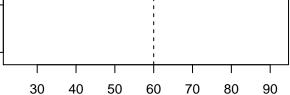




log2(Raw expression)

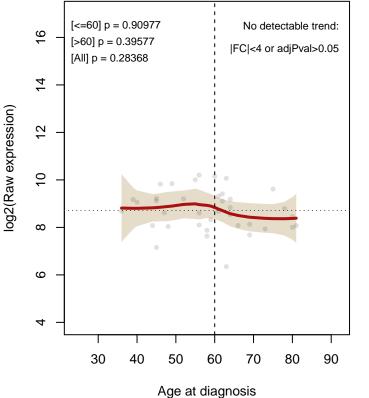
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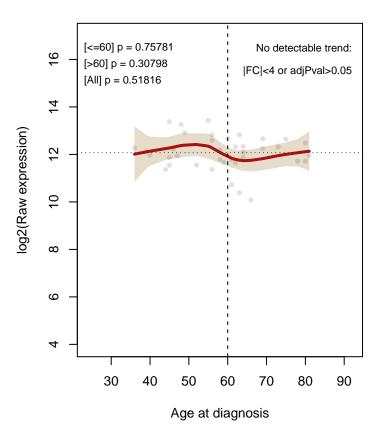


Age at diagnosis

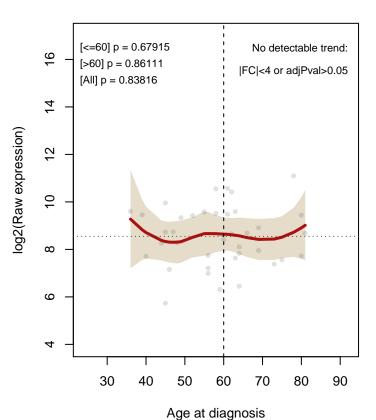
# NOTCH4 (non-ER binding)

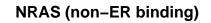


#### NOTCH3 (non-ER binding)

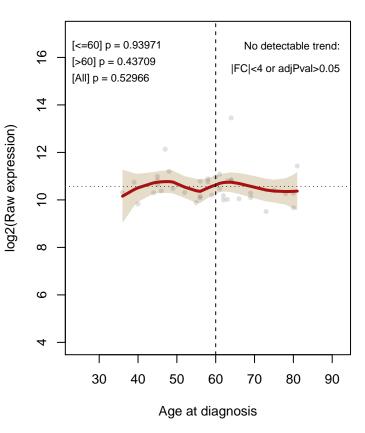


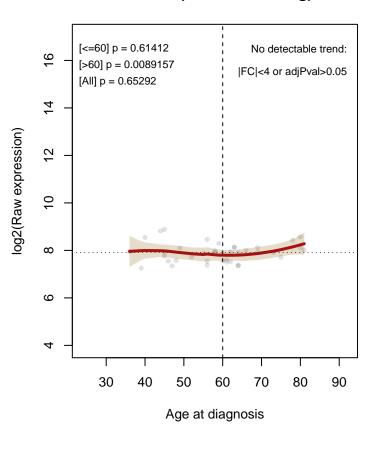
# NR4A2 (non-ER binding)





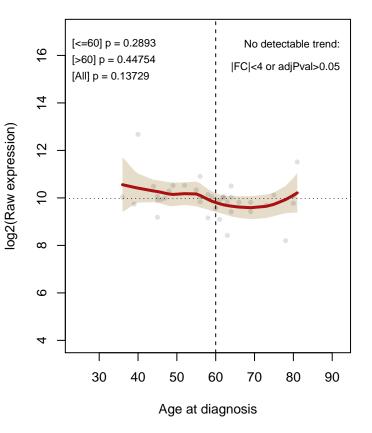
#### PCGF1 (non-ER binding)

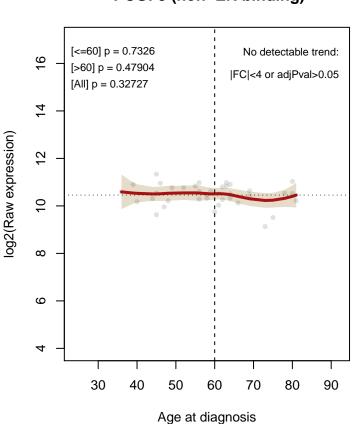




# PCGF2 (non-ER binding)

# PCGF3 (non-ER binding)





# PCGF5 (non-ER binding)

#### [<=60] p = 0.71989No detectable trend: [>60] p = 0.69943 |FC|<4 or adjPval>0.05



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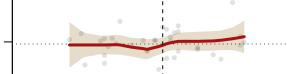
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log2(Raw expression)

log2(Raw expression)



# ω 9

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Age at diagnosis

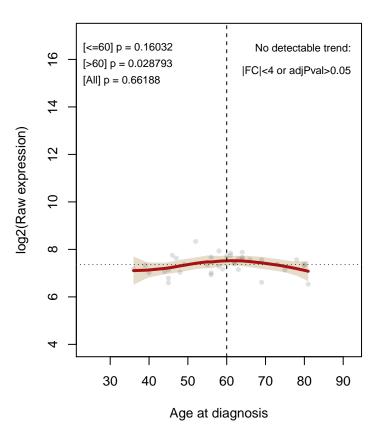
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#### PCGF6 (non-ER binding)

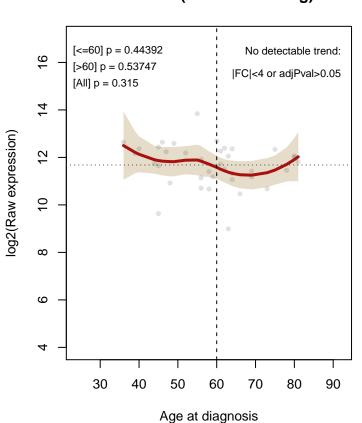


# PDGFRA (non-ER binding)

# [<=60] p = 0.18129 No detectable trend: 16 [>60] p = 0.56908 |FC|<4 or adjPval>0.05 [All] p = 0.323894 12 19 ω 9 30 40 50 60 70 80 90

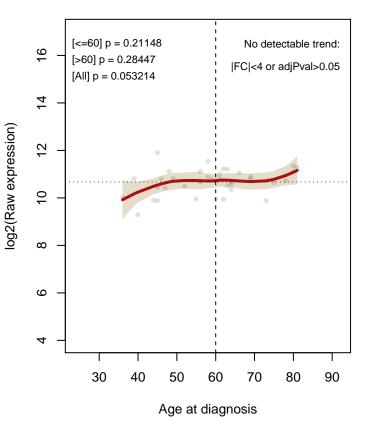
Age at diagnosis

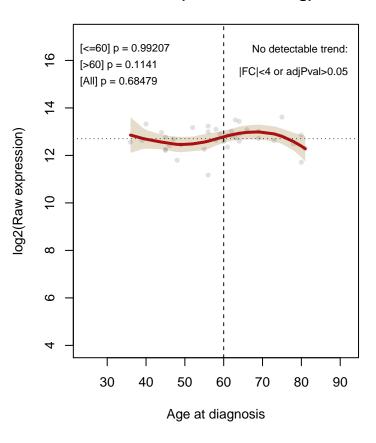
# PDGFRB (non-ER binding)





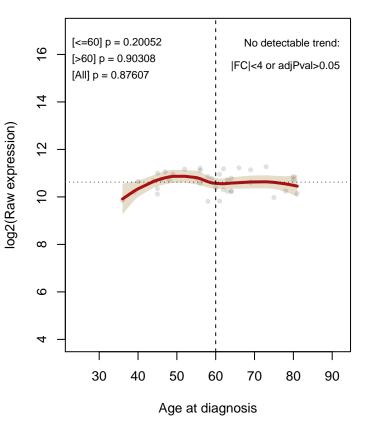
#### PEBP1 (non-ER binding)

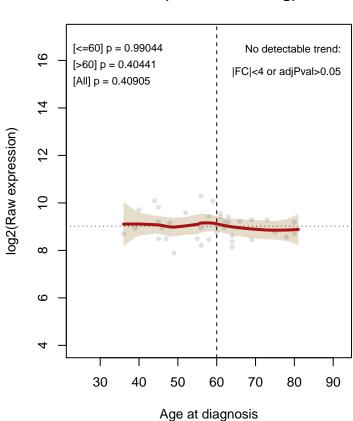


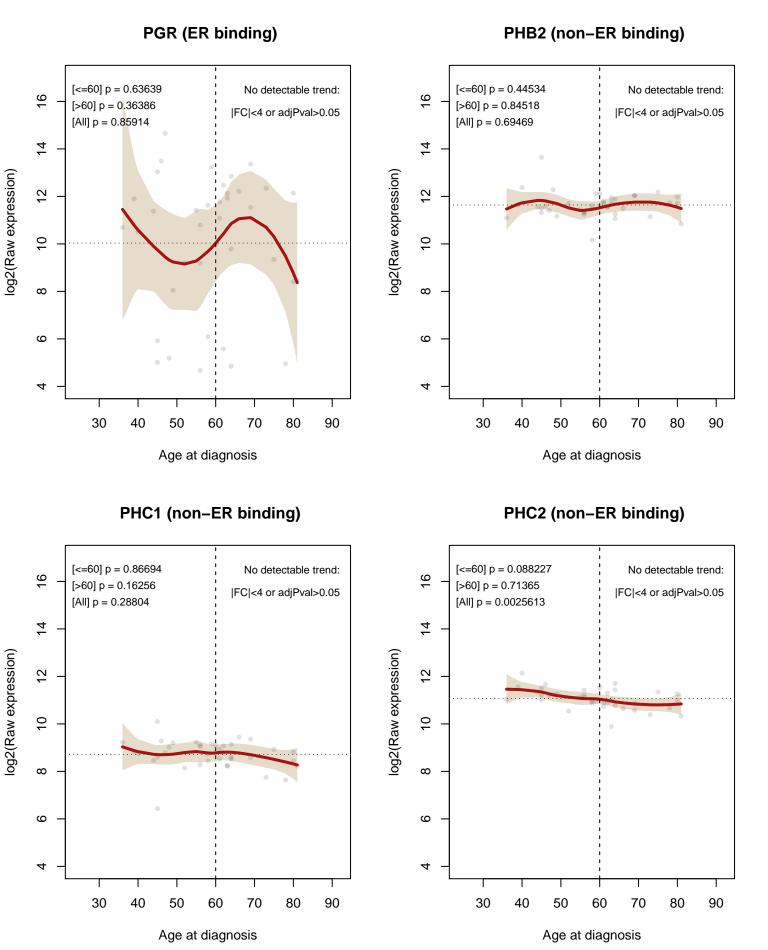


PELP1 (non-ER binding)

PGP (non-ER binding)







#### PHC3 (non-ER binding) PHF1 (non-ER binding) [<=60] p = 0.31603No detectable trend: [<=60] p = 0.59844No detectable trend: 16 16 [>60] p = 0.67805 [>60] p = 0.020175 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.21409[AII] p = 0.10714 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 PHF19 (non-ER binding) PIK3CA (non-ER binding) [<=60] p = 0.67509No detectable trend: [<=60] p = 0.91592No detectable trend: 16 16 [>60] p = 0.42552 [>60] p = 0.64492|FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.67107[All] p = 0.192224 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

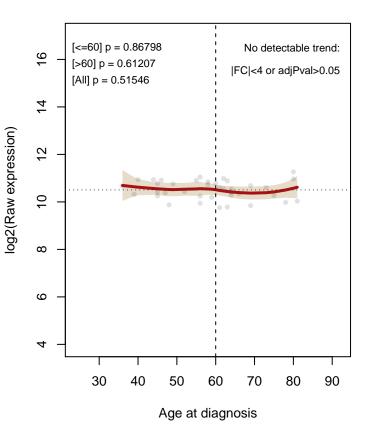
70

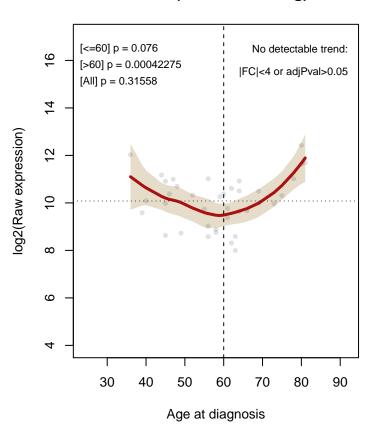
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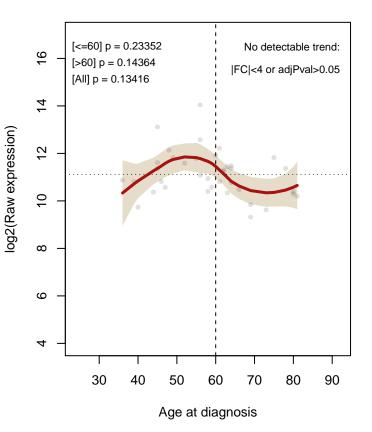
#### PLAU (non-ER binding)

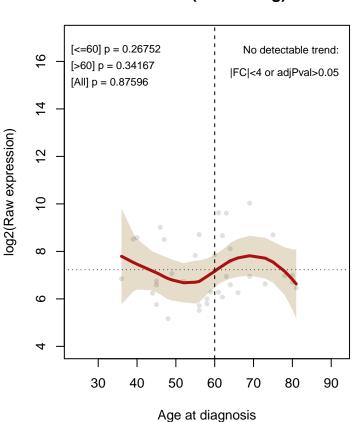


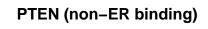


# PODXL (non-ER binding)

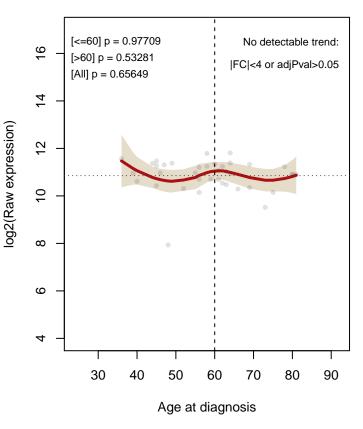
# **PPARG (ER binding)**

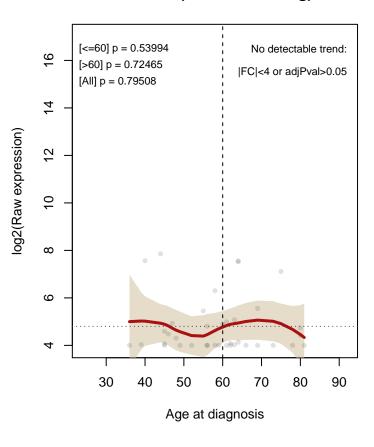






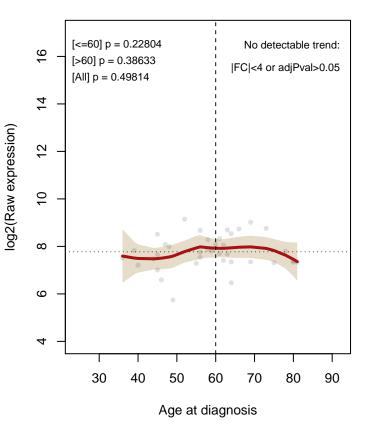
#### **PYDC1** (non-ER binding)

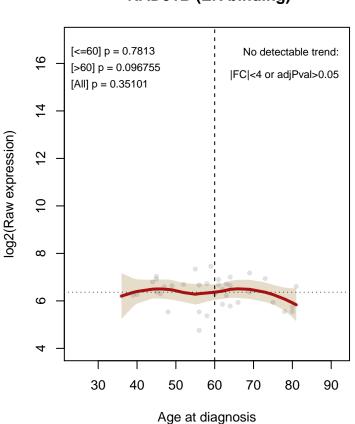




# RAD51 (non-ER binding)

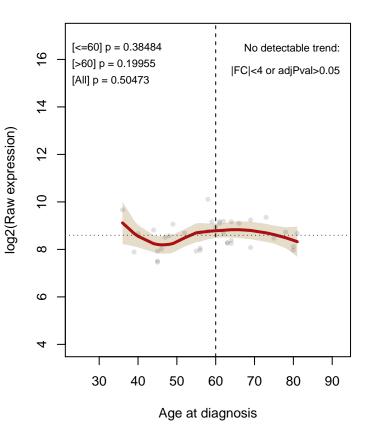
#### RAD51B (ER binding)

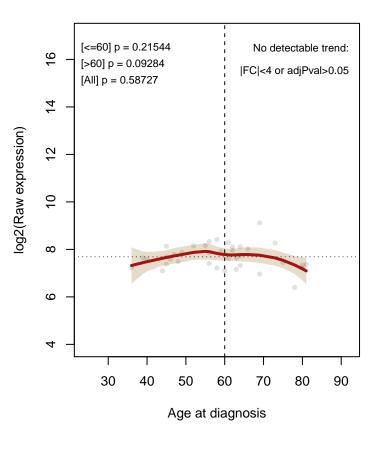




#### RAD51C (non-ER binding)

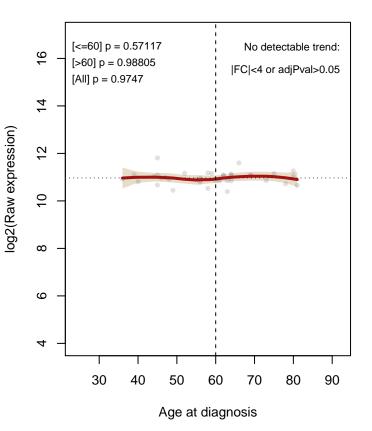
#### RAD51D (non-ER binding)

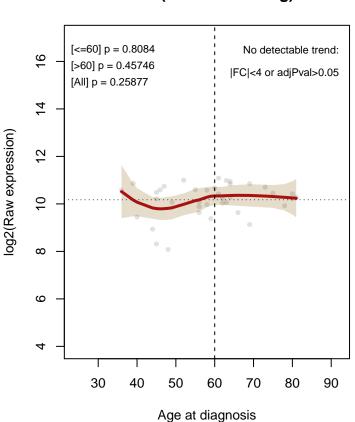


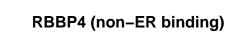


RAF1 (non-ER binding)

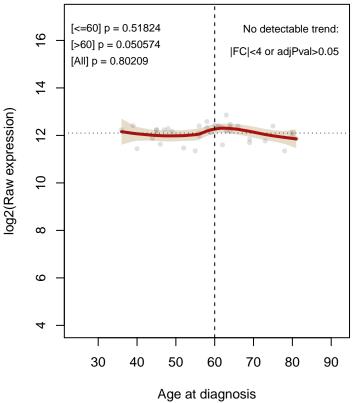
**RB1 (non-ER binding)** 

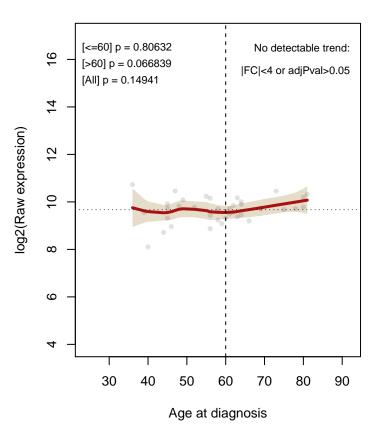






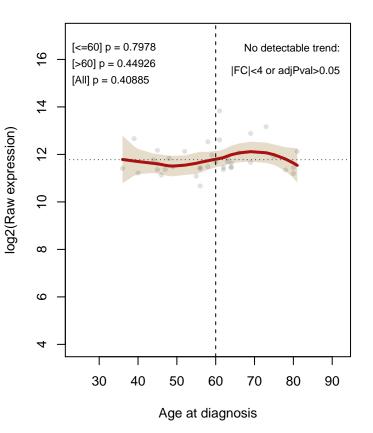
#### RBBP5 (non-ER binding)

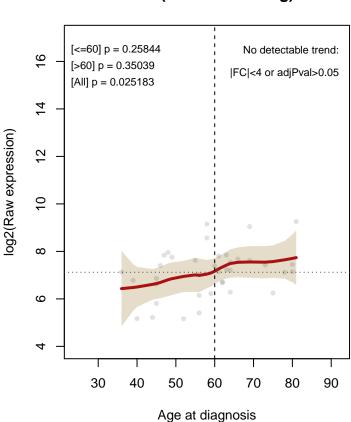


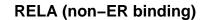


# RBBP7 (non-ER binding)

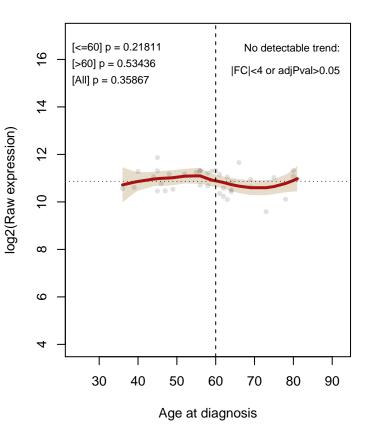
**REL** (non-ER binding)

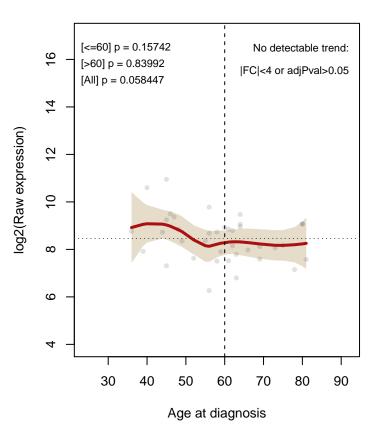






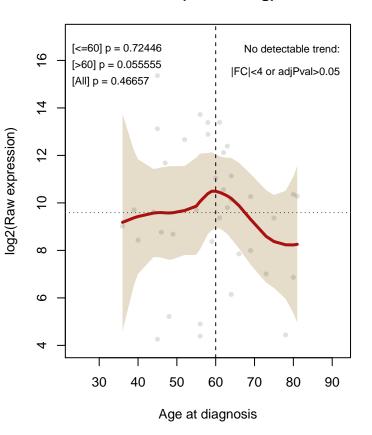
#### **RELB** (non-ER binding)

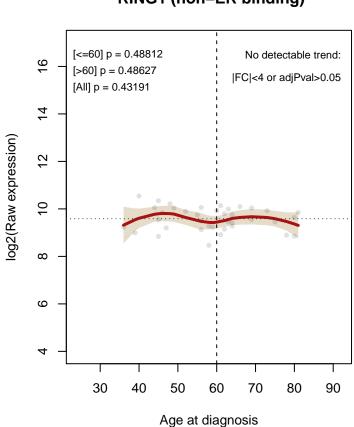




**RET (ER binding)** 

RING1 (non-ER binding)





#### RNF2 (non-ER binding) **RUNX1 (ER binding)** [<=60] p = 0.068123No detectable trend: [<=60] p = 0.28281No detectable trend: 16 16 [>60] p = 0.96183 [>60] p = 0.20316 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.09855[All] p = 0.263544 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 = 0.15692No detectable trend: [<=60] p = 0.84939No detectable trend: 16 16 [>60] p = 0.16469 [>60] p = 0.71135 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.23129[All] p = 0.673644 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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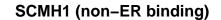
60

Age at diagnosis

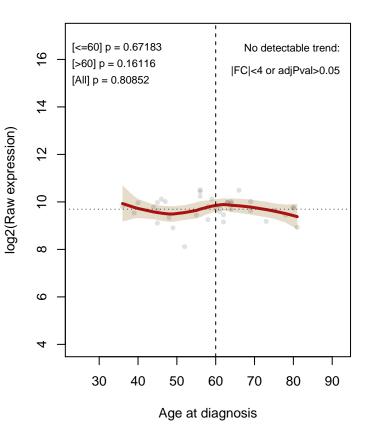
70

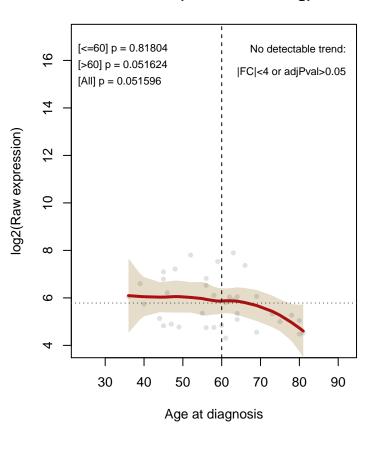
80

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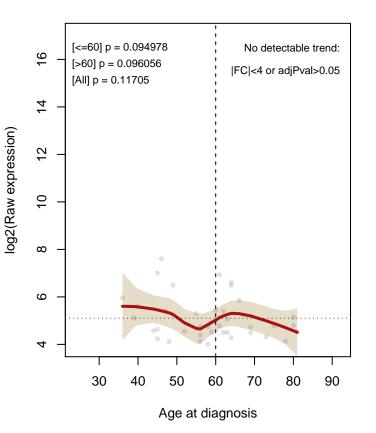
#### SCML2 (non-ER binding)

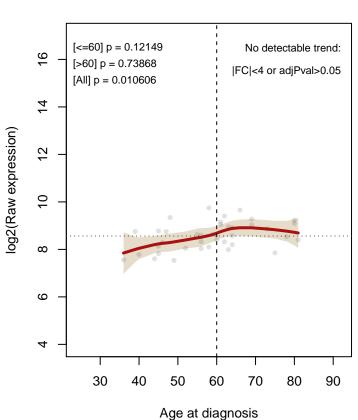




# SCML4 (non-ER binding)

SFMBT1 (ER binding)





#### SFMBT2 (ER binding) SFPQ (non-ER binding) [<=60] p = 0.93185No detectable trend: [<=60] p = 0.80841No detectable trend: 16 16 [>60] p = 0.25697 [>60] p = 0.24641 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [All] p = 0.48143[AII] p = 0.47744 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 = 0.40034No detectable trend: [<=60] p = 0.12643No detectable trend: 16 16 [>60] p = 0.058014 [>60] p = 0.030148 |FC|<4 or adjPval>0.05 |FC|<4 or adjPval>0.05 [AII] p = 0.97664[All] p = 0.998274 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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60

Age at diagnosis

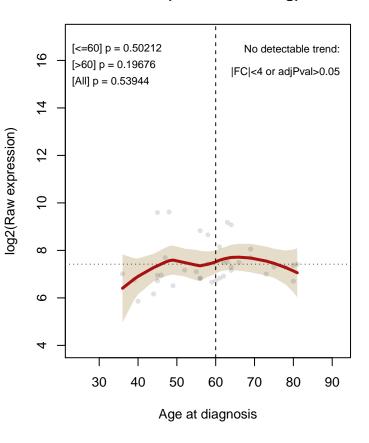
70

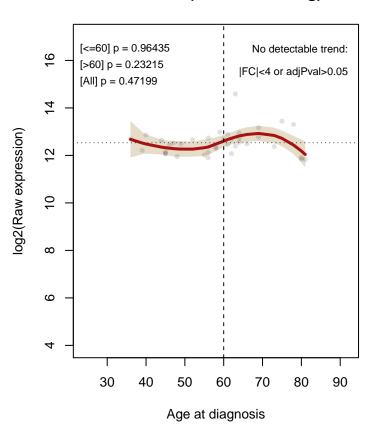
80

90

#### SKP2 (non-ER binding)

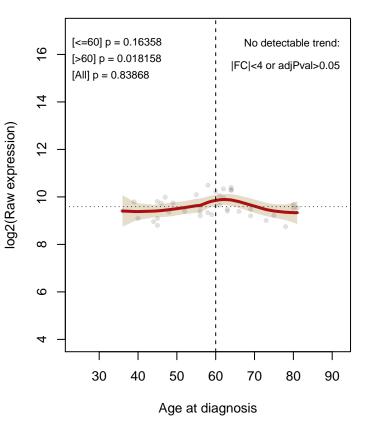
#### SLC25A3 (non-ER binding)

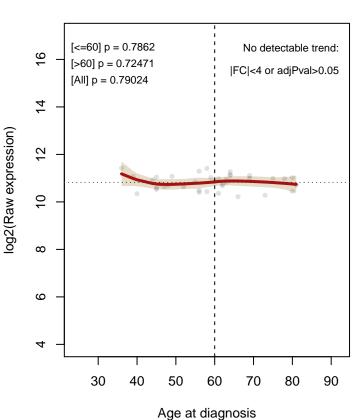




# SMAD1 (non-ER binding)

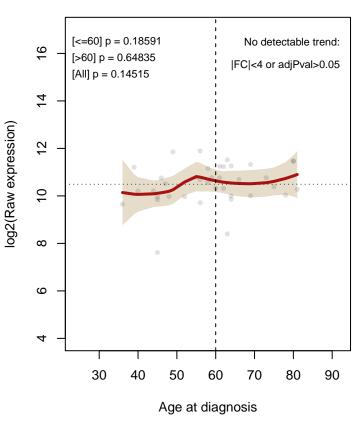
# SMAD2 (non-ER binding)

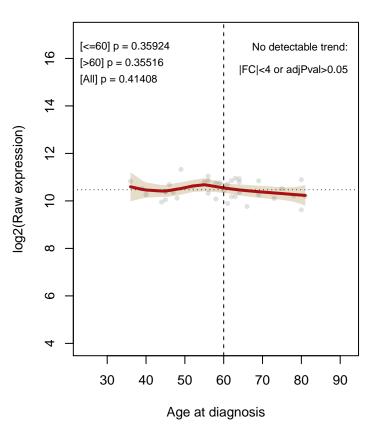






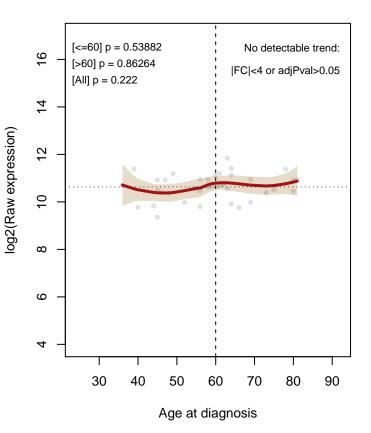
# SMAD4 (non-ER binding)

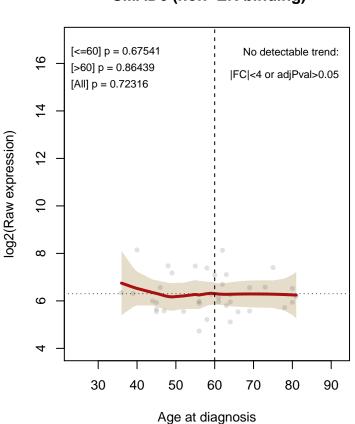




# **SMAD5** (non-ER binding)

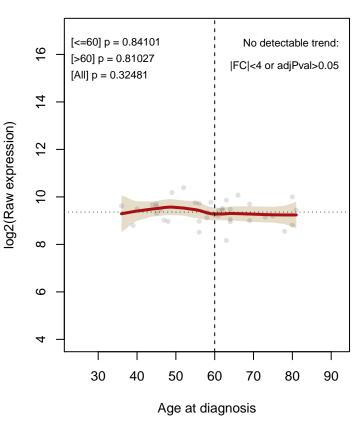
# SMAD6 (non-ER binding)

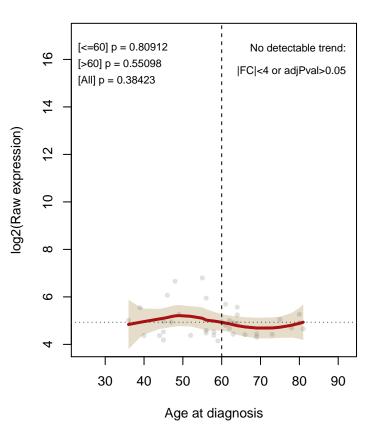






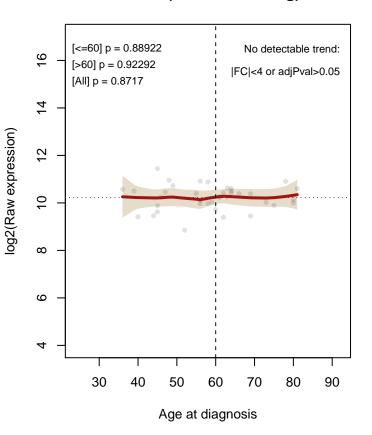
#### SMAD9 (non-ER binding)

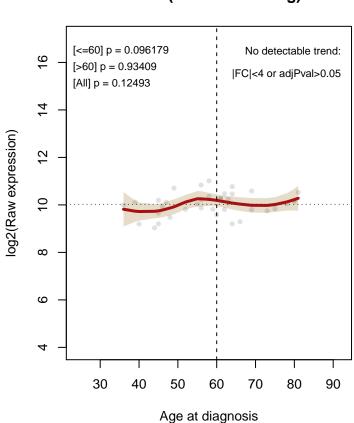


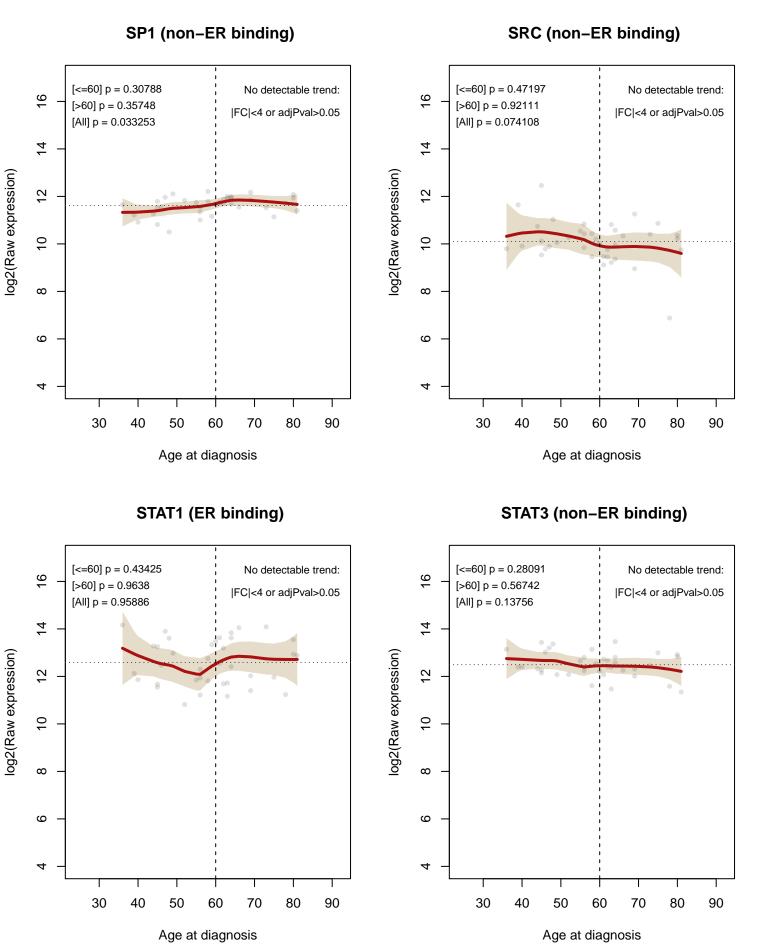


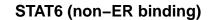
# SOS1 (non-ER binding)

SOS2 (non-ER binding)

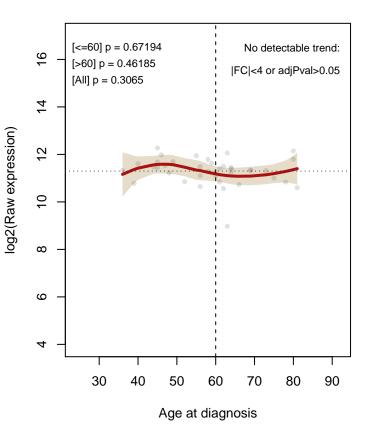


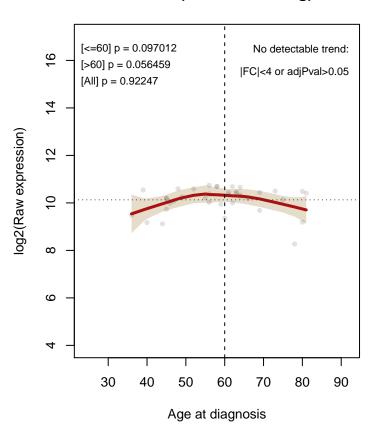






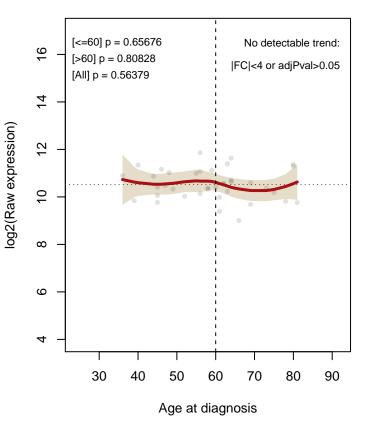
#### SUZ12 (non-ER binding)

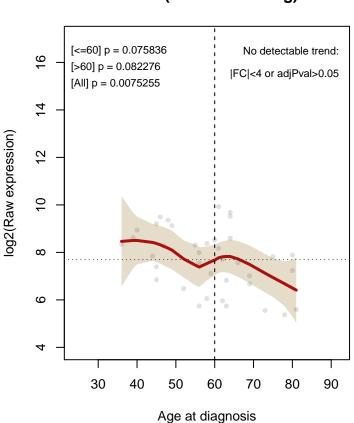




TCF3 (non-ER binding)

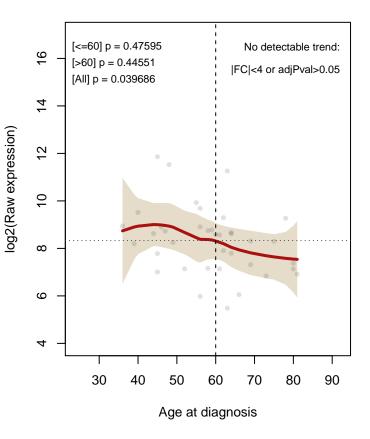
TCF7 (non-ER binding)

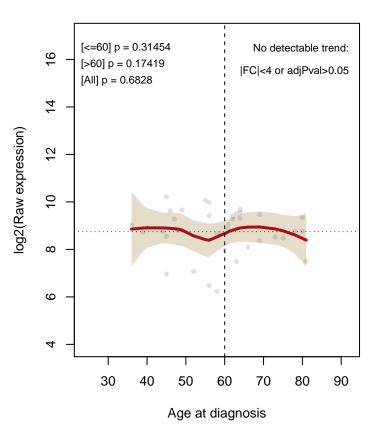






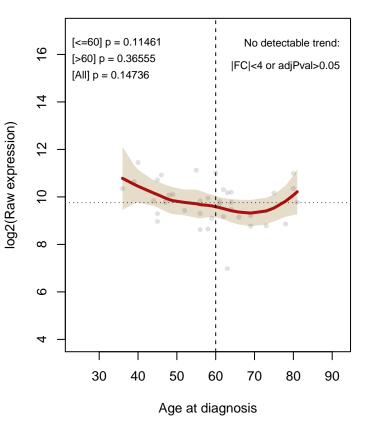
#### TCF7L2 (non-ER binding)

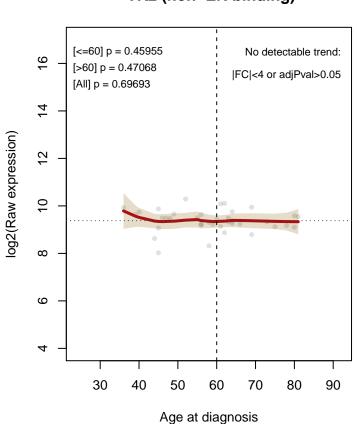


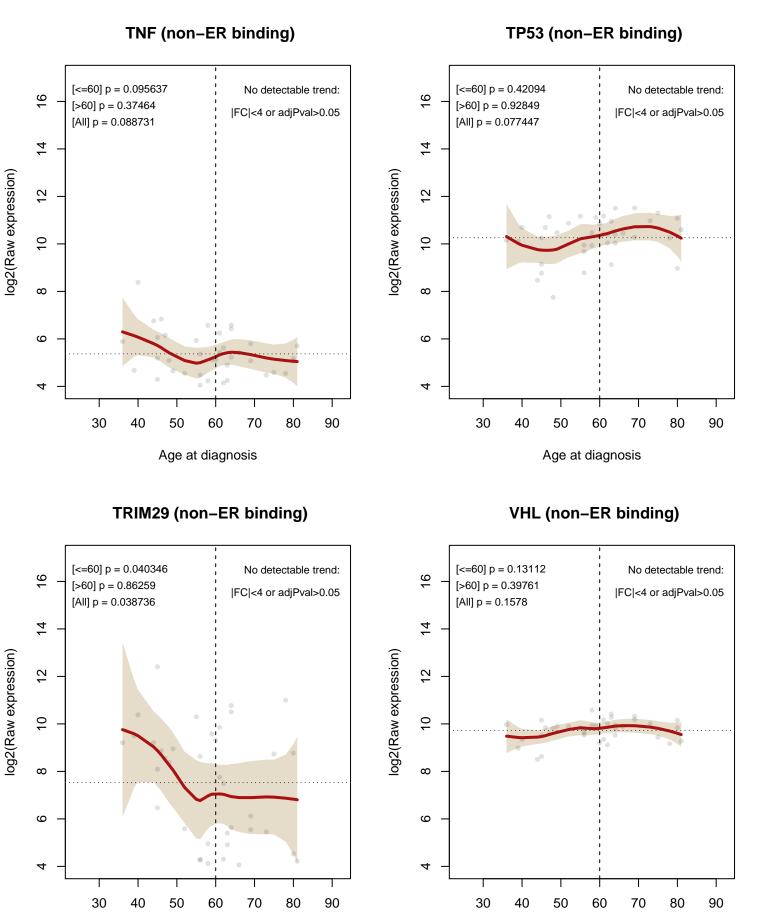


# TGFB1 (non-ER binding)

TK2 (non-ER binding)





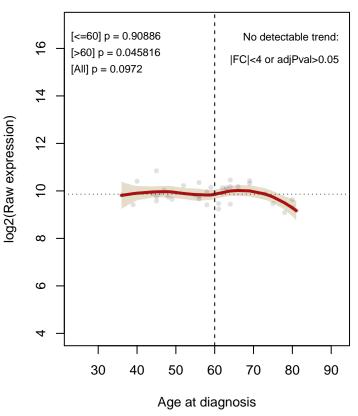


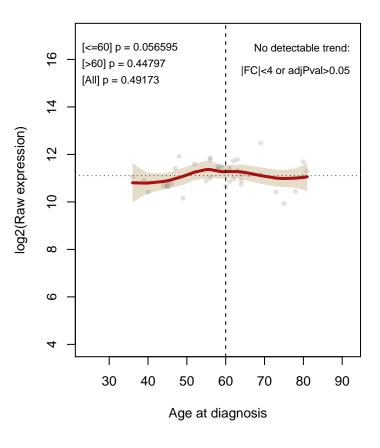
Age at diagnosis

Age at diagnosis



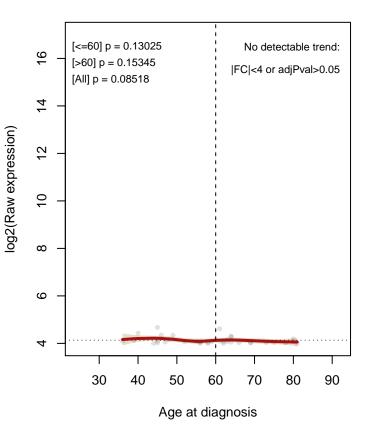
# WHSC1 (non-ER binding)

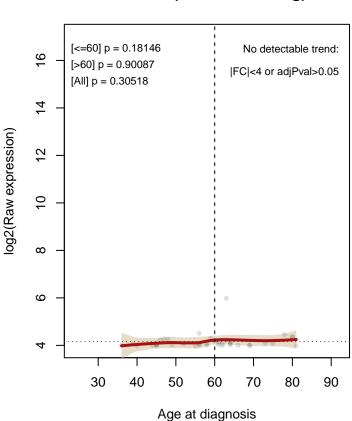


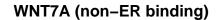


# WNT1 (non-ER binding)

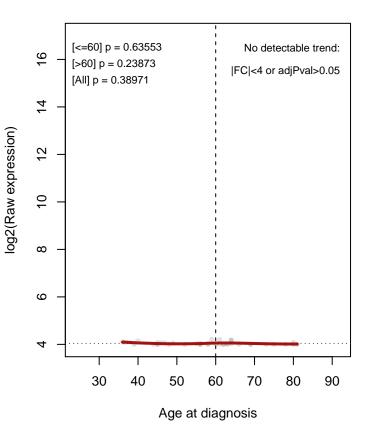
#### WNT3A (non-ER binding)

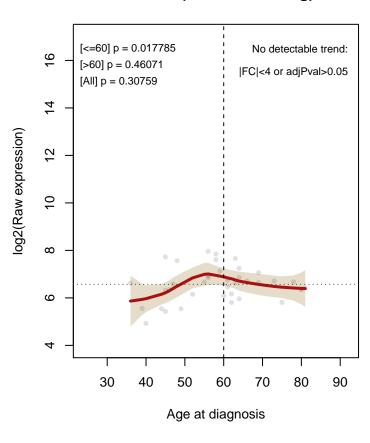






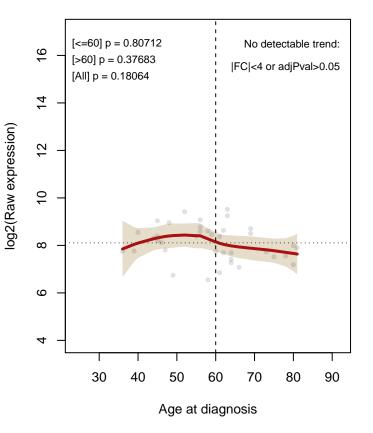
#### XRCC2 (non-ER binding)

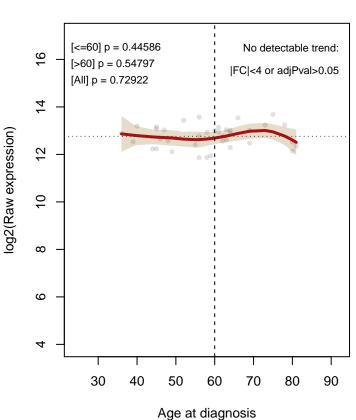




# XRCC3 (non-ER binding)

# XRCC6 (non-ER binding)

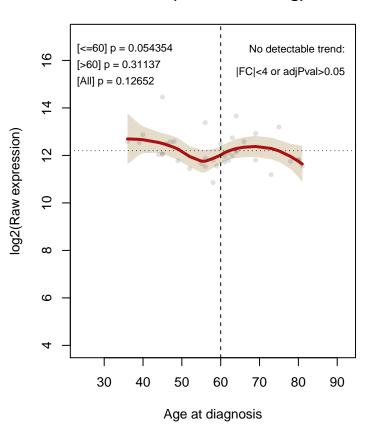




#### YAF2 (non-ER binding)

# [<=60] p = 0.093141No detectable trend: 16 [>60] p = 0.15447|FC|<4 or adjPval>0.05 [All] p = 0.956844 log2(Raw expression) 12 10 ω 9 4 30 40 50 60 70 80 90

# YBX1 (non-ER binding)



# YY1 (non-ER binding)

Age at diagnosis

